



# DHEERAN IAS ACADEMY®

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## TOPIC: HISTORY

### PINGALI VENKAYYA

#### In News:

PM tweeted, "I pay homage to the great Pingali Venkayya on his birth anniversary. Our nation will forever be indebted to him for his efforts in giving us the Tricolour, which we are very proud of. Taking strength and inspiration from the Tricolour, may we keep working for national progress."

#### Analysis of Background:

Born on August 2, 1876, he was a freedom fighter, educationist, writer and polyglot besides being a nationalist and true patriot. Such was his patriotism that he reportedly said that his last wish was to be draped in the Indian flag

#### About Pingali Venkayya:

- Pingali Venkayya belonged to a traditional Telugu Brahmin family.
- Born in a small village near Machilipatnam, Venkayya studied in a Hindu high school in Madras. He would go on to pursue his further education at the University of Cambridge in England.
- He developed a taste for geology and agriculture but was keenly interested in being an educationist, linguist and writer.
- In fact, Venkayya was fluent in many languages, including Sanskrit, Urdu and Japanese. His fluency in Japanese earned him the name of "Japan Venkayya."
- At the age of 19, Venkayya joined the army during the Boer war. It was during this stint in the British Army that Venkayya met Gandhi Their association would last over 50 years.
- The evolution of the Indian flag's design
- From 1913 onwards, Venkayya used to regularly attend Congress sessions and actively participate in them. He even presented the leaders with a possible design of what would eventually become the Indian national flag.
- He wrote a book titled "National Flag for India," which was published in 1916. The book showcased thirty designs of what could make the Indian flag.
- Throughout all Congress sessions between 1918 and 1921, he relentlessly put forth the idea of having a flag of our own since that would resonate with the people and develop our own identity. Back in the days of the freedom struggle, the flag would also give rise to the spirit of independence.

- In 1921, Venkayya presented the first draft design of the flag to Mahatma Gandhi at the AICC session held at Bezwada. Besides Gandhi, several other national leaders attended the event, which is often described as a turning point in the history of India's freedom movement.
- After a few rounds of changes, Venkayya's design was adopted as the final Indian national flag just before independence in 1947.
- The first draft designed by Venkayya had two predominant colours: green and red. On top of them was a spinning wheel of the Gandhi Chakra in blue. Before being accepted as the Congress party's flag, the colour red was replaced with saffron and the colour white was also added. The design of the Chakra was also changed, and it now sat on the white strip between the saffron and green bands.
- Later, the Gandhi Chakra was replaced by the Ashoka Chakra when the design for the tricolour was finalised.

### **The legacy,**

- Venkayya was posthumously honoured with a postage stamp in 2009 for his contribution to the Indian freedom struggle.
- In 2014, his name was also brought up for the Bharat Ratna. In 2015, the then Urban Development Minister, M Venkaiah Naidu, renamed the AIR Vijaywada after Venkayya and unveiled a statue on its premises.

## **LORD CURZON**

### **In News:**

The 119-year-old Curzon Gate in Bardhaman in West Bengal is at the centre of a political row after it emerged earlier this week that the Trinamool Congress (TMC)-run Bardhaman municipality has decided to erect a statue of Bardhaman's Maharaja Bijay Chand Mahatab and his wife Radharani in front of the city's prominent landmark.

### **Analysis of Background:**

- Politicians, historians, and heritage experts have questioned the ruling party's decision, with some claiming that the statutes would block the view of the structure, which was built by Mahatab in 1903, when Lord Curzon, then Viceroy of India, visited Bardhaman.
- Of all the Viceroys of India, Curzon is possibly the most criticised — he is the man who partitioned Bengal in 1905, and triggered a wave of Bengali nationalism that contributed to the wider Indian national movement.
- He was also one of the more openly imperialist of viceroys, and a man who saw Britain's rule over India as critical to the survival of empire.

- In 1900, Curzon famously stated, “We could lose all our [white settlement] dominions and still survive, but if we lost India, our sun would sink to its setting.”

#### **About Lord Curzon:**

- George Nathaniel Curzon was a British conservative politician who was educated at the elite institutions of Eton and Oxford.
- He served as Under-Secretary of State for India (1891-1892), and for Foreign Affairs (1895-1898), before being appointed Viceroy of India in 1899.
- As viceroy, his administration was known for intense activity and emphasis on efficiency.
- Curzon created a separate Muslim majority province of the North-West Frontier Province, sent a British expedition to Tibet, established a separate police service, and established the Archaeological Survey of India, in order to study and protect historical monuments.
- Early on in his career, Curzon earned some praise from his colonial subjects, notes Sumit Sarkar, for taking action against Europeans in a number of high-profile racist attacks against Indians.
- In 1899, he punished white soldiers for raping a woman in Rangoon; he disciplined soldiers of the 9th Lancers for beating an Indian cook in Sialkot to death in 1902; and he tried unsuccessfully to get the Calcutta High Court to change the meagre punishment given to an Assam tea manager for murdering a “coolie”.
- Curzon was both vexed and enraged by the growing nationalist movement in India and he sought to throttle the growing aspirations of the educated Indian middle class.
- A staunch imperialist, he took a series of extremely unpopular measures, including passing, in 1899, the Calcutta Municipal Amendment Act which reduced the number of elected representatives in the Calcutta Corporation; the Indian Universities Act (1904), that placed Calcutta University under government control, and the Indian Official Secrets Amendment Act (1904) that reduced the freedom of the press even further.
- Curzon believed that the Indian National Congress had lost its influence and appeal amongst the Indians, and in 1900 declared that the organisation was “tottering to its fall”.
- Ironically though, it was his biggest and most reviled decision — to partition Bengal in 1905 — that led to a spurt in nationalist sentiment and revitalized the Congress.

### **How and why did the partition of Bengal take place?**

- Calcutta was the capital of the British Raj, and Bengal Presidency was one of the largest provinces in India, populated by more than 78 million people, encompassing present day West Bengal, Bangladesh, Bihar, parts of Chhattisgarh, Odisha, and Assam.
- For long, the British had maintained that Bengal was too large to efficiently manage and administer; it was also believed that with Calcutta as the nerve centre of the educated nationalists, the resistance to colonial rule would only increase.
- In July 1905, Curzon announced the partition of Bengal into two provinces. East Bengal and Assam, with a population of 38 million, was predominately Muslim, while the western province, called Bengal, was reduced to 55 million people, primarily Hindus.
- Protests began almost immediately after the announcement, with meetings taking place in more than 300 cities, towns, and villages across Bengal.
- The educated Bengali bhadralok saw this move as an attempt to break apart their homeland, and curb their influence in the region, while later nationalists would argue that it was indicative of the British's divide and rule policy.

### **Consequences of the partition:**

- Popular anger against partition had been brewing since the British announced their scheme, but grew into a stronger and more organized movement after it was implemented in 1905.
- In opposition to the partition, nationalist leaders organized a campaign of boycott of British goods and institutions and encouraged the use of local products.
- After a formal resolution was passed at a meeting in Calcutta in August 1905, the Swadeshi movement began.
- Students were at the forefront of the movement, which was characterized by boycotts of British educational institutions and law courts, and large bonfires of imported cotton textiles.
- There was a surge in nationalist rhetoric, and the song 'Bande Mataram', set to music by Rabindranath Tagore, became the informal anthem of the movement.
- The Swadeshi movement and boycott was not restricted to Bengal, and spread to other parts of the country, including Punjab, Maharashtra, and parts of the Madras Presidency.
- A number of secret societies, such as the Anushilan Samiti of Bengal, sought to overthrow British rule through violent means. Revolutionary groups used bombs, attempted to assassinate colonial officials, and engaged in armed robberies to finance their activities.

- In 1905, Curzon resigned and returned to England after losing a power struggle with the commander-in-chief of the British Army, Lord Kitchener.
- The protests continued after his exit, and the colonial government in 1911 announced the reunification of Bengal, and the capital of the Raj was shifted from Calcutta to Delhi

## THE HISTORY OF POPULAR SLOGANS RAISED DURING INDIAN INDEPENDENCE MOVEMENT

In News:

Be it 'Jai Hind!' or 'Vande Mataram!', most of the popular patriotic slogans raised today are likely to have their origins in the movement for Indian independence.

### Analysis of Background;

#### 'Jai Hind' by Netaji Subhash Chandra Bose

- Bengal's Netaji Subhas Chandra Bose popularised 'Jai Hind' as a salutation for soldiers of his Indian National Army (INA), which fought alongside Netaji's ally Japan in the Second World War. But according to some accounts, Netaji did not actually coin the slogan.
- In his 2014 book, 'Lengendotes of Hyderabad', former civil servant Narendra Luther said the term was coined by Zain-ul Abideen Hasan, the son of a collector from Hyderabad, who had gone to Germany to study. There, he met Bose and eventually left his studies to join the INA. His grand-nephew, Anvar Ali Khan, later wrote that Khan was tasked by Bose to look for a military greeting or salutation for the INA's soldiers, a slogan which was not caste or community-specific, given the all-India basis of the INA.

#### 'Tum mujhe khon do, main tumhe aazadi doonga' by Netaji Subhash Chandra Bose

- As per the book 'Subhas Chandra Bose: The Nationalist and the Commander – What Netaji Did, What Netaji Said' edited by Vanitha Ramchandani, the slogan had origins in a speech Netaji made in Myanmar, then called Burma, on July 4, 1944.

#### 'Vande Mataram' by Bankim Chandra Chatterji

- The term refers to a sense of respect expressed to the motherland. In 1870, Bengali novelist Bankim Chandra Chattopadhyay wrote a song which would go on to assume a national stature, but would also be seen as communally divisive by some.
- Written in Bengali, the song titled 'Vande Mataram' would not be introduced into the public sphere until the publishing of the novel Anandamath in 1882, of which the song is a part. Vande Mataram would soon be at the forefront of sentiments expressed during the freedom movement.



- The novel Anandmath, set in the early 1770s against the backdrop of the Fakir-Sannyasi Rebellion against the British in Bengal, came at a time of the Bengal agrarian crisis when the region was hit by three famines one after another.

### **‘Inquilab Zindabad’ by Maulana Hasrat Mohani**

- ‘Inquilab Zindabad’ (Long live the revolution) was first used by Maulana Hasrat Mohani in 1921.
- Hasrat Mohani was a labour leader, scholar, poet and also one of the founders of the Communist Party of India in 1925.
- Along with Swami Kumaranand — also involved in the Indian Communist movement — Mohani first raised the demand for complete independence or ‘Poorna Swaraj’, at the Ahmedabad session of the Congress in 1921. He was later elected a member of the Constituent Assembly and was also a member of the drafting committee of the Constitution along with Dr B R Ambedkar.
- It was from the mid-1920s that this slogan became a war cry of Bhagat Singh and his Naujawan Bharat Sabha, as well as his Hindustan Socialist Republican Association (HSRA). Bhagat Singh also wished for a social revolution to break age-old discriminatory practices. This slogan got major traction when he and B K Dutt dropped bombs in the Assembly on April 8, 1929, and shouted it.

### **‘Sarfaroshi ki Tamanna’ by Bismil Azimabadi**

- “Sarfaroshi ki tamanna ab hamare dil men hai, dekhna hai zor kitna bazu-e-qatil men hai” (Our hearts are now longing to die for a good cause, that we shall see what strength the arms of killers possess), are the first two lines of a poem written by Bismil Azimabadi, a freedom fighter and poet from Bihar, after the Jallianwala Bagh Massacre of 1921 in Amritsar, Punjab.
- The lines were popularised by Ram Prasad Bismil, another revolutionary. They convey a deep longing to take on an enemy, a spirit seen in the way Bismil, an Urdu poet and revolutionary, was part of major events that raised the spirits of fellow freedom fighters at the time. He was a part of the Kakori train robbery, a successful and ambitious operation in which a train filled with British goods and money was robbed for Indian fighters to purchase arms.

### **‘Do or Die’ by Mohandas Karamchand Gandhi**

- In 1942, with the Second World War commencing and the failure of Stafford Cripps Missions – which only promised India a ‘dominion status’ where it would still have to bear allegiance to the King of England – it was realised that the movement for freedom needed to be intensified.

- On August 8, 1942, the All-India Congress Committee met in Gowalia Tank Maidan (August Kranti Maidan) in Bombay. Gandhi addressed thousands after the meeting to spell out the way forward. He told the people that he would firmly take his demands to the Viceroy, saying, “I am not going to be satisfied with anything short of complete freedom. Maybe he will propose the abolition of salt tax, etc. But I will say, ‘Nothing less than freedom’”.

### **‘Quit India’ by Yusuf Meherally**

- While Gandhi gave the clarion call of ‘Quit India’, the slogan was coined by Yusuf Meherally, a socialist and trade unionist who also served as Mayor of Mumbai. A few years ago, in 1928, Meherally had also coined the slogan “Simon Go Back” to protest the Simon Commission – that although was meant to work on Indian constitutional reform, but lacked any Indians.

## **TOPIC: GEOGRAPHY**

### **KERALA STARES AT REPEAT OF 2018 FLOODS AS RAIN FURY CONTINUES**

#### **In News:**

The release of water from the Parambikulam and Thoonakkadavu dams to the Poringalkuthu dam has resulted in the Chalakudy river breaching the banks in many places, forcing district administrations in Thrissur and Ernakulam to evacuate people from the banks of the river.

#### **Analysis of Background:**

##### **Chalakudy river**

- Chalakudy River or ChalakudyPuzha is the fifth longest river in Kerala, India. The river flows through Thrissur district, Palakkad district and Ernakulam district of Kerala.
- Chalakudy River and its basin area were one of the most affected rivers during the 2018 Kerala floods
- Source-AnamalaiHills,Mouth – Periyar River

##### **The Pamba River**

- The Pamba River (also called Pampa river) is the longest river in the Indian state of Kerala after Periyar and Bharathappuzha, and the longest river in the erstwhile former princely state of Travancore. Sabarimala temple dedicated to Lord Ayyappa is located on the banks of the river Pamba.

- The river is also known as 'DakshinaBhageerathi'. During ancient times it was called 'River Baris'.The River Pamba enriches the lands of Pathanamthitta District and the Kuttanad area of Alappuzha District and few areas of Kottayam
- Source-Pulachimala,MouthVembanad Lake &Thottappally Spillway

### **Periyar River**

- Periyar is the longest river and the river with the largest discharge potential in the Indian state of Kerala. It is one of the few perennial rivers in the region and provides drinking water for several major towns. The Periyar is of utmost significance to the economy of Kerala
- It generates a significant proportion of Kerala's electrical power via the Idukki Dam and flows along a region of industrial and commercial activity.
- Source-Chokkampatti Mala, Periyar Tiger Reserve, Mouth-Arabian Sea, Vembanad Lake
- Tributaries
  - Left-Cheruthoni
  - Right-Mullayar, Perinjankutti, Muthirapuzha, Edamala
- Cities – Kochi, Neriamangalam, Kalady, Malayattoor

### **Bharathappuzha River**

- Bharathappuzha , also known as the Nila or PonnaniRiverorKuttippuram River, is a river in India in the state of Kerala.
- It is the second longest river that flows through Kerala after the Periyar.
- It flows through Palakkad Gap, which is also the largest opening in the Kerala portion of Western Ghats.
- Source- AnamalaiHills,Mouth- Lakshadweep Sea
- Tributaries-Thuthapuzha, Gayathripuzha, Kalpathipuzha, Kannadipuzha, Tirur River

## **GREENLAND**

### **In News:**

According to a recent study, nearly 75% of Greenlanders are in the favour of extracting and exporting sand left by melting ice sheets. The melting of glaciers due to climate change has resulted in the deposition of sand and gravel along the coasts of Greenland. Arctic countries like Greenland have been struggling with the long-term implications of climate

change, primarily due to their over-reliance on the commercial fishing industry. Greenland is trying to diversify its economy through mining, oil extraction and tourism.

### **Analysis of Background:**

#### **About Greenland:**

- Greenland is an island country that is a part of Denmark.
- It is located between the Arctic and Atlantic oceans.
- Greenland is the world's largest island.
- The citizens of these countries are all Danish nationals.
- With a population of 56,081 (2020 data), it is the least densely populated region in the world.
- Greenland's capital is Nuuk, About a third of the population lives in Nuuk.
- It is the capital and largest city of Greenland.
- Though a part of the continent of North America, Greenland has been politically and culturally associated with Europe.
- The population is concentrated mainly on the southwest coast, while the rest of the island is sparsely populated.
- Nearly 75% of Greenland is covered by a permanent ice sheet.

## **CLOUDBURST**

### **In News:**

Over 20 people have been killed in destruction caused by cloudbursts and flash floods in different parts of Himachal Pradesh and Uttarakhand over the last three days.

### **Analysis of Background:**

#### **About cloudburst:**

- Cloudbursts are short-duration, intense rainfall events over a small area.
- According to the India Meteorological Department (IMD), it is a weather phenomenon with unexpected precipitation exceeding 100mm/h over a geographical region of approximately 20-30 square km.
- Not all instances of very heavy rainfall, are cloudbursts. A cloudburst has a very specific definition: Rainfall of 10 cm or more in an hour over a roughly 10 km x 10-km area is classified as a cloudburst event. By this definition, 5 cm of rainfall in a half- hour period over the same area would also be categorized as a cloudburst.

#### **Occurrence:**

- Cloudburst is basically a rainstorm and occurs mostly in the desert and mountainous regions, and in interior regions of continental landmasses due to the warm air current

from the ground or below the clouds rushes up and carries the falling raindrops up with it.

- The rain fails to fall down in a steady shower, which causes excessive condensation in the clouds as new drops form and old drops are pushed back into it by the updraft.

### **Meteorological Factors behind the Cloudburst:**

- Atmospheric pressure, atmospheric temperature, rainfall, cloud water content, cloud fraction, cloud particle radius, cloud mixing ratio, total cloud cover, wind speed, wind direction, and relative humidity during the cloudburst, before as well as after the cloudburst.
- Relative humidity and cloud cover is at the maximum level with low temperature and slow winds.

### **Can cloudbursts be forecast:**

- The India Meteorological Department forecasts rainfall events well in advance, but it does not predict the quantum of rainfall — in fact, no meteorological agency does. The forecasts can be about light, heavy, or very heavy rainfall, but weather scientists do not have the capability to predict exactly how much rain is likely to fall at any given place.
- Additionally, the forecasts are for a relatively large geographical area, usually a region, a state, a meteorological sub-division, or at best a district. As they zoom in over smaller areas, the forecasts get more and more uncertain. Theoretically, it is not impossible to forecast rainfall over a very small area as well, but it requires a very dense network of weather instruments, and computing capabilities that seem unfeasible with current technologies.
- As a result, specific cloudburst events cannot be forecast.

## **AGASTHIYAMALAI ELEPHANT RESERVE**

### **In News:**

The proposal to designate 1,197.48 sq.km in Kanyakumari and Tirunelveli as the Agasthiyarmalai Elephant Reserve was approved by the Union Environment Ministry.

### **Analysis of Background;**

- India has 31 Elephant Reserves.
- In the last 3 years, Dandeli Elephant Reserve of Karnataka, Singphan Elephant Reserve by Nagaland and Lemru Elephant Reserve in Chhattisgarh.
- This has brought the total area under Elephant Reserves in India to about 76,508 sqkm across 14 states of the country.

- The current population estimates indicate that there are about 50,000 – 60,000 Asian elephants in the world. More than 60% of the population is held in India.
- Indian Elephant has also been listed in the Appendix I of the Convention of the Migratory species in the recently concluded Conference of Parties of CMS 13 at Gandhi Nagar, Gujarat in February 2020.
- World Elephant Day is being celebrated to bring attention of various stakeholders to support various conservation policies to help elephants, including improving enforcement policies to prevent the illegal poaching and trade of ivory, conserving elephant habitats, providing better treatment for captive elephants and reintroducing some captive elephants into sanctuaries.
- Elephant is the Natural Heritage Animal of India and India also celebrates this day to spread awareness towards conservation of the species.
- World Elephant Day celebrated on August 12 is an international annual event, dedicated to the preservation and protection of the world's elephants.
- As Elephant is the Natural Heritage Animal of India, India also celebrates this day to spread awareness towards conservation of the species.
- Asian elephants are listed as “Endangered” and African elephants as ‘vulnerable’ on the IUCN Red List of threatened species.
- Indian Elephant has also been listed in the Appendix I of the Convention of the Migratory species and Schedule 1 of WPA, 1972.
- Project Elephant: It is a centrally sponsored scheme which was launched in 1992 for their protection. The population of these animals was about 15,000 when the project was started and has increased since then. It also led to setting up of different programs and agencies such as MIKE- Monitoring of Illegal Killing of Elephants and the Elephant Task Force (2003)

#### **Agasthiyamalai Elephant reserve:**

- The Agasthiyamalai in Tamil Nadu, adding 1197 sqkm of Protected Area dedicated for protection and conservation of elephants in India.
- Asian elephant numbers in the Periyar-Agasthiyamalai landscape are estimated to be 1,800 (Census 2010).
- About 300 of them are found alone on the southern side in the Agasthiyamalai Elephant Reserve and Mahendragiri hill ranges in the Neyyar, Shendurney, and Peppara

Wildlife Sanctuaries and Kalakkad-Mundanthurai Tiger Reserve, all located in Thiruvananthapuram Forest Division.

- The Periyar-Agasthyamalai region, which spans 5,600 sq km and 16 forest divisions in Tamil Nadu and Kerala, is home to the elephant population to the south of this.
- The southern portion of the Periyar Plateau and its eastern spur, the Varushnad and Meghamalai hill ranges, the Achankoil valley, and the Agasthiyarmalai Elephant Reserve and Mahendragiri hill ranges on the southern side make up the elephant habitat in the landscape.
- It can connect the populations to other areas in the SrivilliputhurMeghamalai tiger reserve and with the Periyar landscapes.

## TOPIC: POLITY

### CBI and CVC

#### In News:

According to the annual report of the Central Vigilance Commission (CVC), The Central Bureau of Investigation (CBI) recorded a conviction rate of 67.56% in 2021 as compared to 69.83% in 2020.

#### Analysis of Background:

##### Central Vigilance Commission:

- It is the main agency for preventing corruption in the Central government.
- It was established in 1964 by an executive resolution of the Central government.
  - It was established based on the recommendations by the Santhanam Committee on Prevention of Corruption (1962–64).
- Initially, the CVC was neither a constitutional body nor a statutory body.
  - In 2003, the Parliament enacted a law granting statutory status to the CVC.
- CVC is a multi-member body consisting of a Central Vigilance Commissioner (chairperson) and not more than two vigilance commissioners.
  - They are appointed by the President of India by warrant under his hand and seal on the recommendation of a three-member committee;
    - The prime minister is its head.
    - The Union Minister of Home Affairs.
    - The Leader of the Opposition in the Lok Sabha.

- The President can also remove the Central Vigilance Commissioner or any vigilance commissioner on the ground of proven misbehavior or incapacity.

### **Functions:**

- Inquiry or investigation is to be conducted into any complaint against any official belonging to the below-mentioned category of officials wherein it is alleged that he has committed an offence under the Prevention of Corruption Act, 1988.
- Give directions to the Delhi Special Police Establishment to discharge the responsibility entrusted to it under the Delhi Special Police Establishment Act, 1946.
- The Union Government is required to consult the CVC in making rules and regulations governing the vigilance and disciplinary matters relating to the members of Central Services and All-India Services.
- The Central Vigilance Commissioner is also the Chairperson of the two Committees, on whose recommendations the Central Government appoints the Director of the Delhi Special Police Establishment and the Director of Enforcement.
- Present annually to the President a report on its performance.
  - The President places this report before each House of Parliament.
- Jurisdiction
  - Members of All India Services serving in connection with the affairs of the Union and Group A officers of the Central Government.
  - Officers of the rank of Scale V and above in the Public Sector Banks.
  - Officers in Grade D and above in Reserve Bank of India, NABARD and SIDBI.
  - Managers and above in General Insurance Companies.
  - Senior Divisional Managers and above in Life Insurance Corporation.

### **About Central Bureau of Investigation (CBI):**

- The Central Bureau of Investigation (CBI) was set up in 1963 by a resolution of the Ministry of Home Affairs. Later, it was transferred to the Ministry of Personnel.
- The Special Police Establishment set up in 1941 was also merged with the CBI.
- The establishment of the CBI was recommended by the Santhanam Committee on Prevention of Corruption (1962–1964).
- The CBI is not a statutory body. It derives its powers from the Delhi Special Police Establishment Act, 1946.
- The CBI is the main investigating agency of the Central Government. It plays an important role in the prevention of corruption and maintaining integrity in administration.
- It also assists the Central Vigilance Commission and Lokpal.



- The CBI investigates crimes of corruption, economic offences and serious and organized crime other than terrorism.
  - For Terrorism: The National Investigation Agency (NIA) has been constituted after the Mumbai terror attack in 2008 mainly for the investigation of incidents of terrorist attacks, funding of terrorism and other terror-related crime.
- CBI is headed by a Director. He is assisted by a special director or an additional director.
- The Central Government appoints the Director of CBI on the recommendation of a three-member committee consisting of;
  - The Prime Minister as Chairperson.
  - The Leader of Opposition in the Lok Sabha.
  - The Chief Justice of India or Judge of the Supreme Court nominated by him.

### **Cases investigated by the CBI**

- Anti-Corruption Crimes - Investigate cases under the Prevention of Corruption Act against Public officials and the employees of Central Government, Public Sector Undertakings, Corporations or Bodies owned or controlled by the Government of India.
- Economic Crimes - Investigate major financial scams and serious economic frauds, including crimes relating to Fake Indian Currency Notes, Bank fraud and Cyber Crime, Smuggling of narcotics, antiques, cultural property and smuggling etc.
- Special Crimes - Investigate seriously and organized crime under the Indian Penal Code and other laws at the requests of State Governments or on the orders of the Supreme Court and High Courts.
- Suo Moto Cases - CBI can suo-moto take up investigation of offences only in the Union Territories.
- The Central Government can authorize CBI to investigate a crime in a State but only with the consent of the concerned State Government.
- The Supreme Court and High Courts, however, can order CBI to investigate a crime anywhere in the country without the consent of the State.

## SC JUDGES RULES

### In News:

- The Union Ministry of Law and Justice has permitted the retired Chief Justice of India to rent-free Type-VII accommodation in Delhi for 6 months from the date of superannuation.
- This provision was introduced by amending the Supreme Court Judges Rules of 1959 in the exercise of powers conferred on it under the Supreme Court Judges (Salaries and Conditions of Service) Act, 1958.
- The Ministry also highlighted that the amended Rules would provide a chauffeur, a secretarial assistant and security cover to retired Chief Justice and Judges of the Supreme Court for a year from the date of retirement. This will be in addition to his or her personal security guard.

### Analysis of Background:

#### Supreme Court:

- Articles 124 to 147 deal with the independence, jurisdiction, powers, procedures, etc of the Supreme Court under part V of the Indian Constitution.
- Currently, the Supreme Court of India can maximums have 34 judges (1 chief justice and 33 other judges).
  - The Union government has increased the number of Supreme Court judges from 31 to 34, including the Chief Justice of India in 2019.
- A person shall be qualified for appointment as a Judge of the Supreme only if he/she meets all the following criteria:
  - Is a citizen of India.
  - Has been for at least five years a judge of a High Court or two such Courts in succession; or
  - Has been for at least ten years an advocate of a High Court or two or more such Courts in succession or is, in the opinion of the President, a distinguished jurist.
- Every person appointed to be a Judge of the Supreme Court shall make an oath or affirmation according to the form set out in the 3rd Schedule of the Constitution.
- The Indian Constitution does not specify a minimum age limit for a judge to occupy his/her office.
  - A Supreme Court judge continues to hold the office till he/she attains the age of 65 yrs.
- A Judge of the Supreme Court may tender his/her resignation to the President even before he/she reaches the age of 65 years.

- After retirement, the Supreme Court Judge shall not do legal practice in any court in Indian Territory.
- The retired chief justice and judges are qualified to 50 % of their last drawn salary as a monthly pension.

### **Collegium System for the appointment of Judges:**

- Under the Collegium System, appointments/elevation of judges/lawyers to the Supreme Court and transfers of judges of High Courts and Apex Court are decided by a panel of the Chief Justice of India and the four senior-most judges of the Supreme Court.'
- The word 'Collegium' is nowhere mentioned in the Indian Constitution, it has come into force as per Judicial Pronouncement.
- Evolution of Collegium System
- Under the Constitution, The Judges of the Supreme Court are appointed by the president. The chief justice is appointed by the president after consultation with such judges of the Supreme Court and high courts as he deems necessary.
  - The other judges are appointed by the president after consultation with the chief justice and other judges of the Supreme Court and the high court as he deems necessary.
  - The consultation with the chief justice is obligatory in the case of the appointment of a judge other than the Chief justice
- First judges case (1982): The Supreme court held that consultation does not mean agreement and it only means an exchange of views.
- Second judges case (1993): The court changed its earlier ruling and changed the meaning of the word consultation to consensus.
  - It ruled that the advice tendered by the CJI is binding on the President in matters of appointment of SC judges. But any such advice would be tendered after CJI consults with two of his most senior judges.
- Third judges case (1998): The consultation process should be based on the plurality of judges.
  - CJI should consult a Collegium of four senior-most judges before making a recommendation to the President and even if two judges give an unfavourable opinion, he should not send the proposal to the President.

## FOOD SECURITY IN INDIA

### In News:

The Supreme Court of India has directed the Union government to expand the coverage under the National Food Security Act (NFSA). The main objective of the verdict was to provide benefits to needy persons and citizens under the provisions of the National Food Security Act (NFSA). The Supreme court also directed the States to register unorganized workers, including migrant labourers, on the e-Shram portal within 6 weeks.

### Analysis of Background:

#### Food Security:

- The basic concept of food security is to ensure that all people, at all times, should get access to basic food.
- The right to food is part of the fundamental right to life enshrined under Article 21 of the Indian Constitution.
- The government enacted the National Food Security Act, of 2013 to shift the approach from welfare to a rights-based approach.

#### National Food Security Act, 2013:

- The National Food Security Act, 2013 was notified to provide food and nutritional security.
- The objective of the Act is to provide for food and nutritional security in the human life cycle approach, by ensuring access to an adequate quantity of quality food at affordable prices to people to live a life with dignity.
- The Act provides for coverage of up to 75% of the rural population and up to 50% of the urban population for receiving subsidized foodgrains under the Targeted Public Distribution System (TPDS), thus covering about two-thirds of the population.
- The eligible persons will be entitled to receive 5 Kgs of foodgrains per person per month at subsidized prices of Rs. 3/2/1 per Kg for rice/wheat/coarse grains.
- The existing Antyodaya Anna Yojana (AAY) households, which constitute the poorest of the poor, will continue to receive 35 Kgs of foodgrains per household per month.
- Corresponding to the all-India coverage of 75% and 50% in the rural and urban areas, State-wise coverage is determined by the Central Government.
- The work of identification of eligible households is to be done by States/UTs.
- Pregnant women and lactating mothers and children in the age group of 6 months to 14 years are entitled to meals as per prescribed nutritional norms under Integrated Child Development Services (ICDS) and Mid-Day Meal (MDM) schemes.

- Children up to 14 years of age are entitled to nutritious meals as per the prescribed nutritional standards. In case of non-supply of entitled food grains or meals, the beneficiaries will receive a food security allowance.
- Besides meals to pregnant women and lactating mothers during pregnancy and six months after childbirth, such women are entitled to receive maternity benefits of not less than Rs. 6,000.
- The eldest woman of the household age 18 years or above be the head of the household to issue ration cards.
- Grievance redressal mechanism at the District and State levels. States will have the flexibility to use the existing machinery or set up separate mechanisms.

### **E-Shram Portal:**

- The Ministry of Labour and Employment has developed the e-SHRAM portal for building a National Database of Unorganized Workers (NDUW).
- The Portal was developed with the aim of extending the benefits of the social security schemes to unorganized sector workers.
- It is the first-ever national database of unorganized workers including migrant workers, construction workers, gig and platform workers, etc.
- The following is required to register on the portal:
  - Aadhar Number
  - The mobile number is linked with Aadhaar
  - Savings Bank Account Number
- It created a centralized database of all unorganized workers including Construction Workers, Migrant Workers, Gig and Platform workers, Street Vendors, Domestic Workers, Agriculture Workers, etc.
- Smooth Sharing of information in respect of registered unorganized workers with various stakeholders such as Ministries/ Departments/ Boards/ Agencies/ Organizations of the Central & State Governments.

## SECTION 69A OF THE IT ACT

### In News:

VideoLAN Client (VLC) website has been banned in India. However, there is no official information about this ban. VLC spokesperson has stated that their website has been banned since February 2022.

### Analysis of Background:

- In India, VideoLAN (VLC) gained popularity in the late 90s with the penetration of personal computers.
- VLC is the most popular media player.
  - It is free and open-source software.
  - It easily integrates with other platforms and streaming services.
  - It supports all file formats without requiring additional coding.

### Why was VLC banned?

- Several Individuals and Civil society organizations have filed RTI applications with the Union Ministry of Electronics and Information Technology (MeitY), but the reply states that “no information is available” with the Ministry.
  - However, the website displays the message “The website has been blocked as per the order of Ministry of Electronics and Information Technology under IT Act, 2000”.
- The lack of official information has led to the assumption that VLC was banned along with the 54 Chinese applications in February 2022.
  - VLC is not a Chinese app.
- In April 2022, several cybersecurity firms raised concerns that hacker groups have been using the VLC Media Player to introduce a malicious malware loader.
- Present status of the VLC in India
- The present ban is a soft ban and not hard. While the VLC website has been banned, the VLC app continues to be available for download on Google and Apple stores.
- This is probably because the app stores’ servers are believed to be safer than desktop website servers.

### Section 69A of the IT Act 2000

- Section 69A of the Information Technology (IT) Act empowers the government to restrict access to any online content to protect the interest of;
  - Sovereignty and Integrity of the Nation.
  - Security of the State.

- Friendly relations with foreign states.
- Public order.
- All orders to restrict information or content must be recorded in writing.
- Social media intermediaries failing to comply with the rules and regulations are liable to be monetarily penalized along with an imprisonment term which may extend up to 7 years.
- The procedures for executing the provisions of the act are mentioned in the Information Technology (Procedure and Safeguards for Blocking for Access of Information by Public) Rules, 2009.
  - Step 1: It mentioned that an officer along with an examination committee review the content in question within 48 hours of receiving the takedown request.
  - Step 2: Provide an opportunity to the author or originator of the content for clarifications.
  - Step 3: The recommendations are then sent to the Secretary of the Dept of Information Technology for approval and then a request is forwarded to the social media intermediary for restricting access.
- Emergency provisions specify that clarification is required within 48 hours after the content has been blocked for specified reasons.
  - Blocking Orders can be revoked after review or examination.
- Rule 16 of the act states that strict confidentiality should be maintained on all requests and actions taken, but without compromising transparency and accountability.
- The Act complies with Article 19 of the Indian Constitution which guarantees freedom of speech and expression. However, Clause 2 of the article allows the state to impose reasonable restrictions for the same reasons as those for Section 69A.
- Concern
  - The Confidentiality Clause under the act is preventing legal challenges to content blocking orders; it is difficult to understand the Governments reasoning.
  - It doesn't come under the purview of Right to Information (RTI), recently the Bharat Sanchar Nigam Limited (BSNL) rejected many RTI requests that asked for the list of blocked websites.
  - The lack of transparency, Clear guidelines and a monitoring mechanism under the act means that there are various forms of arbitrary behaviour involved.
  - The concerns are raised mainly when the orders are aimed at blocking individual accounts and not the specific content.

## JAL JEEVAN MISSION

### In News:

Jal Jeevan Mission has achieved a new landmark by providing connection to more than 10 Crore rural households with safe and clean drinking water through taps. When the Prime Minister launched the Jal Jeevan Mission on 15th August 2019, only 3.23 Crore of the households in villages had access to piped water connections.

3 States (Goa, Telangana and Haryana) and 3 UTs (Puducherry, Dadra & Nagar Haveli and Daman & Diu (D&NH and D&D) and A&N Islands), have reported 100% coverage.

### Analysis of Background:

#### Jal Jeevan Mission

- The Mission was launched on August 15, 2019.
- Implemented by the Ministry of Jal Shakti
- To provide safe and adequate drinking water through household tap connections by 2024 to all rural households and public institutions; Gram Panchayat building, Primary School, Anganwadi centre, Health and wellness centres, etc.

### Features:

- The Mission ensures community participation and also includes an Awareness, Education and Communication Campaign.
- Development of water supply infrastructure to provide tap water connection to every rural household.
- Development of drinking water sources to ensure the long-term sustainability of the water supply system.
- Other features; Providing training, establishing water quality laboratories, Strict water quality testing and surveillance, Promoting Research work, starting a knowledge centre, a programme for capacity building of communities, etc.

### Significance of the Mission:

- Jal Jeevan Mission has brought socio-economic benefits to the rural population.
- Regular tap water supply relieves people, especially women and young girls, from carrying heavy bucket loads of water to meet their daily household needs.
- The saved time can be used for income generation activities, learning new skills and supporting children's education.

### Concern:

- India has adequate fresh water. The problem is inefficient and wasteful use.



- Law and policy measures to address it remain insufficient. The primary source of domestic water and irrigation is groundwater but the media and policymakers still and often focus on surface water.
- The reason for excessive use of groundwater is the legal framework governing access to the resource; landowners see groundwater as their own and as a resource, they can exploit without considering the need to protect
- The present framework remains mostly top-down and is incapable of addressing local situations adequately.
- Water usage for major crops in India is two to four times that in other large farming nations due to wasteful flood irrigation, mostly in northern India.
- The present subsidy structure “encourages using more inputs such as fertilizer, water and power. Most states provide electricity either for free or at a flat rate. This leads to wasteful water extraction.
- About 80 Crore Indians face water Scarcity and about 2 lakh people die every year due to inadequate access to Safe water.
- The population of India will be more than 1.5 billion people by 2030. Achieving food Security for this rising Population becomes more difficult with water Scarcity.
- No Indian City Supplied 24x7 water to its entire urban Population, and only 35% of urban households in India had piped water.
- Water Shortages Can hamper industrial operations
- Biodiversity is impacted by human activities undertaken to Create additional water Sources. These activities include dam Construction and river diversion which Can lead to Changes in water flow, Salinity levels, and monsoon Patterns.

### **Steps by the Government for water management**

- The government of India launched Jal Shakti Abhiyan with a mission mode approach intended to improve water availability including groundwater conditions in the water-stressed blocks in India.
- National Water Policy (2012) has been formulated by the Department of Water Resources for the conservation of rivers, river bodies and infrastructure in a scientifically planned manner through community participation.
- Central Ground Water Authority has been constituted under the “Environment (Protection) Act, 1986” for regulation and control of groundwater development and management in the Country.
- Master Plan for Artificial Recharge to Groundwater 2020 has been prepared in consultation with States/UTs.

- Construction of watershed management structure under Mahatma Gandhi National Rural Employment Guarantee Scheme.
- Pradhan Mantri Krishi Sinchayee Yojana promotes water conservation and management, water harvesting, soil and moisture conservation, groundwater recharge, flood protection, and land development.
- Atal Bhujal Yojana for sustainable management of groundwater with community participation is being taken up in the identified over-exploited and water-stressed areas in the States of Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.

## SMILE 75

### In News:

The Union Ministry of Social Justice and Empowerment has launched the 'SMILE-75' initiative. The main objective of the scheme is to ensure comprehensive rehabilitation of baggers in 75 identified municipalities as a part of the 75th year of Independence day celebrations. The initiative is a part of the Ministry's ongoing SMILE project.

### Analysis of Background:

- The Ministry of Social Justice and Empowerment has launched an umbrella scheme "SMILE: Support for Marginalized Individuals for Livelihood and Enterprise" to cover several comprehensive measures including welfare measures for both transgender persons and persons who are engaged in the act of begging.
- The Ministry allocated Rs 265 cr under Comprehensive Rehabilitation for Welfare of Transgender Persons, and Rs 100 cr under Comprehensive Rehabilitation of Persons engaged in the Act of Begging for the years 2021-22 to 2025-26.

### About SMILE Scheme:

- The Scheme aims to provide welfare and rehabilitation to the Transgender community and the people engaged in the act of begging.
- The 2 sub-schemes of SMILE are:
  - Central Sector Scheme for Comprehensive Rehabilitation for Welfare of Transgender Persons.
  - Central Sector Scheme for Comprehensive Rehabilitation engaged in the act of Begging'.
- It aims to provide comprehensive welfare and rehabilitation measures to the Transgender community and the people engaged in the act of begging.

- The scheme aims to ensure social security through multiple dimensions of identity, medical care, education, occupational opportunities and shelter.
- The Ministry has allocated Rs. 365 Crore for the scheme from 2021-22 to 2025-26.
- It has provisions for Skill Development and Livelihood under the PM-DAKSH scheme.

### **Expected Outcome of the Scheme:**

- Through Composite, Medical Health aims to provide a comprehensive package in convergence with PM Jan Arogya Yojna (PM-JAY) supporting Gender-Reaffirmation surgeries through selected hospitals.
- Providing Housing facilities in the form of 'Garima Greh' to ensure food, clothing, recreational facilities, skill development opportunities, recreational activities and medical support etc. to the Transgender community and the people engaged in the act of begging.
- The Provision of Transgender Protection Cell in each state will monitor cases of offences and to ensure timely registration, investigation and prosecution of offences.
- The National Portal and Helpline will provide necessary information and solutions to the Transgender community and the people engaged in the act of begging when needed.
- Concerns
- Transgender face numerous forms of discrimination and injustice, exclusion from participation in social and cultural life, education, and economic sphere, and political and decision-making processes.
- Issues with Current legislations:
  - Discretionary powers to Police to arrest.
  - No distinction between beggars and the homeless.
  - Different definitions in different States.
- The problem of beggary, like any other social problem, is multi-dimensional. Its roots are found in the diverse patterns of its intertwined and interlocked social fabrics.
- According to an estimate, 3 lakh children across India are forced to beg, using everything from addiction to drugs, to threats of violence and actual beating.
- In India, there is a lack of adequate provision for treatment and social rehabilitation of blind, deaf, dumb or physically handicapped. In the absence of any reasonable alternative, such persons are forced to beg.
- Economic factors which generally prompt people to take to begging. Among these factors poverty, unemployment, under-employment and loss of income are important.

## TAX DEVOLUTION TO STATES

### In News:

The Union government has released over Rs 1.16 lakh crore to the States, which is equivalent to two monthly installments of tax devolution. The amount was released to push State governments' capital spending abilities in this financial year.

### Analysis of Background:

#### Financial Relations between Union and State

- Part XII of the Indian Constitution deals with financial relations between the centre and the states.
- The Finance Commission (Article 280) makes recommendations to the President on the division of net tax receipts between the centre and the states.
- Indian Constitution divides the taxation authorities between the Central government and the states in the following ways;
  - Parliament has sole authority to charge the taxes included in the Union List.
  - The state legislature has sole authority to impose the taxes listed on the state list.
  - The taxes included in the Concurrent List can be imposed by both Parliament and state legislatures.
  - The Parliament has the residuary power of taxation (that is, the authority to impose taxes not listed in any of the three lists). The parliament has implemented a gift tax, a wealth tax, and an expenditure tax under this clause.
  - The Union can make grants-in-aid to states, which Parliament can authorize. Such funds are applied to India's Consolidated Fund.
  - The Union has the authority to make grants to states and to any institution within those states for public purposes.

**Grants-in-Aid to the States:** The Constitution provides for grants-in-aid to the states from Central resources in addition to revenue sharing between the Centre and the states. Statutory grants and discretionary grants are the two forms of grants-in-aid:

- **Statutory Grants** - Article 275 authorizes Parliament to offer grants to states in need of financial help, rather than to all states. Every year, these funds are charged to India's Consolidated Fund.
  - Aside from this basic provision, the Constitution also provides for specific funds to promote the welfare of scheduled tribes in a state or to improve the standard of administration in scheduled areas in a state, such as Assam.
- The Finance Commission recommends that the states receive statutory grants (both general and particular) under Article 275.

- **Discretionary Grants** - Both the Centre and the states are empowered under Article 282 to give any grants for any public purpose, even if it falls outside of their respective legislative jurisdiction. The Centre makes grants to the states under this clause.
- Other Grants - The third sort of grant-in-aid was also included in the Constitution, but it was only for a limited time.

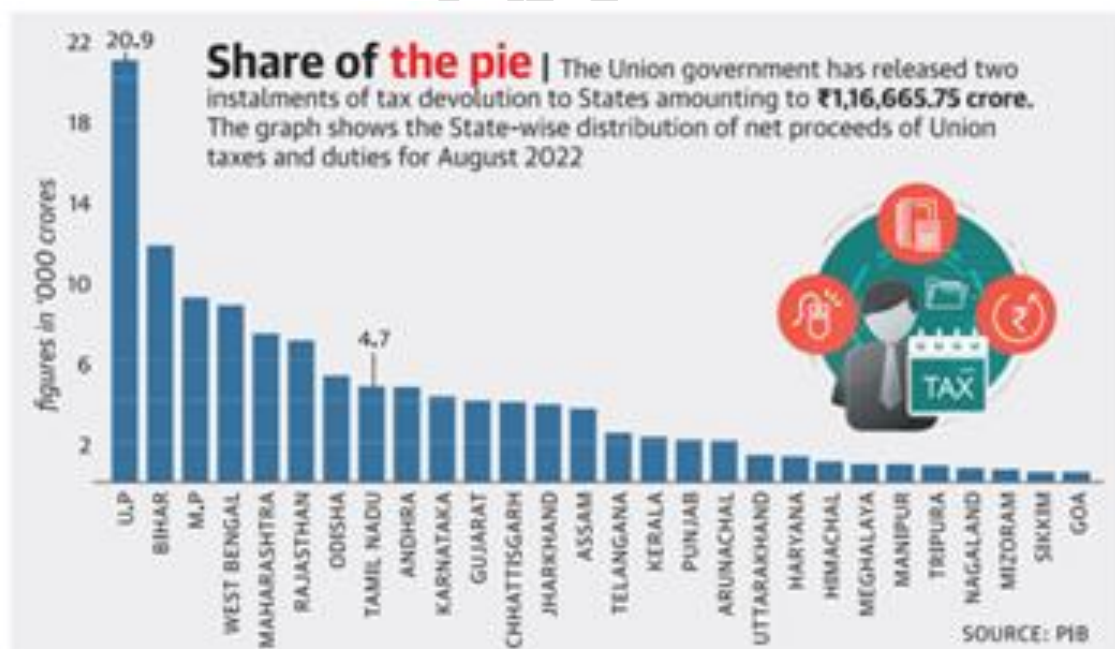
### **Borrowing by the Centre and the States**

- The Union has the authority to grant loans to states and to guarantee loans raised by them.
- The Union government can borrow either within India or abroad, using the Consolidated Fund of India as security or providing guarantees, but only within the restrictions set by Parliament.
- Similarly, a state government can borrow inside India (but not overseas) on the security of its Consolidated Fund or provide guarantees, but only within the restrictions set by that state's legislature.
- Any state can borrow money from the federal government, and the federal government can guarantee loans raised by any state.
- The Consolidated Fund of India will be charged with any amounts required for the purpose of providing such loans.
- If any part of a loan made to the state by the Centre or in respect of which the Centre has offered a guarantee is still unpaid, the state cannot obtain any loan without the agreement of the Centre.

### **Report of the 15th Finance Commission for 2021-26**

- Finance Commission is a constitutional body; it is formed by the President of India to give recommendations on centre-state financial relations.
- 15th Finance Commission headed by N. K. Singh.
- The share of states in the central taxes is recommended to be 41%.
- This is less than the 42% share recommended by the 14th Finance Commission.
- Over the 2021-26 period, the following grants will be provided from the centre's resources:
  - Revenue deficit grants: 17 states will receive grants worth Rs 2.9 lakh crore to eliminate the revenue deficit.
  - Sector-specific grants of Rs 1.3 lakh crore will be given to states for eight sectors:
    - Health
    - School Education
    - Higher Education

- Implementation of agricultural reforms
  - Maintenance of PMGSY roads
  - Judiciary
  - Statistics
  - Aspirational districts and blocks.
- A portion of these grants will be performance-linked.
  - The Finance Commission recommended state-specific grants of Rs 49,599 crore. These will be given in the areas of:
    - Social needs
    - Administrative governance and infrastructure.
    - Water and sanitation.
    - Preservation of culture and historical monuments.
    - High-cost physical infrastructure.
  - The total grants to local bodies will be Rs 4.36 lakh crore (a portion of grants to be performance-linked) including;
    - Rs 2.4 lakh crore for rural local bodies.
    - Rs 1.2 lakh crore for urban local bodies.
    - Rs 70,051 crore for health grants through local governments.



## PRADHAN MANTRI AWAS YOJANA

### In News:

The Union Cabinet has extended the Pradhan Mantri Awas Yojana (Urban) up to 31st December 2024, so that the sanctioned houses are completed.

### About Pradhan Mantri Awas Yojana:

- The Ministry of Housing and Urban Poverty Alleviation launched Pradhan Mantri Awas Yojana in 2015.
- The Programme was initiated with the objective of 'Housing for All by 2022'.
- Providing housing Facilities to rural poor and urban poor including slum dwellers
- Financial assistance is provided to eligible beneficiaries for the construction of pucca houses.
- The Centre and States share the Cost of the houses made under the scheme.
- The mission has 2 Components: Pradhan Mantri Awas Yojana (Urban) and Pradhan Mantri Awas Yojana (Rural).
- Pradhan Mantri Awas Yojana Gramin (PMAY-G) was formerly called the Indira Awas Yojana and was renamed in March 2016.
- It is targeted at promoting accessibility and affordability of housing for all of rural India with the exceptions of Delhi and Chandigarh.
- Pradhan Mantri Awas Yojana (Urban) Programme
  - In Situ Slum Redevelopment: A slum rehabilitation grant of Rs. 1 lakh per house, on average, would be admissible for all houses built for eligible slum dwellers in all such projects. Slums so redeveloped should compulsorily be denotified.
  - Affordable Housing through Credit Linked Subsidy: Under Credit Linked Subsidy, beneficiaries of Economically Weaker Section (EWS) and Low Income Group (LIG) can seek housing loans from Banks, Housing Finance Companies and other such institutions for new construction and enhancement of existing dwellings as incremental housing.
  - Affordable Rental Housing Complexes: It will be a mix of single/double bedroom Dwelling Units and a Dormitory of 4/6 beds including all common facilities which will be exclusively used for rental housing for a minimum period of 25 years.
- Aadhar Card is mandatory to take benefit of the scheme.
- Economically weaker sections and Middle-Income Groups are also eligible for financial assistance under the Missions.
- Priority is given to SCs, STs, OBSs, differently-abled persons, senior citizens, minorities, single women, transgender and other Socio-economic weaker sections of the society.

- Identifying beneficiaries eligible for assistance and their prioritisation to be done using information from the Socio-Economic and Caste Census (SECC) ensures total transparency and objectivity.
- The ownership of houses is provided in the name of female members or joint names.
- Houses made under the scheme would ensure basic facilities like salutation, tap water connection, etc.
- Under the scheme, the Government promoted Training to Rural Masons under Rural Mason Training (RMT) programme to make a pool of trained rural masons available for faster construction of quality houses.

### **Objectives of Pradhan Mantri Awas Yojana**

- To promote the empowerment of citizens, the Ownership of a house is one of the key indicators of socio-economic development.
- They are ensuring Women's empowerment through the Scheme, as the ownership of the house is provided in the name of a female member or joint ownership.
- To Promote Cooperative Federalism, Autonomy is given to States/UTs to decide the list of beneficiaries and adopt innovative methods to implement housing projects.

### **Present Status**

- The Prime Minister has said that the Government has provided pucca houses to 2.5 crore families across the country — of these, 2 crore houses are in rural areas.
- To achieve the target of “Housing for All”, the Union Government is implementing Pradhan Mantri Awas Yojana.
- It aims to assist eligible rural households with an overall target to construct 2.95 crore pucca houses with basic amenities by March 2024.

## **CENTRAL ADMINISTRATIVE TRIBUNAL**

### **In News:**

The Union minister of Personnel, Public Grievances and Pensions has stated that the Central Administrative Tribunal (CAT) has attained a disposal rate of more than 91% in five years. A higher disposal rate was achieved from 2015 to 2019; it was around 89% from 2010 to 2014. He mentioned that the Union government is committed to promoting transparency and justice for all.



## **Analysis of Background:**

### **About Tribunals:**

- The original Constitution did not contain provisions with respect to tribunals.
- The 42nd Amendment Act of 1976 added a new Part XIV-A to the Constitution. This part is entitled 'Tribunals' and consists of only two Articles;
  - Article 323 A: Dealing with administrative tribunals.
  - Article 323 B: Dealing with tribunals for other matters.
- Administrative Tribunals: Article 323 A empowers the Parliament to provide for the establishment of administrative tribunals for the adjudication of disputes relating to recruitment and conditions of service of persons appointed to public services of the Center, the states, local bodies, public corporations and other public authorities.
  - Under Article 323 A, the Parliament passed the Administrative Tribunals Act in 1985. The act authorizes the Central government to establish one Central Administrative Tribunal (CAT) and the State Administrative Tribunals (SAT).
  - The CAT exercises original jurisdiction in relation to recruitment and all service matters of public servants covered by it. Its jurisdiction extends to the all-India services, the Central civil services, civil posts under the Center and civilian employees of defence services. However, the members of the defence forces, officers and servants of the
- State Administrative Tribunals: The Administrative Tribunals Act of 1985 empowers the Central government to establish the State Administrative Tribunals (SATs) at a specific request of the concerned state governments.
- The SATs exercise original jurisdiction in relation to recruitment and all service matters of state government employees.
- Tribunals function as a parallel mechanism to the traditional court system.
- Tribunals were established for two main reasons:
  - Allowing for specialized subject knowledge in disputes on technical matters.
  - Reducing the burden on the court system.
- The Finance Act, of 2017 reorganized the Indian tribunal system to ensure uniformity in their administration by merging certain tribunals based on the similarity in their functional domain.
- The 2017 Act also empowered the central government to make Rules to provide for the qualifications, appointments, term of office, salaries and allowances, removal, and other conditions of service for chairpersons and members of these tribunals.
- The Tribunals Reforms Act 2021 abolishes nine existing appellate bodies and transfers their functions mainly to high courts.

- The 2021 Act also amends the Finance Act, of 2017, to bring certain provisions (such as qualifications, appointments, term of office, salaries and allowances of tribunal members) under the purview of the 2021 Act.
- Key points of Tribunal Reforms Act 2021
- The Act dissolved certain existing appellate bodies and transferred their functions (such as adjudication of appeals) to other existing judicial bodies.
- Provisions on the composition of selection committees and terms of office have been included in the Act.
- Qualification of members and other terms and conditions of service will be notified by the central government.
- The Chairperson and Members of the Tribunals will be appointed by the central government on the recommendation of a Search-cum-Selection Committee. The Committee will consist of:
  - The Chief Justice of India, or a Supreme Court Judge nominated by him, as the Chairperson (with casting vote),
  - 2 Secretaries nominated by the central government,
  - The sitting or outgoing Chairperson or a retired Supreme Court Judge, or a retired Chief Justice of a High Court,
  - The Secretary of the Ministry under which the Tribunal is constituted (with no voting right).
- State administrative tribunals will have separate search-cum-selection committees. These Committees will consist of:
  - The Chief Justice of the High Court of the concerned state, as the Chairman (with a casting vote),
  - The Chief Secretary of the state government and the Chairman of the Public Service Commission of the concerned state,
  - The sitting or outgoing Chairperson, or a retired High Court Judge,
  - The Secretary or Principal Secretary of the state's general administrative department (with no voting right).
  - The central government must decide on the recommendations of selection committees preferably within three months from the date of the recommendation.
- The Act provides for a 4-year term of office (subject to the upper age limit of 70 years for the Chairperson, and 67 years for members). Further, it specifies a minimum age requirement of 50 years for the appointment of a chairperson or a member

**Concerns:**

- The existence of a large number of vacancies for Members and Chairpersons and the delay caused in filling them up has resulted in a weakening of the tribunals.
- The dissolution of certain tribunals and appellate bodies and the transfer of their functions to High Courts can be criticized on the grounds that Indian courts are already overburdened with their existing caseload.

**PESA ACT****In News:**

Aam Aadmi Party (AAP) has released a six-point “guarantee” for tribals in Gujarat and announced that if they came into power then they will “strictly implement” The Panchayats (Extension to the Scheduled Areas) Act (PESA Act) in the state.

**Analysis of Background:**

- In 1996, After the PESA Act was enacted; the Union Ministry of Panchayati Raj circulated the model PESA Rules.
  - However, only 6 states have notified these Rules, including Gujarat.
- The state government of Gujarat notified the State PESA Rules in 2017.
  - However, many social activists have criticized the state government by highlighting that the Act has not been enforced in letter and spirit.
- PESA (Panchayat Extension to Scheduled Areas) Act 1996
- In many states, the Panchayati raj provisions of the 73rd amendment were not made extended to the areas inhabited by the Adivasi populations (5th Schedule of the Indian constitution).
  - PESA Act, 1996 was passed to extend the provisions of Part IX of the Indian Constitution relating to the Panchayats to the Scheduled Areas.
- Under the Act, Scheduled Areas are those areas mentioned in Article 244(1), the provisions of the 5th Schedule apply to the Scheduled Areas and Scheduled Tribes in states other than Assam, Meghalaya, Tripura, and Mizoram.
- 10 states have been notified under the 5th Schedule areas that cover (partially or fully) several districts in each of these states: Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, and Telangana.
- The Act was enacted to ensure self-governance through village assemblies (Gram Sabhas) for the people living in the Scheduled Areas.

- It recognises the rights of resident tribal communities of the Scheduled Areas, to govern themselves through their systems of self-government, and also recognises their traditional rights over natural resources.
- The idea behind this act is that local traditions of self-government should be protected while introducing modern elected bodies.
- The Act empowers Gram Sabhas to play a key role in approving development plans and controlling all social sectors. This includes:
  - Exercising control over minor (non-timber) forest resources, minor water bodies and minor minerals.
  - Managing local markets, preventing land alienation.
  - Right to mandatory consultation with gram sabha in land acquisition, resettlement and rehabilitation of displaced persons.
  - Mandatory recommendations by Gram Sabha or Panchayat at an appropriate level for prospective licenses/leases for mines and concessions for the exploitation of minor minerals.
  - Regulate sale/consumption of intoxicants and ownership of minor forest produce.
  - Prevent land alienation and restore alienated land.
  - Control over institutions and functionaries in the social sector, and local plans including Tribal sub-plans and resources.

## CABINET SECRETARY

### In News:

The Appointments Committee of the Cabinet (ACC) headed by the Prime Minister has extended the tenure of present Cabinet Secretary Rajiv Gauba for one year.

### Analysis of Background:

#### Cabinet Secretary

- The Cabinet Secretary is the top-most executive official and senior-most civil servant of the Government of India.
- The Cabinet Secretary is the ex-officio head of the Civil Services Board.
- The administrative head of the Cabinet Secretariat.
- Works under the direct charge of the Prime Minister.
- He is responsible for the administration of the Transaction and Business rules and Allocation of business rules.

- He ensures that the President, Vice President and Ministries are kept informed of the major activities of all Ministries/Departments by means of a monthly Summary of their Activities.
- Manage the major crises in the country and Coordinate activities of various Ministries in such a situation.
- Provide Secretarial Assistance:
  - Convening of the meetings of the cabinet on the orders of the Prime Minister.
  - Preparation and Circulation of the agenda.
  - Preparing a record of discussions taken.
  - Circulation of the record after obtaining the approval of the Prime Minister.
  - Watching implementation of the decisions taken by the Cabinet.
  - Custodian of the papers of the Cabinet meetings
- Acts as the chief coordinator of the central government
- Chairman of the Civil Services Board, which recommends the empanelment of officers (except officers under the Ministry of External Affairs), for the ranks of secretary, additional secretary and joint secretary.
- Chairman of the Conference of Chief Secretaries of States.
- Recommends postings of officers (except officers under the Ministry of External Affairs) of the rank of secretary and additional Secretary to the Appointments Committee of the Cabinet (ACC).
- Acts as a senior adviser to the Prime Minister.
- Assist the Council of Ministers.

## PARLIAMENTARY PRIVILEGES

### In News:

The Chairman of Rajya Sabha has stated that Members of Parliament have a wrong belief that during the session they have a privilege from action taken by the investigating agencies. He highlighted that as lawmakers, the member must respect the law and legal procedures. He mentioned that Under Article 105 of the Indian Constitution, Members of Parliament enjoy certain privileges so that they can perform their parliamentary duties without any obstruction.

### Analysis of Background:

- A Member of Parliament cannot be arrested in a civil case, 40 days before the beginning of the session or committee meeting and 40 days thereafter. This privilege is already included under section 135A of the Civil Procedure Code.

- However, in criminal matters, MPs do not enjoy any immunity from being arrested in a criminal case during the session.

### **Parliamentary Privileges:**

- They are the special rights, immunities and exemptions enjoyed by the Members of Parliament, parliamentary committees and their members.
  - These privileges do not extend to the president who is also an integral part of the Parliament.
- These privileges are necessary to secure their independence in working.
- Without these privileges;
  - The Houses cannot maintain their authority, dignity and honour.
  - The House cannot protect its members from any obstacle in the discharge of their parliamentary responsibilities.
- The Indian Constitution has also extended these privileges to the persons who are authorised to speak and take part in the Parliamentary procedures or any of its committees.
  - These include the attorney general of India and Union ministers.
- These Privileges can be classified into two broad categories:
  - Collective Privileges - Those that are collectively enjoyed by the each House of Parliament.
  - Individual Privileges - Those that are individually enjoyed by the members.
- Collective Privileges
- Parliament has the right to publish its reports, debates and proceedings and also the right to prohibit others from publishing the same.
  - The 44th Amendment Act of 1978 restored the freedom of the press to publish true reports of parliamentary proceedings without prior permission of the House.
  - But this is not applicable in the case of a secret sitting of the House.
- It can exclude strangers from its proceedings and hold secret sittings to discuss some important matters.
- It can make rules to regulate its procedure and the conduct of its business.
- It can punish members as well as outsiders for breach of its privileges.
- It has the right to receive immediate information about the arrest, detention, conviction, imprisonment and release of a member.
- The courts are prohibited to inquire into the proceedings of a House or its committees.

- No person (either a member or outsider) can be arrested, and no legal process (civil or criminal) can be served within the House without the permission of the presiding officer.

### **Individual Privileges:**

- Members of Parliament cannot be arrested during the session of Parliament and 40 days before the beginning and 40 days after the end of a session.
- This privilege is available only in civil cases and not in criminal cases or preventive detention cases.
- They have freedom of speech in Parliament. No member is liable to any proceedings in any court for anything said or any vote given by him in Parliament or its committees.
- They are exempted from jury service. They can refuse to give evidence and appear as a witness in a case pending in a court when Parliament is in session.

### **Sources of Privileges:**

- The Parliament, till now, has not made any special law to exhaustively codify all the privileges.
- At Present, all the privileges are based on 5 sources:
  - Constitutional provisions.
  - Various laws made by Parliament.
  - Rules of both the Houses.
  - Parliamentary conventions.
  - Judicial interpretations

## **FOREIGNER'S TRIBUNALS:**

### **In News:**

The High Court of Guwahati has asked the Union and the Assam state government to collectively decide on the appointment of the staff for 200 additional Foreigners' Tribunals (FT). Assam had as many as 100 Foreigners' Tribunals (FT) before the publication of the complete draft of the updated National Register of Citizens (NRCs) in 2019 August. To hear appeals of the 19.06 lakh people excluded from the published list of citizens. The Union Home Ministry decided to increase the number of FTs in Assam to 1,000 to cope with the expected litigation after rejection slips were issued by the NRC authority.

## **Analysis of Background:**

### **Foreigners Tribunals:**

- They are established under the provisions of the Foreigners Act 1946 and Foreigners (Tribunals) Order 1964.
- They are quasi-judicial bodies, their main function is to determine whether a person staying illegally is a “foreigner” or not.
- Only Foreigners’ Tribunals can declare a person as a foreigner.
- Any Person, whose name is not in the final published list of the National Register of Citizens (NRC), can represent their case in Foreigners Tribunals (FT).
- Each Foreigners Tribunal Member is appointed as per the guidelines issued by the government.

### **Related News**

- Recently the Union government introduced a new clause in the Foreigners Order, 1948, that requires foreigners to hold a valid passport or travel documents not just while entering India, but also during their entire stay in the country.
- The Government has explained that these “valid documents” would include “emergency certificate or certificate of identity or such other document” issued by the foreign country concerned.
- Exemption from holding valid travel documents to “persons belonging to minority communities in Afghanistan, Bangladesh and Pakistan, namely, Hindus, Sikhs, Buddhists, Jains, Parsis and Christians who were compelled to seek shelter in India due to religious persecution or fear of religious persecution and entered into India on or before December 31, 2014”.
- The Ministry of Home Affairs said that the exception has nothing to do with the Citizenship Amendment Act (CAA), which grants citizenship to above-mentioned communities from the three countries. The Act, passed in 2019, has not been implemented as its rules are yet to be framed.

### **Reason behind the amendment:**

- Sources in the Ministry of Home Affairs (MHA) said several foreigners have been found to be overstaying in India and claiming to have lost their documents.
- “Earlier, the Foreigners Act and Order only talked about holding a valid document while entering India. Although it is understood that one must continue to hold the document while living in India, it has been observed that some people have been violating this condition and so it has been inserted for more clarity”.



- In a genuine case of loss of documents, it is expected the foreigner would report the matter to police and contact his embassy to get temporary documents.

### **Foreigner registration in India**

- Foreigner registration is a mandatory requirement by the Government of India under which all foreign nationals (excluding overseas citizens of India) visiting India on a long term visa (more than 180 days) are required to register themselves with a Registration Officer within 14 days of arriving in India.
- Pakistani nationals visiting India are required to register within 24 hours of arrival regardless of the duration of their stay.
- Foreign children below the age of 16 are exempt from registration requirements.
- Foreign nationals must report in-person to the nearest Registration Officer in their jurisdiction.
- Persons suffering from medical issues may be exempt from appearing in-person for registration.
- Foreign nationals are issued a residential permit at the time of registration. The permit has a validity matching the period of stay specified in the visa.
- In April 2018, the Union Government launched the e-FRRO scheme which allows foreigners to register and avail visa and immigration related services online. Under the new scheme, a foreign citizen is no longer required to appear in-person at an FRRO, unless specifically required to do so.
- Foreigners order 1948
  - It provides guidelines to deal with all foreigners.
  - It empowered the government to take such steps as are necessary to prevent illegal migrants including the use of force.
  - The concept of 'burden of proof' lies with the person, and not with the authorities.
  - Empowered the government to establish tribunals which would have powers similar to those of a civil court.
- Amendments (2019) to the Foreigners (Tribunals) Order, 1964 empowered even district magistrates in all States and Union Territories to set up tribunals to decide whether a person staying illegally in India is a foreigner or not.

### **HOUSING FOR ALL MISSION**

#### **In News:**

The Union Minister of State for Housing and Urban Affairs has informed the Lok Sabha about the progress made under Pradhan Mantri Awas Yojana-Urban (PMAY-U) – 'Housing for All' Mission. The Mission was started in 2015 for giving Central assistance to States/ Union

Territories (UTs) for providing all-weather pucca houses to all eligible urban beneficiaries. According to the data released by the ministry, nearly 122.69 lakh houses have been sanctioned till 31 March 2022.

### **Analysis of Background:**

#### **Housing for All Mission:**

- It aims to assist eligible rural households with an overall target to construct 2.95 crore pucca houses with basic amenities by March 2024.
- To achieve the target of “Housing for All”, the Union Government is implementing Pradhan Mantri Awas Yojana.

#### **Pradhan Mantri Awas Yojana:**

- The Ministry of Housing and Urban Poverty Alleviation launched Pradhan Mantri Awas Yojana in 2015.
- The Programme was initiated with the objective of ‘Housing for All by 2022’.
- Providing housing Facilities to rural poor and urban poor including slum dwellers
- Financial assistance is provided to eligible beneficiaries for the construction of pucca houses.
- The Centre and States share the Cost of the houses made under the scheme.
- The mission has 2 Components: Pradhan Mantri Awas Yojana (Urban) and Pradhan Mantri Awas Yojana (Rural).
- **Pradhan Mantri Awas Yojana Gramin** (PMAY-G) was formerly called the Indira Awas Yojana and was renamed in March 2016.
- It is targeted at promoting accessibility and affordability of housing for all of rural India with the exceptions of Delhi and Chandigarh.
- **Pradhan Mantri Awas Yojana (Urban) Programme**
  - In Situ Slum Redevelopment: A slum rehabilitation grant of Rs. 1 lakh per house, on average, would be admissible for all houses built for eligible slum dwellers in all such projects. Slums so redeveloped should compulsorily be denotified.
  - Affordable Housing through Credit Linked Subsidy: Under Credit Linked Subsidy, beneficiaries of Economically Weaker Section (EWS) and Low Income Group (LIG) can seek housing loans from Banks, Housing Finance Companies and other such institutions for new construction and enhancement of existing dwellings as incremental housing.
  - Affordable Rental Housing Complexes: It will be a mix of single/double bedroom Dwelling Units and a Dormitory of 4/6 beds including all common facilities

which will be exclusively used for rental housing for a minimum period of 25 years.

- Aadhar Card is mandatory to take benefit of the scheme.
- Economically weaker sections and Middle-Income Groups are also eligible for financial assistance under the Missions.
- Priority is given to SCs, STs, OBSs, differently-abled persons, senior citizens, minorities, single women, transgender and other Socio-economic weaker sections of the society.
- Identifying beneficiaries eligible for assistance and their prioritisation to be done using information from the Socio-Economic and Caste Census (SECC) ensures total transparency and objectivity.
- The ownership of houses is provided in the name of female members or joint names.
- Houses made under the scheme would ensure basic facilities like salutation, tap water connection, etc.
- Under the scheme, the Government promoted Training to Rural Masons under Rural Mason Training (RMT) programme to make a pool of trained rural masons available for faster construction of quality houses.

#### **Objectives of Pradhan Mantri Awas Yojana;**

- To promote the empowerment of citizens, the Ownership of a house is one of the key indicators of socio-economic development.
- They are ensuring Women's empowerment through the Scheme, as the ownership of the house is provided in the name of a female member or joint ownership.
- To Promote Cooperative Federalism, Autonomy is given to States/UTs to decide the list of beneficiaries and adopt innovative methods to implement housing projects.

## **ELECTORAL BONDS**

### **In News:**

According to the State bank of India data “Donations to political parties through Electoral Bonds have crossed the Rs 10,000-crore mark since 2018”. This information was given by the State Bank of India (the only bank authorized to sell these bonds) in a reply to the RTI application.

### **Analysis of Background:**

#### **About Electrol Bonds:**

- The Electoral bonds were introduced with the Finance Bill (2017).

- The Union Government has notified the detailed guidelines about the Electoral Bonds Scheme in January 2018, with the objective to cleanse the system of political funding in the country.
- The Electoral Bond is a bearer instrument like a Promissory Note and an interest-free banking instrument.
  - A bearer instrument is a document that authorizes the holder with the right of ownership or title of the property, such as Currency, shares or bonds.
  - Unlike normally registered instruments, no record is kept about the owners of bearer instruments or the transfer of ownership.
  - Whoever physically holds the bearer document is assumed to be the owner of the property.
- Electoral bonds may be purchased by a person, who is a citizen of India or established in India.
  - An individual can buy electoral bonds either singly or jointly with other individuals.
  - The Electoral Bond does not carry the name of the payee.
- Electoral bond would be issued/purchased for any value, in multiples of Rs 1,000 from the specified branches of the State Bank of India (SBI).
  - Electoral Bonds have a validity of 15 days.
- Political parties registered under Section 29A of the Representation of the People Act, 1951 and also secured a minimum of 1% of voters polled in the last general election to the House of the People or the Legislative Assembly of the State are eligible to receive electoral bonds.
- The Electoral Bonds shall be available for purchase for 10 days each in January, April, July and October, as may be specified by the Central Government.
  - An additional period of 30 days shall be specified by the Central Government in the year of the General election to the House of People.
- Electoral Bonds can be encashed by an eligible political party only through their bank accounts with the authorised bank.
  - The bonds do not have the name of the donor or the receiving political party.
  - It only carries a unique hidden alphanumeric serial number as an in-built security feature.
- Electoral bonds protect the identity of political donors and parties receiving contributions.
  - Donors who contribute less than Rs 20,000 to political parties through the purchase of electoral bonds need not provide their identity details such as PAN, etc.

## Finance Bill (2017):

- Before the bill came into force;
  - A company donating to a political party could contribute a maximum of 7.5% of the average net profits in the last three financial years.
  - It was required to disclose the details of the contributions made to any political parties along with the name of the political parties to which such contributions were made.
- The Finance Bill (2017) introduced new provisions;
  - It removed the maximum limit set on the companies for donations to political parties, now there is no limit on companies for donating to political parties.
  - It also removed the requirement for a company to disclose the name of the political parties to which it was donating.
- The bill adds that "contributions will have to be made only through a cheque, bank draft, electronic means, or any other scheme notified by the government to make contributions to political parties."

## Arguments in favour of Electoral Bond

- It promotes transparency in funding and donation received by political parties.
- It is an important "electoral reform" toward a "cashless-digital economy".
- It is a tool to eradicate black money in political funding.

### Benefits of Electoral Bonds

**WILL BRING** substantial transparency in political donations against the present system of contributions in the election funding mechanism

**HOW MUCH** funding comes, what kind of funding it is, the source of funding and where it will be spent will be known clearly

**NON DISCLOSURE** of recipients will ensure people are free to donate to any political party of their choice

**WILL REINFORCE** the idea of moving away from a cash system towards clean money which cheque system could not achieve

**15 DAYS** between buying and selling will ensure they don't turn into a parallel economy

## Arguments against Electrol Bond

- The bonds increase the anonymity of political donations, Citizens will not be able to know who is donating how much money to which political party.
- Promoting corruption and lack of transparency in the accounts of all political parties.

- The electoral bonds scheme has opened floodgates to unlimited corporate donations to political parties and anonymous financing by Indian as well as foreign companies which is a threat to Indian democracy.

#### **Concern:**

- The Election Commission and the Reserve Bank of India objected to electoral bonds and had advised against the issuance of electoral bonds as a mode for donation to political parties.
- It alleged that almost 99% of electoral bonds purchased are of value one crore and 10 lakh denominations which shows that it is not individual citizens but large corporations which are purchasing these bonds with a view to receiving kickbacks from the government.
- The Election Commission of India filed an affidavit in 2019, saying the government's scheme for political funding has legalized anonymity.
- Many major political parties have not disclosed the amount they received through electoral bonds.
- As the bonds are sold through a public sector bank, the government would easily know who is funding which political party.

## **INDIAN ANTARCTIC BILL**

#### **In News:**

The Parliament of India has passed the Indian Antarctic Bill, in 2022. The Bill aims to extend the application of domestic laws to India's research stations in the Antarctic region. The bill prohibits Indian expedition to Antarctica without a permit or written authorisation of another party to the Antarctic Treaty.

#### **Analysis of Background:**

- The bill aims to ensure the de-militarization of the region along with getting rid of mining or illegal activities.
- It also aims that there should not be any nuclear test/explosion in the region.
- The bill is pursuant to India's accession to the Antarctic Treaty, the Protocol on Environment Protection (Madrid Protocol) to the Antarctic Treaty and the Convention on the Conservation of Antarctic Marine Living Resources.
- The Bill provides a harmonious policy and regulatory framework for India's Antarctic activities through well-established legal mechanisms and will help in efficient and elective operations of the Indian Antarctic Programme.

- It will also facilitate India's interest and proactive involvement in the management of growing Antarctic tourism and sustainable development of fisheries resources in Antarctic waters.
- It will also help in increasing the international visibility, and credibility of India in Polar governance leading to international collaboration and cooperation in scientific and logistics fields.
- The enforcement of such laws will confer Jurisdiction on the courts of India to deal with any dispute or crimes committed in parts of Antarctica.
- The Bill also proposed to set up Indian Antarctic Authority (IAA) under the Ministry of Earth Sciences, which shall be the apex decision-making authority and shall facilitate programmes and activities permitted under the Bill.

### **Present status**

- India today has two operational research stations in Antarctica named;
  - Maitri (Commissioned in 1989).
  - Bharati (Commissioned in 2012).
- India has successfully launched 40 annual scientific expeditions to Antarctica till date.
- With Himadri station in Ny-Alesund, Svalbard, Arctic, India now belongs to the elite group of nations that have multiple research stations within the Polar Regions.
- The Antarctic Treaty was signed in Washington D.C. in 1959 and was initially signed by 12 countries. India signed the Antarctic Treaty in 1983 and received consultative status in 1983.
- The Convention on the Conservation of Antarctic Marine Living Resources was signed at Canberra in 1980, for the protection and preservation of the Antarctic environment and, in particular, for the preservation and conservation of marine living resources in Antarctica.
- India signed the Protocol on Environmental Protection to the Antarctic Treaty in 1998. Antarctica lies south of 60 degrees South Latitude, which is a natural reserve, devoted to peace and science and should not become the scene or object of any international discord.

## **CREATION/ABOLITION OF DISTRICTS IN INDIA**

### **In News:**

The State cabinet of West Bengal headed by the Chief Minister has approved the creation of 7 new districts in the state. This will increase the number of districts in West Bengal from the existing 23 to 30.



### **Analysis of Background:**

- The Chief Minister stated that;
  - A new Sundarban district will be carved out of the South 24-Parganas district.
  - 2 new districts will be created out of the North 24-Parganas district.
  - A new district in Basirhat.
  - A new district will be carved out of the existing Bankura district.
  - 2 new districts will be created out of the Murshidabad district.

### **Creation of New Districts:**

- States keep creating new districts from time to time to make governance easier and to bring the government and the administration closer to the people.
- Sometimes, the decision to create a new district is influenced by local demands.
- In April 2022, Andhra Pradesh Chief Minister announced 13 new districts to fulfil his election promise.
  - He believes that the decentralisation and smaller administrative units will bring better and more transparent governance and smoother and more effective delivery of welfare.
  - The same reasons would apply to West Bengal too.
- As per Census 2011 figures, on average 4 million people live in each of 23 districts in West Bengal.
  - This is among the highest in the country.
- The Power to decide on creating or scrapping districts or changing their boundaries lies with the state governments, who can pass a law in the Assembly or simply issue an order and notify it in the gazette.
  - The Union government does play a role, however, when a change of name of a district or railway station is changed.
  - The request of the state government is sent to several central government departments to get a no-objection certificate.

### **Present Status**

- The number of districts around the country is increasing with time.
  - The 2001 Census recorded 593 districts, which increased to 640 in 2011.
  - Currently, India has more than 775 districts.
- Uttar Pradesh has the highest number of districts (75) in the country, Madhya Pradesh (52) at 2nd position.
- Goa has only 2 districts.
- The Kachchh district of Gujarat is the largest in the area.



- Mahe district of Puducherry union territory is the smallest district in the area.
- The largest district by population is Thane (Maharashtra).
- Dibrang Valley in Arunachal Pradesh is the lowest populated district of India.

## **FREEBIES CULTURE**

### **In News:**

The Supreme Court of India has said that the Parliament may not take steps to do away with “irrational freebies”, as no political party wants to take away freebies. The Supreme Court has suggested setting up a specialised body to examine the problem related to “freebies”.

### **Analysis of Background:**

- Recently the Supreme Court of India has asked the Union government to find out a way to restrain political parties from promising and distributing "irrational freebies" during election campaigns.
- A Bench led by the Chief Justice of India has raised concern over the issue as "serious" and asked the union government to control the promise of "freebies" to entice votes.
- The Election Commission of India (ECI) stated that "whether such policies are financially viable or its adverse effect on the economic health of the State is a question that has to be considered and decided by the voters of the State".
- The court said that freebies are a "serious issue" and had to be tackled at the level of the States.

### **More on Details:**

- During election time, Political parties make promises to the voters to provide free electricity/water supply, monthly allowance for the unemployed, laptops, smartphones, etc.
- These steps are justified as there has been rising inequality in our country, therefore some kind of relief to the population needs to be provided.
- It promotes socio-economic Growth: Public Distribution System, employment guarantee schemes, and support for the social sector: education and health.
- Concern
- Freebies can hurt macroeconomic stability, it distorts expenditure priorities.
- Negative impact on the public exchequer and most of the states of India do not have strong financial health.

- Against Free and Fair Election
- It would lead to the overuse of natural resources, Ex- Free water, electricity, etc.

## CENTRAL VIGILANCE COMMISSION

### In News:

The President of India has appointed Mr Suresh N. Patel as the Central Vigilance Commissioner (CVC). Mr Patel was a former managing director and chief executive officer of Andhra Bank. In April 2020, he was appointed as the vigilance commissioner. His selection was approved by a panel headed by the Prime Minister and the Leader of the Opposition (LoP).

### Analysis of Background:

#### Central Vigilance Commission (CVC)

- CVC is the main agency for preventing corruption in the Union government.
- It was established in 1964 by an executive resolution of the Central government.
- It was established on the recommendation of the Santhanam Committee on Prevention of Corruption (1962–64).
- Initially, the CVC was neither a constitutional body nor a statutory body.
  - CVC became a statutory body under Central Vigilance Commission Act, 2003.
- CVC is a multi-member body consisting of a Central Vigilance Commissioner (chairperson) and not more than two vigilance commissioners.
- They are appointed by the president by warrant under his hand and sealed on the recommendation of a three-member committee consisting of;
  - The Prime minister is the head.
  - The Union minister of home affairs.
  - The Leader of the Opposition in the Lok Sabha.
- The President can also remove the Central Vigilance Commissioner or any vigilance commissioner on the ground of proven misbehaviour or incapacity.
  - The president has to refer the matter to the Supreme Court for an enquiry.
  - If the Supreme Court, after the enquiry, upholds the cause of removal and advises so, then the president can remove him.

### Functions:

- Conduct an Inquiry or investigation into any complaint against any official wherein it is alleged that he has committed an offence under the Prevention of Corruption Act, 1988.

- Give directions to the Delhi Special Police Establishment to discharge the responsibility entrusted to it under the Delhi Special Police Establishment Act, 1946.
- The Union Government is required to consult the CVC in making rules and regulations governing the vigilance and disciplinary matters relating to the members of Central Services and All-India Services.
- The Central Vigilance Commissioner is also the Chairperson of the two Committees, on whose recommendations the Central Government appoints the Director of the Delhi Special Police Establishment and the Director of Enforcement.
- CVC Present annually to the President a report on its performance.
  - The President places this report before each House of Parliament.

#### **Jurisdiction of CVC to investigate the case against:**

- Members of All India Services serving in connection with the affairs of the Union and Group A officers of the Central Government.
- Officers of the rank of Scale V and above in the Public Sector Banks.
- Officers in Grade D and above in Reserve Bank of India, NABARD and SIDBI.
  - Managers and above in General Insurance Companies.
  - Senior Divisional Managers and above in Life Insurance Corporation.

## **MGNREGA**

### **In News:**

Recently MGNREGA workers from across the country organised a 3 days protest at the national capital's Jantar Mantar, and they claimed that they hadn't been paid for months. Millions of workers employed under the MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) have not received wages for months.

### **Analysis of Background:**

- Recently the Union government introduced the mandatory implementation of a national mobile monitoring system for the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).
- The National mobile monitoring system was initiated to capture the attendance through the mobile system at worksites with more than 20 workers.
- The new system has resulted in the delay of wage payments to workers.
  - According to some social activists, the new system was launched without addressing various technical issues.
  - Many districts are unable to process wage payments.
  - Inability to upload attendance data.

- After the implementation of the Public Financial Management System, it is necessary to release funds through a single account for the State MGNREGA, this has also complicated matters.
- Critics say that the Union government has implemented these changes unilaterally without studying the ground reality.
- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) 2005
- The MGNREGA is Indian labour law and social security programme that aims to guarantee the 'right to work'.
- It provides a legal right for 100 days of employment in every financial year to at least one member of every rural household whose adult members agree to do unskilled manual work.
- The Ministry of Rural Development is monitoring the implementation of this scheme.
- Women were guaranteed one-third of the jobs made available under the MGNREGA.
- The MGNREGA programme also helps in creating durable assets (such as roads, canals, ponds and wells).
- Work to be provided within 5 km of workers' residence and minimum wages are to be paid.
- Right to get unemployment allowance in case employment is not provided within 15 days of applying.
- MGNREGA is implemented mainly by gram panchayats. Adult members of rural households submit their details to the Gram Panchayat. The Gram Panchayat registers households after making an enquiry and issues a job card. The job card contains the details of the adult member enrolled and his /her photo
- The involvement of contractors is banned.
- The Social Audit of MGNREGA works is mandatory, which ensures accountability and transparency.

### **Constitutionality of MGNREGA**

- MGNREGA provides a 'right to work' in accordance with Article 41 that directs the State to secure for all citizens the right to work.
- It also protects the environment through sustainable rural works, which is consistent with Article 48A which directs the State to protect the environment.
- Article 21 guarantees the right to life with dignity to every citizen of India, this act promotes dignity among the rural people through an assurance of livelihood security.
- Article 16 guarantees equality of opportunity in matters of public employment and prevents the State from discriminating against anyone in matters of employment on

the grounds only of religion, race, caste, sex, descent, place of birth, place of residence or any of them.

- NREGA also follows Article 46 which requires the State to promote the interests of and work for the economic uplift of the scheduled castes and scheduled tribes and protect them from discrimination and exploitation.
- Article 40 mandates the State to organize village panchayats and award them with such powers and authority as may be necessary to enable them to function as units of self-government.

### **Significance of MGNREGA:**

- The programme is providing economic security and creates rural assets.
- It also helps in protecting the environment, reducing rural-urban migration and promoting social equity, etc.
- It focuses on the economic and social empowerment of women.
- It provides “Green” and “Decent” work.
- Works under MGNREGA help to address the climate change vulnerability and protect the farmers from such risks and conserve natural resources.

## **LOK ADALATS**

### **In News:**

National Lok Adalat has settled over 74 lakh pending and pre-litigation cases across the country. The total value of the settlement amount is nearly Rs 5,039 crore. The legal services authorities under the Chief Justice of India, who is also the executive chairman of the National Legal Services Authority (NALSA) have conducted ‘digital lok adalat’ in Maharashtra and Rajasthan.

### **Analysis of Background:**

## **LOK ADALATS**

- The Lok Adalat is a platform where the cases (or disputes) which are pending before a court or which are at the pre-litigation stage (not yet brought before a court) are compromised or settled in an agreeable manner.
- The ‘Lok Adalat’ is one of the components of the ADR (Alternative Dispute Resolution) system.
- Indian courts are overburdened with a backlog of cases and the regular courts are to decide the cases involving a lengthy, expensive and tedious procedure.
- Lok Adalat provides alternative resolutions for expeditious and inexpensive justice.

- Lok Adalat is an alternate mode of dispute settlement that has come to be accepted as a viable, economic, efficient and informal one.

#### **More on Lok Adalat:**

- The first Lok Adalat camp was organised in Gujarat in 1982. This initiative proved very successful in the settlement of disputes.
  - The institution of Lok Adalat started spreading to other parts of the country.
  - At that time, this institution was functioning as a voluntary and conciliatory agency without any statutory backing for its decisions.
- The institution of Lok Adalat has been given statutory status under the Legal Services Authorities Act, 1987.
- Key Points of the Legal Services Authorities Act, 1987
- The State Legal Services Authority or the District Legal Services Authority or the Supreme Court Legal Services Committee or the High Court Legal Services Committee or the Taluk Legal Services Committee may organise Lok Adalats at such intervals and in such areas as it thinks fit.
- Every Lok Adalat organised for an area shall consist of such a number of serving or retired judicial officers and other persons of the area as may be specified by the agency organizing such Lok Adalat.
  - Generally, a Lok Adalat consists of a judicial officer as the chairman and a lawyer (advocate) and a social worker as members.
- A Lok Adalat shall have jurisdiction to determine and to arrive at a compromise or settlement between the parties to a dispute in respect of:
  - Any case pending before any court.
  - Any matter which is falling within the jurisdiction of any court and is not brought before such court.
- The Lok Adalat can deal with various matters such as;
  - Matrimonial/Family Disputes.
  - Criminal (Compoundable Offences) cases.
  - Land Acquisition cases.
  - Labour disputes, Workmen's compensation cases.
  - Bank Recovery cases.
  - Pension cases.
  - Housing Board and Slum Clearance cases.
  - Housing Finance cases.
  - Consumer Grievance cases, Electricity matters.

- Disputes relating to Telephone Bills, Municipal matters including House Tax cases, Disputes with Cellular Companies etc.
- The Lok Adalat shall have no jurisdiction in respect of any case or matter relating to an offence not compoundable under any law.
  - The offences which are non-compoundable under any law fall outside the purview of the Lok Adalat.
- Any case pending before the court can be referred to the Lok Adalat for settlement if:
  - The parties thereof agree to settle the dispute in the Lok Adalat.
  - One of the parties thereof makes an application to the court referring the case to the Lok Adalat.
  - The court is satisfied that the matter is an appropriate one to take cognizance of by the Lok Adalat.
  - In the case of a pre-litigation dispute, the matter can be referred to the Lok Adalat for settlement by the agency organizing the Lok Adalat, on receipt of an application from any one of the parties to the dispute.
- The Lok Adalat shall have the same powers as are vested in a Civil Court under the Code of Civil Procedure (1908).
- An award of a Lok Adalat shall be deemed to be a statute of a Civil Court or an order of any other court.
- Every award made by a Lok Adalat shall be final and binding on all the parties to the dispute.
  - No appeal shall lie to any court against the award of the Lok Adalat.

#### **Significance of Lok Adalat:**

- There is no court fee and if the court fee is already paid the amount will be refunded if the dispute is settled at Lok Adalat.
- The basic features of Lok Adalat are procedural flexibility and speedy trial of disputes.
  - There is no strict application of procedural laws like the Civil Procedure Code and the Evidence Act while assessing the claim by Lok Adalat.
- The parties to the dispute can directly interact with the judge through their counsel which is not possible in regular courts of law.
- The award by the Lok Adalat is binding on the parties and it has the status of a statute of a civil court and it is non-appealable, which does not cause a delay in the settlement of disputes finally.
- Lok Adalats are a boon to the litigating public as they can get their disputes settled fast and free of cost and amicably.
- It is less expensive and less time-consuming.

- It is free from technicalities vis-a-vis conducting cases in law courts.
- Parties are free to discuss their differences of opinion without any fear of disclosure before any law courts.
- Parties have the feeling that there is no losing or winning side between them but at the same time their grievance is redressed and their relationship is restored.

## UDAN SCHEME

### In News:

UDAN (Ude Deshka Aam Nagrik) Scheme of the Union Ministry of Civil Aviation has completed 5 years. The scheme was started in 2016 with the objective to enhance aviation infrastructure and air connectivity in tier II and tier III cities.

### Analysis of Background:

- UDAN scheme has increased the regional air connectivity;
  - From 74 operational airports in 2014 to 141 by 2022.
  - 68 underserved/unserved destinations which include 58 Airports, 8 Heliports & 2 Water Aerodromes have been connected under the UDAN scheme.
  - With 425 new routes started, UDAN has provided air connectivity to more than 29 States/ UTs across the country.
- As on 4th August 2022, more than one crore passengers have availed of the benefits of this scheme.

### About UDAN Scheme:

- Ude Desh ka Aam Naagrik or UDAN is a regional airport development programme of the Union Government and also a part of the Regional Connectivity Scheme (RCS).
- The main objective is to upgrade under-serviced air routes and to promote air transport infrastructure development in all regions and states of India.
- Its goal is to make air travel affordable, boost economic development, and promote job growth.

### Key features of the UDAN Scheme

- The UDAN Scheme is a key element of the National Civil Aviation Policy (NCAP) which was released by the Ministry of Civil Aviation (India) in 2016.
- It is jointly funded by the Union government and state governments.
- Develop new airports and enhance the existing regional airports to increase the number of operational airports with regularly scheduled flights.
- The UDAN scheme will run for 10 years and can be extended thereafter.



- Concessions from the Union Government;
  - Created a Viability Gap Funding (VGF) to subsidise the airfare.
  - Concession on service tax on tickets.
- Concessions from State Governments;
  - Reduction of GST for 10 years.
  - Coordinate with oil companies to create fuelling infrastructure on airports.
  - Provide free land for the development of the airport, with multimodal (rail, road, metro, waterways, etc.) hinterland connectivity.
  - Provide free security Systems and manpower.
  - Provision of water, electricity and other utilities at a reduced rate.
  - 20% share of Viability Gap Funding; North-Eastern states, Uttrakhand, Himachal Pradesh and Union territories to provide 10% share only.
- Concessions from airport operators;
  - No landing, parking or other charges.
  - No Terminal Navigation Landing Charges.
- There is a cap of maximum fare of Rs 2,500 per hour of flight for 50% of the seats, connecting un-served and underserved regional airports, the remaining 50% of seats will be priced at market rate.
- For helicopter services, the maximum fare is also capped at Rs 2,500 for every 30-minute leg of the flight.

#### **About International Air Connectivity Scheme (IACS)**

- The Ministry of Civil Aviation has launched the International Air Connectivity Scheme (IACS) under the “International Ude Desh ka Aam Nagrik (UDAN)” initiative.
- The main objective of the scheme is to improve air connectivity between certain Indian States with designated international destinations to promote the socio-economic growth of the Indian state.
- The scheme is also supported by the State Governments.
- The State Government of Assam, Manipur and Tripura have specified routes connecting Guwahati, Imphal and Agartala with selected international destinations viz. Bangkok, Dhaka, Kathmandu, Yangon, Hanoi, Mandalay, Kunming and Chittagong.
- Development and up-gradation of airports to international standards are undertaken by concerned airport operators.

## UNMOGIP

### In News:

United Nations (UN) Secretary-General Antonio Guterres has appointed Rear Admiral Guillermo Pablo Rios of Argentina as the Head of Mission and Chief Military Observer for the United Nations Military Observer Group in India and Pakistan (UNMOGIP), the office of the UN Secretary-General has announced.

### Analysis of Background:

- Rear Admiral Rios will follow Major General Jose Eladin Alcain of Uruguay who has nearly completed his tenure. UNMOGIP emerged from UN Security Council Resolution 39 of January 1948 that set up the UN Commission for India and Pakistan (UNCIP).
- The Karachi Agreement of July 1949 firmed up the role of UN-level military observers and permitted supervision of the Ceasefire Line established in Jammu and Kashmir.
- India officially maintains that the UNMOGIP's role was "overtaken" by the Simla Agreement of 1972 that established the Line of Control or the LoC which with "minor deviations" followed the earlier Ceasefire Line.
- Pakistan, however, did not accept the Indian argument and continued to seek cooperation from the UNMOGIP.
- As a result of this divergent policies, Pakistan continues to lodge complaints with the UNMOGIP against alleged Indian ceasefire violations whereas India has not officially gone to the UNMOGIP since 1972 with complaints against Pakistan.
- In view of the difference of opinion between India and Pakistan, the UN has maintained that the UNMOGIP could be dissolved only with a decision from the UN Security Council.
- Despite the respective official positions, the military observers have at times hit the headlines.
- In the summer of 2017, Pakistan alleged that Indian side had fired upon vehicles carrying UNMOGIP officials who were travelling in the Pakistani territory.
- The then MEA Spokesperson Gopal Baglay categorically denied that charge and the UN Secretary-General's office had observed that there was no evidence that could prove Pakistan's allegation. Earlier, India had asked UNMOGIP to vacate the residential property that it occupied.
- The Ministry of External Affairs, however, explained that decision as part of "rationalizing the presence of UNMOGIP".

- The latest announcement regarding appointment of the Argentine naval figure to head the UNMOGIP however has come at a time when India and Argentina are warming up official-level dialogue.
- Argentina which fought the war over the Falklands with the United Kingdom in 1982 has urged the international community to bring the U.K. to the negotiating table so that it could regain control over the Falklands.
- India hosted the Argentine Foreign Minister Santiago Cafiero in April. Argentina's embassy here reopened its military wing in 2021 indicating at warming up of defence ties between India and Argentina.
- UNMOGIP is funded through the UN's regular budget.

## YUAN WANG 5

### In News:

Sri Lanka approved the arrival of a Chinese satellite-tracking vessel to its southern Chinese-funded Hambantota port. It was the second approval from the island nation's Ministry of Foreign Affairs, after it first cleared the visit on July 12.

In the weeks in between, India raised concerns over the ship's visit with President Ranil Wickremesinghe, and officially commented on it, while Indian media splashed headlines of a "Chinese spy ship" hovering in the Indian Ocean. Caught in a delicate diplomatic and geopolitical spot, Colombo gave its nod after "extensive consultations" with "all parties".

### Analysis of Background:

#### What is the vessel?

- Yuan Wang 5 was described by the Sri Lankan government as a "scientific research ship".
- The BRISL (Belt & Road Initiative Sri Lanka), a Colombo-based organisation studying China's ambitious connectivity project, was the first to draw attention to the visit in a Twitter post late July.
- It said that the Yuan Wang 5 will conduct "satellite control and research tracking in the northwestern part of the Indian Ocean Region" through August and September.
- Vessels of the Yuan Wang class are said to be used for tracking and supporting satellite as well as intercontinental ballistic missiles by the People's Liberation Army Strategic Support Force.

#### How have different countries reacted?

- India has expressed its concern over the Chinese vessel visit. The spokesperson of the Ministry of External Affairs commented twice on the issue.

- Addressing the weekly media conference in New Delhi, the official initially stated that India “carefully monitors any development having a bearing on its security and economic interests” and later said that they were “rejecting insinuations” that Sri Lanka was “pressured”.
- China reacted strongly after Sri Lanka, following concerns voiced by India, requested China to defer the visit of the vessel “in light of the need for further consultations”.
- Chinese Foreign Ministry spokesperson Wang Wenbin said, “I have noted relevant reports and would like to stress two points.
- First, Sri Lanka is a transportation hub in the Indian Ocean. Scientific research vessels from various countries including China have made port calls in Sri Lanka for replenishment. China always exercises freedom of the high seas in accordance with the law and fully respects coastal countries’ jurisdiction over scientific research activities in waters under their jurisdiction.
- Second, Sri Lanka is a sovereign country. It has the right to develop relations with other countries based on its development interests. To have normal cooperation is the independent choice made by our two countries. It serves the shared interests of both sides and does not target any third party.” Without directly referring to India, he added that it was “completely unjustified for certain countries to cite the so-called ‘security concerns’ to pressure Sri Lanka.”

## **NAGORNO-KARABAKH CONFLICT**

### **In News:**

The conflict between Armenia and Azerbaijan over Nagorno-Karabakh has been at the centre of three major wars and multiple clashes for decades. The recent flare-up began on August 3 after Azerbaijan claimed that it had captured the territory in Karabakh in a retaliatory campaign, after an Armenian attack killed one Azerbaijani soldier.

### **Analysis of Background:**

- The Nagorno-Karabakh conflict remains stalemated despite the several ceasefire agreements reached in the past.
- Both Baku and Yerevan claim absolute historic ownership of the region which is located within the boundaries of Azerbaijan but is populated largely by ethnic Armenians.
- Following Azerbaijan’s announcement of capturing Karabakh, the military in Nagorno-Karabakh disputed the claim and accused Azerbaijan of killing two soldiers, declaring a “partial mobilisation” in response to the clash.

- Armenia has called on the international community to help stop Azerbaijan's "aggressive actions" claiming that it continues its "policy of terror" against the population of Nagorno-Karabakh.
- Russia has also accused Azerbaijan of breaking the ceasefire agreement of 2020 and claimed that it was "taking measures to stabilise the situation" with Armenian and Azerbaijani representatives.

### **Recent Issue:**

Russia brokered a new peace deal between Armenia and Azerbaijan who have been in a military conflict for over six weeks over the disputed region of Nagorno-Karabakh in the South Caucasus. Over 1200 have died and thousands displaced.

### **What Is The Deal?**

- Both sides will now maintain positions in the areas that they currently hold, which will mean a significant gain for Azerbaijan as it has reclaimed over 15-20 per cent of its lost territory during the recent conflict.
- All military operations are suspended, Russian peacekeepers will be deployed along the line of contact in Nagorno-Karabakh and along the Lachin corridor that connects the region to Armenia.
- These Russian peacekeepers with a force of roughly 2,000 will be deployed in the area for a period of five years.
- Refugees and internally displaced persons will return to the region and the adjacent territories and the two sides will also exchange prisoners of wars and bodies.
- A new corridor will be opened from Nakhchivan to Azerbaijan, which will be under Russian control.

### **Russia's Role:**

- Russia's role in the conflict has been somewhat opaque since it supplies arms to both countries and is in a military alliance with Armenia called the Collective Security Treaty Organisation.
- Russia "has always taken a balanced position" on the matter and has "traditionally good relations" with both countries.

### **Issue:**

- The genesis of the conflict is in the flawed creation of an Armenian Christian majority autonomous region, Nagorno-Karabakh, on the territory of a Muslim majority Azerbaijan.

- While the area remains in Azerbaijan, it is today governed by separatist Armenians who have declared it a republic called the “Nagorno-Karabakh Autonomous Oblast”. While the Armenian government does not recognise Nagorno-Karabakh as independent, it supports the region politically and militarily.
- In July 1921, when the South Caucasus was being incorporated into the evolving USSR, Nagorno-Karabakh’s repeated petitions to Moscow for its merger with Armenia were turned down.
- When the Soviet Union began to collapse in the late 1980s, Armenia’s regional parliament voted for the region’s transfer to Armenia; the Soviet authorities turned down the demand.
- Years of clashes followed between Azerbaijan forces and Armenian separatists.
- In 1994, Russia brokered a ceasefire, by which time ethnic Armenians had taken control of the region.
- Even after the 1994 peace deal, the region has been marked by regular exchanges of fire.
- In 2016, it saw a Four-Day War before Russia mediated peace. OSCE Minsk Group, chaired by France, Russia and the US, has tried to get the two countries to reach a peace agreement for several years.
- the current clashes were possibly a fallout of Azerbaijan’s bid to reclaim some territories occupied by separatist Armenians.
- Since the conflict started in September, multiple ceasefire agreements have been signed, but none so far have been successful.



### Analysis:

- Prima facie, the conflict is between two countries and is territorial in nature. However, several regional/ global players like Russia, USA , Europe, Turkey and Iran are also involved to secure their strategic, security and economic interests in the region.

- India doesn't have a publicly articulated policy for South Caucasus (unlike Neighbourhood First, Act East /Central Asia Connect).
- There is visible asymmetry in India's relations with Armenia, Azerbaijan.
- Armenia is the only country in the region with which it has a friendship and cooperation Treaty. India has received three heads of states from Armenia, but none from Azerbaijan. Armenia extends its unequivocal support to India on Kashmir issue whereas Azerbaijan not only supports but also promotes Pakistan's narrative on this issue.
- The levels of India's trade or investment with Armenia are, however, very low. In the case of Azerbaijan, GAIL and ONGC/OVL have made relatively small investments. Azerbaijan falls on the International North South Transport Corridor route.
- In the initial stages of the conflict, India endorsed the concept of respect for territorial integrity. But now, India has adopted a balanced and neutral stance and made a politically correct statement in which it has expressed its concern, called for restraint and immediate cessation of hostilities and resolution of the conflict peacefully through diplomatic negotiations.

## IRAN NUCLEAR DEAL

### In News:

A European Union proposal to revive the 2015 Iran nuclear deal "can be acceptable if it provides assurances" on Tehran's key demands, the state news agency IRNA said.

### Analysis of Background:

- The EU said it had put forward a "final" text following four days of indirect talks between U.S. and Iranian officials in Vienna.
- No more changes could be made to the text, which has been under negotiation for 15 months. He said he expected a final decision from the parties within a "very, very few weeks."
- IRNA quoted the unidentified Iranian diplomat as saying Tehran was reviewing the proposal.
- The Islamic Republic has sought to obtain guarantees that no future U.S. President would renege on the deal if it were revived, as former President Donald Trump did in 2018 and restored harsh U.S. sanctions on Iran.
- However, President Joe Biden cannot provide such ironclad assurances because the deal is a political understanding rather than a legally binding treaty.
- Background:

- Diplomats from Iran and world powers are seeking a deal to revive the Tehran's 2015 nuclear accord.
- The United States has participated indirectly in the talks because it withdrew from the accord in 2018 under then President Donald Trump.
- The accord, formally known as the Joint Comprehensive Plan of Action, granted Iran sanctions relief in exchange for curbs on its nuclear program.
- The 2015 JCPOA agreement:
  - It sought to cut Iran off a possible path to a nuclear bomb in return for lifting of economic sanctions.
  - Iran agreed to cut its stockpile of enriched uranium by 98% to 300 kg and keep them at a low purity level of 3.67%. In return, the Obama administration lifted sanctions.
  - Restrictions were introduced on the number of centrifuges it could keep and Iran agreed to open all its facilities to the inspection of the International Atomic Energy Agency (IAEA).

#### **India-Iran:**

- Trade with central Asia: Iran-India relations are of vital importance for India because of Iran's Chabahar port, which plays a fundamental role in India's trade connectivity with Afghanistan, Central Asia, Eurasia and Europe.
- Energy security: India being the second largest importer of crude oil from Iran has begun to effectuate a plan to ensure that there is no shortage in supply by increasing imports from other countries.
- Sanction impact: The immediate impact of the sanctions on India was that it can no longer use US dollars for transactions with Iran.
- Investment by Indian companies in Iran's oil and gas development projects and pipeline projects, not permitted to open new US bank accounts and facing restrictions on loans, licences and Ex-Im credit.
- In December 2018, India and Iran agreed to revive its 2012 rupee-rial payment mechanism to receive payments in Indian rupee, where half of the payments would be used to import products from India.
- Impacts of Iran's sanctions on India:
  - Energy security: Cutting down crude imports from Iran will impair India's energy-security needs affecting inflation and slow down economic growth.
  - China's growing presence: In the absence of Indian infrastructural development projects in Iran, the vacuum created is likely to be filled by China amid fast-changing geopolitics.



- Lack of clear policy: India's policy towards Iran and developments in the Middle East has been largely reactive.
- Create a balance between U.S. and Iran: In the backdrop of tensions between US and Iran, India has had to re-adjust its own relations with Iran while maintaining strategic ties with US and Israel.

## START TREATY

### In News:

Russia told the United States it would not allow its weapons to be inspected under the START nuclear arms control treaty for the time being because of travel restrictions imposed by Washington and its allies.

### Analysis of Background:

- The New START Treaty, which came into force in 2011, caps the number of strategic nuclear warheads that the United States and Russia can deploy, and the deployment of land- and submarine-based missiles and bombers to deliver them.
- S. President Joe Biden said that his administration was ready to "expeditiously" negotiate a framework to replace New START, which is due to expire in 2026, if Moscow demonstrated its willingness to resume work on nuclear arms control.
- But Russia's mission to the United Nations said Washington had withdrawn from separate talks with Moscow on strategic stability over the Ukraine conflict, and needed to decide what it wanted.

### The Treaty:

- It is a treaty between the United States of America and the Russian Federation on measures for the further reduction and limitation of strategic offensive arms.
- It came into force on 5th February, 2011.
- New START has replaced the 1991 START I treaty, which expired in December 2009, and superseded the 2002 Strategic Offensive Reductions Treaty (SORT), which terminated when New START entered into force.
- The START Framework of 1991 (at the end of the Cold War) limited both sides to 1,600 strategic delivery vehicles and 6,000 warheads.
- The May 2002 Strategic Offensive Reductions Treaty (SORT), also known as the Moscow Treaty, committed the United States and Russia to reduce their deployed strategic nuclear forces to 1,700-2,200 warheads apiece.

- It continues the bipartisan process of verifiably reducing the USA and Russian strategic nuclear arsenals by limiting both sides to 700 strategic launchers and 1,550 operational warheads.
- It was to lapse in February 2021, but after receiving renewal approval from USA and Russia, will be extended for a five-year period.

## INDIA TAIWAN RELATIONS

### In News:

As US House Speaker Nancy Pelosi arrived in Taiwan, upsetting China, India was keenly watching the developments, although it has not yet commented on it.

### Analysis of Background:

- India does not have formal diplomatic ties with Taiwan yet, as it follows the One-China policy.
- However, during then Chinese premier Wen Jiabao's visit to India in December 2010, India did not mention support for the One-China policy in the joint communique.
- In 2014, when Prime Minister Narendra Modi came to power, he invited Taiwan's Ambassador Chung-Kwang Tien, along with Lobsang Sangay, president of the Central Tibetan Administration to his swearing-in.
- While following the One-China policy, India has an office in Taipei for diplomatic functions — India-Taipei Association (ITA) is headed by a senior diplomat.
- Taiwan has the Taipei Economic and Cultural Center (TECC) in New Delhi. Both were established in 1995.
- Their ties focus on commerce, culture and education.
- Now in their third decade, these have been deliberately kept low-profile, owing to China's sensitivities. For example, parliamentary delegation visits and legislature-level dialogues have stopped since 2017, around the time the India-China border standoff happened in Doklam.
- But, in recent years, India has tried to play up its relationship with Taiwan, as its ties with China have been strained. In 2020, after the Galwan clashes, New Delhi handpicked diplomat Gourangalal Das — then joint secretary (Americas) in the Ministry of External Affairs — to become its envoy in Taipei.
- On May 20 that year, the BJP asked two of its MPs, Meenakshi Lekhi and Rahul Kaswan, to attend the swearing-in ceremony of Taiwan President Tsai Ing-wen through virtual mode.

- In August 2020, condoling the death of former Taiwan President Lee Teng-hui, India described him as “Mr Democracy” — again perceived as a message to Beijing. New Delhi’s mission is otherwise extremely careful not to issue politically-loaded statements on Taiwan.
- Taiwan’s current President Tsai Ing-wen is considered Lee’s protege.
- Any significant development in India-Taiwan relations runs the risk of meeting with a likely stern reaction from Beijing. This explains India’s steady, albeit slow, outreach to Taiwan.
- Given that India-China relations are not likely to witness a return to normalcy in the near future, India should consider adopting a bold, comprehensive and long-term approach to engage Taiwan.
- While there are compelling reasons for India and Taiwan to look towards each other, much of the relationship has been episodic, characterised by momentary highs. The relations have been suffering from divergent approaches, unrealistic expectations, and the resultant missed opportunities.
- The Tsai government is keen on expanding areas of cooperation with India as it is one of the priority countries for Taiwan’s New Southbound Policy.
- So far, it’s been largely an economic and people-to-people relationship. Now, amid the tension with China, New Delhi is paying attention to the need to advance India-Taiwan ties.

#### **Recent tussle:**

- Tensions between China and Taiwan have escalated since October 1, when China observes its National Day to mark the birth of the People’s Republic of China.
- Coinciding with the 72nd anniversary celebrations, China flew over 100 fighter jets into Taiwan’s air defence identification zone, jangling nerves in Taiwan and setting off alarm around the world that it was prepping to take over the island by force.
- Background:
- Although largely unrecognised by other countries as such, self-ruled Taiwan sees itself as no less than an independent nation, and its leaders, including the fiercely pro-independence President Tsai Ing-wen, have vowed to defend its sovereignty against the Chinese goal of “reunification”.
- But Taiwan is entirely dependent on the US for its defence against possible Chinese aggression — and that is why every spike in military tensions between China and Taiwan injects more hostility in the already strained relationship between Washington and Beijing.

- Taiwan, earlier known as Formosa, a tiny island off the east coast of China, is where Chinese republicans of the Kuomintang government retreated after the 1949 victory of the communists — and it has since continued as the Republic of China (RoC).
- The island is located in the East China Sea, to the northeast of Hong Kong, north of the Philippines and south of South Korea, and southwest of Japan.
- What happens in and around Taiwan is of deep concern to all of East Asia.
- Taiwan observes October 10 — “double 10” — as its national day; it was on this day in 1911 that sections of the Manchu army rose in rebellion, leading ultimately to the overthrow of the Qing dynasty and the end of 4,000 years of the monarchy.
- The RoC was declared on December 29, 1911, and it found its feet in the 1920s under the leadership of Dr Sun Yat-sen, founder of the Kuomintang (KMT) Party.
- Sun was succeeded by General Chiang Kai-shek, whose actions against the Chinese communists, who were part of an alliance with the KMT, triggered the civil war that ended in victory for the communists and retreat of Chiang and the KMT to Taiwan.
- Since its founding in 1949, the PRC has believed that Taiwan must be reunified with the mainland, while the RoC has held out as an “independent” country.
- The RoC became the non-communist frontier against China during the Cold War, and was the only ‘China’ recognised at the UN until 1971. That was when the US inaugurated ties with China through the secret diplomacy of Henry Kissinger, national security adviser to President Richard Nixon.
- The US backs Taiwan’s independence, maintains ties with Taipei, and sells weapons to it — but officially subscribes to PRC’s “One China Policy”, which means there is only one legitimate Chinese government. Just 15, mostly very small, countries recognise Taiwan.
- Starting from the 1990s, and despite the missile crisis, relations between the PRC and RoC improved, and trade ties were established. As the British prepared to exit Hong Kong in 1999, the “One China, Two Systems” solution was offered to Taiwan as well, but it was rejected by the Taiwanese.
- In 2000, Taiwan got its first non-KMT government, when the Taiwanese nationalist Democratic Progressive Party (DPP) won the presidency.
- In 2004, China started drafting an anti-secession law aimed at Taiwan; trade and connectivity, however, continued to improve.
- The 2016 election of President Tsai marked the onset of a sharp pro-independence phase in Taiwan, and the current tensions with China coincided with her re-election in 2020.
- Taiwan now has massive economic interests, including investments in China, and pro-independence sections worry that this might come in the way of their goals. Inversely,

the pro-reunification sections of the polity, as well as China, hope that economic dependence and increasing people-to-people contacts will wear out the pro-independence lobbies.

### **Challenge for the US:**

- As tensions rise, the world is watching the US, whose status as the world's pre-eminent power has been dented by the messy exit from Afghanistan.
- In East and Southeast Asia, several countries including Japan, South Korea, and the Philippines, which are sheltered under the protective umbrella of the US, are reading the tea leaves.
- President Joe Biden has so far walked a thin line between pledging support for Taiwan, and keeping the lid on tensions with Beijing.
- China and US had agreed to abide by the "Taiwan Agreement", under which US support for the "One China Policy" is premised on Beijing not invading Taiwan.
- The AUKUS pact among the US, UK, and Australia, under which Australia will be supplied with nuclear submarines, has imparted a new dimension to the security dynamics of the Indo-Pacific. Taiwan has welcomed the pact, while China has denounced it as seriously undermining regional peace.

### **Implications for India:**

- With India facing its own problems with China at the LAC, there have been suggestions that it should review its One China Policy — it has in any case long stopped reiterating this officially — and use not just the Tibet card, but also develop more robust relations with Taiwan to send a message to Beijing.
- India and Taiwan currently maintain "trade and cultural exchange" offices in each other's capitals.
- In May 2020, the swearing-in of Tsai was attended virtually by MPs.
- In 2016, New Delhi had dropped plans to send two representatives for Tsai's first inaugural at the last minute.
- Bloomberg has reported that talks with Taipei are ongoing to bring a \$7.5-billion semiconductor or chip manufacturing plant to India.

## Ex VINBAX 2022

### In News:

3rd edition of Vietnam-India Bilateral Army exercise to begin at Chandimandir

### Analysis of Background:

- The exercise is a sequel to a previously conducted bilateral exercise in Vietnam in 2019 and a major milestone in strengthening the bilateral relations between India and Vietnam.
- India and Vietnam share a Comprehensive Strategic Partnership and defence cooperation is a key pillar of this partnership.
- Vietnam is an important partner in India's Act East policy and the Indo-Pacific vision.
- The theme of Ex VINBAX - 2022 is the employment and deployment of an Engineer Company and a Medical Team as part of the United Nations Contingent for Peace Keeping Operations.
- India has a rich legacy of deployment of troops in United Nations missions and has some of the best capacities to impart United Nations peace operations training incorporating best practices and hands-on training to prospective United Nations peacekeepers at tactical, operational and strategic levels.

## INDIA MALDIVES RELATIONS

### In News:

Maldives President Ibrahim 'Ibu' Solih arrived in Delhi for a bilateral visit, amid rows within his government over ties with India, the Yoga Day attack, and a bitter row with Maldivian Speaker, former President and party colleague Mohammad Nasheed.

### Analysis of Background:

- He will meet with Prime Minister Narendra Modi for bilateral talks, discuss strategic ties, and the status of infrastructure agreements between them, and sign a number of MoUs (Memorandum of Understanding).
- Solih will become the first visiting head of state to meet President Droupadi Murmu.
- The infrastructure projects include the Greater Male Connectivity Project of bridges connecting the capital city to neighbouring islands, to be built by Indian company Afcon with the help of a \$400-million Line of Credit and a \$100-million grant from India, along with other projects under India's \$1.4-billion assistance announced during Mr. Solih's last visit to India in December 2018.

- However, in contrast to the last visit, which came right after his Maldivian Democratic Party (MDP) won a landslide verdict, Mr. Solih's visit to Delhi comes amid a number of controversies involving a tricky balance between his erstwhile friend Mr. Nasheed, as well the religious extremist parties in his ruling coalition.

### **India-Maldives bilateral Relations:**

- India and Maldives are neighbors as they share a maritime border. Relations have been friendly and close in strategic, economic and military cooperation. India continues to contribute to maintaining security on the island nation.

### **Historical relations:**

- Both nations' were Britain colonies.
- India was among the first to recognise Maldives after its independence in 1965 and to establish diplomatic relations with the country. India established its mission at Malé in 1972.
- India and Maldives share ethnic, linguistic, cultural, religious and commercial links steeped in antiquity and enjoy cordial and multi-dimensional relations.

### **Political relations:**

- India and Maldives have consistently supported each other in multilateral fora such as the UN, the Commonwealth, the NAM and the SAARC.
- High connectivity: High People-to-People contacts, as Air India operates daily flights to Malé from Thiruvananthapuram, Bangalore and Chennai.
- Tourism: The proximity of location and improvements in air connectivity in recent years has led to a very substantial increase in the number of Indians visiting Maldives for tourism (around 33,000) and business.
- Soft diplomacy: India is a preferred destination for Maldivian for education, medical treatment, recreation and business.
- Diaspora: Indians are the second largest expatriate community in the Maldives.

### **Why Maldives matters to India?**

- Strategic location: Maldives holds strategic importance for India under the Modi government's 'Neighborhood First' policy due to its location in the Indian Ocean.
- The Eight Degree Channel is one of the major maritime lanes of the world.
- Stability, maturity and democratic system in the Maldives can ensure peace and security in the Indian Ocean.

## **Major challenges:**

### **Chinese influence:**

- India has been quite apprehensive of the growing Chinese influence in Maldives even as it continues to give utmost priority to the island nation.
- There have been growing concerns regarding China's role in the Maldivian economy through so-called "debt-trap diplomacy."
- Maldives incurred a debt of about \$1.4 billion owing to loans from China to finance several of its infrastructure projects.
- Maldives and China had also entered into a free trade agreement.
- India's position in Male crisis:
- During the pro-Beijing regime of their former President Abdulla Yameen, ties between the nations got strained. In fact, there came a point in 2018 when India even contemplated a military intervention.

### **Dhruv controversy:**

- India gave two Dhruv Advanced Light Helicopters (ALH) to the Maldives in 2010 and 2015 both of which were to be used for ocean search-and-rescue operations, maritime weather surveillance and for airlifting patients between islands.
- However, some people in the PPM stirred up a controversy by saying that the helicopters marked the start of military presence in the country.
- The Maldives government requested India to take back the helicopters in 2016, but India refused to do

### **The Naval Base controversy**

- The Uthuru Thilafalhu is a strategically located atoll near the capital Malé and was called the UTF Harbour project.
- Also, in 2016, an action plan was signed by both the governments for defence cooperation to enhance "shared strategic and security interests of the two countries in the Indian Ocean region".
- However, after the Solih government took over, there was speculation that the UTF project would be turned into an Indian naval base.

### **Measures taken so far:**

- After coming to power for the second time in May last year, Prime Minister Modi's first international destination was Maldives. He was also the only head of state to attend Maldives President Ibrahim Mohamed Solih's swearing-in ceremony in November 2018, when he came to power ousting Yameen.
- India has also offered a \$1.4-billion development assistance package to Maldives, which is being utilised in several projects.



- 30 years ago, in 1988, an intervention by the Indian armed forces - codenamed 'Operation Cactus' - trounced an attempted coup on the island nation. On November 3, 1988, when mercenaries attacked the Maldives, India was the first to respond.
- In 2004, when the tsunami hit Maldives, Indian naval ships were dispatched to assist rescue operation.
- During the Male water crisis. Within four hours Indian Navy and Air Force vessels delivered water.

## INDIA BHUTAN RELATIONS

### In News:

The Chief of the Army Staff, General Manoj Pande, has met Bhutanese King Jigme Khesar Namgyel Wangchuck and other top civil and military leaders of Bhutan, with a focus on further boosting strategic ties.

### Analysis of Background:

- Pande's visit is in the backdrop of growing concerns in India over China's relentless attempts to expand military infrastructure around Bhutanese territory on the Doklam plateau.
- Days earlier, new satellite images emerged showing China constructing a village east of the plateau on the Bhutanese side, a region that is considered important for India's strategic interest.
- Regional defence and security challenges, Chinese activities on the plateau and adjoining areas, and ways to further enhance bilateral defence cooperation figured in his talks in Thimphu, said people familiar with his engagements.
- The Army chief's visit to Bhutan coincided with the decision of India to authorise the export of 5,000 tonnes of wheat and 10,000 tonnes of sugar to Bhutan, as per Thimphu's requirements.

### Background Relation:

- India and Bhutan share unique and exemplary bilateral relations, which are based on mutual trust, goodwill and understanding. Formal diplomatic relations between India and Bhutan were established in 1968.
- The basic framework of India-Bhutan relations is the Treaty of Friendship and Cooperation signed in 1949 between the two countries, which was renewed in February 2007.

- The bilateral ties have been advanced by regular high-level exchanges between the two countries.
- **Trade and Economic Ties:**
  - India is Bhutan's largest trading partner.
  - In 2020, bilateral trade accounted for 82.6% of Bhutan's total trade.
  - Imports from India accounting for more than 77.1% of Bhutan's total imports.
  - Bhutan's exports to India constituted 90.2 % of its total exports.
  - The revised Bilateral Agreement on Trade, Commerce and Transit between India and Bhutan came into effect in 2017, and would be valid for ten years.
- In line with our 'Neighbourhood First Policy', new market access has been opened for five agri-commodities from Bhutan to India (Areca nut, Mandarin, Apple, Potato, and Ginger), and three commodities from India to Bhutan (Tomato, Onion, and Okra).
- **Development Partnership:**
  - India has been extending economic assistance to Bhutan's socio-economic development since the early 1960s when Bhutan launched its Five Year Plans.
  - India continues to be the principal development partner of Bhutan.
  - For the 12th Five Year Plan, India's contribution of Rs. 4500 cr. will constitute 73% of Bhutan's total external grant component.
  - At present over 82 large and intermediate projects and 524 Small Development Projects/HICDPs are at various stages of implementation in Bhutan.
- **Hydropower Cooperation:**
  - The ongoing cooperation between India and Bhutan in the hydropower sector is covered under the 2006 bilateral agreement for cooperation and its Protocol signed in 2009.
  - Four hydro-electric projects (HEPs) totaling 2136 MW are already operational in Bhutan and are supplying electricity to India.
  - The 720 MW Mangdechhu, 1200 MW Punatsangchhu-I, 1020 MW Punatsangchhu-II in Inter-Governmental mode are under various stages of implementation.
  - The Concession Agreement for the first Joint Venture Hydro Electric Power Project, 600 MW Kholongchhu, was signed in 2020
- **Educational, Cultural Cooperation and People-to-People Exchanges:**
  - Over 950 scholarships are being provided annually by Gol for Bhutanese students to study in India in a wide range of disciplines including medicine, engineering, etc.
  - It is estimated that approximately 4,000 Bhutanese are studying in undergraduate courses in Indian Universities on self-finance basis.

- Under the ITEC program, about 300 slots have been utilized annually by Bhutan for upgrading administrative and technical skills of government officials and private sector employees in Bhutan.
- Cultural and Buddhist Links: A number of Bhutanese pilgrims travel to Bodh Gaya, Rajgir, Nalanda, Sikkim, Udayagiri, and other Buddhist sites in India.
- **New Areas of Cooperation:**
  - Apart from hydro-power cooperation and development partnership has moved into new and emerging areas with full interoperability of the flagship digital project RuPay, which has been successfully completed.
  - Bhutan became the second country to launch the BHIM app, further deepening the financial linkages between our two countries.
  - Space cooperation has continued with the two countries collaborating on the development of a small satellite for Bhutan.
  - COVID-19 Assistance: In line with India-Bhutan unique and special relations, Gol ensured continuous supply of trade and essential items to Bhutan, despite COVID-19 related lock-downs.
- Indian Community: About 60,000 Indian nationals live in Bhutan, employed mostly in the hydro-electric power construction and road industry.
- Multilateral Partnership: Both India and Bhutan are founding members of SAARC that deals with economic, social and cultural development of South Asian Region. Both of them also share other multilateral forums such as BBIN, BIMSTEC etc.
- Bhutan's Significance to India:
  - Bhutan shares border with four Indian States: Assam, Arunachal Pradesh, West Bengal and Sikkim.
  - Nestled in the Himalayas, Bhutan serves as a buffer between India and China.
  - Security of Bhutan's present borders especially its western border is very important for India.
  - Bhutan provides a market for Indian commodities and is a destination for Indian investment.
  - Also for India, Bhutan is a rich source of hydropower.
  - A politically stable Bhutan is important to India. An unstable and restive Bhutan can provide a safe haven to anti-India activities and anti-India militant groups.

### **Challenges:**

- There have been instances when India has meddled in Bhutan's internal affairs. This has led to negative perception of India in the minds of Bhutanese.

- There is a growing feeling in Bhutan that India's development of Bhutan's hydropower production is driven by self-interest as it is getting Bhutan's surplus power at relatively cheap rates.
- From internal security perspective, illicit establishment of camps by militant outfits in the dense jungles of south-east Bhutan is a cause of concern for both the nations.
- China's continuous claims to important border areas such as Chumbi valley and Doklam and its continuous efforts for establishing strong diplomatic and economic relations with Bhutan have been continuous source of concern for India.

## TOPIC: SOCIETY / SOCIAL ISSUES

### SPECIAL MARRIAGE ACT, 1954

#### In News:

Recently, the Supreme Court of India dismissed a writ petition challenging provisions of the Special Marriage Act (SMA), 1954 that requires couples to publicize their intention to marry by giving public notice 30 days after their marriage. Petitioner lawyers said that they were would adopt an alternative approach through Public Interest Litigation (PIL).

#### Analysis of Background:

#### Arguments by the Petitioner:

- According to the petitioner, these provisions violate the right to privacy guaranteed under Article 21 of the Indian Constitution because the act instructs couples to give 30 days of public notice before their marriage.
  - The provisions contradict Article 14 and Article 15 of the Indian Constitution.
  - Article 14 provides for equality before the law or equal protection of the laws within the territory of India.
- It states: "The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India."
  - Article 15 prohibits discrimination on grounds of religion, race, caste, sex or place of birth
- The State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, and place of birth or any of them.

#### Special Marriage Act (SMA), 1954

- The original Special Marriage Act was enacted in 1872, following a campaign launched in 1860 by Brahma Samaj for simpler marriage ceremonies.

- Its requirement of renouncing one's religion was not consistent with modern ideas of liberalism, individualism and autonomy of the individual.
- Therefore the 1954 law replaced the 1872 Act, and the requirement to renounce one's religion was removed.
- The law was the first step toward a Uniform Civil Code. The objective was that if we want a liberal, modern, secular and progressive law, we first start the experiment voluntarily.
  - Therefore, those going for an inter-faith marriage could register under the SMA.
  - Once your marriage is registered under SMA, your religion's laws won't apply.
- The provision under the law requires couples getting married to give notice to the Marriage Officer 30 days before the date of marriage.
  - The notice can be inspected by "any person and anyone can object to the marriage.

#### **Concern:**

- The Special Marriage Act (SMA), 1954, was enacted to help inter-faith couples. But, the provisions like the need to give prior notice, and inviting 'objections' goes against its original objective and also open the doors to violent moral policing by vigilante groups.
- The SMA did not achieve the kind of success it was intended to achieve; very few marriages get registered under the SMA demonstrates that society is not yet ready to accept the inter-faith marriage.
- The provisions of public notices under the act have been used by anti-social elements to harass couples getting married.

### **MISSION VATSALYA SCHEME**

#### **In News:**

The Union Minister of Women and Child Development informed the Lok Sabha about the steps taken under 'Mission Vatsalya' to ensure women's empowerment.

#### **Analysis of Background:**

- The Union Ministry of Women and Child Development is implementing "Mission Vatsalya" for the welfare and rehabilitation of children.
- It is a centrally Sponsored Scheme.
- For the effective implementation of various schemes and programmes, all major schemes under the Ministry of Women and Child Development, have been classified under 3 umbrella schemes;
  - a. Mission Poshan 2.0
  - b. Mission Vatsalya
  - c. Mission Shakti

## **Mission POSHAN 2.0**

- It is an Integrated Nutrition Support Programme.
- It aims to address the challenges of malnutrition in children, adolescent girls, pregnant women and lactating mothers.
- The objective is to optimize the quality and delivery of the Supplementary Nutrition Program.
- It also focuses on Maternal Nutrition, Infant and Young Child Feeding Norms, Wellness through AYUSH, etc.
- The Mission will integrate several key strategies to fulfil its objectives;
  1. Corrective strategies
  2. Nutrition Awareness strategies
  3. Communication strategies and Creation of green eco-systems.
- Digital infrastructure under the “Poshan Tracker” will strengthen and bring about transparency in nutrition delivery support systems.
- Schemes under Mission POSHAN 2.0
  - ICDS-Anganwadi Services
  - Poshan Abhiyan
  - Scheme for Adolescent Girls
  - National Crèche Scheme

## **Mission Vatsalya**

- The objective of Mission Vatsalya is to ensure a healthy and happy childhood for every child in India.
- Focus under Mission Vatsalya;
  - Service delivery structures
  - Institutional care/services
  - Non-institutional community-based care
  - Emergency outreach services
  - Training and capacity building
  - Child Protection Services and Child Welfare Services

**MISSION VATSALYA** The scheme aims to :

- Support and Sustain Children in difficulty circumstances
- Develop context-based solutions for holistic development of children from varied backgrounds
- Provide scope for green field projects for encouraging innovative solutions.
- Cement convergent action by gap funding as per the need.



### Mission Shakti

- Mission Shakti aims to ensure a lifecycle support system for women through integrated care, safety, protection, rehabilitation and empowerment.
- Mission Shakti has two sub-schemes 'Sambal' and 'Samarthya'.
  - The "Sambal" is a sub-scheme for the safety and security of women.
  - The "Samarthya" is a sub-scheme for the empowerment of women.
- Initiatives under SAMBAL;
  - One-Stop Centre (OSC) to facilitate access to an integrated range of services including medical aid, police assistance, legal aid/ case management, psychosocial counselling and temporary support services to women affected by violence.
  - Beti Bachao Beti Padhao, to address the declining Child Sex Ratio.
  - Mahila Police Volunteers, to report the incidences of violence against women
  - Women's Helpline.
  - Nari Adalats to promote and facilitate alternative dispute resolution and gender justice within families and in society.
- Initiatives under SAMARTHYA;
  - Gender Budgeting is a tool for mainstreaming gender perspectives at various stages of planning, budgeting, implementation, impact assessment and revisiting of policy/programme objectives and allocations.
  - Swadhar Greh to provide relief and rehabilitation to destitute women and women in distress.
  - Working Women Hostels for ensuring safe accommodation for women working away from their place of residence.
  - National Creche Scheme to provide daycare facilities to children of the age group of 6 months to 6 years of working women who are employed.
  - Pradhan Mantri Matru Vandana Yojana (PMMVY) Provide Cash incentives for improved health and nutrition to pregnant and nursing mothers.

- Umbrella ICDS Scheme is also subsumed in 'Samarthya'.

## TOPIC: HEALTH

### SICKLE CELL DISEASE

#### In News:

Health ministers of African countries recently launched a campaign, to ramp up awareness and bolster prevention and care to curb the toll of sickle cell disease.

#### Analysis of Background:

##### About Sickle cell disease:

- Sickle cell disease is a group of disorders that affects hemoglobin, the molecule in red blood cells that delivers oxygen to cells throughout the body. People with this disease have atypical hemoglobin molecules called hemoglobin S, which can distort red blood cells into a sickle, or crescent, shape.

##### Signs and symptoms:

- Signs and symptoms of sickle cell disease usually begin in early childhood. Characteristic features of this disorder include a low number of red blood cells (anemia), repeated infections, and periodic episodes of pain. The severity of symptoms varies from person to person. Some people have mild symptoms, while others are frequently hospitalized for more serious complications.
- The signs and symptoms of sickle cell disease are caused by the sickling of red blood cells. When red blood cells sickle, they break down prematurely, which can lead to anemia. Anemia can cause shortness of breath, fatigue, and delayed growth and development in children.
- The rapid breakdown of red blood cells may also cause yellowing of the eyes and skin, which are signs of jaundice. Painful episodes can occur when sickled red blood cells, which are stiff and inflexible, get stuck in small blood vessels.
- These episodes deprive tissues and organs, such as the lungs, kidneys, spleen, and brain, of oxygen-rich blood and can lead to organ damage.
- A particularly serious complication of sickle cell disease is high blood pressure in the blood vessels that supply the lungs (pulmonary hypertension), which can lead to heart failure. Pulmonary hypertension occurs in about 10 percent of adults with sickle cell disease.



**Treatment:**

- Sickle cell disease is a lifelong illness. A blood and bone marrow transplant is currently the only cure for sickle cell disease, but there are effective treatments that can reduce symptoms and prolong life.

**TOMATO FLU****In News:**

A new infection dubbed tomato flu, or tomato fever, has been detected in India mostly among children younger than five, according to a report in the Lancet Respiratory Journal.

**Analysis of Background:****About Tomato Flu:**

- Tomato Flu is a rare viral disease, which causes red-coloured rashes, skin irritation and dehydration, and the disease gets its name from the blisters it causes, which look like tomatoes. It is a form of hand, foot and mouth disease (HFMD).
- The 'tomato flu' is caused by Coxsackie virus A 16. It belongs to Enterovirus family. Hand, foot, and mouth disease (HFMD) is a frequent febrile rash illness of childhood caused by enteroviruses (EV): Coxsackie A16 (CA16), EV A71, Coxsackie A6, Coxsackie B and Echo viruses.

**Vulnerability:**

- Till now, most of the reported cases of Tomato Flu or Tomato Fever are among children from age 1-9.
- The illness is rare in adults as they usually have immune systems strong enough to defend them from the virus.
- Tomato flu is very contagious and children are at an increased risk of exposure as viral infections are common in this age group and the spread is likely to be through close contact.
- Young children are also prone to this infection through the use of nappies, touching unclean surfaces, and putting things directly into the mouth.

**Symptoms:**

- The primary symptoms of tomato flu are similar to those of chikungunya, which include high fever, rashes, and intense pain in the joints. As with other viral infections, further symptoms include fatigue, nausea, vomiting, diarrhoea, dehydration, swelling

of joints, body aches, and common influenza-like symptoms, which are similar to those manifested in dengue.

#### **Treatment:**

- The Tomato Flu or Tomato Fever is a self-limiting one and there are no specific drugs for it.
- As tomato flu is similar to chikungunya and dengue as well as hand, foot, and mouth disease, the treatment is also similar — isolation, rest, plenty of fluids, and hot water sponge for the relief of irritation and rashes.
- Supportive therapy of paracetamol for fever and body ache and other symptomatic treatments may be required.

#### **How to prevent Tomato Flu?**

- Sanitization and hygienic surroundings are a must to stop the spread of Tomato Flu or Tomato Fever. Infected children must be kept in isolation till the symptoms have subsided completely and sharing of food, toys, clothes and other items must be prevented. Infected children should avoid touching or scratching the blisters.

## **WEST NILE VIRUS**

#### **In News:**

The New York City Health Department announced that the West Nile virus had been detected in two people.

#### **Analysis of Background:**

##### **About West Nile Virus:**

- West Nile virus (WNV) is a single-stranded RNA virus that causes West Nile fever.
- It is a member of the family Flaviviridae, from the genus Flavivirus, which also contains the Zika virus, dengue virus, and yellow fever virus.
- West Nile virus can cause a fatal neurological disease in humans.
- However, approximately 80% of people who are infected will not show any symptoms.
- The virus can cause severe disease and death in horses.
- Birds are the natural hosts of West Nile virus.

#### **Transmission**

- Human infection is most often the result of bites from infected mosquitoes.
- Mosquitoes become infected when they feed on infected birds, which circulate the virus in their blood for a few days.

- The virus eventually gets into the mosquito's salivary glands.
- During later blood meals (when mosquitoes bite), the virus may be injected into humans and animals, where it can multiply and possibly cause illness.
- The virus may also be transmitted through contact with other infected animals, their blood, or other tissues.

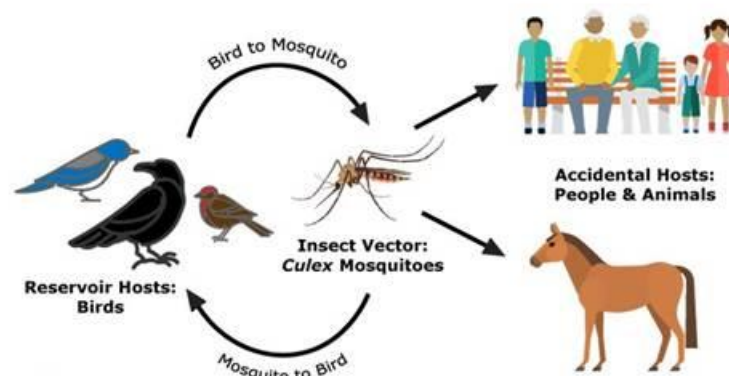
### Symptoms

- Usually, people who are affected with WNV will not have any different symptoms, not even mild symptoms.
- However, the symptoms will include fever, headache, body aches, skin rash and swollen lymph glands.
- They can either last for several weeks or can get away on their own.

### Prevention

- In the absence of a vaccine, the only way to reduce infection in people is by raising awareness of the risk factors and educating people about the measures they can take to reduce exposure to the virus.
- Vaccines are available for use in horses but not yet available for people.

**West Nile Virus Transmission Cycle**



## LUMPY SKIN DISEASE

### In News:

Over the last few weeks, nearly 3,000 cattle have died in Rajasthan and Gujarat due to a viral infection called the Lumpy Skin Disease (LSD).

### Analysis of Background:

### About Lumpy Skin Disease:

- Lumpy skin disease (LSD) is an infectious disease in cattle caused by a virus of the family Poxviridae, also known as Neethling virus.

## **Transmission**

- LSD infects cattle and water buffalo mainly through vectors such as blood-feeding insects.

## **Symptoms**

- The disease is characterized by fever, enlarged superficial lymph nodes and multiple nodules on the skin and mucous membranes. Infected animals immediately start losing weight and may have fever and lesions in the mouth, along with a reduced milk yield. Other symptoms include excessive nasal and salivary secretion. Pregnant cows and buffaloes often suffer miscarriage and, in some cases, diseased animals can die due to it as well.

## **Prevalence**

- The disease has been endemic in most African countries, and since 2012 it has spread rapidly through the Middle East, Southeast Europe and West and Central Asia. Since 2019, several outbreaks of LSD have been reported in Asia.

## **Economic Implications**

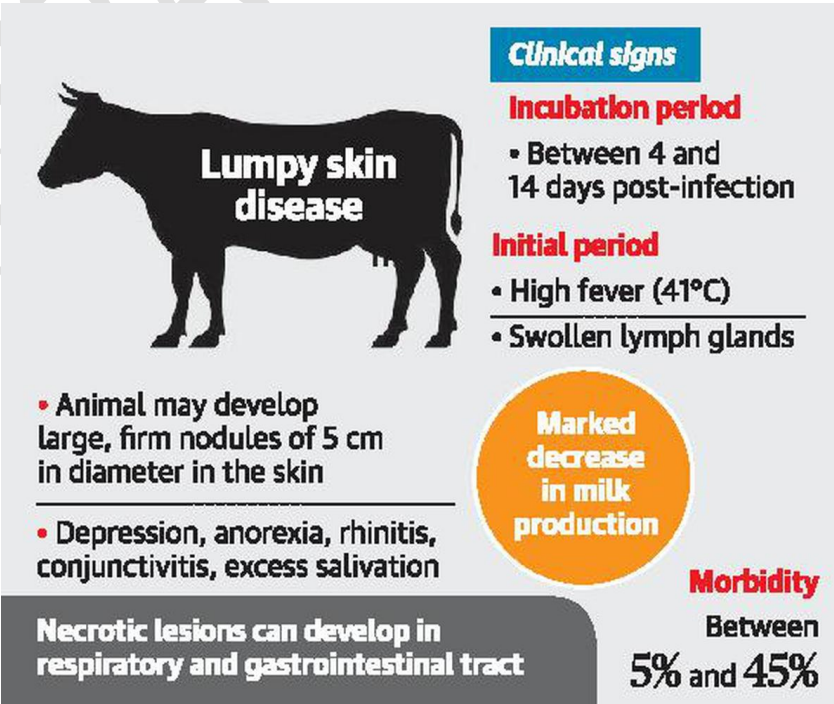
- The virus has important economic implications since affected animals tend to have permanent damage to their skin, lowering the commercial value of their hide. Additionally, the disease often results in chronic debility, reduced milk production, poor growth, infertility, abortion, and sometimes death.

## **Prevention**

- Successful control and eradication of LSD relies on early detection...followed by a rapid and widespread vaccination campaign.
- Other steps:
- Sanitise cattle-sheds by eliminating vectors through application of insecticides and spraying disinfectant chemicals.
- Isolate the infected cattle immediately from the healthy stock and contact the nearest veterinarian for treatment of the infected animal. This is necessary as otherwise the virus may prove fatal.
- Report the outbreak to the state government so that the rest of the healthy herd can be vaccinated using goat pox vaccine.
- Proper disposal of the carcasses can include incineration or burning of the bodies at high temperatures, along with disinfection of premises.

## Impact on India

- In India, which has the world's highest 303 million heads of cattle, the disease has spread to 15 states within just 16 months.
- In fact, in August 2019, when the first outbreak of LSD was reported from Odisha, five districts were grappling with the exotic cattle pox.
- Worse, studies suggest the virus could have already mutated in the country.
- Since LSD virus is related to sheep and goat pox, it can transmit to sheep and goats as well.
- Measures being taken
- Veterinary hospitals have been directed to provide all the treatments for free. However, the challenge is no specific vaccine against LSD is available in India. Right now, the veterinarians are following the protocols they would follow in case of a pandemic.
- Dairy farmers are advised to spray disinfectants in cattle-sheds several times a day to eradicate flies and mosquitoes that act as vectors of LSD.
- In case of death of an animal, farmers have been advised to bury the carcass deep inside the earth. But more than that, they have been advised to quarantine the cattle even at the slightest symptom of the disease.
- As of now, several states have authorised the use of goat pox vaccine for treating LSD as the virus is antigenically similar to sheep and goat pox. This will have a devastating impact on the country, where most dairy farmers are either landless or marginal landholders and milk is among the cheapest protein source.



**Lumpy skin disease**

- Animal may develop large, firm nodules of 5 cm in diameter in the skin
- Depression, anorexia, rhinitis, conjunctivitis, excess salivation

**Clinical signs**

**Incubation period**

- Between 4 and 14 days post-infection

**Initial period**

- High fever (41°C)
- Swollen lymph glands

**Marked decrease in milk production**

**Morbidity**

Between 5% and 45%

**Necrotic lesions can develop in respiratory and gastrointestinal tract**

## AFRICAN SWINE FEVER

### In News:

Culling of pigs at a local farm in Kanichar panchayat in Kannur district is progressing in the wake of recent detection of African Swine fever.

### Analysis of Background:

#### What is African swine fever?

- African swine fever (ASF) is a highly contagious haemorrhagic viral disease of domestic and wild pigs, which is responsible for serious economic and production losses.
- It is caused by a large DNA virus of the Asfarviridae family, which also infects ticks of the genus *Ornithodoros*.
- Although signs of ASF and classical swine fever (CSF) may be similar, the ASF virus is unrelated to the CSF virus.
- ASF is a disease listed in the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code and must be reported to the OIE.

#### Transmission and spread:

- direct contact with infected domestic or wild pigs
- indirect contact, through ingestion of contaminated material (e.g. food waste, feed, or garbage)
- contaminated fomites, or biological vectors (soft ticks of the genus *Ornithodoros*) where present.

#### Public health risk

- ASF is not a risk to human health.

#### Clinical signs

- Acute forms of ASF are characterised by high fever, depression, anorexia and loss of appetite, haemorrhages in the skin (redness of skin on ears, abdomen and legs), abortion in pregnant sows, cyanosis, vomiting, diarrhoea and death within 6-13 days (or up to 20 days).
- Mortality rates may be as high as 100%.

#### Prevention and control

- Currently there is no approved vaccine for ASF.

- Prevention in countries free of the disease depends on implementation of appropriate import policies and biosecurity measures, ensuring that neither infected live pigs nor pork products are introduced into areas free of ASF.
- This includes ensuring proper disposal of waste food from aircraft, ships or vehicles coming from affected countries and policing illegal imports of live pigs and pork products from affected countries.

## TOPIC: ENVIRONMENT

### BIOFUELS

#### In News:

On the occasion of World Biofuel Day, Prime Minister Narendra Modi dedicated the 2nd generation (2G) ethanol plant set up at the Indian Oil Corporation's Panipat refinery in Haryana. This plant will not only help reduce air pollution from the Delhi–NCR region but also help generate additional income and green fuel.

#### Analysis of Background:

##### Biofuels

- Biofuels are liquid or gaseous fuels primarily produced from biomass —that is, plant or algae material or animal waste.
- Biofuels can be used to replace or can be used in addition to diesel, petrol or other fossil fuels for transport, stationary, portable and other applications.
- Ethanol and biodiesel are the two main transport biofuels. These fuels can be produced from a variety of biomass.

##### Categories of biofuels

- First generation biofuels- First-generation biofuels are made from sugar, starch, vegetable oil, or animal fats using conventional technology. Common first-generation biofuels include Bioalcohols, Biodiesel, Vegetable oil, Bioethers, Biogas.
- Second generation biofuels -These are produced from non-food crops, such as cellulosic biofuels and waste biomass (stalks of wheat and corn, and wood). Examples include advanced biofuels like biohydrogen, biomethanol.
- Third generation biofuels- These are produced from micro-organisms like algae.
- Fourth generation biofuels- These are produced from genetically modified (GM) algae to enhance biofuel production.

## India's Biofuel Economy

- India is one of the fastest growing economies and the third largest consumer of primary energy in the world after the US and China.
- India's fuel energy security will remain vulnerable until alternative fuels are developed based on renewable feedstocks.
- The government of India targets reducing the country's carbon footprint by 30-35% by the year 2030.
- These targets will be achieved through a five-pronged strategy which includes:
  - Increasing domestic production
  - adopting biofuels and renewable
  - implementing energy efficiency norms
  - improving refinery processes and
  - achieving demand substitution.
- The government of India has proposed a target of 20% blending of ethanol in petrol and 5% blending of biodiesel in diesel by 2030 and introduced multiple initiatives to increase indigenous production of biofuels.

## What are 1G and 2G biofuels?

- 1G Bioethanol plants utilise sugarcane juice and molasses, byproducts in the production of sugar, as raw material.
- 2G plants utilise surplus biomass and agricultural waste to produce Bioethanol.
- Third generation biofuels- These are produced from micro-organisms like algae.
- Fourth generation biofuels- These are produced from genetically modified (GM) algae to enhance biofuel production.
- The prices of both sugarcane and bio-ethanol are set by the central government.

## Benefits of India's ethanol blending mandates include:

- Reduce Import Dependency: Will save foreign exchange (forex).
- Cleaner Environment: Reducing crop burning and converting agricultural residues/wastes to biofuels will further reduce greenhouse gas (GHG) emissions.
- Health Benefits: Prolonged reuse of cooking oil for preparing food, particularly in deep-frying, is a potential health hazard and can lead to many diseases. Used cooking oil (UCO) is a potential feedstock for biodiesel and its use for making biodiesel prevents reuse of UCO within the food industry.
- Solid Waste Management: There are technologies available, which can convert solid waste and plastics to drop-in fuels.



- **Infrastructural Investment in Rural Areas:** Establishing additional 2G biorefineries across the country will spur infrastructural investment in rural areas.
- **Employment Generation:** 2G biorefinery can contribute 1200 jobs across plant operations, village level entrepreneurs and supply chain management.
- **Additional Income to Farmers:** By adopting 2G technologies, agricultural residues/wastes that otherwise are burnt can be converted to ethanol. Farmers can realise an additional revenue source if markets are developed for these residues/wastes.

**Major programs supporting the development of biofuels production and use in India include:**

- Viable gap funding (VGF) for commercial scale 2G ethanol plants under Pradhan Mantri JI-VAN Yojana
- Financial assistance for demonstration scale 2G integrated bioethanol under Pradhan Mantri JI-VAN Yojana.
- Grants for research and development from DBT to 5 Centres for Excellence in the Bioenergy area.
- The National Policy on Biofuels 2018 specifically promotes advanced biofuels to achieve a target of 20% blending of biofuels with fossil-based fuels by 2030.

**Measures that can improve Bio-fuel economy:**

- Currently in India, Biofuel development is centred around the cultivation of Jatropha plant seeds. There is need to develop new feedstock for biofuels.
- To facilitate the blending of biofuels with conventional fuels, there is need to set up advanced biorefineries.
- Research and development should be promoted to support generation of bio-fuel from waste. As it will ensure realizing the goal of waste management and waste to energy.

## **GREAT INDIAN BUSTARD**

**In News:**

The perceived beliefs and recorded observations of egg laying habit of Great Indian Bustard (GIB) have changed after the recent excessive rains in western Rajasthan. The critically endangered bird species has adopted an altogether new behaviour of giving clutch of two eggs at a time after getting additional protein diet during the monsoon season.

**Analysis of Background:**

- Environmentalists in Rajasthan have hailed it as a new record, as all experts had been reporting a clutch of single egg by GIB for more than a century.

- Scientists working on ex situ breeding of these endangered birds have discovered the new proclivity in Jaisalmer district's Desert National Park (DNP).
- Aimed at preserving the GIBs whose population has reduced to less than 150 in the wild, the breeding project focuses on spatial prioritisation, risk characterisation and conservation management with the endangered species.

#### **About Great Indian Bustard (GIB):**

- GIB is one of the most critically threatened species in India, with less than 150 birds left in the wild.
- GIBs are one of the heaviest flying birds in India.
- Experts say only two districts in Rajasthan — Jaisalmer and Barmer — have a breeding GIB population in the wild.
- The bird can also be found in very small numbers in Gujarat, Madhya Pradesh, Karnataka, Maharashtra and Andhra Pradesh.

#### **Steps taken by the Government for protection of Great Indian Bustards in the country:**

- A site for establishment of a Conservation Breeding Centre for the Great Indian Bustard has been identified at Kota District, Rajasthan, under the project 'Habitat Improvement and Conservation Breeding of Great Indian Bustard-an integrated approach'.
- A satellite conservation breeding facility with incubator, hatcher, chick rearing and housing for captive birds has been set up at Sam, Jaisalmer, Rajasthan.
- The Great Indian Bustard is listed in Schedule-I of the Wild Life (Protection) Act, 1972, thereby, according it highest degree of legal protection from hunting.
- Important habitats of Great Indian Bustards are designated as National Parks/Sanctuaries for their better protection.
- The species has been identified for conservation efforts under the component 'Species Recovery Programme' of the Centrally Sponsored Scheme (CSS)-Development of Wildlife Habitat.
- The Ministry with financial support from National Authority for Compensatory Afforestation Funds has sanctioned an outlay of Rs. 33.85 crores for the duration of five years for the programme 'Habitat Improvement and Conservation Breeding of Great Indian Bustard-an integrated approach' to build up captive population of Great Indian Bustard.
- Ministry has also constituted a Task Force for suggesting Eco- friendly measures to mitigate impacts of power transmission lines and other power transmission infrastructures on wildlife including the Great Indian Bustard.

- The Great Indian Bustard has been included in the Appendix I of Convention on Migratory Species (CMS) of the basis of proposal submitted by India. It was also the mascot of the prestigious 13th CMS Conference of Parties held in Gandhinagar giving wider publicity for the conservation of the species.

## U.S. BILL ON CLIMATE ACTION

### In News:

U.S. Senate approved a bill titled the Inflation Reduction Act (IRA) 2022. The IRA has a special focus on climate, healthcare, and tax provisions to address inflation.

### Analysis of Background:

- The Bill marks the largest American investment aimed toward making the U.S. a leader in clean energy.
- It provides a tax deduction to low and middle-income households to go electric and seeks to lower the energy bills of U.S. households.
- For disadvantaged low-income communities and tribal communities, the Bill provides funding to benefit from zero-emission technologies.
- It also imposes a fee on methane leaks from oil and gas drilling.
- However, climate advocates criticise the bill for coupling the development of renewable energy, which is the cause of global warming, with land leasing for oil and gas drilling.

### What are the climate change provisions?

- The Bill marks the largest American investment aimed toward making the U.S. a leader in clean energy.
- It includes packages worth \$369 billion for the clean energy transition.
- It provides a tax deduction to low and middle-income households to go electric and seeks to lower the energy bills of American households.
- It also aims to bolster the domestic production of heat pumps and critical minerals.
- For disadvantaged low-income communities and tribal communities, the Bill provides funding to benefit from zero-emission technologies which reduce greenhouse gas emissions, enhance climate resilience, and mitigate risks from extreme heat.
- The Bill provides significant investment in renewable energy through heavy tax credits for wind and solar energy projects and electric vehicles.

- Additionally, the Bill imposes a tax on the largest and most profitable companies in order that they pay their fair share, without levying any taxes on households with income less than \$40,000 per annum.
- It also imposes a fee on methane leaks from oil and gas drilling.
- At the same time, the Bill also aims at more investments in fossil fuels.
- It seeks to expand oil and gas drilling, with the federal government offering land for onshore and offshore drilling as a prerequisite for developing renewable energy.
- Thus, it handcuffs the expansion of oil and gas with renewable energy development.

### **Why does the U.S. want to invest in addressing climate change?**

- The U.S is currently facing extreme climate threats. This includes heatwaves, wildfires, cyclones, floods, and hurricanes that have become frequent and intense in the past few years.
- Additionally, President Joe Biden has also undertaken certain climate commitments. Climate action has been a priority since he came into office. In 2021, he committed to the new ambitious target of cutting emissions by 50-52% below 2005 levels by 2030 and signed a new methane deal to curb methane emissions from the oil and gas industry.
- He introduced the Build Back Better plan which was a multi-trillion deal with key provisions for climate change.
- In May 2022, the Biden administration revoked the Alaska oil and gas drilling lease sales in the backdrop of soaring fuel prices, a move that is consistent with its climate commitment.

### **Criticism:**

- The legislation faced criticism not only from Republicans but also from a section within the Democrats along with fossil fuel supporters, and climate advocates.
- Climate advocates criticise the bill for coupling the development of renewable energy, which is the cause of global warming, with land leasing for oil and gas drilling. The Bill still contains giveaways to the fossil fuel sector.
- How does the Bill help the U.S. achieve its climate targets?
- The Bill being the largest-ever investment in addressing the climate crisis in U.S. history, will help the nation get closer to its climate target of reducing 50-52% emissions below 2005 levels by 2030.
- According to an estimate by the Rhodium Group, the investments in the Bill could reduce greenhouse gas emissions by 31 to 44% by 2030.

### **Have similar climate packages been announced by other countries?**

- In May 2022, Japan announced its 'Invest in Kisida' plan which aims for a \$1.1 trillion investment to bolster the Japanese economy.
- As part of the plan, the country aims to transition to clean energy and achieve 46% reduction in greenhouse gas emissions by 2030.
- In June 2021, the European Union (EU) proposed a similar 'Fit for 55' plan to reduce emissions by 55% by 2030. The plan is expected to become law soon. Being the largest emitters, both the U.S. and the EU can play a significant role in taking responsibility for historical emissions.

## GREAT BARRIER REEF

### In News:

The highest levels of coral cover, within the past 36 years, has been recorded in the northern and central parts of Australia's Great Barrier Reef, according to the annual long-term monitoring report by the Australian Institute of Marine Science.

### Analysis of Background:

- Australia's GBR is the world's largest reef system stretching across 2,300 km and having nearly 3,000 individual reefs.
- The new survey shows record levels of region-wide coral cover in the northern and central GBR since the first ever AIMS survey was done.
- The record levels of recovery were fuelled by increases in the fast-growing Acropora corals.
- However, scientists warned that these fast growing corals are also the most susceptible to environmental pressures such as rising temperatures, cyclones, pollution etc.

### What are coral reefs?

- Corals are marine invertebrates or animals which do not possess a spine. They are the largest living structures on the planet.
- Each coral is called a polyp and thousands of such polyps live together to form a colony, which grow when polyps multiply to make copies of themselves.
- Corals are of two types — hard corals and soft corals.
- Hard corals extract calcium carbonate from seawater to build hard, white coral exoskeletons. Hard corals are in a way the engineers of reef ecosystems and measuring the extent of hard coral is a widely-accepted metric for measuring the condition of coral reefs.

- Soft corals attach themselves to such skeletons and older skeletons built by their ancestors. Soft corals also add their own skeletons to the hard structure over the years. These growing multiplying structures gradually form coral reefs.
- Australia's Great Barrier Reef is the world's largest reef system stretching across 2,300 km and having nearly 3,000 individual reefs. It hosts 400 different types of coral, gives shelter to 1,500 species of fish and 4,000 types of mollusc.
- Coral reefs support over 25% of marine biodiversity even as they take up only 1% of the seafloor. The marine life supported by reefs further fuels global fishing industries.
- Besides, coral reef systems generate \$2.7 trillion in annual economic value through goods and service trade and tourism.
- In Australia, the Barrier Reef, in pre-COVID times, generated \$4.6 billion annually through tourism and employed over 60,000 people including divers and guides.

## PENINSULAR ROCK AGAMA

### In News:

Habitat loss and other such features of urbanisation have affected the presence of the animal in urban centres. The study, published in *Frontiers in Conservation Science*, examined several environmental factors that could affect the presence of the lizard and revealed that they are found mainly in rocky places and warm spots. Thus, the inference is that conservation efforts must point towards retaining rocky patches even while reviving landscapes by planting trees.

### About Peninsular Rock Agama:

- The Peninsular Rock Agama (*Psammophilus dorsalis*) which is a type of garden lizard has a strong presence in southern India.
- IUCN Status: Least Concern

## E-WASTE RULES

### In News:

A proposed framework by the Centre for regulating e-waste in India has upset a key link of India's electronic waste collection system and threatens the livelihood of thousands.

### Analysis of Background:

- Electronic waste, or electronic goods that are past their shelf life, is largely handled by India's vast informal sector.

- Spent goods are dismantled and viable working parts refurbished, with the rest making their way into chemical dismantling units. Many of these units are run out of unregulated sweatshops that employ child labour and hazardous extraction techniques.
- This electronic detritus also contributes to contaminating soil as well as plastic pollution.
- To address all of this, the environment ministry brought the E waste (Management) Rules, 2016, that introduced a system of Extended Producer Responsibility (EPR) compelling makers of electronic goods to ensure a proportion of the goods they sold every year was recycled.
- They are expected to maintain records annually demonstrating this. Most companies however didn't maintain an in-house unit in charge of recycling and this gave rise to network of government-registered companies, called Producer Responsibility Organisations (PRO) who acted as an intermediary between manufacturers of electronic goods and formal recycling units, that were technologically equipped to safely and efficiently recycle end-of-life electronic goods.
- PROs typically bid for contracts from companies and arrange for specified quantities of goods to be recycled and provide companies certified proof of recycling that they then maintain as part of their records. Several PROs work on consumer awareness and enable a supply chain for recycled goods.
- As of March, the Central Pollution Control Board has registered 74 PROs, and 468 authorised dismantlers who have a collective recycling capacity of about 1.3 million tons.
- The Environment Ministry estimated 7,70,000 tons of e-waste to have been generated in 2018-19 and around one million tons in 2019-20 of which only a fifth (about 22% in both years) has been confirmed to be "dismantled and recycled."
- Environment Ministry issued a draft notification that does away with PRO and dismantlers and vests all responsibility of recycling with authorised recyclers, only a handful of whom exist in India.
- Recyclers will source a quantity of waste, recycle them and generate electronic certificates. Companies can buy these certificates equivalent to their annual committed target and thus do not have to be involved with engaging PROs and dismantlers.
- Several PROs have mailed their objections to the Environment Ministry arguing that dismantling a fledgling system was detrimental to the future of e-waste management in India.

- Under the new rules, recyclers will likely establish their own supply chains and companies will no longer bear any responsibility for ensuring that their produce is recycled.
- Five years of investing and putting in place a system to collect and channelise waste was under threat as about 25,000-30,000 were employed in this sector.
- PROs provide check and balance and this is necessary because in the current system there is a lot of unauthorised recycling and we are an important element in the chain to ensure verifiable recycling
- The Centre hasn't explained its rationale for dismantling the existing system in its draft notification.

#### **More on Details:**

- According to Global E-waste Monitor 2020, Global e-waste will increase by 38 per cent in the decade between 2020 and 2030.
- There was 6 million tonnes of electronic waste in 2019 which is an average of 7.3 kg per capita. That is a nearly 21 per cent increase in just five years
- Asia generated the greatest volume of e-waste in 2019.
- Most E-waste in 2019 consisted of small equipment, large equipment and temperature exchange equipment.
- Less than 18 per cent of the e-waste generated in 2019 was collected and recycled.
- The number of countries that have adopted a national e-waste policy, legislation or regulation has increased from 61 to 78 and includes India. It is far from the target set by the International Telecommunication Union to raise the percentage of countries with an e-waste legislation to 50 per cent.
- The Global E-waste Monitor 2020 is a collaborative product of the Global E-waste Statistics Partnership, formed by the United Nations University, International Telecommunication Union, International Solid Waste Association, UN Environment Programme.

#### **E-Waste:**

- E-Waste is short for Electronic-Waste and the term used to describe old, end-of-life or discarded electronic appliances.
- It is categorised into 21 types under two broad categories: Information technology and communication equipment and Consumer electrical and electronics.
- E-waste includes their components, consumables, parts and spares.
- E-waste contains several toxic additives or hazardous substances such as mercury, brominated flame retardants (BFR), CFCs and HCFCs.



- The increasing levels of e-waste, low collection rates, and non-environmentally sound disposal and treatment of this waste stream pose significant risks to the environment and to human health.
- International E-Waste Day has been observed on 14th October since 2018.

#### **India specific:**

- There are 312 authorised recyclers of e-waste in India, with the capacity for treating approximately 800 kilotonnes annually.
- About 90 per cent of the country's e-waste is recycled in the informal sector.
- India's first e-waste clinic for segregating, processing and disposal of waste from household and commercial units has been set-up in Bhopal, Madhya Pradesh.
- According to the Central Pollution Control Board (CPCB), India generated more than 10 lakh tonnes of e-waste in 2019-20, an increase from 7 lakh tonnes in 2017-18. Against this, the e-waste dismantling capacity has not been increased from 7.82 lakh tonnes since 2017-18.

#### **Concerns:**

- Toxicity: E-waste consists of toxic elements such as Lead, Mercury, Cadmium, Chromium, Polybrominated biphenyls and Polybrominated diphenyl.
- Effects on Humans: Some of the major health effects include serious illnesses such as lung cancer, respiratory problems, bronchitis, brain damages, etc due to inhalation of toxic fumes, exposure to heavy metals and alike.
- Effects on Environment: E-waste is an environmental hazard causing groundwater pollution, acidification of soil and contamination of groundwater and air pollution due to the burning of plastic and other remnants.

#### **Challenges Related to Management of E-Waste in India:**

- A key factor in used electronic devices not being given for recycling was because consumers themselves did not do so.
- In India, about 5 lakh child laborers in the age group of 10-14 are observed to be engaged in various E-waste activities and that too without adequate protection and safeguards in various yards and recycling workshops.
- There is absence of any public information on most State Pollution Control Boards (SPCBs)/PCC websites.
- No clear guidelines are there for the unorganized sector to handle E-waste.
- Also, no incentives are mentioned to lure people engaged to adopt a formal path for handling E-waste.

- 80% of E-waste in developed countries meant for recycling is sent to developing countries such as India, China, Ghana and Nigeria.
- Lack of coordination between various authorities responsible for E-waste management and disposal including the non-involvement of municipalities.
- End of life computers often contain sensitive personal information and bank account details which, if not deleted leave opportunity for fraud.

#### **International Conventions and government initiatives:**

- Originally the Basel Convention did not mention e-waste but later it addressed the issues of e-waste in 2006 (COP8).
- Nairobi Declaration was adopted at COP9 of the Basel Convention. It aimed at creating innovative solutions for the environmentally sound management of electronic wastes.
- Rotterdam Convention, 2004 seeks to promote exchange of information among Parties over a range of potentially hazardous that may be exported or imported.
- In India prior to 2011, e-waste was covered under the Hazardous Waste Management (HWM) Rules.
- In 2011, under the Environmental Protection Act 1986, the E-waste (Management and Handling) Rules, 2011 were enacted
- In 2016, the E-Waste (Management) Rules, 2016 were enacted which replaced the 2011 Rules. The Rules were amended in 2018
- CPCB has also issued guidelines Environmentally Sound Management of E-waste (on Collection, Storage, Dismantling & Segregation, Recycling, and Treatment & Disposal of E-Waste)
- Awareness Program on Environmental Hazards of Electronic Waste initiated by Ministry of Electronics and Information Technology
- Creation of Management Structure for Hazardous Substances seeks to raise awareness among people about the 2016 Rules and its implementation.
- Swachh Digital Bharat seeks to create awareness among the public about the hazards of e-waste recycling by the unorganised sector, and to educate them about alternate methods of disposing of their e-waste.

#### **NGT's Directions:**

- Further steps should be taken for scientific enforcement of E-Waste Management Rules, 2016 (EWMR) in the light of the reports of the CPCB.
- It noted gaps in collection targets, as the amount of e-waste collected in 2018-19 was 78,000 tonnes against a target of 1.54 lakh tonnes. There are clear governance deficits on the subject.

- The CPCB may consider steps for compliance of Rule 16 requiring reduction in the use of Hazardous substances in the manufacture of electrical and electronic equipment and their components or consumables or parts or spares.
- It took note that a large number of accidents take place in residential areas on account of unscientific handling of e-waste.
- This needs special attention for constant vigilance in such hotspots. This also requires review and updation of siting norms for e-waste by the CPCB which may be done within three months.
- All the state pollution control boards need to identify the hotspots by constant vigil and to coordinate with the District Administration at local levels to prevent damage to the environment and public health and meaningful enforcement of rule of law.

#### **E-Waste Management Rules, 2016:**

- The Ministry of Environment, Forest and Climate Change notified the E-Waste Management Rules, 2016 in supersession of the E-waste (Management & Handling) Rules, 2011.
- Over 21 products (Schedule-I) were included under the purview of the rule. It included Compact Fluorescent Lamp (CFL) and other mercury containing lamps, as well as other such equipment.
- For the first time, the rules brought the producers under Extended Producer Responsibility (EPR), along with targets. Producers have been made responsible for the collection of E-waste and for its exchange.
- Various producers can have a separate Producer Responsibility Organisation (PRO) and ensure collection of E-waste, as well as its disposal in an environmentally sound manner.
- Deposit Refund Scheme has been introduced as an additional economic instrument.
- The role of State Governments has been also introduced to ensure safety, health and skill development of the workers involved in dismantling and recycling operations.
- A provision of penalty for violation of rules has also been introduced.
- Urban Local Bodies (Municipal Committee/Council/Corporation) have been assigned the duty to collect and channelize the orphan products to authorized dismantlers or recyclers.
- Allocation of proper space to existing and upcoming industrial units for e-waste dismantling and recycling.

## TOPIC: SCIENCE AND TECH

### FACIAL RECOGNITION

#### In News:

RTI responses received by the Internet Freedom Foundation reveal that the Delhi Police treats matches of above 80% similarity generated by its facial recognition technology system as positive results.

#### Analysis of Background:

##### Facial recognition

- Facial recognition is a biometric technology that uses distinguishable facial features to identify a person.
- Facial recognition technology has received significant attention as it has the potential for a wide range of application related to law enforcement as well as other enterprises.
- Whether it's a surveillance camera in grocery stores, tagging friends in social media, or logging into our smart-phones, facial recognition finds its application.

#### Pros of Facial Recognition

##### Enhanced security

- With the 3D biometric system and infrared cameras, facial recognition can perform more efficiently.
- A organization's premises can be secured by monitoring employees and visitors.
- With the help of facial recognition, it will be easier to track down any burglars, thieves, or other trespassers.
- On the governmental level, facial recognition can help identify terrorists or any other criminals with the help of the face scan only. The additional bonus is the fact that one cannot hack the technology: there is nothing to steal or change, like in case of a password, for example.
- As for personal use, facial recognition can be used as a security tool for locking personal devices and for personal surveillance cameras.

##### Faster processing

- The process of recognizing a face takes a second or less — and this is incredibly beneficial for the companies.
- In the era of constant cyber attacks and advanced hacking tools, companies need a technology that would be both secure and fast. Considering that facial recognition is almost instant, it grants a quick and efficient verification of a person. In addition, it's hard to fool this technology so this is another bonus.

### **Automation of identification**

- Before, security guards had to perform manual identification of a person that took too much time and did not have high accuracy. But today, facial recognition is completely independent in the identification process and not only takes seconds but is also incredibly accurate.
- The 3D facial recognition technology and the use of infrared cameras significantly boosted the level of accuracy of facial recognition and made it really hard to fool.

### **Seamless integration**

- The facial recognition technology is quite easily integrated. It does not require spending additional money on its integration and most facial recognition solutions are compatible with the majority of security software. A 100% win-win.

### **Reduces the number of touch-points**

- Facial recognition requires fewer human resources than other types of security measures, such as fingerprinting. It also doesn't require physical contact or direct human interaction. Instead, it uses AI to make it an automatic and seamless process.
- It also limits touch-points when unlocking doors and smart-phones, getting cash from the ATM or performing any other task that generally requires a PIN, password or key.

### **Less Germs**

- Facial recognition is no contact, meaning travelers won't have to whip out their hand sanitizer at every other airport station requiring them to prove their identity.

### **Helps find missing people**

- Law enforcement agencies use facial recognition to find missing people, and they've also used it to find missing children.
- When combined with aging software that shows how the child would look several years later, facial recognition can even help find someone who's been missing for years.

### **Improves medical treatment**

- One surprising use of facial recognition technology is the detection of genetic disorders.
- By examining subtle facial traits, facial recognition software can, in some cases, determine how specific genetic mutations caused a particular syndrome. The technology may be faster and less expensive than traditional genetic testing.

## **Cons of Face Recognition Technology**

### **Data Storage**

- In today's world of data, data storage is gold since there is so much data in the world. Whether it may be a very high quality movie or 100,000 faces to store, everything requires space. This means that in order for facial recognition systems to be efficient, they only process about 10-25% of videos.
- To combat this, many companies use many computers to process everything and to cut the time it takes to do so. However; until technology significantly develops, this obstacle is here to stay.

### **Vulnerability in recognition**

- Facial recognition technology is indeed very accurate and no one can doubt that.
- At the same time, a slight change in the camera angle or even the change of appearance will inevitably lead to an error.
- The camera angle has a very strong influence on whether or a not a face is processed. In order for a facial recognition system to completely identify a face, it needs multiple angles, including profile, frontal, 45 degree and more, to ensure the most accurate definitely cause some trouble.

### **Threatens individual and societal privacy**

- With the help of this technology, the government can track down the criminals. But at the same time, it can actually track down people anytime, anywhere.
- The threat to individual privacy is a significant downside of facial recognition technology. People don't like having their faces recorded and stored in a database for unknown future use.
- Privacy is such a big issue that some cities, including San Francisco, California and Cambridge, Massachusetts, have banned law enforcement's use of real-time facial recognition surveillance. In these cases, police can use video recordings from personally owned security video devices, but they can't use live facial recognition software.

### **Lack of regulations in the AI in Face recognition systems**

- Government across the whole world doesn't have a particular policy or regulations to regulate the usage of touch less biometric attendance system. Some cities and places in the world have already banned this system considering the amount of threat it can

cause to the people. While there are some places in the world where usage of face recognition based attendance system is already under progress but without any regulation. Which means lakhs of people's data is already under threat.

### **Implementation comes at a cost**

- The technology comes at a cost. Facial recognition software is extremely advanced and requires top-of-the-line cameras to guarantee accuracy and speed.

### **Still a work in progress**

- While facial recognition software is super high tech, it isn't perfect. AI still isn't fully effective at identifying race or gender. These programs also struggle to track change in appearance such as a fluctuation in weight, a new hair style and even facial hair.

### **Violates Right to Freedom**

- Countries with limited personal freedoms, such as China, UAE, North Korea, Iran and Iraq, commonly use facial recognition to spy on citizens and arrest those deemed troublemakers.

### **Creates data vulnerabilities**

- There is also concern about the storage of facial recognition data, as these databases have the potential to be breached.
- Hackers have broken into databases containing facial scans collected and used by banks, police departments and defense firms in the past.

### **Provides opportunities for fraud and other crimes**

- Lawbreakers can use facial recognition technology to perpetrate crimes against innocent victims too. They can collect individuals' personal information, including imagery and video collected from facial scans and stored in databases, to commit identity fraud.
- With this information, a thief could take out credit cards and other debt or open bank accounts in the victim's name, or even build a criminal record using the victim's identity.
- Beyond fraud, bad actors can harass or stalk victims using facial recognition technology.
- For example, stalkers could perform reverse image searches on a picture taken in a public place to gather information about their victims and determine who they are and where they live.

- Plus, because technological crime moves faster than the law, people can be victimized before the activity is viewed as a crime.

## THE TECHNOLOGY POWERING HYBRID ELECTRIC VEHICLES

### In News:

In recent months, automakers Maruti Suzuki, Toyota and Honda have launched hybrid electric vehicles in India, offering car buyers more choices in the nascent electric vehicle market

### Analysis of Background:

#### What is a hybrid electric vehicle?

- A hybrid electric vehicle (HEV) uses an internal combustion engine (a petrol/diesel engine) and one or more electric motors to run.
- It is powered by the electric motor alone, which uses energy stored in batteries, by the ICE, or both.
- The powertrain of the HEV is more complex than a regular ICE-powered car as it has EV components and a conventional ICE.

#### How do HEV powertrains work?

- HEV powertrains are designed to power cars in a series, parallel or series-parallel (power split) methods
- A series HEV uses only the electric motor to drive the wheels, while the ICE powers the generator, which in turn recharges the battery.
- A parallel HEV, based on the driving condition, uses the best power source to power the vehicle. It will alternate between the electric motor and the ICE to keep the car moving.
- A series-parallel HEV offers a combination of both models and allows to split power, wherein power is routed from the ICE alone or from the battery to the electric motor to drive the vehicle.
- In all above three designs, the battery is charged through regenerative braking technology.

#### What is Regenerative Braking Technology (RBT)?

- Regenerative braking is an energy recovery mechanism that slows down a moving vehicle or object by converting its kinetic energy into a form that can either be used immediately or stored until needed.



### **How does regenerative braking work?**

- A regenerative braking system (RBS) used in automotive applications has several advantages like better braking efficiency in stop-and-go traffic which enhances fuel economy and also helps in reducing carbon emissions
- RBS also helps in energy optimisation resulting in minimum energy wastage.
- A kinetic system can recover the energy lost during braking and then use this energy to recharge the high-voltage battery of the vehicle. An electric system generates electricity through a motor during sudden braking. Lastly, a hydraulic system uses pressurised tanks to store the vehicle's kinetic energy and can offer a high energy recovery rate which is ideal for heavy vehicles.
- The efficiency of HEVs and EVs will in large part be determined by their ability to recover as much energy as possible while braking, with a higher degree of energy recovery lowering fuel consumption
- The amount of recoverable energy depends upon factors like vehicle speed and stopping pattern.

### **What are the different types of HEVs?**

- The HEVs can be categorized into micro, mild and full hybrid vehicles, based on the degree of hybridization.
- A full HEV will have a larger battery and a more powerful electric motor compared with a mild HEV. As a result, a full HEV can power the vehicle for longer distances using just electric mode, whereas a mild HEV cannot drive using only the electric motor and uses the battery at traffic lights or in stop-and-go traffic to support the ICE.
- Micro hybrids do not offer electric torque assistance as they lack an electric motor, but they have an idle stop-start system and energy management functions
- There are plug-in hybrid electric vehicles (PHEVs) that are just like full HEVs, but they can be charged using a wall outlet, as they have an onboard charger and a charging port
- PHEVs generally use the electric motor until the battery is almost drained, and then automatically switch to the ICE.

### **Advantages of hybrid technology:**

- Most vehicles with hybrid technology offer better fuel efficiency, more power, and minimum emissions

- The design of hybrid vehicles for reduced engine size and car weight as compared to ICE vehicles, translates into increased mileage to favour the demand for these vehicles
- With the increase in total power and torque, HEVs can deliver instant torque and provide high torque even at low speeds.

### **Challenges of hybrid technology:**

- A major challenge for HEVs is the high vehicle cost.
- Battery, a vital component of an HEV, increases the cost of the vehicle, making it pricier than vehicles powered only by an ICE. The RBS also adds to the higher cost of an HEV

## **HAYABUSA-2**

### **In News:**

The Hayabusa-2 probe brought 5.4 grams of rocks and dust from the asteroid Ryugu to Earth in December 2020. In an article published recently in the journal Nature Astronomy scientists from Japan suggest that water and organic materials might have been brought to our planet from the outer edges of the solar system.

### **Analysis of Background:**

#### **Hayabusa2**

- Hayabusa2 is an asteroid sample-return mission operated by the Japanese state space agency JAXA. It is a successor to the Hayabusa mission, which returned asteroid samples for the first time in June 2010.
- Hayabusa2 was launched on 3 December 2014 and rendezvoused in space with near-Earth asteroid 162173 Ryugu on 27 June 2018.
- It surveyed the asteroid for a year and a half and took samples. It left the asteroid in November 2019 and returned the samples to Earth on 5 December 2020 UTC. Its mission has now been extended through at least 2031, when it will rendezvous with the small, rapidly-rotating asteroid 1998 KY26.
- Hayabusa2 carried multiple science payloads for remote sensing and sampling, and four small rovers to investigate the asteroid surface and analyze the environmental and geological context of the samples collected.

#### **Asteroids and Ryugu**

- Asteroids are rocky objects that orbit the Sun, much smaller than planets. They are also called minor planets. According to NASA, there are 994,383 known asteroids, the remnants from the formation of the solar system over 4.6 billion years ago.

- Asteroids are divided into three classes. First are those found in the main asteroid belt between Mars and Jupiter, which is estimated to contain somewhere between 1.1-1.9 million asteroids.
- The second group is that of trojans, which are asteroids that share an orbit with a larger planet. NASA reports the presence of Jupiter, Neptune and Mars trojans. In 2011, they reported an Earth trojan as well.
- The third classification is Near-Earth Asteroids (NEA), which have orbits that pass close to the Earth. Those that cross the Earth's orbit are called Earth-crossers. More than 10,000 such asteroids are known, out of which over 1,400 are classified as potentially hazardous asteroids (PHAs).
- Ryugu is also classified as a PHA and was discovered in 1999 and was given the name by the Minor Planet Center in 2015. It is 300 million kilometres from Earth and it took Hayabusa-2 over 42 months to reach it.

## NAVIC

### In News:

Government said, India's satellite-based navigation system, NavIC, is as good as GPS of the United States in terms of position accuracy and availability in its service region.

### Analysis of Background:

#### NavIC

NavIC (Navigation with Indian Constellation) is an autonomous regional satellite navigation system established and maintained by ISRO.

#### Coverage

- It covers India and a region extending up to 1,500 km beyond Indian mainland (primary coverage area) with plans of extension.
- An extended service area lies between the primary service area and a rectangle area enclosed by the 30th parallel south to the 50th parallel north and the 30th meridian east to the 130th meridian east.

#### Satellites

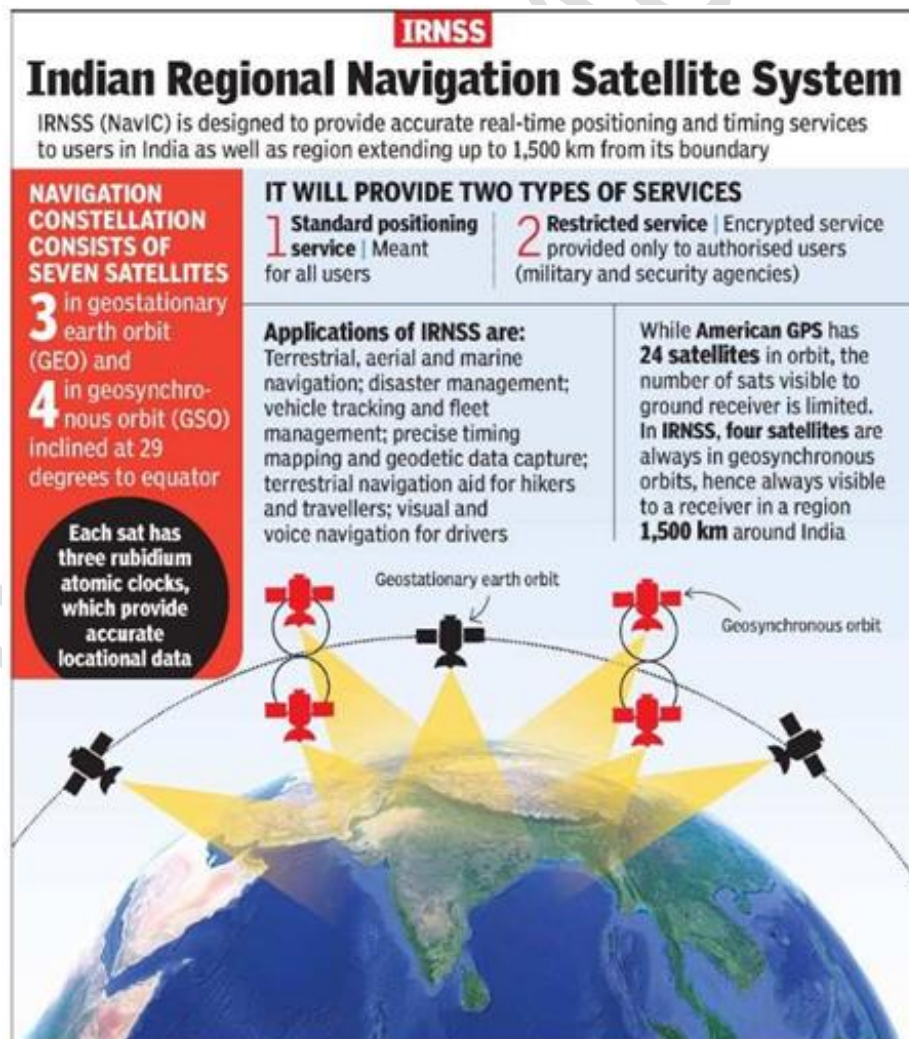
- The system currently consists of a constellation of seven satellites, with two additional satellites on ground as stand-by.
- Three of the seven satellites in constellation are located in geostationary orbit (GEO) and four in inclined geosynchronous orbit (IGSO).

#### Accuracy

- The system is intended to provide an absolute position accuracy of better than 10 metres throughout Indian landmass and better than 20 metres in the Indian Ocean.
- In short, it provides position accuracy better than 20 m and timing accuracy better than 50 nanoseconds(20).

## Applications

- NavIC will provide two levels of service, the "standard positioning service", which will be open for civilian use, and a "restricted service" (an encrypted one) for authorised users (including the military).
- NavIC based applications are being used in various civilian sectors, including, transport, map applications, and timekeeping.
- NavIC based trackers are compulsory on commercial vehicles in India.
- Today major mobile chipset manufacturers like Qualcomm, MediaTek and Broadcom already support NavIC across various chipset platforms.
- NavIC is an indigenous positioning system that is under Indian control.
- There is no risk of the service being withdrawn or denied in a given situation.



## GPS VS NAVIC

- The GPS, has a position accuracy of 20–30 m.
- Unlike GPS which is dependent only on L-band, NavIC has dual frequency (S and L band frequencies).
- When low frequency signal travels through atmosphere, its velocity changes due to atmospheric disturbances.
- US banks on atmospheric model to assess frequency error and it has to update this model from time to time to assess the exact error.
- In India's case, the actual delay is assessed by measuring the difference in delay of dual frequency (S and L bands).
- Therefore, NavIC is not dependent on any model to find the frequency error and is more accurate than GPS.

### **About Frequency Bands:**

#### **L Band**

- The L band is the Institute of Electrical and Electronics Engineers (IEEE) designation for the range of frequencies in the radio spectrum from 1 to 2 gigahertz (GHz).

#### **Applications**

- Mobile service
- Satellite navigation
- Telecommunications use
- Aircraft surveillance
- Amateur radio
- Digital audio, Video, multimedia broadcasting
- Astronomy

#### **Advantages of L Band Frequency over other frequency bands:**

- This frequency band faces less interference from heavy rain fading.
- The low frequency range makes it easier to design and source components.
- The components for this band are less expensive than those for higher frequency bands.

#### **S band**

- The S band is a designation by the Institute of Electrical and Electronics Engineers (IEEE) for a part of the microwave band of the electromagnetic spectrum covering frequencies from 2 to 4 gigahertz (GHz).

#### **Applications**

- The S band is used by airport surveillance radar for air traffic control, weather radar, surface ship radar, and some communications satellites, especially those used by NASA to communicate with the Space Shuttle and the International Space Station.
- The largest use of this band is by WiFi networks.
- The S band can also be used for issuing distress signals in accident situations and for delivering real-time data and status for traffic and weather conditions.
- In some countries, S band is used for Direct-to-Home satellite television.
- IndoStar-1 was the world's first commercial communications satellite to use S-band frequencies for broadcast.

## SPACE DEBRIS

### In News:

The Australian Space Agency is investigating space debris found in farmland in the Snowy Mountains in southern NSW, after being notified by an astrophysicist who believes it to be from a SpaceX mission. Also, the debris from a large Chinese rocket – the Long March 5B — crashed to earth over the Pacific and the Indian oceans.

### Analysis of Background:

#### Space Debris

- Space junk is any piece of machinery or debris left by humans in space—principally in Earth orbit.
- These include dead satellites, fragments of rocket bodies and spacecraft etc.

#### Concerns

- Currently, an estimated 20,000 objects—including satellites and space debris—are crowding low-Earth orbit. It can be a hazard to active satellites and spacecraft.
- At orbital velocities, even the tiniest pieces of debris can disable an operational satellite.
- Potential collision threat to the space station.
- Earth orbit could even become impassable if the risk of collision grows too high.
- It could hinder our ability to use weather satellites, and hence to monitor weather changes.

#### Kessler syndrome

- This is an idea proposed by NASA scientist Donald Kessler in 1978.

- It says if there is too much space junk in orbit, it could result in a chain reaction where more and more objects will collide and create new space junk in the process, to the point where Earth's orbit became unusable – a Domino Effect.
- 12 fragmentation events have already taken place every year for the past two decades.

### **Mitigation Measures**

- Developing Reusable spacecrafts.
- Designing and building spacecraft that can better withstand the harsh environment of space without disintegrating.
- Releasing stored energy and fuel so that defunct spacecraft don't explode.
- Once a spacecraft's mission is over, moving it to a safer orbit. That is - A "graveyard orbit" high above the low-Earth space.
- Bringing it down using laser into Earth's atmosphere to burn up on re-entry as a neat disposal system.
- Capture debris or de-orbit old satellites.
- Charge operators "orbital-use fees" for every satellite put into orbit.
- Careful choice of orbits.
- Performing 'collision avoidance manoeuvres'.
- Orbital lifetime reduction (accelerating the natural decay of space objects to reduce the time that they remain in orbit).
- International cooperation in the debris mitigation measures.
- Contributing to the efforts of the Inter-Agency Space Debris Coordination Committee (IADC) and United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS).
- Initiatives taken to tackle the problem
- Inter-Agency Space Debris Coordination Committee
- IADC is an inter-governmental forum whose aim is to co-ordinate efforts to deal with debris in orbit around the Earth founded in 1993.

### **NORAD**

- North American Aerospace Defense Command, is an initiative of the U.S. and Canada that shares selective debris data with many countries.

### **ClearSpace-1 Mission**

- In this a "chaser" with its four robotic arms will grab the leftover of 2013 craft known as VESPA (Vega Secondary Payload Adapter) and drag it down to Earth's atmosphere where both will burn up. To be launched in 2025.

### **ELSA-d, Mission**

- ELSA-d (End-of-Life Services b), will test technologies to capture an object in low-Earth orbit and move it to a lower altitude, where it will eventually burn up harmlessly in Earth's atmosphere.

### **Starship**

- Space X Starship – the passenger-carrying spacecraft once ready can collect and de-orbit space junk apart as well.

### **NEO-01'**

- China launched a low Earth orbit robot prototype called 'NEO-01'.
- It can scoop up space debris left behind by other spacecraft with a big net.
- NEO-01, was launched on Long March 6 rocket.
- NEO-01 will use a net to capture space debris and then burn it with its electric propulsion system.
- The NEO-01, will also peer into deep space to observe small celestial bodies.
- The 30kg robot will pave the way for future technologies capable of mining on asteroids.

### **Space Liability Convention of 1972**

- Space Liability Convention of 1972 defines responsibility in case a space object causes harm. The treaty says that "a launching State shall be absolutely liable to pay compensation for damage caused by its space objects on the surface of the earth or to aircraft, and liable for damage due to its faults in space. The Convention also provides for procedures for the settlement of claims for damages."
- However, there is no law against space junk crashing back to earth.

### **ISRO's Efforts**

#### **'Project NETRA'**

- It is an early warning system in space to detect debris and other hazards to Indian satellites.
- Other
  - ISRO's GSLV employs passivation of the Cryogenic Upper Stage at the end of its useful mission.
  - ISRO's communication satellites are designed with adequate propellant margins for re-orbiting at the end of their useful life to a higher graveyard orbit.



- Successful example: INSAT-2C

## TELECOM SECTOR

### In News:

- 5G telecom services will be made available in India from October 2022 onwards and the industry would decide on the pricing structure.
- Telecom Regulatory Authority of India
- In the year 1997, TRAI Act was enacted to regulate the telecommunications sector in India.
- It also provided for a mechanism of dispute resolution among the stakeholders of the telecom sector.
- It was amended in 2000, establishing a Telecom Disputes Settlement and Appellate Tribunal (TDSAT) to take over the adjudicatory and disputes functions from TRAI.

### Analysis of Background:

#### Telecom Regulatory Structure in India

- Telecommunications in India began as a Government monopoly, which was then liberalized in the early 1990s and private sector participation was permitted gradually.
- Major parties in the Indian telecom market include BSNL (Bharat Sanchar Nigam Limited), Bharti Airtel, Vodafone Idea Limited, and Reliance Jio Infocomm.
- National Telecom Policy, 1994, allowed entry of private entities in the telecom sector and with entry of the private sector, the need was felt to have a regulator for this sector.
- Establishment of Telecom Regulatory Authority of India in 1997 through enactment of TRAI Act. Initially, TRAI played the role of regulator as well as adjudicator.
  - The TRAI Act was amended, and established a Telecom Disputes Settlement and Appellate Tribunal (TDSAT) to take over the adjudicatory and disputes functions from TRAI.
- The Ministry of Communications and Information Technology presides over the telecom industry in India and governs the following bodies:
  - The Department of Telecommunications exercises its exclusive privilege establishing, maintaining, and working telegraph and wireless equipment and grants Licenses for such activities.
  - Wireless Planning Commission(WPC) responsible for Frequency Spectrum Management, including licensing of wireless stations and caters to the needs of all wireless users in India.

- Telecom Regulatory Authority of India (TRAI) is an autonomous statutory body with the sole authority to take binding decisions on the fixation of tariffs for the provision of telecommunications services. TRAI's recommendations are mandatory for the DoT to consider before licensing telecom services.
- Telecom Disputes Settlement and Appellate Tribunal has been vested with exclusive powers to adjudicate any dispute between the licensor (DoT) and a licensee; service providers; and service providers and groups of customers.

## **Telecommunications Laws and Regulations**

### **The Indian Telegraph Act, 1885**

- It empowers the Government of India to take control of the existing telegraph lines and lay down the necessary infrastructure for further expansion of telecommunications in India.
- It authorizes the Government of India to grant telecom Licenses on such conditions and in consideration of such payments as it thinks fit, to any person to establish, maintain, and work a telegraph within any part of India.
- It authorizes the Government of India to take possession of licensed telegraphs and to order interception of messages on the occurrence of any public emergency or in the interest of public safety.
- Any dispute concerning a telegraphic appliance/ apparatus/ line between the telegraph authority and a licensee shall be determined by arbitration by an arbitrator appointed by the Central Government.

### **The Telecom Regulatory Authority of India Act, 1997**

- The Telecom Regulatory Authority of India was established under the Telecom Regulatory Authority of India Act, 1997.
- It empowered the TRAI with quasi-judicial authority to adjudicate upon and settle telecom disputes.
- The Act was amended in 2000 to clearly distinguish between the regulatory and recommendatory functions of TRAI. The Amendment also set up the TDSAT; jurisdiction of civil courts.

### **The Information Technology Act, 2000**

- The Act was passed to promote e-commerce, to legally recognize electronic documents and digital signatures as valid authentication of electronic documents.

### **The Information Technology Amendment Act of 2008**

- It provided additional focus on information security and added several new sections on offences such as cyber terrorism and data protection.
- It provides penalties for various offences such as cybercrime, e-commerce frauds such as cheating by impersonation, and pornography.

### **National Digital Communications Policy, 2018**

- The National Digital Communications Policy (NDCP) was enacted with the goal of digital empowerment and well-being of Indian citizens; it outlines a set of goals, initiatives, strategies, and intended policy outcomes.
- Provisioning of Broadband for All by 2022.
- Creating four million additional jobs in the digital communications sector by 2022.

### **Aim of India's Communication Policy:**

- **Connect India:** Creating robust digital communications infrastructure to promote 'Broadband for All' as a tool for socio-economic development, while ensuring service quality and environmental sustainability.
- **Secure India:** Ensuring sovereignty, safety, and security of digital communications to secure the interests of citizens and safeguard the digital sovereignty of India with a focus on ensuring individual autonomy and choice, data ownership, privacy, and other Future Technologies.
- **Innovate India:** Promoting next-generation technologies and services through investments, innovation, and intellectual property rights (IPR) generation to harness the power of emerging digital technologies, including 5G, AI, IoT, cloud, and big data to enable the provision of future-ready products and services.
- **India's Telecom Sector**
- India's telecommunication network is the second largest in the world by number of telephone users (both fixed and mobile phone).
- It has one of the lowest call tariffs in the world enabled by mega telecom operators and hyper-competition among them.
- India has the world's second-largest Internet user-base.
- Indian telecom industry underwent a high pace of market liberalization and growth since the 1990s and now has become the world's most competitive and one of the fastest growing telecom markets.

### **Industry Scenario**

- India is expected to have a digital economy of \$1 tn by 2025.

- The Telecommunications industry is divided into following subsectors: Infrastructure, Equipment, Mobile Virtual Network Operators (MNVO), White Space Spectrum, 5G, Telephone service providers and Broadband.
- Over the last seven years, the Indian Telecom Tower industry has grown significantly by 65%. The number of mobile towers increased from 400,000 in 2014 to 660,000 in 2021. Similarly, the number of Mobile Base Transceiver Stations have grown rapidly by 187% and increased from 800,000 in 2014 to 2.3 mn in 2021.
- It is also estimated that 5G technology will contribute approximately \$450 bn to the Indian Economy in the period of 2023-2040. Currently, the auction of IMT/5G spectrum is undergoing.
- India added over 500 Mn new smartphone users over the last decade. We are expected to have 850 Mn smartphone users by 2026, representing ~55% of the total population.
- The DoT is targeting a combination of 100% broadband connectivity in the villages, 55% fiberisation of mobile towers, average broadband speeds of 25 mbps and 30 lakh kms of optic fibre rollouts by December 2022. By December 2024, it is looking at 70% fiberisation of towers, average broadband speeds of 50 Mbps and 50 lakh kms of optic fibre rollouts at a pan-India level.

### **Union Budget 2022 Highlights**

- Spectrum auctions to be conducted in 2022 for the rollout of 5G mobile services
- Scheme for design-led manufacturing under PLI Scheme to be launched to build a strong 5G ecosystem
- Contracts for laying optical fibres in all villages to be awarded under the Bharat Net project in FY 22-23

### **Government Initiatives:**

Some of the other major initiatives taken by the government for growth for telecom companies are as follows:

### **BharatNet**

- The Government is implementing the flagship BharatNet project (in phases), to link each of the 2.5 lakh Gram Panchayats of India through optical fibre network.
- This is the largest rural connectivity project of its kind in the world and is the first pillar of Digital India Programme.
- It will facilitate the delivery of various e-Services and applications including e-health, eeducation, e-governance and e-commerce in the future.

- The project envisages optimal mix of underground fibre, fibre over power lines, radio and satellite media for providing broadband connectivity which can be utilized by all categories of service providers on non-discriminatory basis.

### **Twitter Sewa**

- The Ministry of Communications & Information Technology has launched Twitter Sewa, an online communications platform for registration and resolution of user complaints in the telecommunications and postal sectors.

### **Net neutrality framework**

- The Telecom Regulatory Authority of India (TRAI) has released a consultation paper which aims to offer consumers free Internet services within the net neutrality framework and has proposed three models for free data delivery to customers without violating the regulations.

### **Amendment of the Unified License for telecom operations:**

- The Department of Telecommunications (DoT) has amended the Unified Licence for telecom operations which will allow sharing of active telecom infrastructure like antenna, feeder cable and transmission systems between operators, thereby lowering the costs of operations and leading to faster rollout of networks.

### **National Action Plan for Skill Development in Telecom Sector**

- The Ministry of Skill Development and Entrepreneurship (MSDE) signed a Memorandum of Understanding (MoU) with Department of Telecommunication (DoT) to develop and implement National Action Plan for Skill Development in Telecom Sector, with an objective of fulfilling skilled manpower requirement and providing employment and entrepreneurship opportunities in the sector.

### **Recommendation against dropped calls**

- The Telecom Regulatory Authority of India (TRAI) has directed the telecom companies or mobile operators to compensate the consumers in the event of dropped calls with a view to reduce the increasing number of dropped calls.
- PLI scheme
- PLI scheme is an initiative that provides incentives to domestic industries to boost local production.
- Through this scheme the Government aims to give companies incentives on incremental sales from products manufactured in domestic units.

- PLI) Scheme has been introduced in Telecom & Networking Products sector for Enhancing India's Manufacturing Capabilities and Enhancing Exports – Atmanirbhar Bharat. In October 2021, 31 companies (including both domestic and global companies) were provided approval under the PLI Scheme.

## TOPIC: ECONOMY

### WATERWAYS IN INDIA

#### In News:

To promote inland water transport (IWT) in the country, 111 inland waterways spread over 24 states have been declared as National Waterways (NWs) under National Waterway Act, 2016. Based on the outcome of techno-economic feasibility and Detailed Project Reports (DPRs) of these NWs, action plan has been formulated by IWAI for 26 NWs found viable for cargo/passenger movement.

#### Analysis of Background:

#### About National Waterways:

- India has a vast network of inland waterways that include river bodies, canals, backwaters and creeks.
- However, these inland waterways have been unutilised, as compared to other countries in the world.
- The National Waterways Act proposed 106 additional national waterways to the five national waterways declared earlier.
- The Inland Waterways Authority of India (IWAI) is responsible for the timely execution of national waterways projects and to ensure improved water transportation in India.
- Under the National Waterways Act, 2016, 111 inland waterways (including five national waterways in India declared earlier) have been declared as 'national waterways'.

NATIONAL WATERWAY	DETAILS OF WATERWAYS	STATES
National Waterway 1	Ganga-Bhagirathi-Hooghly River System (Haldia - Allahabad)	Uttar Pradesh, Bihar, Jharkhand & West Bengal
National Waterway 2	Brahmaputra River (Dhubri - Sadiya)	Assam
National Waterway 16	Barak River	Assam
National Waterway 3	West Coast Canal (Kottapuram - Kollam),	Kerala

	Champakara and Udyogmandal Canals	
National Waterway 4	Krishna River (Vijayawada – Muktyala)	Andhra Pradesh
National Waterway 5	Dhamra-Paradio via Mangalagadi to Pankopal	Odisha
National Waterway 8	Alappuzha- Changanassery Canal	Kerala
National Waterway 9	Alappuzha - Kottayam – Athirampuzha Canal	Kerala (Alternate route: 11.5km)
National Waterway 27	Cumberjua River	Goa
National Waterway 68	Mandovi River	Goa
National Waterway 86	Rupnarayan River	West Bengal
National Waterway 97	Sunderbans Waterway	West Bengal
National Waterway 111	Zuari River	Goa
National Waterway 10	Amba River	Maharashtra
National Waterway 40	Ghagra River	Bihar
National Waterway 44	Ichamati River	West Bengal
National Waterway 52	Kali River	Karnataka
National Waterway 57	Kopili River	Assam
National Waterway 25	Chapora River	Goa
National Waterway 37	Gandak River	Bihar
National Waterway 28	Dabhol Creek Vasisti River	Maharashtra
National Waterway 73	Narmada River	Maharashtra & Gujarat
National Waterway 85	Revadanda Creek - Kundalika River System	Maharashtra
National Waterway 94	Sone River	Bihar
National Waterway 100	Tapi River	Maharashtra & Gujarat
National Waterway 31	Dhansiri River	Assam

### About Inland Waterways Authority of India (IWAI):

- The Inland Waterways Authority of India (IWAI) is responsible for the development and regulation of inland waterways for shipping and navigation.
- Launched in October 1986, the Noida-headquartered Authority has regional offices across different cities.
- It mainly undertakes projects for developing and maintaining the Inland Water Transport (IWT) infrastructure on national waterways through grants from the Shipping Ministry.

## JUTE INDUSTRY

### In News:

- India's jute economy is faltering while Bangladesh's is flourishing: Experts.

### Analysis of Background:

#### Jute industry of West Bengal

- The jute industry of West Bengal is facing a major crisis and impacting the livelihoods of thousands of workers and farmers.

- The sector directly provides employment to about 70 lakh workers in the country and sustains over 40 lakh farm families.
- With 70 of the 93 (2016 data) mills in India, West Bengal is the hub of India's jute industry, valued at around Rs 10,000 crore. Several mills are on the verge of closing.

### **Issue**

- The issue is the procurement of raw jute at a higher cost but the final output is being sold at higher rates.
- The government procures raw jute from farmers at a fixed Minimum Support Price (MSP) which is Rs 4,750 per quintal for the financial year 2022-23.
- This reaches the mill at Rs. 7,200 per quintal, that is, Rs. 700 more than the Rs. 6,500 per quintal cap for the final product.
- The jute mills do not procure raw material directly from the farmers because the mills are far from farmers and the process of procurement takes time. No single farmer produces enough to meet the entire demand of a mill. Thus, the middlemen or traders procure raw jute from multiple farmers and then trade it to the mills.

### **Supply Crunch**

- The occurrence of Cyclone Amphan in May 2020 and the subsequent rains in major jute producing States aggravated the crisis. These events led to lower acreage, which in turn led to lower production and yield compared to previous years.
- Additionally, as the Commission for Agricultural Costs and Prices (CACP) stated in its report, this led to production of a lower quality of jute fibre in 2020-21 as water-logging in large fields resulted in farmers harvesting the crop prematurely.
- Acreage issues were accompanied by hoarding at all levels – right from the farmers to the traders.

### **Impact**

- As the jute sector provides direct employment to 3.70 lakh workers in the country and supports the livelihood of around 40 lakh farm families, closure of the mills is a direct blow to workers and indirectly, to the farmers whose production is used in the mills. West Bengal, Bihar and Assam account for almost 99% of India's total production.

### **India's Jute Industry**

- India is the world's biggest producer of jute, followed by Bangladesh. Jute is primarily grown in West Bengal, Odisha, Assam, Meghalaya, Tripura and Andhra Pradesh.



- The jute industry in India is 150 years old. There are about 79 jute mills in the country, of which about 60 are in West Bengal along both the banks of river Hooghly.
- Jute production is a labour intensive industry. It employs about two lakh workers in the West Bengal alone and 4 lakh workers across the country.

### **Jute as a crop and its benefits**

- Jute is the only crop where earnings begin to trickle in way before the final harvest. The seeds are planted between April and May and harvested between July and August.
- The leaves can be sold in vegetable markets for nearly two months of the four-month jute crop cycle. The tall, hardy grass shoots up to 2.5 metres and each part of it has several uses.
- The outer layer of the stem produces the fibre that goes into making jute products. But the leaves can be cooked, the inner woody stems can be used to manufacture paper and the roots, which are left in the ground after harvest, improve the yield of subsequent crops.
- Compared to rice, jute requires very little water and fertiliser. It is largely pest-resistant, and its rapid growth spurt ensures that weeds don't stand a chance.
- To top it all, the monetary returns on jute are twice that of paddy. An acre of land produces approximately nine quintals of fibre.
- Jute brings home higher returns compared to most cash and food crops, and it is also a massive winner on the sustainability front.
- Jute is the second most abundant natural fibre in the world. It has high tensile strength, acoustic and thermal insulation, breathability, low extensibility, ease of blending with both synthetic and natural fibres, and antistatic properties.
- Jute can be used: for insulation (replacing glass wool), geotextiles, activated carbon powder, wall coverings, flooring, garments, rugs, ropes, gunny bags, handicrafts, curtains, carpet backings, paper, sandals, carry bags, and furniture.
- A 'Golden Fibre Revolution' has long been called for by various committees, but the jute industry is in dire need of basic reforms.

### **Problems of Jute Industry in India**

The major problems of Indian Jute Industries are mentioned below:

- High cost of production: Equipments for production are all worn out, outmoded in design. Many mills are uneconomic. Products are made costlier.
- Storage of raw Jute: Jute industry suffers from inadequate supply of raw jute.
- Shortage of Power Supply: Load-shedding creates problem of under-utilization of capacity.

- Growth of Jute mills in Bangladesh and loss of foreign market: Newly started jute industry in Bangladesh has captured some of the market of Indian jute goods.
- Emergence of substitute goods against gunny bags and loss of demand for jute goods both at home and abroad: Indian jute goods have been losing ground in the world market primarily due to keen competition from synthetic substitutes and also supplies from Bangladesh and China.
- Effects of Partition: Due to Partition in 1947, the erstwhile best quality jute-producing areas went to the then East Pakistan (now Bangladesh) while the jute mills were mainly concentrated in the Indian Territory. Bangladesh received 82% of the good quality jute growing tract India retained 95% of the mills. The resultant acute shortage of raw jute forced some of the mills to close down.
- Stiff Competition: Bangladesh, Sri Lanka, Thailand and China are recently posing grave threat to India in international export market.
- Low Yield Per Acre: India produces very low quantity of jute per unit of land. In Bangladesh the average yield per hectare is 1.62 tonnes. It is only 1.3 tonnes per hectare in India. The corresponding figure of jute production in China is 1.78 tonnes per hectare. In Taiwan, it is 2 tonnes per hectare.
- Outmoded Mills and Machinery: Most of these jute mills were established some 100 or 150 years back. Naturally most of these mills are having backdated machinery. Output of these machines is very low compared to the modern sophisticated machines. Because of use of these for more than a century, productive capacity has gradually declined.
- Low Demand: Not many people are aware of plastic alternatives like jute. Besides, the misconception that cotton bags are more durable, presentable and nature friendly has resulted in very few people using jute products.
- Pandemic: The coronavirus pandemic has also thwarted hopes of restoring the lost glory of the industry — several mills have shut down and lockdowns have caused labour and raw material shortages.

## **JOB CRISIS**

### **In News:**

India has an unemployment, quality of jobs and quality of income challenge, data show. Unemployment in India stood at 8.1% in February 2022, per Centre for Monitoring Indian Economy (CMIE) data.

### **Analysis of Background:**

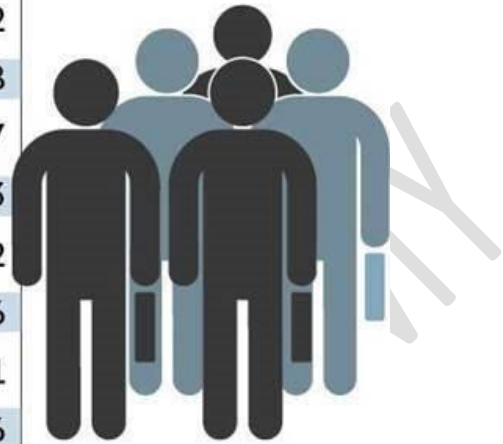
#### **Unemployment rate**

Unemployment rate is a ratio between persons who are not currently employed but are actively searching for a job, and the total labour force.

### Unemployment rate (%)

Week ended	All-India	Urban	Rural
May 23, 2021	14.73	17.41	13.52
May 30, 2021	12.15	17.88	9.58
June 6, 2021	13.62	14.4	13.27
June 13, 2021	8.7	9.7	8.23
June 20, 2021	9.35	10.3	8.92
June 27, 2021	8.72	8.98	8.6
July 4, 2021	7.3	8.57	6.71
July 11, 2021	7.64	8.9	7.06

Source: CMIE



## Types of Unemployment in India

### 1. Open Unemployment

Open unemployment is a situation where in a large section of the labour force does not get a job that may yield them regular income. This type of unemployment can be seen and counted in terms of the number of unemployed persons. The labour force expands at a faster rate than the growth rate of economy. Therefore all people do not get jobs.

### 2. Disguised Unemployment

It is a situation in which more people are doing work than actually required. Even if some are withdrawn, production does not suffer. In other words it refers to a situation of employment with surplus manpower in which some workers have zero marginal productivity. So their removal will not affect the volume of total production. Overcrowding in agriculture due to rapid growth of population and lack of alternative job opportunities may be cited as the main reasons for disguised unemployment in India.

### 3. Seasonal Unemployment

It is unemployment that occurs during certain seasons of the year. In some industries and occupations like agriculture, holiday resorts, ice factories etc., production activities take place only in some seasons. So they offer employment for only a certain period of time in a year. People engaged in such type of activities may remain unemployed during the off-season.

### 4. Cyclical Unemployment

It is caused by trade cycles at regular intervals. Generally capitalist economies are subject to trade cycles. The down swing in business activities results in unemployment. Cyclical unemployment is normally a short-run phenomenon.

### **5. Educated Unemployment**

Among the educated people, apart from open unemployment, many are underemployed because their qualification does not match the job. Faulty education system, mass output, preference for white collar jobs, lack of employable skills and dwindling formal salaried jobs are mainly responsible for unemployment among educated youths in India. Educated unemployment may be either open or underemployment.

### **6. Technological Unemployment**

It is the result of certain changes in the techniques of production which may not warrant much labour. Modern technology being capital intensive requires fewer labourers and contributes to this kind of unemployment.

### **7. Structural Unemployment**

This type of unemployment arises due to drastic changes in the economic structure of a country. These changes may affect either the supply of a factor or demand for a factor of production. Structural unemployment is a natural outcome of economic development and technological advancement and innovation that are taking place rapidly all over the world in every sphere.

### **8. Underemployment**

It is a situation in which people employed contribute less than their capacity to production. In this type of unemployment people are not gainfully employed. They may be employed either on part-time basis, or undertake a job for which lesser qualification is required. For example a Post Graduate may work as a clerk for which only S.S.L.C. is enough.

### **9. Casual Unemployment**

When a person is employed on a day-to-day basis, casual unemployment may occur due to short-term contracts, shortage of raw materials, fall in demand, change of ownership etc.

### **10. Chronic Unemployment**

If unemployment continues to be a long term feature of a country, it is called chronic unemployment. Rapid growth of population and inadequate level of economic development on account of vicious circle of poverty are the main causes for chronic unemployment.

### **11. Frictional Unemployment**

Frictional unemployment is caused due to improper adjustment between supply of labour and demand for labour. This type of unemployment is due to immobility of labour, lack of correct and timely information, seasonal nature of work etc.

### **Causes of Unemployment in India**

#### **Jobless growth**

- In India, since independence, the rate of growth of employment has been considerably less than the rate of economic growth.
- Moreover, the rate of economic growth has not been adequate enough to absorb the increasing labour force in India. As a result, there is widespread unemployment.

#### **Increase in the labour force**

- Over the years, the mortality rate has declined rapidly without a corresponding fall in birth rate and the country has, thus, registered an unprecedented population growth.
- This was naturally followed by an equally large expansion in the labour force.

#### **Use of machinery**

- In India, manpower is available in large quantities. Under these circumstances, the country would have a labour intensive technique of production.
- However, in India, not only in industries but also in agriculture, the capital-intensive technique of production is being used. This policy results in large scale unemployment.

#### **Lack of skill**

- In India, vocational skill development courses which are compatible with the Indian industry are comparatively less in number. So, there is a dearth of skilled manpower needed by the industry.

#### **Expectations towards employment**

- Educated youth in India aspire for a white-collar job.
- There is a lack of innovative and entrepreneurial spirit to organize economic activities where they can be self-employed.

- In India, most of the graduates prefer to remain unemployed till they get a job which is up to their expectations in terms of salary and nature of work.

### **Seasonal nature of agriculture**

- Agriculture in India is seasonal by nature. It depends on monsoon.
- Lack of irrigation facilities, poor soil fertility, outdated production techniques, non-availability of certified seeds and fertilizers are the factors that reduce the capacity of agriculture for other gainful employment throughout the year.
- The labourers are employed only for a few months in a year. For the rest of the year, the labour force remains jobless.

### **The slow rate of economic development**

- The overall economic development of India is very slow.
- Inadequate irrigation facilities, fertilizers, unsatisfactory growth of infrastructure are all due to inadequate industrial expansion.
- As a result, employment opportunities have not increased enough in the rural sector to absorb the growing labour force.

### **Migration of rural population**

- There has been a continuous migration of people from rural to urban areas in search of jobs. This has increased the problem of unemployment in urban areas.

## **FAIR AND REMUNERATIVE PRICE (FRP)**

### **In News:**

The Cabinet Committee on Economic Affairs, has approved Fair and Remunerative Price (FRP) of sugarcane for sugar season 2022-23 (October - September) at ₹305 per quintal. The move will put pressure on sugar companies as they will have to pay more to procure and will come as a relief to the farmers as the sugarcane crushing season is set to start early this year.

### **Analysis of Background:**

#### **What is Fair and Remunerative Price?**

- Fair and Remunerative Price or FRP is the price required to be paid by sugar mills and factories to sugarcane farmers. It was introduced in 2009 and replaced the concept of Statutory Minimum Price (SMP).

- Under the FRP system, the price paid to farmers for sugarcane is not linked to the profits generated by sugar mills. Instead, FRP is based on the recovery rate of sugar from sugarcane.
- Mills are required to pay the basic FRP within 14 days of purchase of sugarcane from growers.

### **What is the State Advised Price?**

- State Advised Price or SAP is the price announced by the state government, over and above the FRP.
- Since sugar pricing comes under the concurrent list, the Supreme Court has held that both the centre and the state have the power to fix sugarcane prices — while the centre's price is the minimum price, states can set an SAP that will always be higher than the centre's FRP.
- Pricing policy for sugarcane
- Sugarcane prices are determined by the Centre as well as States.
- The pricing of sugarcane is governed by the statutory provisions of the Sugarcane (Control) Order, 1966 issued under the Essential Commodities Act (ECA), 1955.
- Prior to 2009-10 sugar season, the Central Government was fixing the Statutory Minimum Price (SMP) of sugarcane and farmers were entitled to share profits of a sugar mill on 50:50 basis.
- As this sharing of profits remained virtually unimplemented, the Sugarcane (Control) Order, 1966 was amended in 2009 and the concept of SMP was replaced by the Fair and Remunerative Price (FRP) of sugarcane.
- The Centre announces Fair and Remunerative Prices which are determined on the recommendation of the Commission for Agricultural Costs and Prices (CACP) and are announced by the Cabinet Committee on Economic Affairs, which is chaired by Prime Minister.
- The State Advised Prices (SAP) are announced by key sugarcane producing states which are generally higher than FRP.
- The amended provisions of the Sugarcane (Control) Order, 1966 provides for fixation of FRP of sugarcane having regard to the following factors:
  1. cost of production of sugarcane;
  2. return to the growers from alternative crops and the general trend of prices of agricultural commodities;
  3. availability of sugar to consumers at a fair price;
  4. price at which sugar produced from sugarcane is sold by sugar producers;
  5. recovery of sugar from sugarcane;

6. the realization made from sale of by-products viz. molasses, bagasse and press mud or their imputed value.
7. reasonable margins for the growers of sugarcane on account of risk and profits.

### **How are FRP and SAP different from MSP?**

- While FRP and SAP are different versions of the price for sugarcane that need to be paid by the mills to farmers, MSP or Minimum Selling Price is the assured price of sugar for mills. Prices of sugar are usually market driven.
- But to ensure that the industry gets, at least, the minimum cost of sugar production so as to clear cane price dues to farmers, the concept of sugar MSP has been introduced since 2018.

## **TRADE DEFICIT**

### **In News:**

India's trade deficit has widened to a record \$31.02 billion in July due to contracting merchandise exports and a rise in imports. This is a three-times increase from the \$10.63 billion trade deficit reported in July last year.

### **Analysis of Background:**

#### **What is trade deficit?**

- Simply put, trade deficit or negative balance of trade (BOT) is the gap between exports and imports. When money spent on imports exceeds that spent on exports in a country, trade deficit occurs.
- It can be calculated for different goods and services and also for international transactions. The opposite of trade deficit is trade surplus.

#### **What Causes a Trade Deficit?**

- It can be hard to pinpoint the exact cause of a trade deficit. Typically, multiple factors are at play. Here are some of the leading causes of an increase in a country's trade deficit.
- Fall in domestic production: goods not being produced domestically. In that case, they have to be imported. This leads to an imbalance in their trade.
- Economic growth: A large trade deficit can actually indicate economic growth. When the economy of a country grows and strengthens, consumers have more wealth to purchase goods from overseas, which will increase the trade deficit. A strong economy also attracts foreign investors, further enlarging the trade deficit.



- **Increased government spending:**An increase in government spending can mean a country's savings diminish, increasing the trade deficit.
- **Changes in exchange rate:**A change in the strength of a country's currency can impact the trade deficit. When a country's currency weakens relative to other nations, trade between other countries becomes more costly. If a country's currency is strong, it may want to import more goods or services.
- **Limits of production:**Certain goods simply cannot be produced domestically, or are much cheaper to produce abroad due to climate, natural resources, or other reasons. For example, a small island nation may rely on imports of agricultural products from the mainland.
- **Removal of barriers to trade, such as tariffs:**Trade policy can have an effect on the trade deficit, but unless the country was previously closed to trade, trade policy mostly serves to shift the trade deficit toward another trading partner, rather than creating or increasing the overall trade deficit.

### **Potential Effects of a Trade Deficit**

Here are some of the ways a trade deficit can affect a country's economy.

#### **Lower prices**

A country may have a trade deficit because it is cheaper to purchase goods internationally than to produce them at home. This means that prices of consumer goods and services may decrease.

#### **Weakening currency:**

A trade deficit has the potential to weaken a country's currency.

#### **Deflation:**

A country that has a trade deficit is sending a portion of its currency overseas. This can cause deflation, a state in which reduced demand leads to lower prices.

#### **Changes in employment:**

If a country imports more than it exports, unemployment may increase. For example, if a country shifts from manufacturing cars to importing cars from international car manufacturers, the job market for car manufacturing will be negatively impacted. Some economists argue that the reduced prices caused by a trade deficit can make up for these losses, by allowing resources to be allocated to new jobs, while others suggest that workers displaced by shifts in trade are unlikely to benefit from jobs created in other fields.

## Decrease in GDP:

Trade deficit is one factor used to calculate a country's Gross Domestic Product (GDP), a measure of the size of the economy. If the trade deficit increases, the GDP decreases.

## EMERGENCY CREDIT LINE GUARANTEE SCHEME

### In News:

The Union Cabinet chaired by Prime Minister Narendra Modi approved a proposal to enhance the limit of the Emergency Credit Line Guarantee Scheme (ECLGS) by ₹ 50,000 crore to ₹ 5 lakh crore.

### Analysis of Background:

#### Emergency Credit Line Guarantee Scheme

- Emergency Credit Line Guarantee Scheme is a type of multipurpose loan offered by the Government of India.
- The ECLGS primarily aims to provide a line of credit loan facility to MSMEs and business enterprises that have faced hardships due to the pandemic. As a part of the same, government officials provide a 100% credit guarantee on behalf of the National Credit Guarantee Trustee Company (NCGTC).
- The Emergency Credit Line Guarantee Scheme makes up a part of the ₹20 lakh crore package announced by the Indian Finance Ministry back in the early months of the pandemic. It was done to help various struggling enterprises. According to the Emergency Credit Line Guarantee Scheme guidelines, all eligible entities were entitled to a credit of up to 20% of their existing business loan dues starting from February 29, 2020. However, it must be noted that the capping for the same is set at ₹5 Crores.

#### Key Features of ECLGS Scheme

- To determine if the line of credit loan offered under the Emergency Credit Line Guarantee Scheme is the right option for someone, they must review the following features of the scheme:
- The ECLGS loan amount offered is up to 20% of the borrower's total outstanding loan of up to ₹50 Crores, which means the maximum loan amount will be ₹10 Crores.
- Separate loan accounts are made for borrowers who have sanctioned loans under the ECLGS scheme.
- The ECLGS loans do not attract any fees that one would pay on an ordinary business loan, such as the processing fee and the applicable prepayment charges.

- The ECLGS scheme offers a repayment tenure of up to 4 years from the date of disbursement.
- The emergency credit scheme also offers a moratorium of up to one year to repay the principal amount.
- It is important to note that the ECLGS loan interest rate payment will continue during the moratorium period. Post the moratorium period, the principal balance amount will be paid over three years in 36 equal monthly installments.

### **ECLGS Scheme Eligibility Criteria**

- The MSME or business enterprise borrower accounts must have a minimum annual turnover of up to ₹250 Crores for FY19-20 and combined outstanding loans of up to ₹50 Crores.
- The MSME or Business Enterprise must be recognised as a partnership, trust, limited liability partnership, proprietorship, or a registered company.
- To be eligible for a credit line provided under the ECLGS loan, the MSME or business enterprise must be a GST-registered entity. However, businesses that do not require a GST licence to operate are eligible for the scheme's beneficiaries' benefits.
- Borrowers must also be existing customers on the books of the Member Lending Institutions (MLIs)
- The ECLGS is not applicable for loans provided in an individual capacity.

### **ECLGS 2.0**

- Under ECLGS 2.0 entities with outstanding credit above Rs 50 crore and not exceeding Rs 500 crore as on February 29, 2020, which were less than or equal to 30 days past due as on February 29, 2020 are eligible.
- The loans provided under ECLGS 2.0 will have a five-year tenor, with a 12-month moratorium on repayment of principal.
- These entities or borrower accounts will be eligible for additional funding up to 20 per cent (which could be fund based or non-fund based or both) of their total outstanding credit (fund based only) as a collateral free Guaranteed Emergency Credit Line (GECL), which would be fully guaranteed by NCGTC.

### **ECLGS 3.0**

- It would involve extension of credit of upto 40% of total credit outstanding across all lending institutions as on 29.02.2020.

- The tenor of loans granted under ECLGS 3.0 shall be 6 years including moratorium period of 2 years.
- Validity of ECLGS i.e. ECLGS 1.0, ECLGS 2.0 & ECLGS 3.0 have been extended upto 30.06.2021 or till guarantees for an amount of Rs. 3 lakh crore are issued.
- The modifications will enable availability of additional funding facility to the eligible beneficiaries will go a long way in contributing to economic revival, protecting jobs, and creating conducive environment for employment generation.

## STABLE COINS

### In News:

Crypto critics are using the collapse of dollar-pegged virtual currency Terra USD as ammunition to attack stablecoins and the crypto industry as a whole.

### Analysis of Background:

#### What is Stablecoin?

- A stablecoin is a digital currency that is pegged to a “stable” reserve asset like the U.S. dollar or gold.
- Stablecoins are designed to reduce volatility relative to unpegged cryptocurrencies like Bitcoin.

### More on Details;

- A stablecoin is one type of cryptocurrency that is designed to maintain a fixed value over time. The value of a stablecoin is typically pegged to a specific real currency, often the U.S. dollar.
- In this setup, one unit of the cryptocurrency typically equals one unit of the real currency. Unlike highly volatile cryptocurrencies such as Bitcoin, the price of stablecoins is not meant to fluctuate.

### Importance

- Digital currencies like Bitcoin and Ethereum are tremendously volatile, which makes pricing things in their terms very difficult. Stablecoins avoid this issue by locking their prices to a known reserve currency.
- In addition, their stability allows many stablecoins to be used as a functional currency within a crypto brokerage. For example, traders might convert Bitcoin into a stablecoin such as Tether, rather than into dollars.

- Stablecoins are available 24/7, making them more accessible than cash obtained through the banking system, which is closed overnight and on weekends.
- Stablecoins can also be used with smart contracts, which are a kind of electronic contract that is automatically executed when its terms are fulfilled. The stability of the digital currency also helps circumvent disagreements that could arise when dealing with more volatile cryptocurrencies.

### **What are the risks of stablecoins?**

- **Security:** Like other cryptocurrencies, stablecoins must be held somewhere, whether digital wallet or with a broker or exchange. And that presents risks since a given trading platform may not be secure enough or may have some vulnerabilities.
- **Counterparty risk:** While it may seem like cryptocurrency is highly decentralized, in reality one has to deal with several parties in a transaction, including the bank holding the reserves and the organization issuing the stablecoin. They must be doing the right things (security, properly reserving, etc.) for the currency to maintain its value.
- **Reserve risk:** A key element of the stable-coin ecosystem are the reserves backing a stablecoin. Those reserves are the last backstop on a stablecoin's value. Without them, the coin issuer cannot guarantee the value of a stablecoin with full confidence.
- **Lack of confidence:** If a stablecoin is not sufficiently backed by hard assets, especially cash, it could suffer a run and lose the peg against its target currency. That's effectively what happened to the algorithmic stablecoin TerraUSD in May 2022, since it wasn't backstopped by cash but rather by other cryptocurrencies. The price of the stablecoin broke and spiraled downward, as traders lost confidence in its ability to maintain the peg.

### **Bottom line**

- Stablecoins provide some of the stability that is lacking in most cryptocurrencies, making them unusable as actual currency. But those using stablecoins should know the risks they're taking when they own it. While in most periods it may seem like stablecoins have limited risks, stablecoins may become the riskiest in a crisis when it ought to be the safest to own them.

## **NON-FUNGIBLE TOKENS (NFTS)**

### **In News:**

In January OpenSea's monthly volumes for Ethereum shot over \$4.8 billion. OpenSea is said to be one of the largest NFT marketplaces.

### **Analysis of Background:**

#### **What are NFTs?**

- NFTs are digital assets whose ownership is verified through transaction records stored on blockchains. Art work, digital avatars and accessorised monkeys are some of the most commonly traded NFTs.
- In a nutshell, NFT means non-fungible tokens (NFTs), which are generally created using the same type of programming used for cryptocurrencies. In simple terms these cryptographic assets are based on blockchain technology. They cannot be exchanged or traded equivalently like other cryptographic assets.
- Like Bitcoin or Ethereum. The term NFT clearly represents it can neither be replaced nor interchanged because it has unique properties. Physical currency and cryptocurrency are fungible, which means that they can be traded or exchanged for one another.
- NFT stands for a non-fungible token, which means it can neither be replaced nor interchanged because it has unique properties.

#### **Key Features of NFT**

- Digital Asset - NFT is a digital asset that represents Internet collectibles like art, music, and games with an authentic certificate created by blockchain technology that underlies Cryptocurrency.
- Unique - It cannot be forged or otherwise manipulated.
- Exchange - NFT exchanges take place with cryptocurrencies such as Bitcoin on specialist sites.

#### **How is an NFT Different From Other Cryptocurrencies?**

- Although NFTs are created using the same kind of programming language as other cryptocurrencies, that's where the similarity ends.

Other Cryptocurrency	NFT
<ul style="list-style-type: none"><li>• Cryptocurrencies are “fungible”; they can be traded or exchanged for one another. They’re also equal in value.</li><li>• For example Dollar is always equal to one Dollar., one Bitcoin is always equal to</li></ul>	<ul style="list-style-type: none"><li>• Each NFT acts as a digital signature that makes it impossible for them to be exchanged for or equal to one another.</li><li>• For example, The Last Supper is a</li></ul>

another Bitcoin, or one

painting of a kind and cannot be exchanged with another painting.

## INDEX FUND

### In News:

Index funds charge a far lower management fees than actively managed fund. Warren Buffett, a famous investor, says that index funds are a safe way to save for retirement.

### Analysis of Background:

#### Index Fund

- An index fund is a portfolio of stocks or bonds designed to mimic the composition and performance of a financial market index.
- Thus, an index fund tracks the performance of an underlying index, like the Nifty or the Sensex. These funds stick to their benchmark index regardless of what happens in the market.
- Their main goal is to make a portfolio that looks like an index of the stock market. A fund that tracks an index holds the same stocks in the same amounts as the index. Indian index funds are based on gold, Nifty, Midcap index, etc.

#### The way Index Funds work

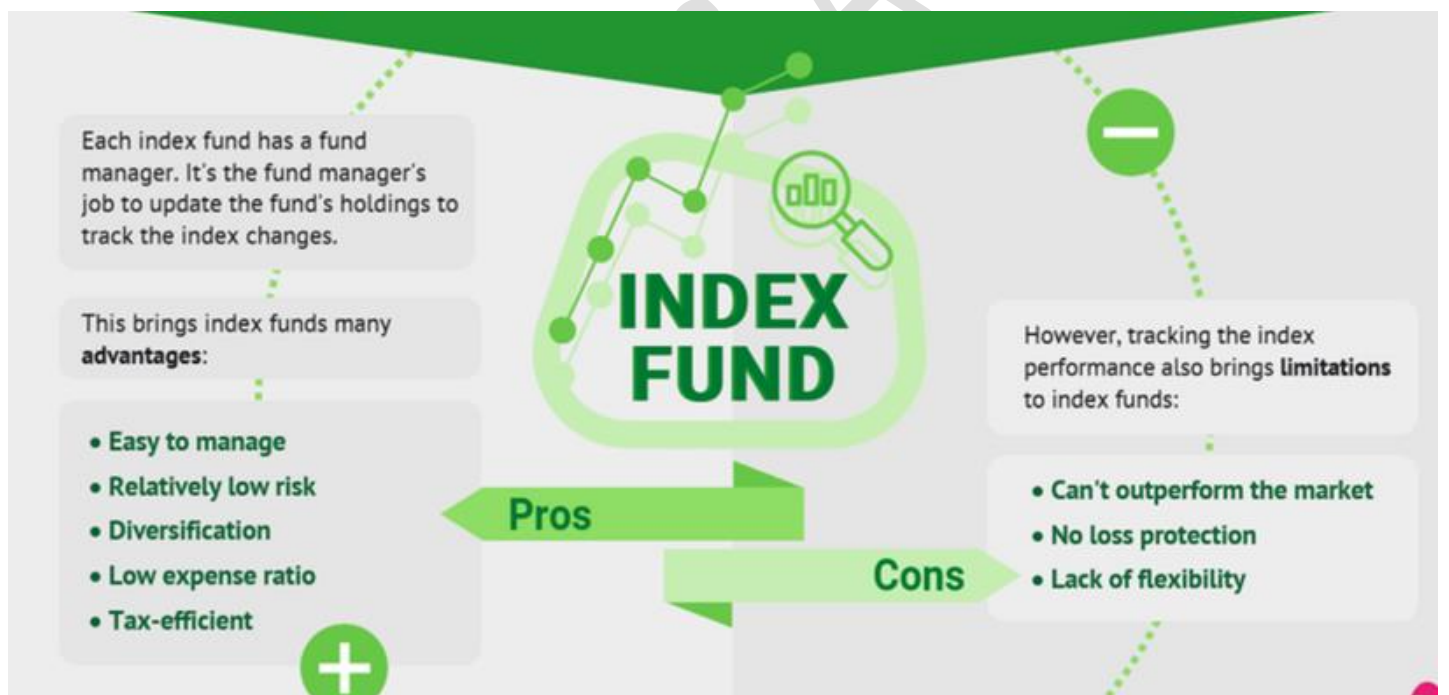
- Indexing is a passive way to manage investments. Instead of picking stocks to invest in and planning when to buy and sell them, a fund portfolio manager builds a portfolio whose holdings match those of an index. The idea is that if the fund mimics the profile of the index—either the whole stock market or a large part of it—its performance will be the same as that of the index.

#### Index Funds as compared to actively managed funds

- Passive investing is one way to look at investing in index funds. The opposite of passive investing is active investing, which is what actively managed mutual funds with a portfolio of securities and market timing do.

#### Reduced Costs

- The lower management expense ratio is one of the main reasons why index funds are better than actively managed funds.
- The expenditure ratio of a mutual fund, also called the management expense ratio, includes all of the fund's operating costs, such as the pay of its advisers and managers, transaction fees, taxes, and accounting fees.
- Since index fund managers just copy the performance of a benchmark index, they don't need the help of research analysts and other people who help choose stocks. The fewer managers of index funds change their holdings, the less they have to pay in transaction fees and commissions. On the other hand, actively managed funds have bigger staffs and more transactions, which raises the cost of doing business.
- The expense ratio shows how much more it costs to run a fund and passes those costs on to investors. So, inexpensive index funds usually cost less than 1 percent, usually between 0.2 percent and 0.5 percent, and some companies offer expense ratios of 0.05 percent or less. On the other hand, Actively managed funds charge much higher fees, usually between 1 percent and 2.5 percent.







# Index Funds

## Advantages

- Easy to understand
- High liquidity
- Can diversify a portfolio
- Professionally managed
- Fewer fees than actively managed funds

## Disadvantages

- Not flexible
- Can have limited gains
- Can have average returns
- High maintenance fees for some
- Tracking errors are possible

GO BankingRates

## Risks of Index Fund

Index funds have the same level of safety as the index they follow. Index funds show the volatility of the market right away. So, these funds are as safe as the market as a whole. It is a way to invest in immediate markets, not managed and spread out.

## Significance

- Index funds are known for providing diversified exposure with lower management costs.
- Index funds are generally seen as good core holdings for retirement plans.

## TOPIC: SECURITY / DEFENSE

### UNSC MEET ON COUNTER-TERRORISM

#### In News:

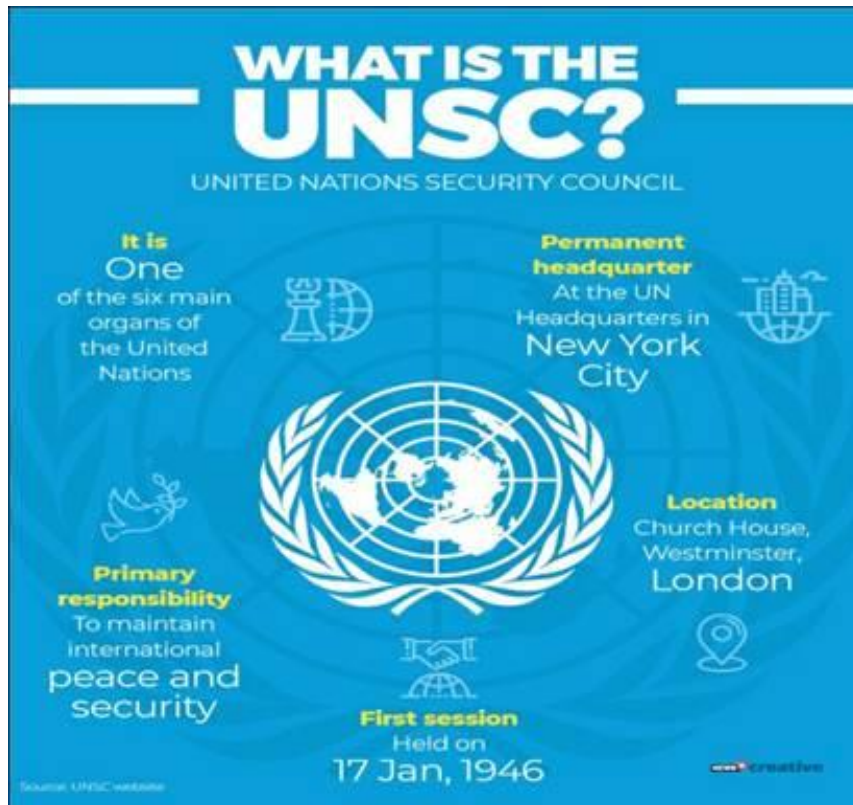
In a first, India will host diplomats and officials from all 15 countries of the United Nations Security Council, including China, Russia and the U.S., for a special meeting on terrorism, in Delhi and Mumbai in October.

#### Analysis of Background:

- The meeting of the Counter-Terrorism Committee (CTC), which India is chairing for 2022 as a member of the UNSC, will focus particularly on challenges such as terrorism financing, cyberthreats and the use of drones, said officials.
- New Delhi is expected to highlight cross-border threats from Pakistan and Afghanistan at the meeting, which will come two months before India completes its tenure as an elected member of the UNSC (2021-22).
- In addition, India has been pushing for the UN members to adopt a Comprehensive Convention on International Terrorism (first proposed in 1996), which is likely to be raised during the meeting.

#### New challenges

- Sources said that while terror financing was now recognised and dealt with through mechanisms such as the Financial Action Task Force (FATF), it was necessary to build templates and “codes of conduct” for newer threats, including financing through cryptocurrency and the use of drones for terror attacks.
- They said the CTC meeting in India could also pave the way for a possible visit to New York by Prime Minister Narendra Modi in December, when India will be the President of the UNSC for the entire month.
- The special meeting will specifically focus on three significant areas where emerging technologies are experiencing rapid development, growing use by Member States (including for security and counter-terrorism purposes), and increasing threat of abuse for terrorism purposes, namely (a) the Internet and social media, (b) terrorism financing, and (c) unmanned aerial systems.



### India at UNSC:

- India has recently taken over the presidency of the United Nations Security Council.
- India began its eighth term as a non-permanent member of the UNSC on January 1 and will remain as such for a period of two years.
- India's bid for a permanent seat at the UN Security Council has support from four of the five P5 nations, namely the US, UK, France and Russia.
- China is the only permanent member which is yet to officially back India's bid.

### Composition of UN Security Council:

The UN Security Council is composed of

- 15 members, including five permanent member states - China, France, Russian Federation, the United States, and the United Kingdom - and
- 10 non-permanent member states elected by the United Nations General Assembly (UNGA).
- Each non-permanent member gets the opportunity to work as UNSC president.
- Ten non-permanent members are elected to the UNSC every year for a two-year term. India's current term began on January 1 of this year and will last until December 31, 2023.
- The 10 non-permanent seats are distributed among the regions of the world: five seats for African and Asian countries (three are for Africa and two for Asia), one for Eastern

European countries, two for Latin American and Caribbean countries, and the remaining two for Western European and other countries.

- The Africa and Asia Pacific group takes turns every two years to put up an Arab candidate.

### **How does presidency of UNSC rotate?**

- Each non-permanent member gets the opportunity to operate as president of the UN Security Council during the two years it is part of the grouping.
- The presidency of UNSC changes hands every month between its members in the English alphabetical order of the member states' names.
- In August, the presidency was passed on from France to India. Similarly, Ireland is slated to take over the presidency from India in September.
- India will be in line for the presidency again in December 2022.
- The country's last term as a non-permanent member of the UNSC was in 2011-12, which was preceded by stints in 1991-92, 1984-85, 1977-78, 1972-73, 1967-68, and 1950-51.

### **Powers of the UNSC President:**

- The presidency derives responsibility from the Provisional Rules of Procedure of the United Nations Security Council as well as UNSC's practice.
- The holder of the presidency is considered to be the 'face' and spokesperson of the UNSC.
- Responsibilities of the UNSC president include:
  - Calling meetings of the UN Security Council
  - Appealing to parties in a conflict to "exercise restraint"
  - Reading statements of the UN Security Council to the press
  - Approving provisional agenda (proposed by the secretary-general)
  - Presiding at UNSC meetings and deciding questions relating to policy and overseeing any crisis

### **Veto power of UNSC member states:**

- The UN defines 'veto' as a "special voting power", which provides that "if any one of the five permanent members cast a negative vote in (UNSC), the resolution or decision would not be approved".
- However, the "veto power" is restricted to P5 member states of the UN Security Council. Non-permanent members of the UNSC do not enjoy this privilege.

- Article 27 of the UN Charter says each member of the UNSC shall have one vote and that decisions on "procedural matters" shall require no more than the affirmative vote of nine out of the 15 members.
- Decisions on any other matter need not only an affirmative vote of nine members but also the concurring votes of the permanent members.

## GALLANTRY AWARDS

### In News:

As many as 107 gallantry awards to the armed forces and Central Armed Police Forces (CAPF) were approved by President Droupadi Murmu to mark Independence Day, which includes three Kirti Chakras and 13 Shaurya Chakras, a statement by the Ministry of Defence said.

### Analysis of Background:

#### What are the Gallantry Awards in India?

- Post-Independence, first three gallantry awards namely Param Vir Chakra, Maha Vir Chakra and Vir Chakra were instituted by the government of India on 26th January, 1950 which were deemed to have effect from 15th August, 1947.
- Thereafter, other three gallantry awards — the Ashoka Chakra Class-I, the Ashoka Chakra Class-II and the Ashoka Chakra Class-III — were instituted in 1952, which were deemed to have effect from 15th August, 1947.
- These awards were renamed as Ashoka Chakra, Kirti Chakra and Shaurya Chakra respectively in January 1967.
- Order of precedence of these awards is the Param Vir Chakra, the Ashoka Chakra, the Mahavir Chakra, the Kirti Chakra, the Vir Chakra and the Shaurya Chakra.
- Param Vir Chakra: It is India's highest military decoration awarded for displaying distinguished acts of valor during wartime whether on land, at sea or in the air.
- Maha Vir Chakra: It is the second highest gallantry award for acts of conspicuous gallantry in the presence of the enemy whether on land, at sea or in the air.
- Vir Chakra: It is the country's third-highest wartime gallantry award after Param Vir Chakra and Maha Vir Chakra.
- Ashoka Chakra: It is the highest military award during peacetime for valor, courageous action or sacrifice.
- Kirti Chakra: It is the second highest peacetime gallantry award and is awarded for valor, courageous action or self-sacrifice away from the field of battle.
- Shaurya Chakra: It is awarded to the personnel of the armed forces for instances of extraordinary gallantry.

## TOPIC: REPORT / INDEX

### FINANCIAL INCLUSION INDEX (FI-INDEX)

#### In News:

The Reserve Bank of India's composite financial inclusion index (FI-Index) capturing the extent of financial inclusion across the country rose to 56.4 in March 2022, showing growth across parameters.

#### Analysis of Background;

- Reserve Bank of India's (RBI) financial inclusion (FI) index, was constructed to capture the extent of financial inclusion across the country.
- The index captures information on various aspects of financial inclusion in a single value ranging between 0 and 100, where 0 represents complete financial exclusion and 100 indicates full financial inclusion.
- The FI index was conceptualised as a comprehensive index incorporating details of banking, investments, insurance, postal as well as the pension sector in consultation with the government and respective sectoral regulators.
- The FI-Index has been constructed without any 'base year', and is published in July every year. The FI-Index comprises three broad parameters:
  1. Access, with a weightage of 35 per cent;
  2. Usage with 45 per cent weightage; and
  3. Quality with 20 per cent weightage
- It incorporates details of banking, investments, insurance, postal as well as the pension sector.
- The Index is responsive to ease of access, availability and usage of services, and quality of services.

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