TATHASTU

Institute of Civil Services

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Editorials of the Month

The Free Fall of Indian Rupee

News: The Indian rupee hit an all-time low against the US dollar this week weakening past the 79 rupees to a dollar mark and selling as low as 79.05 against the dollar. Many analysts expect the rupee to weaken further in the coming months and move past the 80 rupees to dollar mark.

What is Currency Depreciation?

- Currency depreciation is a fall in the value of a currency in a floating exchange rate system.
- Rupee depreciation means that the rupee has become less valuable with respect to the dollar.
- It means that the rupee is now weaker than what it used to be earlier.
- For example, USD 1 used to equal to Rupees 70, now USD 1 is equal to Rupees 79, implying that the rupee has depreciated relative to the dollar. In other words, it takes more rupees to purchase a dollar.

How is Depreciation of Rupee a double edged sword for the RBI?

Positive:

- Weaker rupee should theoretically give a boost to India's exports, but in an environment of uncertainty and weak global demand, a fall in the external value of rupee may not translate into higher exports.

Negative:

- It poses risk of imported inflation, and may make it difficult for the central bank to maintain interest rates at a record low for longer.
- India meets more than two-thirds of its domestic oil requirements through imports.
- India is also one of the top importers of edible oils. A weaker currency will further escalate imported edible oil prices and lead to a higher food inflation.

How do we determine value of Rupee?

- The value of any currency is determined by demand for the currency as well as its supply. When the supply of a currency increases, its value drops.
- In the wider economy, central banks determine the supply of currencies, while the demand for currencies depends on the amount of goods and services produced in the economy.
- In the forex market, the supply of rupee is determined by the demand for imports and various foreign assets. So, if there is high demand to import oil, it can lead to an increase in the supply of rupees in the forex market and cause the rupee's value to drop.
- The demand for rupees in the forex market, on the other hand, depends on foreign demand for Indian exports and other domestic assets.
- When there is great enthusiasm among foreign investors to invest in India, it can lead to an increase in the supply of dollars in the forex market which in turn causes the rupee's value to rise against the dollar.

Why is the Rupee losing its value against the dollar?

- The U.S. Federal Reserve has been raising its benchmark interest rate causing investors seeking higher returns to pull capital away from emerging markets such as India and back into the United States. This, in turn, has put pressure on emerging market currencies which have depreciated significantly against the U.S. dollar so far this year.
- Some analysts believe that the RBI's surprise decision to raise rates in May could have simply been to defend the rupee by preventing any rapid outflow of capital from India.

- India's current account deficit, which measures the gap between the value of imports and exports of goods and services, is expected to hit a 10 year high of 3.3% of gross domestic product in the current financial year.
- Foreign investors are unlikely to plough capital into India when investment yields are rising in the U.S.
- Consistently higher domestic price inflation in India. Higher inflation in India suggests that the RBI has been creating rupees at a faster rate than the U.S. Federal Reserve has been creating dollars.

Way Forward:

- Analysts believe that, over the long run, the rupee is likely to continue to depreciate against the dollar given the significant differences in long run inflation between India and the U.S.
- At the moment, as the U.S. Federal Reserve raises rates to tackle historically high inflation in the country, other countries and emerging markets in particular will be forced to raise their own interest rates to avoid disruptive capital outflows and to protect their currencies.

The Anti-Defection Law – Political Facts, Legal Fiction

News: The practice of lawmakers from changing political parties during their term continues with no end in the Indian legislature despite the 10th schedule having been inserted into the Constitution in 1985. The political crisis in Maharashtra provides a grim reminder of what the 10th Schedule can and cannot do.

What is the Anti-Defection Law? How has it evolved over the years?

- The anti-defection law punishes individual Members of Parliament (MPs)/MLAs for leaving one party for another.
- Parliament added it to the Constitution as the Tenth Schedule in 1985.
- Its purpose was to bring stability to governments by discouraging legislators from changing parties.
- The **Tenth Schedule** which is popularly known as the Anti-Defection Act was included in the Constitution via **the 52nd Amendment Act, 1985.**
- It sets the provisions for disqualification of elected members on the grounds of defection to another political party.
- It allows a group of MP/MLAs to join (merge with) another political party without inviting the penalty for defection and it does not penalize political parties for encouraging or accepting defecting legislators.
- **As per the 1985 Act**, a 'defection' **by one-third of the elected members** of a political party was considered a 'merger'.
- But the **91st Constitutional Amendment Act, 2003**, changed this and now **at least two-thirds** of the members of a party must be in favour of a "merger" for it to have validity in the eyes of the law.
- The members disqualified under the law can stand for elections from any political party for a seat in the same House.
- The decision on questions as to disqualification on ground of defection are referred to the Chairman or the Speaker of such House, which is subject to 'Judicial review'.
- However, the law does not provide a time frame within which the presiding officer has to decide a defection case.

Issues with ADL:

- **Paragraph 4 of the Law** - Paragraph 4 of the Anti - Defection Law creates an exception for mergers between political parties by introducing three crucial concepts:
    - Original Party – The party to which a member belongs (this can refer to the party generally, outside the house)
    - Legislature Party - Consisting of all elected members of a House for the time being belonging to one political party.
    - Deemed Merger
    - Paragraph 4 does not clarify whether the original political party refers to the party at the national level or the regional level, despite the fact that that is how the Election Commission of India recognizes political parties.

- Paragraph 4 states that a merger can take place only when an original party merges with another political party, and at least two-thirds of the members of the legislature party have agreed to this merger.
- Paragraph 4 seems to be creating a **"legal fiction"** so as to indicate that a merger of two third members of a legislature party can be deemed to be a merger of political parties, even if there is no actual merger of the original political party with another party.

- **Undermining Representative and Parliamentary Democracy**
  - After enactment of the ADL, the MP or MLA has to follow the party's direction blindly and has no freedom to vote in their judgment.
  - Due to ADL, the chain of accountability has been broken by making legislators accountable primarily to the political party.
- **Subversion of Electoral Mandates**
  - Defection is the subversion of electoral mandates by legislators who get elected on the ticket of one party but then find it convenient to shift to another, due to the lure of ministerial berths or financial gains.
- **Horse Trading**
  - Defection also promotes horse-trading of legislators which clearly go against the mandate of a democratic setup.
- **Speaker's Controversial Role**
  - There is no clarity in the law about the timeframe for the action of the House Chairperson or Speaker in the anti-defection cases. Some cases take six months and some even three years. There are cases that are disposed off after the term is over.
- **No Recognition of Split**
  - Due to the 91st Constitutional Amendment Act, 2003, the anti-defection law created an exception for anti-defection rulings. However, the amendment does not recognize a 'split' in a legislature party and instead recognizes a 'merger'.
- It allows wholesale defection, but retail defection is not allowed. Amendments are required to plug the loopholes.
- The Anti-Defection Law has created a democracy of parties and numbers in India, rather than a democracy of debate and discussion.

Suggestions related to ADL:

- The Election Commission has suggested it should be the deciding authority in defection cases. Others have argued that the President and Governors should hear defection petitions.
- The Supreme Court has suggested that Parliament should set up an independent tribunal headed by a retired judge of the higher judiciary to decide defection cases swiftly and impartially.
- Some commentators have said the law has failed and recommended its removal. Former Vice President Hamid Ansari has suggested that it applies only to save governments in no-confidence motions.

What is the way forward?

- Various commissions including **National Commission to review the working of the constitution** (NCRWC) have recommended that rather than the Presiding Officer, the decision to disqualify a member should be made by the President (in case of MPs) or the Governor (in case of MLAs) on the advice of the Election Commission.
- **Justice Verma in Hollohan judgment** said that tenure of the Speaker is dependent on the continuous support of the majority in the House and therefore, he does not satisfy the requirement of such independent adjudicatory authority. Thus, the need for an independent authority to deal with the cases of defection.
- **170th Law Commission report** underscored the importance of intra-party democracy by arguing that a political party cannot be a dictatorship internally and democratic in its functioning outside.

5 years of GST

Background of GST:
- GST was introduced through the 101st Constitution Amendment Act, 2016.
- It is the biggest indirect tax reform in the country.
- It was introduced on the pretext of 'One Nation One Tax'.
- It has subsumed indirect taxes like excise duty, Value Added Tax (VAT), service tax, luxury tax
- It is levied at the final consumption point and is essentially a consumption tax.
- It has led to a common national market as it helped mitigate the double taxation, cascading effect of taxes, multiplicity of taxes, classification issues etc.
- The GST paid by a merchant to procure goods or services (i.e. on inputs) can be set off later against the tax applicable on supply of final goods and services.

What has GST achieved?
- **Increased Tax Base –** From 63.9 lakh taxpayers in July 2017 the number has increased over 1.38 crore taxpayers as of June 2022.
- **Average monthly collection** - The average monthly collections have increased from Rs 1.04 lakh crore in 2020-21 to Rs 1.24 lakh crore in 2021-22. In the first two months of this year, the average collections are Rs 1.55 lakh crore.
- **Eliminated Tax Arbitrage** - GST has eliminated the tax arbitrage that existed among the states under the CST/VAT regime.
- **Decrease in Tax Rate** – Before GST regime, on most of the items, the combined state and centre rates were more than 31%. Under GST, the rates have been revised on over 400 goods 80 services. The highest 28% rate is restricted to sin and luxury items.
- **Rise in generation of E-Way Bill** - Over 53 lakh taxpayers and 67,000 transporters are enrolled on the e-way portal, generating, on average, 7.81 crore e-way bills per month. Since the launch of the system, a total of 292 crore e-way bills have been generated of which 42 per cent are for the inter-state transport of goods.
- **Focus on MSME's** – MSME's are given fair attention with their tax and compliance burden being kept low.
- **Professionally managed GSTN** – Since its inception, the administration of GST continues to be IT based and fully automated. The creation of GSTN, a professionally managed technology company to run the platform was a step in the right direction. Constant review and upgrading of hardware and software capacities have helped in keeping the system nimble.
- **Automated IGST** - The system of automated IGST refunds by customs and refund of accumulated input tax credit (ITC) to exporters by the GST authorities has made the neutralization of input taxes on export goods and services seamless and hassle-free.

Issues with GST:
- The system of automated IGST refunds by customs and refund of accumulated input tax credit (ITC) to exporters by the GST authorities has made the neutralization of input taxes on export goods and services seamless and hassle-free.
- GST on bread is zero, but the vegetable sandwich is in the 5% tax slab, hitting the vegetable grower directly.
- Taxes on wine, rum and beer, which generate large-scale employment and are the backbone of grape and sugarcane farming and the cocoa industry.
- Imposing high GST (sin taxes) is against the very purpose of government's policy of creating jobs under 'Make in India'. For example, it is not wise to tax hotels heavily when the very same industry generates indirect employment in ancillary sectors when it buys bed linen, air conditioners, carpets, furniture, electrical fittings and food produce.
- In the automobile sector, the GST on electric cars, tractors, cycles, bikes, low end and luxury cars ranges anywhere from 5% to 50%. The Sale of automobiles is the barometer of an economy.
- There are items that are exempt from GST. Petrol, diesel, aviation turbine fuel are not under the purview of GST, but come under Central excise and State taxes. Central excise duties and varying State Taxes contribute over 50% of the retail price of petrol and diesel.
- Classification issues on certain product. For example, Fryums (18%) vs Papad (0%). Since Papad is a traditional food item and fryums are packaged food items, they cannot have the same tax rate.

Way Forward:

- GST is a positive step towards shifting the Indian economy from the informal to formal economy. It is important to utilize experiences from global economies that have implemented GST before us to overcome the impending challenges.

Can use of Technology prevent Custodial Deaths?

India has a grim record in police brutality and custodial violence. Between 2001 and 2018, 1,727 persons died in police custody, but only 26 policemen were convicted for such deaths.

What are Custodial Deaths?

- Custodial deaths in India may refer to the deaths of persons in police custody and also to the deaths of persons in judicial custody while undergoing trial or serving a sentence.
- It is not uncommon knowledge that the police, when they grow increasingly frustrated with the trajectory of their interrogation, sometimes resort to torture and violence which could lead to the death of the suspect.

Key Highlights surrounding Custodial Deaths:

- According to National Crime Records Bureau (NCRB) data, Over the last 20 years, 1,888 custodial deaths were reported across the country, 893 cases registered against police personnel and 358 personnel charge-sheeted. But only 26 policemen were convicted in this period, official records show.
- Except in Uttar Pradesh, Madhya Pradesh, Chhattisgarh and Odisha, no policeman was convicted for such deaths across the country.
- Apart from custodial deaths, more than 2,000 human rights violation cases were also recorded against the police between 2000 and 2018. And only 344 policemen were convicted in those cases.

Why do we see so many Custodial Deaths?

- **Dearth of strong legislation**
  - India does not have an anti-torture legislation and is yet to criminalise custodial violence, while action against culpable officials remains illusory.
- **Use of Excessive Force**
  - The use of excessive force including torture to target marginalised communities and control people participating in movements or propagating ideologies which the state perceives as opposed to its stature.
- **Failure to bring Prison Reforms**
  - There is little transparency in prison system and failure to bring prison reforms leaves prisons affected by older problems of poor conditions, overcrowding, minimal safety against prisoners and manpower shortages.
- **Failure to ratify on International Standards**
  - India has signed the United Nations Convention Against Torture in 1997 but its ratification is still due.
  - Ratification means acting and bringing in laws and mechanisms to fulfill the commitments. Only signing on the convention doesn't help.

Role of Technology in Custodial Interrogation:

- **Brain Fingerprint System** - BFS is a type of lie-detection technique through which a person's brain waves are measured to find out if the individual is telling the truth while answering questions put to him/her. The technique helps investigative agencies uncover clues in complicated cases.
- **Use of Artificial Intelligence** - Artificial Intelligence (AI) and Machine Learning (ML) are emerging as a tool for interrogations. AI can detect human emotions and predict behavior. ML can in real time alert superiors when police are meting out inhumane treatment to suspects.
- **Use of Robots** - Police departments are increasingly using robots for surveillance and bomb detection.

- Many experts today believe that robots can meet or exceed the capabilities of the human interrogator.
- From his studies, human-computer interaction (HCI) researcher Joseph Weizenbaum concluded that suspects might be more receptive to opening up to automated conversational counterparts than the police.
- Robots equipped with AI and sensor technology can build a rapport with the suspects, utilize persuasive techniques like flattery, shame and coercion, and strategically use body language.
- Researchers at the University of Arizona have created Automated Interrogation technology called The Automated Virtual Agent for Truth Assessments in Real-Time (AVATAR).

Concerns surrounding use of technology:

- There exists the risk of bias, the peril of automated interrogation tactics, the threat of machine learning algorithms targeting individuals and communities, and the hazard of its misuse for surveillance.
- While the technology available to the police and law enforcement agencies is constantly improving, it is a restricted tool that can't eradicate custodial deaths.

What needs to be done to prevent Custodial Deaths?

- We need to formulate a multi-pronged strategy by decision makers encompassing legal enactments, technology, accountability and training.
- The **Law commission of India's** proposition in 2003 to change the Evidence Act to place the onus of proof on the police for not having tortured suspects is important in this regard.
- Besides, stringent action must be taken against personnel who breach the commandments issued by the apex court in **D.K Basu vs State of West Bengal** (1997)
- The **Draft Bill on the Prevention of Torture, 2017**, which has not seen the day, needs to be revived.

Technology may make policing more convenient, but it can never be an alternative for compassionate policing established on trust between the police and citizens.

How Technology can be leveraged for India's judiciary

The Judicial System in India is under tremendous pressure. As of May 2022, over 4.7 crore cases are pending in courts across different levels of the judiciary while nearly 1,82,000 cases have been pending for over 30 years. Inadequate infrastructure has resulted in overburdened courts, which in turn has led to a massive backlog of cases. In this context, let's understand how technology can be leveraged for India's judiciary.

What is the state of existing technological infrastructure in the Indian judicial system?

- **Project eCourts** - It aims to enhance judicial productivity, both qualitatively & quantitatively and to make the justice delivery system affordable, accessible, cost-effective, predictable, reliable and transparent.
- **NICNET** - In 1990, the National Informatics Centre took up computerization in respect of the Supreme Court of India. All High Courts have been computerized and interconnected through NIC's satellite-based computer-communication network NICNET.
- **Integrated Case Management System** - It was launched in 2017 for integrating the Supreme Court and the High Courts of the country and enabling e-filing throughout the country.
- **Shift to Online Dispute Resolution (ODR) System** - ODR is the system of resolution of disputes, particularly small- and medium-value cases, using digital technology and techniques of Alternate Dispute Resolution. ODR has received impetus across Government, businesses and even the judicial processes to tide over the constraints due to Covid-19 pandemic.

Benefits of ODR system:

- **Reduced Legal Costs** – It has the potential to reduce legal costs by way of reduced time for resolution and by doing away with the need for legal advice in select categories of cases.
- **Speedy Resolution** – ODR encourages speedy resolution of cases in an informal way. It is very flexible as it eliminates the need for travel.
- **Easy to access** – ODR can be accessed anywhere at any time wherever internet services are available.

- ODR tools such as online negotiation and mediation are premised on mutually arriving at an agreement, they make the dispute resolution process less adversarial and complicated for the parties.
- Document storage has been replaced by the ODR mechanism as one of the most common problems faced in Indian courts.

Concerns surrounding ODR mechanisms:

- **Dearth of Digital Infrastructure**
  - For ODR integration to thrive we need robust technology infra across the country. From access to smartphones, computers to high speed data is extremely important.
- **Need of Digital Literacy**
  - According to the Ministry of Electronics and Information Technology, only 38% of households in India are digitally literate.
  - In urban areas, digital literacy is relatively higher at 61% relative to just 25% in rural areas.
  - As per Internet India Report 2019, women constitute only 1/3rd of internet users in India.
- **Privacy and Confidentiality Concerns**
  - It includes online impersonation, breach of confidentiality by circulation of documents and data shared during ODR processes, tampering of digital evidence or digitally delivered awards/ agreements.
- **Concerns surrounding e-Stamp certificate**
  - Enforcement of arbitral awards in India is complex and burdensome.
  - It requires stamp duties in most of the States. The archaic requirement to attach an e-Stamp certificate to the document creates barriers in an otherwise end-to-end online process.
- Mutual consent of the parties is necessary for triggering the ODR procedure, whether through an explicit contractual clause or through a separate mutual agreement between the parties, otherwise, any decision made impartially is not legally legitimate and binding on the parties.

Following steps are essential to improve ODR mechanism:

- **Encourage Digital Literacy**
  - While providing necessary infrastructure and physical access to technology is one thing, it is equally important that the citizens are digitally literate.
  - PM Gramin Digital Saksharta Abhiyaan will help ensure access to justice in the remotest and most marginalized sections of the society.
- **Improve Access to Digital Infrastructure**
  - The government and judiciary play a vital role here. While government can be a facilitator in terms of providing infrastructure, the judiciary can make good use of the same so that it improves confidence of the citizens towards its acceptance.
  - National Digital Communication Policy, 2018 and National Broadband Mission aims to provide universal broadband connectivity and facilitate effective participation in the global digital economy.
- **Mobile friendly platform**
  - To maximize access ODR Platforms should be designed mobile friendly to enable their wide adoption. Further, it is also desirable to include voice prompt technology given the limitations in digital literacy.
  - LIMBS is a web-based application for monitoring cases involving the central government of India, in a more effective and transparent manner.
- **Government and PSU's as Role Models**
  - Government and Public Sector Undertakings (PSUs) are amongst the biggest litigants in India.
  - Adoption of ODR to resolve inter and intra Governmental disputes would be a key step in boosting confidence in the process. This will automatically address the issue of trust in ODR processes and outcomes.
- **Harmonize E-Stamp**
  - As ODR often deals with inter-state disputes where disputing parties are residing in different jurisdictions, there is a need to harmonize stamp-duty and procedural requirements across different States.
  - Online notarisation through secure e-signature and electronic notary seal can address this challenge and provide an online mode for authentication and validation.

- Digital lockers can be provided to the notaries to store and maintain all the necessary records for the documents notarised through online notarisation.
- **Block-Chain Technology** can be leveraged for protection of e-evidence from being tampered with.

What are the best practices adopted outside India?
- **Australia** - In the Australian Federal Court, documents are filed electronically on the e Lodgment system, at any time, from anywhere. They are then sealed, or stamped, electronically.
- **Canada** - Canada has introduced its online Civil Resolution Tribunal (CRT) which deals with small claims disputes, as well as property issues of any amount in the province of British Columbia.
- **Rwanda** - Rwanda is using the Electronic Filing System (EFS) to move towards paperless court services.

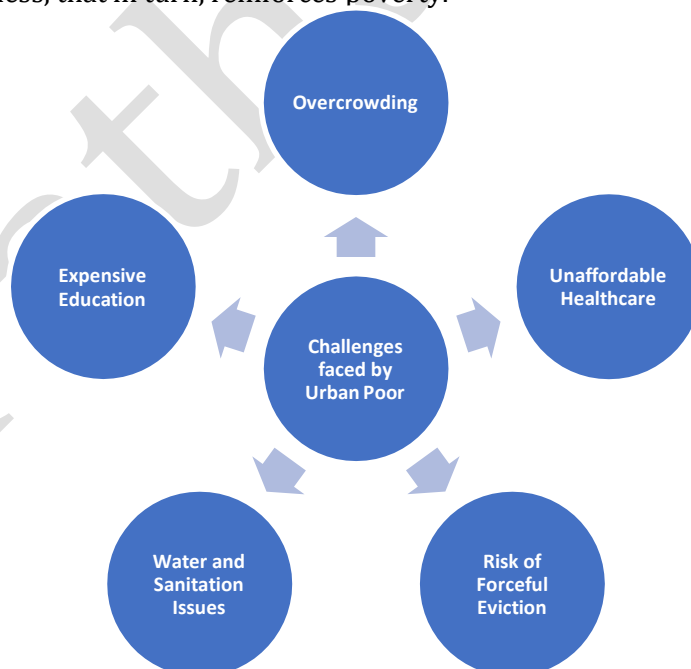## Urban Poverty – Reasons, Challenges and Solution

In the role of economic development of India, its cities have played a major role. Cities provide major hope and often play the role of a magnet for India's rural population as it attracts them to seek a better life. However, with increasing development, population pressure on cities has increased. According to a survey by the UN State of the World Population report in 2007, by 2030, 40.76% of India's population is expected to reside in urban areas.

What is Urban Poverty?
- It is form of poverty that is particularly visible in megacities, characterized by poor living circumstances and income, as well as a lack of essential utilities for a decent standard of life.
- For example, poor quality and overcrowded housing, lack of safe and readily available water supplies, lack of access to government schools, risk of forceful eviction etc.

Reasons behind Urban Poverty:
- The urban poor is largely the overflow of the rural poor who migrate to urban areas in search of alternative employment and livelihood.
- Most of the poor are not able to participate in the emerging employment opportunities in different sectors of the urban economy as they do not have the necessary knowledge and skills to do so.
- A steep rise in the price of food grains and other essential goods further intensifies the hardship and deprivation of lower-income groups in urban areas.
- Unemployment or underemployment and the casual and intermittent nature of work in urban areas lead to indebtedness, that in turn, reinforces poverty.

Overcrowding

Expensive Education

Challenges faced by Urban Poor

Unaffordable Healthcare

Water and Sanitation Issues

Risk of Forceful Eviction

How can we alleviate the problems faced by Urban Poor?

- **Recognition of Settlements by Government**
  - Most relief funds and benefits do not reach slum dwellers, mainly because these settlements are not officially recognized by the government.
  - In addition, absence of proper social security measures for informal workers adds to menace of urban poverty. Implementing a scheme on the lines of MGNREGA in urban areas can be a game changer in the long run to benefit urban slum population.
- **Access to Basic amenities**
  - Providing Basic amenities such as Clean Water, Sanitation and Electricity to the slum areas should be at priority.
- **Creating Basti-level women collectives**
  - Complete coverage of deprived households in urban areas by SHGs should be attempted in a mission mode. This process should be accompanied by access to credit for diversification of livelihoods.
  - Loans for street vendors under Svanidhi Scheme is a good step in that direction.
  - Creating basti-level women's collectives will address several difficult challenges.
- **Providing justice to workers in unorganized sector**
  - Workers engaged in the unorganised sector do not have the benefit of several laws such as the Minimum Wages Act or the Factories Act.
  - Labour contractors very often disburse lower than the minimum wages. There is a need to enforce uniform minimum wages throughout the country's unorganised sector as well.
- **Migration Support Centres**
  - The arrival process of migrants to cities in search of work has to be made less traumatic. For this Migration Support Centres can be established.
  - The expansion of rental housing and property titles to settlers who fulfil the basic requirements will ease access to credit. Support for the destitute and the homeless must be made a priority.

In the below graphic are some of the Government initiatives taken for improving Conditions of Urban Poor:

National Urban Livelihoods Mission

Pradhan Mantri Garib Kalyan Yojana

Atal Mission for Rejuvenation and Urban Transformation

Jal Jeevan Mission - Urban

PM-Awas Yojana Urban
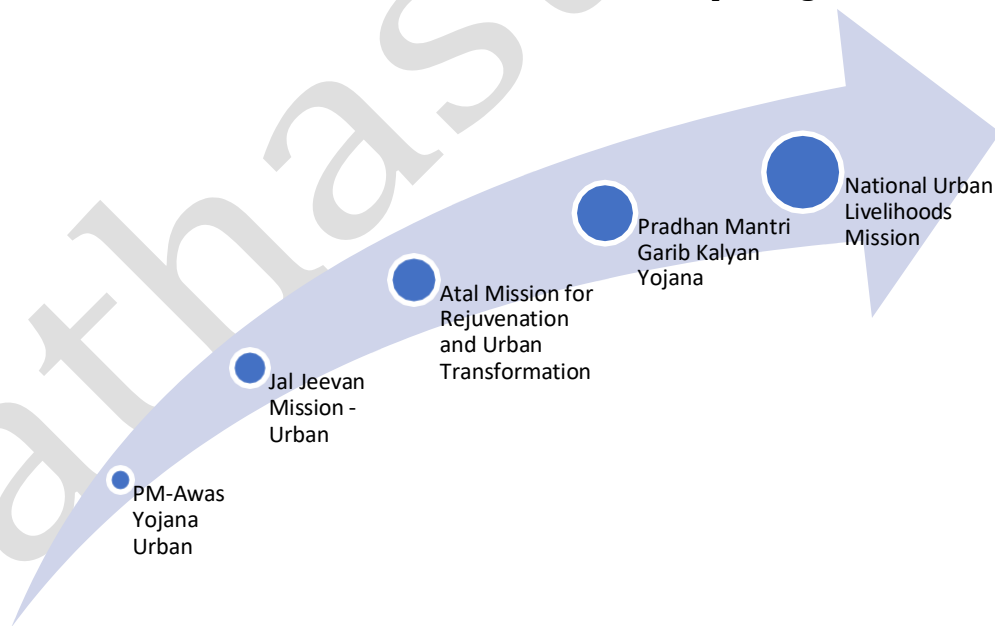
The Scam faultline is damaging Indian Banking

News: The biggest banking scam in India has come to the forefront, Dewan Housing Finance Corporation Limited(DHFL) has hoodwinked a consortium of banks driven by the Union Bank of India to the tune of ₹35,000 crore through financial misrepresentation. The DHFL case was not an isolated case. In February this year, ABG Shipyard Limited of Surat had already taken aloan of about ₹23,000 crore in a fake manner.

What are the issues within the Banking system?

- Data by the Reserve Bank of India (RBI) show that around 34% of scams in the banking industry are on account of inside work and due to poor lending practices by and the involvement of the junior and mid-level management.
- As emphasized by the RBI, scams in banking sector is one of the fundamental problems coming in the way of development of the banking sector in India.
- All scams, whether interior or outside, are results of operational failures.
- In a Financial Stability Report released by the RBI in December 2021, there is a projection of the gross NPAs of banks rising from 6.9% in September 2021 to 8.1% of total assets by September 2022(under a baseline scenario) and to 9.5% under a severe stress scenario.
- Research by Deloitte has shown that limited asset monitoring after disbursement (38%) was the foremost reason behind stressed assets and insufficient due diligence before disbursement (21%) was among the major factors for these NPAs.
- A high NPA also reduces the net interest margin of banks besides increasing their operating cost, these banks meet this cost by increasing the convenience fee from their small customers on a day to day basis.

What must the banks do to overcome the issues it faces?

- **Exercise Due diligence and Caution while offering Funds**
    - Over time, bad loans lead to higher NPAs. So, banks have to exercise due diligence and caution while offering funds.
    - The regulation and the control of chartered accountants is a very important step to reduce non-performing assets of banks.
    - Banks should be cautious while lending to Indian companies that have taken huge loans abroad.
    - There is also an urgent need to tighten the internal and external audit systems of banks.
- Public sector banks should set up an **internal rating agency** for rigorous evaluation of large projects before sanctioning loans.
- The **fast rotation of employees** of a bank's loan department is very important.
- Financial fraud can be reduced to a great extent by the use of **artificial intelligence (AI)** to monitor financial transactions.
- Rather than having to continuously write off the bad loans of large corporations, India has to improve its loan recovery processes and establish an early warning system in the post disbursement phase.
- The CIBIL score of the borrower should be evaluated by the bank concerned and RBI officials. This must also include the classification and responsibilities of the lending and recovery departments.
- Banks must carry out **fraud risk assessments** every quarter.

Chile marks a notch in Global Constitutionalism

News: Chile has constituted a new Constituent Assembly to frame a new constitution.

Background:

- In 2019, a wave of protests engulfed the country of Chile. The protests were triggered by familiar themes such social inequality, the cost of living, and probity in governance.
- As per protesters, Chile's Constitution was no longer fit for purpose.
- One of the demands of the Chilean protesters was to replace Pinochet's Constitution with a democratic Constitution, written by the People of Chile, for themselves.

What is the Pinochet's constitution?

- Drafted in 1980, under the military regime of General Augusto Pinochet, the Chilean Constitution embodied what is popularly known as Chicago School economics.
- Market deregulation was not just a policy choice, but encoded into the Constitution, with one of its most notorious elements being the privatization of water as a constitutional imperative.
- Over the years, this led to Chile becoming one of the most unequal countries in the world.

How is the Constituent assembly inclusive in nature?

- The constituent assembly constituted to frame the new constitution for Chile, comprises of 51% women representatives, step to bridge the gender gap.
- Chile's new Constituent Assembly has also reserved 17 seats for the indigenous people, securing their voice and rights.
- The constituent assembly has also included people from across the socio-economic and geographical spectrum of Chile, sexual minorities etc.
- This intensely representative and participatory process has led to the drafting of a Constitution that is both inclusive and visionary.

What are some of the features of Draft constitution?

- The draft constitution provides for a number of socio-economic rights such as Right to education, worker's right, Gender identity rights and the de-commodification of water.
- Various independent institutions have been introduced by the new draft to maintain the idea of democracy and rule of law.
- Guarantee has been provided to the citizen initiatives including Indigenous initiatives for introducing and changing laws in Parliament.

How is the Chilean draft constitution visionary in nature?

- The draft constitution enshrined the need of data protection authority for data security and privacy as well as guaranteeing a right to digital connectivity.
- The draft Constitution acknowledges the gravity of the climate crisis, and constitutionalizes important principles of international environmental law, such as inter-generational equity.
- It was recognized that merely holding periodic elections is a shallow and attenuated version of democracy. This is worsened by the fact that elections need money and, in many cases, the support of established political parties. Thus, in order to have a rich and vibrant democracy, individuals must engage in deeper and more substantial ways in between election seasons.
- It guarantees a right to nature, which is something that courts in different countries, from India to New Zealand, have recently explored.

General Studies – 1

Indian Heritage and Culture

1. Indian culture will cover the salient aspects of Art Forms, Literature and Architecture from ancient to modern times.

History

2. Modern Indian history from about the middle of the eighteenth century until the present significant events, Personalities, Issues.
3. The Freedom Struggle — Its various stages and Important contributors / contributions from different parts of the country.
4. Post-independence consolidation and reorganization within the country.
5. History of the world will include events from 18th century such as Industrial revolution, World wars, Redrawal of national boundaries, Colonization, decolonization, Political philosophies like communism, capitalism, socialism etc.— their forms and effect on the society

Society

6. Salient features of Indian Society, Diversity of India.
7. Role of women and women's organization, Population and associated issues, Poverty and developmental issues, Urbanization, their problems and their remedies.
8. Effects of globalization on Indian society.
9. Social empowerment, Communalism, regionalism & secularism.

Geography

10. Salient features of world's physical geography.
11. Distribution of key natural resources across the world (including South Asia and the Indian sub-continent) Factors responsible for the location of primary, secondary, and tertiary sector industries in various parts of the world (including India).
12. Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc., Geographical features and their location-changes in critical geographical features (including water-bodies and ice-caps) and in flora and fauna and the effects of such changes

History & Culture

Alluri Sitarama Raju

News: PM Modi to launch the year-long celebrations on the 125th birth anniversary of Alluri Sitarama Raju, enabling a new generation to be aware of the heroics of Alluri and the sacrifices he made for the tribal community.

About:

- Alluri Sitarama Raju (1897 – 1924) was an Indian revolutionary who waged an armed campaign against British colonial rule in India. He was nicknamed "Manyam Veerudu" (Hero of the Jungle) by local villagers for his heroic exploits.
- He became involved in anti-British activities in response to Madras Forest Act of 1882. The act restricted free movement of Adivasis in their habitats and also put a ban on practice of traditional form of agriculture known as Podu.
- Initially, Sitarama Raju, under the influence of Gandhi's Non-cooperation movement, inspired the tribals to seek justice in the local panchayat courts and boycott the colonial courts.
- Despite being a staunch Gandhian, he broke just one rule of that philosophy: non-violence. He trained an entire tribal force in guerrilla warfare to bring about a full-scale rebellion in the Madras presidency. Notably, he was not a tribal himself.
- He led the Rampa Rebellion/Manyam Rebellion of 1922.
- In 1924, Raju was taken into police custody, tied to a tree, and shot by public execution, effectively ending the armed rebellion.

What can we learn from Alluri Sitarama Raju?

- At young age of 27, Sitarama Raju sacrificed his life for the cause of his community and nation as a whole.
- Along with many other freedom fighters he was a true patriot who kept the larger interest of the society ahead of his life. He was truly an 'unsung hero'. As individuals we must celebrate and remember life of courageous fighter as him.
- The government of Andhra Pradesh commemorates his birthdate, the 4th of July, as a state festival.
- He has left behind an inspiring legacy of anti-imperialist rebellion.

Another Lesser known fact – The character of Ramaraju played by Ram Charan in the blockbuster RRR movie is based on the character of Alluri Sitarama Raju.

Dr. Shyama Prasad Mukherjee

News: The Union Home Minister paid tribute to Dr. Shyama Prasad Mukherjee on his birth anniversary.

About:

- He was an Indian politician, barrister, and academician who served as the Minister for Industry and Supply in Prime Minister Jawaharlal Nehru's cabinet.
- At the age of 33, Shyama Prasad Mukherjee became the youngest vice-chancellor of Calcutta University in 1934.
- During His term as Vice-Chancellor, Rabindranath Tagore delivered the university convocation address in Bengali for the first time, and the Indian vernacular was introduced as a subject for the highest examination.
- The first Industrial policy of independent India, which came in 1948 was stamped with his ideas and vision.
- For the proper development of cottage and small industries with finance availability and organizational setup - All India Handicrafts Board, All India Handloom Board and Khadi & Village Industries Board were established between 1948 and 1950. There was also a special emphasis by Dr. Mukherjee on indigenization of India's defence production, in the establishment of four most successful mega projects - Chittaranjan locomotive works factory, Hindustan aircraft factory, Sindri fertilizer factory and Damodar Valley Corporation and other river valley projects. His contribution was significant here.
- He founded the Bharatiya Jana Sangh (BJS), the predecessor of the modern-day Bharatiya Janata Party (BJP).
- After he left the Indian National Congress due to difference of opinion with the then-Prime Minister Dr Jawaharlal Nehru on Jammu and Kashmir issues, he co- founded Janata Party in the year 1977-1979, which later on became the Bharatiya Janata Party.
- In 1953, to protest against the special status given to Kashmir he tried to enter Kashmir without seeking permission and was arrested. He died in mysterious circumstances during detention.
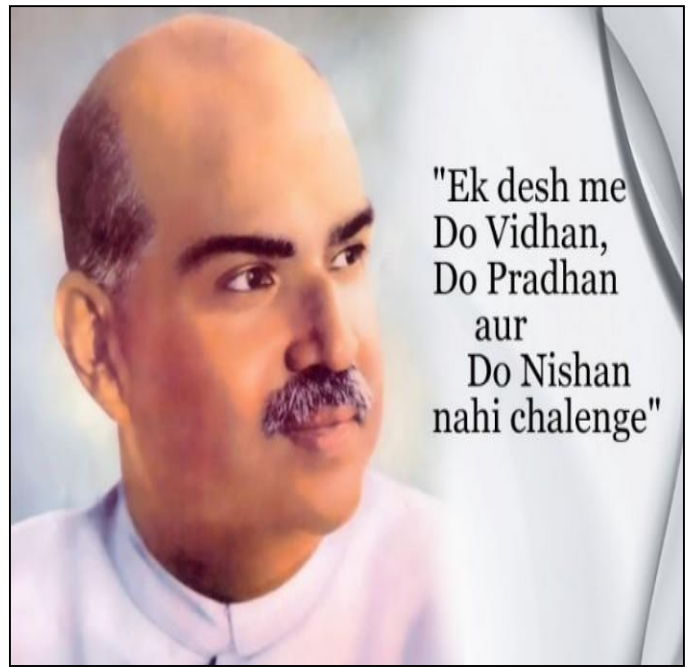
Intangible Cultural Heritage Committee

News: India has been elected as a member of the Intergovernmental Committee of UNESCO's 2003 Convention for the Safeguarding of the Intangible Cultural Heritage for the 2022-2026 cycle.

About:

- The Intergovernmental Committee of the 2003 Convention consists of 24 members and is elected in the General Assembly of the Convention according to the principles of equitable geographical representation and rotation.
- States Members to the Committee are elected for a term of four years.
- With 14 inscriptions on the Representative List of Intangible Cultural Heritage of Humanity, India also ranks high in the listing of intangible cultural heritage.
- After the inscription of Durga Puja in 2021, India submitted the nomination for Garba of Gujarat to be discussed in 2023.

Acharya Prafulla Chandra Ray

News: Ministry of Culture along with the Department of Chemistry, University of Delhi, and Vijnana Bharti (VIBHA) organized a curtain-raiser for two days International Conference on the 'Contributions of Acharya Prafulla Chandra Ray as a Chemist and Freedom Fighter'.

About:

- PC Ray's contribution to the field of Science was a step toward nation-building.
- He was also a scholar who championed educational reforms, promoted employment through industry, and rallied for political advancement.
- He discovered several ground-breaking chemical compounds (mercurous nitrite)
- He published more than a hundred and fifty research papers in famous science journals (For example, Journal of the Chemical Society of London)
- He authored many books on chemical sciences (For example, Life and Experience of a Bengali Chemist).
- He was founder of Bengal Chemical & Pharmaceutical Works
- Amidst his other scholarly work, he also documented the history of Chemistry in India (ancient to medieval times).
- His work was fuelled and guided by an inherently nationalistic spirit. He realized that for India to break the shackles of the overbearing colonial rule, the country needed to build a strong and independent scientific research base – something that was sorely lacking. This research base would then be the foundation on which the country could augment industrialization and thus ensure self-dependence and self-sustenance.
- **If anyone of you have used common household sanitization products such as phenyl or naphthalene balls, you have been touched upon by the legacy of the Acharya!**
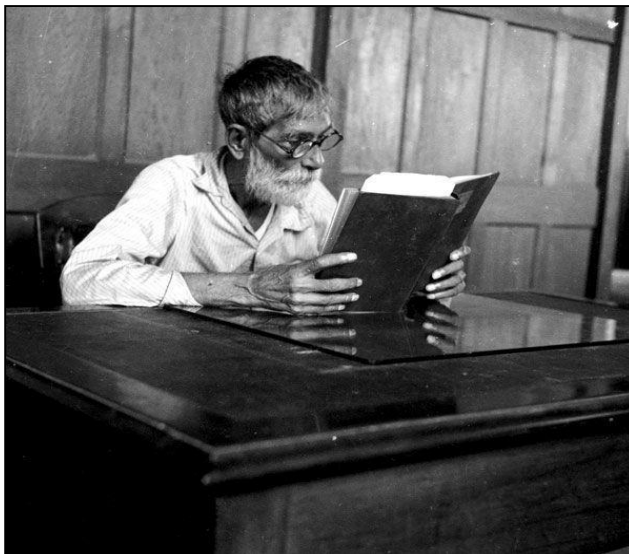
National Emblem of India

News: Prime Minister Narendra Modi unveiled the National Emblem cast on the roof of the new Parliament building.

- The concept sketch and process of casting the National Emblem on the roof of the building went through eight different stages of preparation from clay modelling/ computer graphics to bronze casting and polishing.

About:

- On 26 January 1950, a representation of the Lion Capital of Ashoka placed above the motto, Satyameva Jayate, was adopted as the State Emblem of India.
- It was chosen as a symbol of contemporary India's reaffirmation of its ancient commitment to world peace and goodwill.

Background:

- The state emblem is an adaptation from the Sarnath Lion Capital of Ashoka.
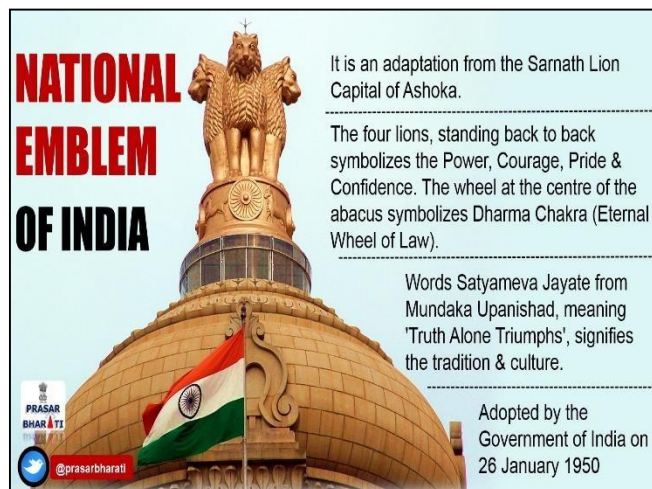
- In the original, there are four lions, standing back to back, mounted on an abacus with a frieze carrying sculptures in high relief of an elephant, a galloping horse, a bull and a lion separated by intervening wheels over a bell-shaped lotus
- Carved out of a single block of polished sandstone, the Capital is crowned by the Wheel of the Law (Dharma Chakra).
- While Buddhist interpretations say the animals represent different phases of the Buddha's life, non-religious interpretations say they depict the reign of emperor Ashoka in the four geographical directions, while the wheels depict his enlightened rule.

Bonalu Festival

News: Dedicated to Goddess Mahakali — a more ferocious avatar of Goddess Durga — the Bonalu festival is celebrated every year in the southern Indian state of Telangana, specifically in the cities of Hyderabad and Secunderabad. This year, Bonalu began on Sunday, July 3, and will continue till July 24.

About:

- Bonalu is celebrated in the month of Ashada which, according to the modern calendar, falls around July-August.
- On the first and last days of the festival, special pujas and other religious ceremonies are held for 'Yellamma', who is said to be one of the many regional incarnations of Mahakali.
- It is essentially a commemoration of the Goddess, to appease her and to thank her for fulfilling wishes. Besides, Yellamma, other forms of the Goddess like Maisamma, Pochamma, Peddamma, Dokkalamma, Ankalamma, Poleramma, Maremma, and Nookalamma, are worshipped during this period.

What does Bonalu mean and what is offered to the Goddess?

- Bonalu gets its name from the word **'bonam'**, which means a **meal or a feast** in Telugu. As such, it is an offering to the Goddess, wherein she is given **rice cooked with milk and jaggery** in a brass or earthen pot decorated with neem leaves, turmeric and vermilion.
- A lit lamp is placed on top of the pot, which is then carried by women on their heads and offered along with turmeric-vermilion, bangles and sari to the deity in various temples.

Society

Self-Help Groups

News: Government is aiming at raising the annual income of each woman in Self-Help Groups (SHGs) to Rs 1 lakh by 2024.

About:

- Self-Help Groups (SHGs) are informal associations of people (primarily women) who voluntarily come together to find ways to improve their living conditions. They are driven by a desire to collectively perform for a common goal.
- SHG rely on the notion of "Self Help" to encourage self-employment and poverty alleviation.

Objectives:
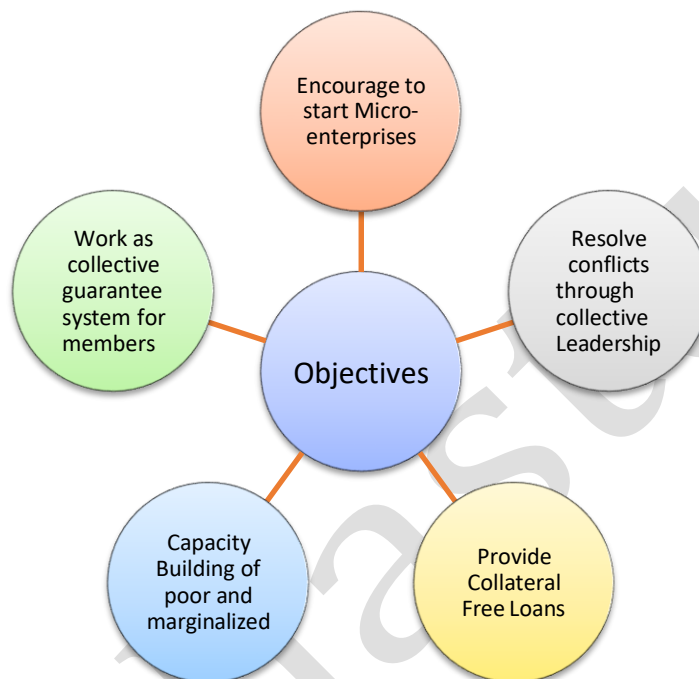
Significance of SHG's:

- **Financial Inclusion** - Priority Sector Lending norms and assurance of returns incentivize banks to lend to SHGs. The SHG-Bank linkage programme pioneered by NABARD has made access to credit easier and reduced the dependence on traditional money lenders and other non-institutional sources.
- **Voice for Weaker sections** - Most of the beneficiaries of government schemes have been from weaker and marginalized communities and hence their participation through SHGs ensures social justice.
- **Bridges Gender Equity Gap** - SHGs empowers women and inculcates leadership skill among them. Empowered women participate more actively in gram sabha and elections. This not only improves their confidence but also has impact on improving their status in society and builds their self-esteem.
- **Additional source of Employment** – It gives options to village dwellers as it helps reduce dependence on agriculture. Loans can be availed at no cost to set-up their own micro-enterprises. For example, tailor shops, grocery stores, ancillary shops for local industries.
- Women are now working in diverse sectors with roles of Business correspondent, Bank Sakhis, Kisan Sakhis and Pashu Sakhis.

Challenges faced by SHG's:

- **Averse to Technological upgradation** - Most SHGs are not making use of new technological innovations and skills. This is because there is limited awareness with regards to new technologies and they do not have the necessary skills to make use of the same.
- **Improper Training** - The training facilities given to the members of SHGs in the specific areas of product selection, quality of products, production techniques, managerial ability, packing, other technical knowledge are not adequate to compete with that of strong units.
- **Poor Financial Management** – Returns from business in certain SHG's are not further invested in business units. Funds are transferred for personal usage such as marriage, construction of homes.
- **Financial Assistance** – The financial assistance provided by agencies to SHG's is inadequate and does not meet their actual requirements.

Youth in India Report 2022

News: Recently, the Ministry of Statistics and Programme Implementation (MoSPI) has released 'Youth in India 2022' Report, which shows that the population share of the youth is starting to decline whereas the share of the elderly is expected to increase during 2021-2036.

Key Findings:

- **Decline in Youth Population** - Youth in the age group of 15-29 years comprise 27.2 per cent of the population for 2021, which is expected to decrease to 22.7 by 2036.
- **Proportion of Youth to Total Population** – From 26.6% in 1991 to 27.6% in 2016; now it is projected to see a downward trend 22.7% by 2036
- **Proportion of Elderly to Total Population** - It has increased from 6.8% in 1991 to 9.2% in 2016 and is projected to reach 14.9% in 2036.
- States such as Kerala, Tamil Nadu and Himachal Pradesh are projected to see a higher elderly population than the youth by 2036.
- Bihar and Uttar Pradesh along with Maharashtra, Madhya Pradesh and Rajasthan, are projected to have over half (52 per cent) of the country's youth, according to the report.
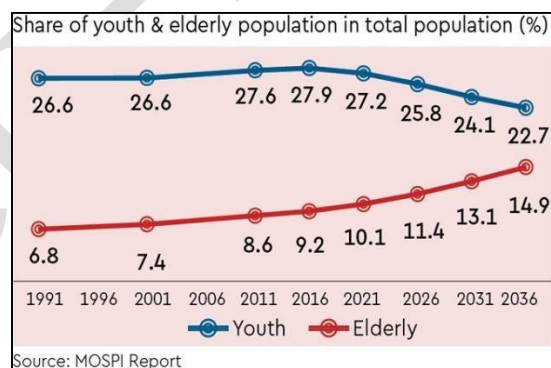
What can we infer from the above findings?

- India is experiencing a demographic window of opportunity, a **'youth bulge'**. Youth Bulge refers to a pattern in which larger share of the population is comprised of children and adults.
- With this opportunity also come challenges and meeting demands of the growing youth population is the key. We must have necessary resources and opportunities to be given in the form of access to education, gainful employment, healthcare, addressing inequality issues.
- A greater proportion of youth at present will result in a greater proportion of elderly in the population in future. Rise in the share of elderly population will put pressure on social security and public welfare systems.

Global Gender Gap Index 2022

News: Recently, the World Economic Forum (WEF) ranked India at 135 out of 146 countries in its Global Gender Gap (GGG) Index for 2022.

- In 2021, India was ranked 140 out of 156 countries.
- The gender gap is the difference between women and men as reflected in social, political, intellectual, cultural, or economic attainments or attitudes.

About:
- It benchmarks countries on their progress towards gender parity in four Key dimensions with Sub Metrices.
- The 4 key dimensions are Political empowerment, Educational attainment, Health and Survival and Economic participation and opportunity.
- On each of the four sub-indices as well as on the overall index the GGG index provides scores between 0 and 1, where 1 shows full gender parity and 0 is complete imparity.

India's performance on different indices:
- **Political empowerment**
  - Of all the sub-indices this is where India ranks the highest (48th out of 146)
  - It includes metrics such as percentage of women in parliament, percentage of women in ministerial positions etc.
  - Iceland is ranked 1 with a score of 0. 874 and Bangladesh is ranked 9 with a score of 0.546.
- **Economic participation and opportunity**
  - India ranks a lowly 143 out of the 146 countries in contention even though its score has improved over 2021 from 0.326 to 0.350.
  - It includes metrics such as percentage of women who are part of labour force, wage equality for similar work and earned income.
- **Educational attainment**
  - Here India ranks 107th out of 146, and its score has marginally worsened since last year.
  - It includes metrics such as Literacy rate and enrolment rates in primary, secondary and tertiary education.
- **Health and survival**
  - India is ranked last (146) among all the countries. Its score hasn't changed from 2021 when it was ranked 155th out of 156 countries.
  - It includes metrics such as sex ratio at birth (in %) and healthy life expectancy (in years).

Geography

Horn of Africa

News: Recently, first 'China-Horn of Africa Peace, Governance and Development Conference.' was held.

What is The Horn of Africa?

- The Horn of Africa is a peninsula in Northeast Africa.
- Located on the easternmost part of the African mainland, it is the fourth largest peninsula in the world.
- It lies along the southern boundary of the Red Sea and extends hundreds of kilometres into the Guardafui Channel, Gulf of Aden, and Indian Ocean.
- The Horn of Africa is equidistant from the equator and the Tropic of Cancer.
- The Horn contains such diverse areas as the highlands of the Ethiopian Plateau, the Ogaden desert, and the Eritrean and Somalian coasts.
- The Horn of Africa denotes the region containing the countries of **Djibouti, Eritrea, Ethiopia, and Somalia.**

Recent Chinese projects in the region:

2035 Vision - Aims to transform health sector, alleviate povery

Green Development, capacity building, people to people contact

Projects

4 Resolutions - The Dakar Action Plan, China Africa Co-op Vision 2035, Sino African Declaration on CC, Declaration of the 8th Ministerial Conference of FOCAC

Donation of Vaccines to Kenya, Ethiopia, Uganda, Somalia
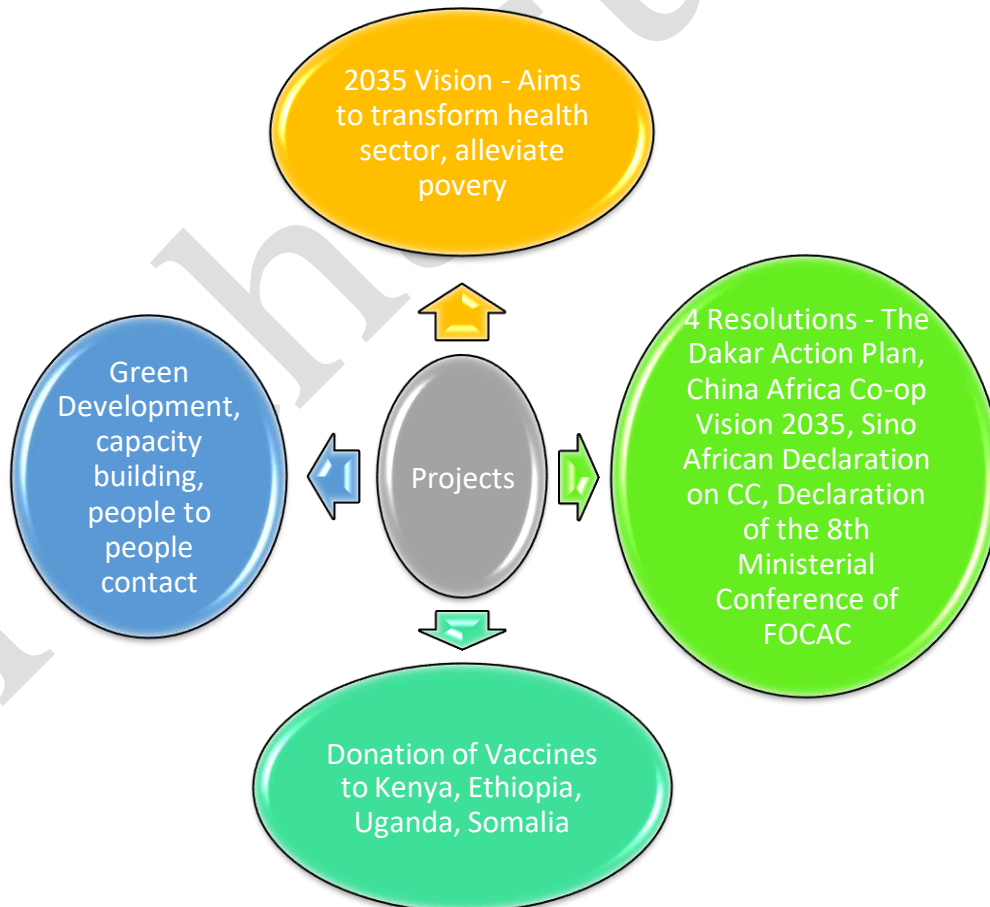
Overview of some of China's work in the region across different sectors:

- **Infrastructure**
    - Fully funded African Union HQ in Addis Ababa
    - Railway project connecting Mombasa-Nairobi
    - A viable military hardware market in Ethiopia
- **Geostrategic Projects**
    - China's first and only military base outside its mainland is in Djibouti.
    - In 2022, China hinted its willingness to develop Eritrea's coast which would connect to China's investments in land-locked Ethiopia.
- **Financial Assistance**
    - Ethiopia, is one of the top five African recipients of Chinese investments, and also has a debt of almost USD 14 billion.
    - China accounts for 67% of Kenya's bilateral debt.
- China is also interested in minerals such as gold, iron-ore, precious stones, chemicals, oil and natural gas in Ethiopia. South Sudan, a source for petroleum products, has had continued Beijing investment in the industry since the latter's initial entry in 1995.

China's presence here is a cause of worry for India. It has direct bearing on India's security and well-being and thus India must play a proactive role to the prevailing conditions and power dynamics in the Horn of Africa.

High Grade Lithium in Nigeria

News: High-grade lithium has been discovered in Nigeria.

About:

- Lithium is a soft, silvery metal.
- It has the lowest density of all metals. It reacts vigorously with water.
- Lithium and most lithium minerals are mined along with other high-value metallic minerals such as tin, niobium-tantalum (columbite-tantalite), and uranium (in pyrochlore).
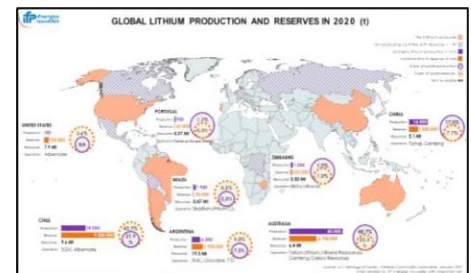
Why is demand for Lithium increasing?

- Greenbushes mine in Western Australia is the largest hard-rock lithium mine in the world.
- Global lithium mine production hit a record high of 100,000 tonnes in 2021, a 21 per cent increase over 2020 (82,500 tonnes).
- Globally, the demand for Lithium has been increasing because of its vast application mainly as a Lithium-ion battery.
- Lithium-ion batteries are generally more expensive but have better performance and are becoming the preferred technology.
- Also, due to the growing interest in clean energy, the demand for lithium has skyrocketed as most countries draw plans to phase out fossil fuel and switch to zero emission electric vehicles.

What is the status of Lithium in India?

- Researchers at the Atomic Minerals Directorate (under India's Atomic Energy Commission) have estimated lithium reserves of 14,100 tonnes in a small patch of land surveyed in Southern Karnataka's Mandya district.
- It is India's first ever Lithium deposit site.

What are steps taken by India to reduce import dependency of Lithium?

- India has adopted a multi-modal strategy to reduce its dependence on imported lithium and give fresh impetus to the growth of the local electric vehicles (EV) industry.

- State-run Khanij Bidesh India Ltd (KABIL) is working with the authorities in Argentina, Chile, Australia and Bolivia for acquiring lithium and cobalt mines overseas. It also carries out exploratory work to extract lithium from the brine pools of Rajasthan and Gujarat and the mica belts of Odisha and Chhattisgarh.
- The country is also working on urban mining where recycled materials remain in circulation and this reduces the dependency on fresh lithium inputs. This will further bring down the requirement for imports.
- ISRO has commercialized indigenously developed lithium ion battery technology and has selected 14 companies for transfer of technology.
- A policy is proposed to incentivize companies for setting up recycling facilities for lithium ion batteries and make it incumbent on producers to collect used batteries.

Cloudburts

News: Sudden, 'highly-localised rains' in Amarnath, Jammu and Kashmir, caused flooding and led to the deaths of at least 16 people and injuries to more than 20 others.

What is a Cloudburst?

- A cloudburst refers to an extreme amount of rain that happens in a short period, sometimes accompanied by hail and thunder, and this has a precise definition.
- The India Meteorological Department (IMD) defines it as unexpected precipitation exceeding 100mm (or 10 cm) per hour over a geographical region of approximately 20 to 30 square km.

What leads to their occurrence?

- The relative humidity and cloud cover is at the maximum level with low temperature and slow winds because of which a high amount of clouds may get condensed at a very rapid rate and result in a cloudburst.
- As temperatures increase, the atmosphere can hold more and more moisture and this moisture comes down as a short very intense rainfall for a short duration probably half an hour or one hour resulting in flash floods in the mountainous areas and urban floods in the cities.

Why does cloudburst occur in hilly areas?

- They are more likely to occur in mountainous zones mainly because of terrain and elevation.
- A cloudburst occurs when moisture-carrying air moves up a hilly terrain, forming a vertical column of clouds known as 'cumulonimbus' clouds.
- Such clouds usually cause rain, thunder and lightning. This upward motion of the clouds is known as an 'orographic lift'.
- These unstable clouds cause an intense rainstorm over a small area after becoming heavy enough and locked in the ridges and valleys between the hills.
- The energy necessary for the cloudburst comes from the upward motion of air. Cloudbursts mostly occur at elevations between 1,000-2,500 metres above sea level.
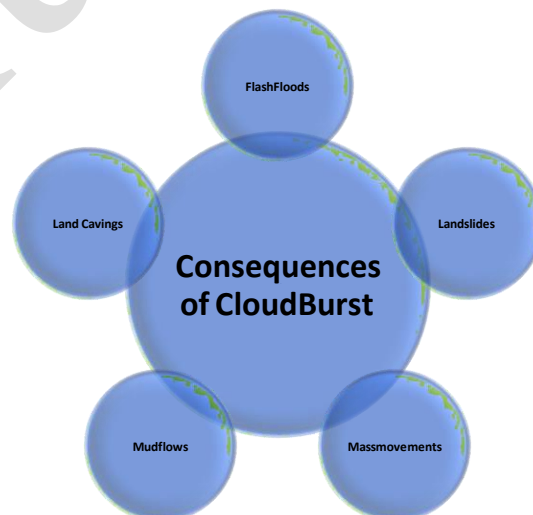
General Studies – 2

Polity & Constitution

1. Indian Constitution—historical underpinnings, evolution, features, amendments, significant provisions and basic structure.
2. Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.
3. Separation of powers between various organs dispute redressal mechanisms and institutions
4. Comparison of the Indian constitutional scheme with that of other countries.
5. Parliament and State legislatures—structure, functioning, conduct of business, powers & privileges and issues arising out of these.
6. Structure, organization and functioning of the Executive and the Judiciary—Ministries and Departments of the Government; pressure groups and formal/informal associations and their role in the Polity.
7. Salient features of the Representation of People's Act.
8. Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies.
9. Statutory, regulatory and various quasi-judicial bodies.

Social Justice

10. Government policies and interventions for development in various sectors and issues arising out of their design and implementation.
11. Development processes and the development industry —the role of NGOs, SHGs, various groups and associations, donors, charities, institutional and other stakeholders.
12. Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.
13. Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.
14. Issues relating to poverty and hunger.

Governance

15. Important aspects of governance, transparency and accountability, e-governance, applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.
16. Role of civil services in a democracy.

International Relations

17. India and its neighborhood- relations.
18. Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.
19. Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.
20. Important International institutions, agencies and fora- their structure, mandate

Polity & Governance

Certain Amendments to FCRA

News: The Union Home Ministry has amended certain rules related to the Foreign Contribution(Regulation) Act (FCRA), allowing Indians to receive up to ₹10 lakh in a year from relatives staying abroad without informing the authorities. The earlier limit was ₹1 lakh.

What are the new rules?

- It allows Indians to receive up to ₹10 lakh in a year from relatives staying abroad without informing the authorities. The earlier limit was ₹1 lakh.
- In a notification, the Ministry also said that if the amount exceeds it, the individuals will now have 90 days to inform the government, instead of 30 days earlier.
- It made five more offences under the FCRA "compoundable" instead of directly prosecuting the organizations or individuals. Earlier, only seven offences under the FCRA were compoundable.
- The amended rules have given individuals and organizations or NGOs 45 days to inform the home ministry about the bank accounts that are to be used for the utilization of such funds.
- The government has also 'omitted' provision 'b' in rule 13, which dealt with declaring foreign funds.
- Now, anyone receiving foreign funds will have to follow the existing provision of placing the audited statement of accounts on receipts and utilization of the foreign contribution, including income and expenditure statement, receipt and payment account, and balance sheet, within nine months of the closure of the financial year on its official website or on the website as specified by the Centre.

Importance of Recent Amendments:

Improves Remittances → Stable Forex Reserve → Reduces Trade Deficit

Section 69A of IT Act, 2000

News: In its latest faceoff with the Ministry of Electronics and Information Technology, Twitter has initiated legal action against some of the government directives ordering it to take down certain content on the site.

What is Section 69(A)?

- Section 69 (A) of the IT Act, 2000 allows the Centre to issue blocking orders to social media intermediaries.

Blocking orders can be issued only for:
- Security of the state
- Defence of India
- Public order
- Friendly relation with Foreign states
- Matters concerning Sovereignty and Integrity of India
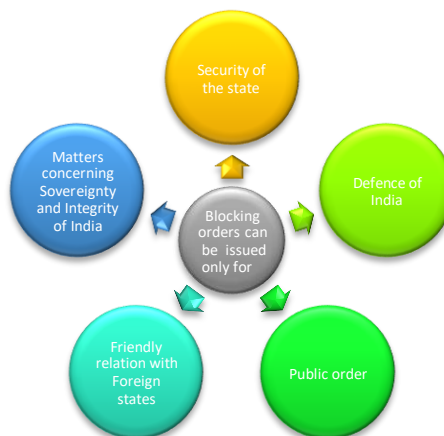
- Lastly, blocking orders can be issued for preventing of incitement to the commission of any cognizable offence relating to those mentioned above.

As per rules that govern these blocking orders, any request made by the government is sent to a review committee, which then issues these directions. Blocking orders issued under Section 69 (A) of the IT Act are typically confidential in nature.

Why has Twitter filed a lawsuit?

- Twitter has claimed that many of the blocking orders are procedurally and substantively deficient under Section 69 (A) of the Act.
- For example, not giving prior notice to users before taking down content posted by them.
- MeitY has failed to demonstrate how some of the content it wants taken down falls under the purview of Section 69 (A).
- Some of the content flagged by the ministry may pertain to official accounts of political parties, blocking which could violate the right to free speech.

How has Government responded?

- While MeitY is yet to formally respond to Twitter's claims in the lawsuit.
- Rajeev Chandrasekhar, MoS for Electronics & Information Technology, made an apparent reference to the case in a Twitter post: "In India, all including Foreign internet intermediaries/platforms have right to court and judicial review. But equally all intermediary/platforms operating here, have unambiguous obligation to comply with our laws and rules"

Digital India Week 2022

News: Recently, the Prime Minister has inaugurated the Digital India Week 2022 under the Digital India Programme, with the aim to strengthen Ease of Doing Business and Ease of Living.

- **Theme – 'Catalyzing New India's Techade'**

What is Digital India Programme?

- Launched in 2015, the programme has been enabled for several important government schemes, such as BharatNet, Make in India, Startup India and Standup India.
- Its key vision is to create a digital infrastructure as utility to every citizen, provide governance services on demand and digitally empower the citizens of the nation.

What are the achievements of Digital India Programme?

- Since 2014, more than Rs 23 lakh crore has been transferred to beneficiaries through Direct Benefit Transfers or DBT.
- Digital platforms like Aadhaar, UPI, Cowin and Digilocker as examples of services that have contributed to the 'ease of living' as citizens get services online without going to government offices or approaching middlemen.
- Digital India has brought the government to the doorsteps and phones of the citizens. More than 1.25 lakh Common Service Centres (CSC) and Grameen Stores are now taking e-commerce to rural India.
- Similarly, property documents for rural properties are being provided by use of technology.
- With the help of One Nation One Ration Card (ONORC), free ration was ensured to more than 80 crore countrymen.
- Through Co-WIN Platform, India has run the world's largest and most efficient covid vaccination and covid relief program.
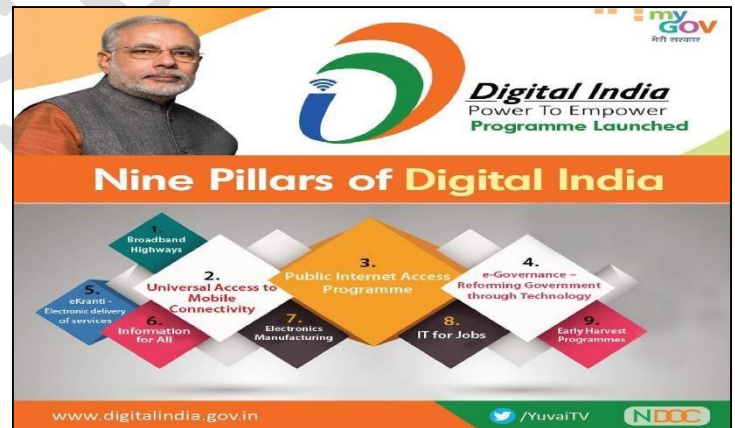
- Most recently, the government through its pilot project of Open Network for Digital Commerce (ONDC) intends to empower local retailers, manufactures and buyers giving them all a level playing field and further encouraging the goal of an Atmanirbhar Bharat.

DMEO pitches for Gender Budgeting Act

News: Development, Monitoring and evaluation office (DMEO) (an attached office of Niti Aayog) has pitched in for the Gender Budgeting Act to the mainstream of gender-based budgeting across all ministries. According to the report, gender budgeting is not practised in most states and is also not captured for many schemes in different sectors.

What is Gender Budgeting?
- It refers to preparing budgets or analyzing them from a gender perspective.
- It is a powerful tool for achieving gender mainstreaming so as to ensure that benefits of development reach women as much as men.

Recommendations by DMEO:
- **Focus on Transgender** - Under report titled 'Gender Mainstreaming in Governance' it said there is a need to improve social acceptance of transgender persons in society.
- **Encourages state government to increase allocation** - The report recommended that the Ministry of Women & Child Development (MWCD) should encourage state governments to increase their budgetary allocation towards women and child development, protection and welfare schemes.
- **Make available Gender-Disaggregated Data** - Absence of such data makes it difficult to measure the true impact of the schemes resulting in poor strategy design.

Gender Budgeting and India
- India has a gender budget component since 2005-06 wherein schemes having allocations at least 30% for women is highlighted.
- Beijing declaration and platform for action 1995 recommended Gender Budgeting.
- Influenced both expenditure and revenue policies as India's gender budgeting efforts is unique because they have not only influenced expenditure but also revenue policies (like differential rates for men and women in property and Income tax rates)
- Gender Budgeting Cells (GBC) has been mandated in each ministry/Department.
- India has shifted its focus from women's development to women-led development.
- Over 1.7 lakh cr has been allocated for women-centric schemes under the gender budget 2022-2023, which is an increase of 5 per cent.

Meghalaya Tribal Council and Sixth Schedule

News: A tribal council in Meghalaya has called for a meeting of traditional heads to revisit the Instrument of Accession that made the Khasi domain a part of the Indian Union more than seven decades ago.

What is IoA?
- The Instrument of Accession was a legal document first introduced by the Government of India Act 1935 and used in 1947 to enable each of the rulers of the princely states under British paramountcy to join one of the new dominions of India or Pakistan created by the Partition of British India.
- The instruments of accession executed by the rulers, provided for the accession of states to the Dominion of India (or Pakistan) on three subjects, namely, defence, external affairs and communications.

IoA and Meghalaya:
- IoA with the Khasi hills state was signed with the Dominion of India between 15th December, 1947, and 19th March, 1948.
- Meghalaya is divided into three regions dominated by as many matrilineal communities – the Khasis, Garos and Jaintias. The Khasi hills straddle 25 Himas or States that formed the Federation of Khasi States.

- The conditional treaty with these States was signed by Governor General of India, Chakravarty Rajagopalachari on 17th August, 1948.

Why does Meghalaya Tribal Council want to revisit IoA?

- The need to revisit the Instrument of Accession and Annexed Agreement was stressed by leaders in the Khasi Hills Autonomous District Council (KHADC).
- According to them, it is important to understand the paragraphs of the agreement, since many provisions are missing from the Sixth Schedule of the Constitution.
- The Federation of Khasi States had sought special status, like Nagaland has under Article 371A, which protects socio-religious and customary practice of nagas with right to administration of civil & criminal justice as per Naga Customary laws. Under Article 371A, Nagas also enjoys ownership and transfer of land and its resources.
- Recently introduced 'Khasi Inheritance of Property Bill, 2021 might have infuriated few leaders of KHADC, as an interference to social and customary practices of Khasi people. The bill called for 'equitable distribution' of parental property among siblings in the Khasi community.
- The KHADC said the provisions can be added to the Sixth Schedule, which 'can be amended by Parliament'.

About Khasi Hill Autonomous District Council:

- KHADC is a body under the Sixth Schedule of the Constitution.
- It does not have the power to legislate.
- Paragraph 12 A of the Sixth Schedule gives the final right of passing a law to the state legislature.
- The Sixth Schedule of the Constitution provides for the administration of tribal areas in Assam, Meghalaya, Tripura and Mizoram to safeguard the rights of the tribal population in these states.
- This special provision is provided under Article 244 (2) and Article 275 (1) of the Constitution.

Guidelines to prevent unfair trade practices

News: On July 4, the Central Consumer Protection Authority (CCPA) announced five guidelines to prevent unfair trade practices and to protect consumer interests regarding the levy of service charges in hotels and restaurants.

What are the new guidelines?

- Hotels or restaurants are prohibited from levying extra charges automatically or by default in the bill or by any other name.
- Also, they are not allowed to force service charges, and must clearly inform the consumers that service charges are voluntary, optional, and at their discretion.
- Hotels and restaurants are no longer allowed to restrict entry or services based on the collection of service charges.
- Hotels cannot add service charges to their bills and charge GST on the total.
- Any tip, donation, token, gratuity, etc. is no longer permitted to be charged and shall be considered as a separate transaction between the consumer and the staff of the hotel and restaurant. It is entirely up to the consumer to decide whether or not to tip.
- If a consumer enters a restaurant or orders something, the restaurant policy cannot require them to tip.
- Guidelines now consider charging a customer other than the price of food items displayed on the menu along with applicable taxes, as an unfair trade practice under the CPA.

What are redressal mechanisms?

If any consumer finds that a hotel or restaurant is levying a service charge in violation of these guidelines:

- They may request the concerned hotel or restaurant to remove the service charge from the bill
- May lodge a complaint on the National Consumer Helpline (NCH), which works as an alternate dispute redressal mechanism at the pre-litigation level
- Complaint against unfair trade practice with the Consumer Commission electronically through **nic.in**. for its speedy and effective redressal.
- NCH - **1800-11-4000 or 14404 or 1915**

NITI Aayog – A suitable intermediary

News: Since its inception in 2015, NITI Aayog has been instrumental in promoting competitive and cooperative federalism.

- NITI Aayog organizes the annual meeting of the Governing Council (GC) under the leadership of the PM, which brings together chief ministers/Lieutenant-governors of the states/UTs to discuss inter-sectoral, inter-departmental and federal issues to accelerate the implementation of the National Development Agenda.
- As a run-up to the 2022 GC meeting, the first National Conference of Chief Secretaries was held in Dharamshala from June 15-17.

Seven Propositions to enhance alignment between the centre and the state as suggested by Suman Bery, Vice Chairman of Niti Aayog:

- **States/UTs are real Growth Drivers** - India's growth is that of its states and UTs. As custodians of regional policy and prime executors of development programmes, states are the Indian economy's growth drivers.
- **To achieve income convergence across states** - To achieve greater socio-economic cohesion within the country, achieving income convergence across states must be a policy priority. Over the last 2 decades, half of India's GDP has been contributed by just a handful of states. Niti Aayog must help those states that have lagged behind by giving financial assistance, improved governance structure and infrastructure.
- **Social Indicators** - performance on social indicators is a sound metric for assessing a state's performance. Social outcomes are de-linked from income in several states. Mizoram's performance on the Infant Mortality Rate (IMR) is one example. Despite being a middle income state, its IMR is lowest at 3 deaths per 1000 live births while the national average is 28.
- **Growth must originate from the grassroots** – NITI aayog must focus on guiding the state governments in replicating the Aspirational District Programme template at the block level and for districts not categorized as aspirational.
- **Better Urbanisation** – Better managed urbanization is crucial. Cities face challenges such as affordable housing, water supply and waste management. There is need to tap into resources other than government budgets, such as monetizing land assets and engaging private capital in service delivery. Efforts to empower and make large urban local bodies atmanirbhar are the needs of the hour.
- **To ensure best practices are shared** - NITI Aayog must act as an intermediary between the Centre and states to ensure cross-sharing of these best practices, insights and perspectives. Some areas that merit particular focus are the use of advanced technology using blockchain and AI, development of social registry, reducing compliance burden, implementation of PM Gati Shakti, decriminalization of minor offences and simplification of laws and processes to enhance ease of doing business.
- **Tackling climate change** - The challenge of climate change is upon us. The world has so far witnessed two models of development - the Industrial Revolution and the rise of East Asia. Both depended on cheap, fossil-fuel energy. India aspires to grow equally fast but is now subject to a carbon constraint.

What are the other dimensions where NITI Aayog can play a proactive role?

- Facilitate effective implementation of national programmes that promote job creation
- Improve the quality of labour force and enhance ease of doing business
- Ensure high-quality public expenditure
- Most importantly, NITI aayog must ensure an element of policy predictability at the state-level.

Reform in Indian Bail law on the lines of UK

News: Recently, the Supreme Court underlined that "there is a pressing need" for reform in the law related to bail and called on the government to consider framing a special legislation on the lines of the law in the United Kingdom.

About recent ruling:

- A two-judge Bench issued certain clarifications to an older judgment delivered in July 2021 on bail reform (Satender Kumar Antil vs CBI).
- Referring to the state of jails in the country, where over two-thirds lodged are undertrials, the Supreme Court underlined that arrest is a draconian measure that needs to be used sparingly.
- Theoretically, the court also linked the idea of indiscriminate arrests to magistrates ignoring the rule of "bail, not jail" to a colonial mindset.

Indian law on Bail:

- The CrPC does not define the word bail but only categories offences under the Indian Penal Code as 'bailable' and 'non-bailable'. The CrPC empowers magistrates to grant bail for bailable offences as a matter of righ
- In case of Non-bailable offences, a magistrate would determine if the accused is fit to be released on bail. Non-bailable offences are cognisable, which enables the police officer to arrest without a warrant.
- Section 436 of the Code of Criminal Procedure, 1973, lays down that a person accused of a bailable offence under I.P.C. can be granted bail.
- On the other hand, Section 437 of the Code of Criminal Procedure, 1973 lays down that the accused does not have the right to bail in non-bailable offences. It is the discretion of the court to grant bail in case of non-bailable offences.

The Bail Act of United Kingdom, 1976

- The above act prescribes the procedure for granting bail.
- A key feature is that one of the aims of the legislation is "reducing the size of the inmate population".
- The law also has provisions for ensuring legal aid for defendants.
- The Act recognizes a 'general right' to be granted bail.
- Its Section 4(1) raises the presumption of bail by stating that the law applies to a person who shall be granted bail except as provided in Schedule 1 to the Act.
- For rejecting bail, the prosecution must show that grounds exist for believing the defendant on bail would not surrender to custody, would commit an offence while on bail, or would interfere with witnesses or otherwise obstruct the course of justice; unless the defendant must be detained for his own welfare or protection; or in other circumstances.

Beti Bachao Beti Padhao

News: Beti Bachao Beti Padhao (BBBP) will now be extended across the country.

About:

- BBBP is the Centre's flagship programme (under the Women and Child Development Ministry) for women's empowerment, which focuses on the education of girl child and improving the sex ratio.
- It was launched in January 2015 to address sex-selective abortion and the declining child sex ratio which was at 918 girls for every 1,000 boys in 2011.
- It is a joint initiative of the Ministry of Women and Child Development, Ministry of Health and Family Welfare and Ministry of Human Resource Development.
- The programme is operational in 405 districts at present.

What are the new guidelines issued by Ministry of Women and Child Development?

- The ministry has now targeted improvement in the Sex Ratio at Birth (SRB) by 2 points every year, improvement in the percentage of institutional deliveries at 95% or above.
- Increasing girls' participation in sports by identifying talent and linking them with appropriate authorities under 'Khelo India'.
- Promoting self-defence camps, construction of girls' toilets, making available sanitary napkin vending machines and sanitary pads, especially in educational institutions, awareness about PC-PNDT (Pre-Conception & Pre-Natal Diagnostic Techniques) Act 1994, etc. PC-PNDT act aims to ban the use of sex selection techniques before or after conception and prevent the misuse of a prenatal diagnostic technique for sex-selective abortion.

IN THE WORKS

- Additional 300 One-Stop Centres to be set up; existing centres to be upgraded
- Govt to introduce free day-care crèche facilities through Palna
- Half-Way Homes to be set up under Anti-
- Trafficking Units, where a group of victims, ready for reintegration, can live and work out of
- Hubs for empowerment of women to be set up at Central, states and districts levels to merge and monitor schemes

- Zero-budget advertising and encouraging greater spend on activities that have on-ground impact.
- **In 2021 parliamentary committee on empowerment of women in its report stated that nearly 80 % funds for the BBBP scheme has been used for advertising, and not on sectoral interventions such as women's health and education**.
- Strengthen One-Stop Centres (OSCs), set up to help women facing violence, including domestic violence and trafficking, by adding 300 OSCs in districts which either have a high rate of crimes against women or are geographically large, preferably in aspirational districts.

PSC Report on Mediation Bill, 2021

News: The Parliamentary Standing Committee on Law and Justice, headed by Sushil Kumar Modi, has recommended substantial changes to the Mediation Bill, meant for the institutionalization of mediation and establishment of the Mediation Council of India.

Issues highlighted by the Committee:

- **Pre-Litigation Mediation** - Making pre-litigation mediation mandatory may actually result in the delaying of cases and may prove to be an additional tool in the hands of truant litigants to delay the disposal of cases.
- **Clause 26** – The panel was against it which gives ultimate power to the Supreme court and High courts to make laws of pre-litigation as per their whimsies.
- **Appointment of chairperson and members** - Appointment of the Chairperson and Members of the Mediation Council of India should be made by a Selection Committee constituted by the Centre.
- Non Applicability of the provisions of the Bill to disputes/matters of non-commercial nature involving the Government and its agencies.

Key Recommendations:

- It recommended to make pre-litigation mediation optional and further introduced it in a phased manner instead of introducing it with immediate effect for all civil and commercial disputes.
- Given the vast range of duties and obligations allocated to the Mediation Council of India, mediation councils should be established in each state. These State Mediation Councils should operate under the general supervision, direction, and control of the Mediation Council of India and perform such functions as it may specify.
- The **Mediation Council** should issue each mediator with **a unique registration number**, and those provisions be made in the bill to allow the Mediation Council to **continuously evaluate the mediator by holding training sessions on a regular basis** and that the **mediator earns a minimum number of credit points on a yearly basis in order to be eligible to conduct mediation.**
- They also recommended reframing the new definition of mediation and do not put it separately under clause 4 as it is already given in clause 3.
- According the draft mediation bill, it suggested the mediation procedure must be completed within 180 days, which the parties may extend by another 180 days. However, the panel recommended reducing the time limit to 90 days and further an extension period to be given that of 60 days.

Following are the types of Alternative Dispute Resolution (ADR) Mechanisms prevalent in India:
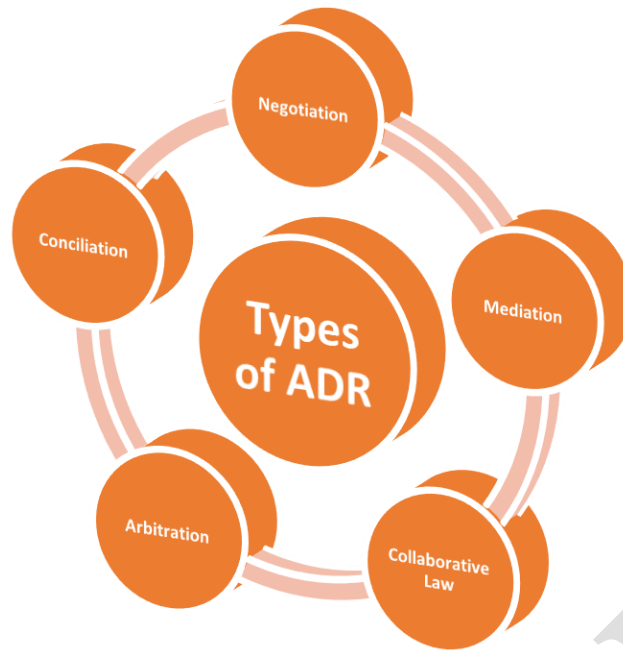
Legal Metrology (Packaged Commodities) Rules 2011

News: The Department of Consumer Affairs vides the Legal Metrology (Packaged Commodities), (Second Amendment) Rules 2022 has allowed electronic products to declare certain mandatory declarations through the QR Code for a period of one year, if not declared in the package itself.

What are the amendments?

- This amendment will allow the industry to declare the elaborated information in digital form through the QR Code.
- It will allow important declarations to be declared effective on the label in the package while the other descriptive information can be conveyed to the Consumer through the QR Code.
- The Department to enable greater use of technology in this digital era to declare the mandatory declaration through the QR Code which can be scanned to view the declarations like the address of the manufacturer or packer or importer, the common or generic name of the commodity, the size and dimension of the commodity and customer care details except for the telephone number & email address.
- Earlier, all the prepackaged commodities including the electronic products were required to declare all the mandatory declarations as per the Legal Metrology (Packaged Commodities), Rules 2011 on the package.

Way Forward:

- This will help ease of doing business and reduce the compliance burden for the electronic industries.

Article 29 and 30 of the Constitution

News: The supreme court while hearing a petition stated that Minority status of religious and linguistic communities is state dependent.

What was the petition about?

- The court was hearing a petition filed by a Mathura resident, Devkinandan Thakur, complaining that followers of Judaism, Bahaism and Hinduism, who are the real minorities in Ladakh, Mizoram, Lakshadweep, Kashmir, Nagaland, Meghalaya, Arunachal Pradesh, Punjab and Manipur cannot establish and administer educational institutions of their choice because of non-identification of 'minority' at State level, thus jeopardizing their basic rights guaranteed under Articles 29 and 30.

- Every person in India can be a minority in one State or the other. The minority status of religious and linguistic communities is "State-dependent", the Supreme Court said.

What were the observations made?
- The court indicated that a religious or linguistic community which is a minority in a particular State can inherently claim protection and the right to administer and run its own educational institutions under Articles 29 and 30 of the Constitution.
- Devkinandan Thakur pointed out that Hindus were a mere 1% in Ladakh, 2.75% in Mizoram, 2.77% in Lakshadweep, 4% in Kashmir, 8.74% in Nagaland, 11.52% in Meghalaya, 29% in Arunachal Pradesh, 38.49% in Punjab and 41.29% in Manipur.
- Mr Datar challenged Section 2(c) of the National Commission for Minorities (NCM) Act 1992, which gave "unbridled power" to the Centre to notify minorities.

What did TMA Pai case observe?
- The SC had said that for the purposes of Article 30 which deals with the rights of minorities to establish and administer educational institutions, religious and linguistic minorities have to be considered state-wise.

Let's do some quick revision:
- **Article 29** - It provides that any section of the citizens residing in any part of India having a distinct language, script or culture of its own, shall have the right to conserve the same. It grants protection to both religious minorities as well as linguistic minorities. However, the SC held that the scope of this article is not necessarily restricted to minorities only, as the use of the word 'section of citizens' in the Article includes minorities as well as the majority.
- **Article 30** - All minorities shall have the right to establish and administer educational institutions of their choice. The protection under Article 30 is confined only to minorities (religious or linguistic) and does not extend to any section of citizens (as under Article 29).

Draft medical devices Bill

News: The Union Health Ministry last week released a draft of a proposed Drugs, Medical Devices and Cosmetics Bill, 2022 to replace the existing Drugs and Cosmetics Act, 1940, and several sets of Rules by which the industry is currently run.

What does the draft focus on?
- The draft focuses on regulating medical devices as a separate entity, makes provision for fines and imprisonment for injury and death related to clinical trials or investigations, and seeks to regulate e-pharmacies.

Key Provisions of the Draft:
- **Provision for compensation** - The draft Bill makes provisions for compensation to participants or their legal heirs for injury or death suffered in clinical trials and investigations for drugs and medical devices. The draft also lays the onus on providing medical management for any injury arising due to the trial of the investigators.
- **Imprisonment and Fines** - It amounts to double the compensation amount if the compensation is not paid. If the draft Bill becomes law, these provisions will be part of it, and will not be restricted to just clinical trial Rules.
- **Online Pharmacies** - No provisions to regulate online pharmacies exist in the 1940 law or any of the Rules. No person shall himself or by any other person on his behalf sell, stock or exhibit or offer for sale, or distribute, any drug by online mode except under and in accordance with a license or permission issued in such manner as may be prescribed.
- **Prohibition of clinical trials without permission** - The draft Bill prohibits clinical trials or clinical investigations of drugs and medical devices without permission from the central licensing authority. While companies have to seek permission from the regulator to conduct trials even now, this is not specifically mentioned in the existing law.

- **Medical devices** - Under the ambit of medical devices defined by the draft Bill are diagnostic equipment, their software, implants, devices for assistance with disabilities, life support, instruments used for disinfection, and reagents or kits. The 1940 Act has medical devices as one of four categories of "drugs".
- To make decisions on regulating medical devices, the draft Bill provides for creating a **Medical Devices Technical Advisory Board** on the lines of the existing drugs technical advisory board, with people who have technical knowledge of the engineering of these devices, and members of the industry. Other than officials of Health ministry, the board will have officials from Department of Atomic energy, Department of Science and Technology, Ministry of electronics and information technology, DRDO and experts from different fields such as biomedical technology, biomaterials, polymer technology.

What constitutes the adulterated or spurious medical devices?

- The draft states that a medical device will be considered to be adulterated if it is rusted, corroded, filthy, putrid, decomposed, packed or stored in unsanitary conditions, contains harmful or toxic substances, or has any component or software removed making it unsafe.
- The draft Bill deems a medical device to be spurious if it carries the label of a fictitious company or is purported to be of a manufacturer that has not manufactured it.

1.6 lakh gave up citizenship in 2021, highest in 7 years

News: The Ministry of Home Affairs stated that over 1.6 lakh Indians renounced their Indian citizenship in 2021.

Citizenship in India

- Citizenship is listed in the Union List under the Constitution and thus is under the exclusive jurisdiction of Parliament.
- The Constitution does not define the term 'citizen' but details of various categories of persons who are entitled to citizenship are given in Part 2 (Articles 5 to 11).
- The Citizenship Act of 1955 prescribes five ways of acquiring citizenship, viz, birth, descent, registration, naturalization and incorporation of territory.

What are the ways to renounce citizenship in India?

- **Voluntary Renunciation**
    - If an Indian citizen wishes, who is of full age and capacity, he can relinquish citizenship of India by his will.
    - When a person relinquishes his citizenship, every minor child of that person also loses Indian citizenship. However, when such a child attains the age of 18, he may resume Indian citizenship.
- **Deprivation by Government** – The GOI also has the right to terminate citizenship of an Indian citizen in the following cases:
    - The citizen has disrespected the Constitution.
    - Has obtained citizenship by fraud.
    - The citizen has unlawfully traded or communicated with the enemy during a war.
    - Within 5 years of registration or naturalisation, a citizen has been sentenced to 2 years of imprisonment in any country.
    - The citizen has been living outside India for 7 years continuously.
- **By Termination**
    - The Constitution of India provides single citizenship. It means an Indian person can only be a citizen of one country at a time. If a person takes the citizenship of another country, then his Indian citizenship ends automatically. However, this provision does not apply when India is busy in war.
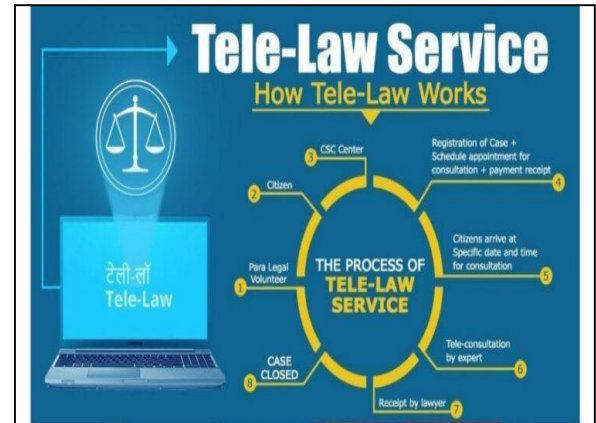
Tele-Law service

News: From this year, Tele-Law service is being made free of cost for citizens in the country," Minister of Law and Justice at the 18th All India Legal Services Meet at Jaipur.

What is Tele-Law service?

- Launched by the Ministry of Law and Justice in collaboration with the Ministry of Electronics and Information Technology (MeitY) in 2017 to address cases at pre–litigation stage.s
- It is a service that uses video conferencing facilities and telephone services to connect lawyers to litigants who need legal advice.
- The concept of Tele-Law is to facilitate delivery of legal advice through a panel of lawyers stationed at the state Legal Services Authorities (SALSA) and CSC.
- This service aims to reach out to the needy, especially the marginalized and disadvantaged.

Key Highlights:

- Tele–Law mainstreams legal aid to the marginalized seeking legal help by connecting them with the Panel Lawyers through the tele/video-conferencing infrastructure available at Common Service Centers (CSCs) across 1 lakh Gram Panchayats.
- For easy and direct access Tele- Law Mobile Application (both Android and IoS) has also been launched in 2021 and it is presently available in 22 scheduled languages.
- Benefitting from this digital revolution, Tele-Law has widened the outreach of legal services to 20 Lakh + beneficiaries in just five years.
- Under the provision of the MoU, NALSA would provide the services of 700 lawyers, in each district exclusively for the Tele-Law program. These empaneled lawyers would now also act as referral lawyers and also assist in strengthening the mechanism for dispute avoidance and dispute resolution at the pre-litigation stage.

It can be noted that this initiative is in line with Sustainable Development Goal-16, which seeks to "Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels".

Simultaneous Elections – Is it feasible in India?

News: The issue of holding simultaneous parliamentary and Assembly polls has been referred to the Law Commission so that a practicable roadmap and framework can be worked out.

What are Simultaneous elections?

- Simultaneous Election (SE) is an exercise of the democratic process wherein the elections to the various house (Lok Sabha and state assemblies) and bodies are synchronized together to have more efficiency and save expenditure.
- In India, SE was the norm till 1967, however, more recently Niti Aayog, Law Commission Report, and our Prime minister have pushed for SE to make the election in India a meaningful democratic exercise.
- The 21st Law commission in its draft report had stated that it was sure that there exists a viable mechanism, necessitating the holding of simultaneous elections to the parliament and state legislatures. SE can prevent the country from being in a constant election mode.

Why should we opt for SE?

- **Will help reduce huge expenditure on Elections** - A staggering Rs 55,000-60,000 crore was spent in the Lok Sabha elections, 2019, according to a study by the Centre for Media Studies (CMS), a not-for-profit multi-disciplinary development research think-tank. SE can help cut short on this mammoth expenditure considerably.
- **Impact on daily public life** - Regular elections impact the functioning of essential services such as regular transport, prices of essentials, etc.
- **Reduces policy paralysis** - Imposition of Model Code of Conduct (MCC) over the state for a longer period of time leads to stoppage of developmental programs.
- Can help reduce populist measures - Populist measures are often not in sync with the economic principles and have a narrow vision of immediate electoral gains.
- Simultaneous elections may rather help increase voter turnout as frequent elections leads to voter's exhaustion.
- It will also help reduce burden on administrative setup and security forces.
- The money saved through SE can be put to use on developmental work, investment in social sector schemes such as healthcare, education which remain underfunded due to multiple issues.

What are the challenges in implementation?

- Curtailing the terms of the existing legislature to synchronize the election will undermine democracy and federalism.
- Frequent election ensures political and developmental accountability of parties in power. But SE might dilute that.
- Some political scientists' say voters may be influenced to vote on national issues (thus benefiting national parties) even for State elections, thereby diluting electoral neutrality and also undermining the status of regional parties.
- SE would require amendment in the provisions of the constitution, RPA 1951, and ratification by states. It may be hard to get in a multiparty and diverse country like India.
- Lastly, it will always be difficult to convince and bring together all the political parties on the same page as far as SE is concerned.

Way Forward

- There needs to be a consensus on whether the country needs one nation, one poll or not. All political parties should at least cooperate in debating this issue, once the debate starts, the public opinion can be taken into consideration. India being a mature democracy, can then follow the outcome of the debate.

India Innovation Index 2021

News: The India Innovation Index, prepared by Niti Aayog and the Institute for Competitiveness, is an assessment framework which ranks states and the union territories on their innovation performance.

Key Highlights:

- The Innovation Index is divided into three categories- major states, Union Territories, and hill and North East states.
- There are 7 pillars in the index. Five 'enabler' pillars measure the inputs and two 'performance' pillars measure the output.
- Five enablers include Human Capital, Investment, Knowledge workers, Business Environment and Safety and Legal environment.
- While the performance pillars include knowledge output and knowledge diffusion.
- Among the major states, Karnataka topped with a score of 18.05 followed by Telangana and Haryana. Gujarat was ranked lowly at 14th with an overall score of 12.41.
- Among the Hill and North-east states, Manipur is leading the category followed by Uttrakhand and Meghalaya.
- As far as UT's/small states are concerned, Chandigarh is the top performer with a 27.88 score followed by Delhi and Andaman and Nicobar Islands.

Challenges observed:

- On an average, the country has not performed well in the knowledge worker pillar, as much as it has in the human capital pillar.
- The expenditure on human capital has been unable to create that knowledge base in the country.
- Innovation is skewed against the manufacturing sector due to the problems pertaining to and the missing middle.
- Missing middle, means there are too many tiny, informal enterprises, and too few large, formal ones to employ thousands of people.

Recommendations:

- GDERD (Gross Domestic Expenditure on R&D) needs considerable improvement and should touch at least 2%, which would play an instrumental role in India achieving the goal of a 5 trillion economy and further influence its innovative footprint across the globe.
- Increasing GDERD promotes private sector participation in R&D and closing the gap between industry demand and what the country produces through its education systems.
- Countries that spend less on GDERD fail to retain their human capital in the long run and the ability to innovate is dependent on the quality of human capital.
- India's GDERD as a percentage of GDP (Gross Domestic Product) stood at about 0.7%.
- The private sector needs to pick up pace in R&D, public expenditure is productive up to some extent; once the growth follows a trajectory, it is desirable to shift to R&D mostly driven by the private sector.

Role of media in Indian Democracy

News: India's CJI has highlighted concerns that 'ill-informed and agenda-driven debates' and 'biased views' are weakening democracy.

Impact of Social Media on Judiciary and Indian Democracy:

- **Damages dignity of the accused** - Social media usually portrays the accused as a villain not based on facts but only to sensationalize the news, which causes damage to the dignity of the accused. For example, Parents of Arushi Talwar in Arushi murder case (2008).
- **Impact on victim** - In cases of a sexual offense, the explicit description of the ordeal on television creates mental torture to the victim. It leads to a breach of privacy, a bias in public opinion, as well as interferes with the sentencing process.
- **Impact of media trial** - Media trial describes the impact of television and print media coverage on a case through an attempt by the media to hold the accused guilty even before the trial begins. Such views and opinion undermine the work of judiciary, it influences public opinion and therefore justice delivery gets adversely affected.
- **Impact on the Judges** – Firstly, it impacts the morale of judge who is bound to be influenced by what is going around him. Social media draws the judge's attention to details that are not to be addressed in adjudicating the case.
- **Impact on society** – People may start losing trust in the judiciary. It violates the principles of natural justice.

How can we protect the Judiciary?

- Germany has The Network Enforcement Act (NetzDG) which for the past two years has required social network owners to combat fake news, hate speech, and other criminal posts against other individuals, or state institutions such as the judiciary.
- The GOI notified Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021 for the regulated use of Social media
- Kerala HC passed a memorandum directing the district judiciary to not use social media for criticizing the policies and actions of the government and its institutions, ministers, and judges, or discuss any cases. The HC will have a monitoring cell to observe and secure computer and internet systems provided in the courts

and report about the misuse of social media. (Such efforts minimize the conflict between executive and judiciary)

- We can make electronic media more accountable for the content they share and their opinions.
- Politicians, bureaucrats, police officers and other public representatives are often provided with security even after their retirement owing to the sensitiveness of their jobs. Ironically, judges are not extended similar protection.

Under what rules can MPs be suspended from Parliament?

News: 27 MPs have been suspended for unruly behavior as opposition continues protests in both houses.

What are the rules under which the Presiding officer acts?

- In order to ensure that proceedings are conducted in the proper manner, the Speaker/ Chairman is empowered to force a Member to withdraw from the House.
- Speaker (under Rule Number 373 of Lok Sabha) may direct such Member to withdraw immediately from the House, and any Member so ordered to withdraw shall do so forthwith and shall remain absent during the remainder of the day's sitting.

What if the member disobeys?

- Speaker may name the member and, on a motion being made forthwith put the question that the Member (naming such Member) be suspended from the service of the House for a period not exceeding the remainder of the session.
- A member suspended under this rule shall forthwith withdraw from the precincts of the House.
- However, under Rule 374A, in case of gross violation or severe charges, on being mentioned by the speaker, the member stands automatically suspended from the service of the house for five consecutive sittings or the remainder of the session, whichever is less.

What is the process followed in Rajya Sabha?

- The Chairman may "name a Member who disregards the authority of the Chair or abuses the rules of the Council by persistently and wilfully obstructing" business.
- In such a situation, the House may adopt a motion suspending the Member from the service of the House for a period not exceeding the remainder of the session.
- The House may, however, by another motion, terminate the suspension.

What is expected of a MP in terms of Parliamentary etiquette?

- The Lok Sabha rulebook specifies that MPs are not to interrupt the speech of others, maintain silence and not obstruct proceedings by hissing or making running commentaries during debates.
- Newer forms of protest led to these rules being updated in 1989.
- Now, members should not shout slogans, display placards, tear up documents in protest, and play a cassette or a tape recorder in the House.

What are the terms of suspension?

- The maximum period of suspension is for the remainder of the session.
- Suspended members cannot enter the chamber or attend the meetings of the committees.
- He will not be eligible to give notice for discussion or submission.
- He loses the right to get a reply to his questions.

Promotion and Regulation of e-commerce in India

News: Recently, a parliamentary standing committee flagged issues and suggested recommendations through report titled 'Promotion of Regulation of e-commerce in India'

What were the issues highlighted?

- **Monopoly** – A handful of platforms control a large part of e-commerce market.
- **Deep discounting** – Discounts of preferred sellers are selectively funded by the platform.

- **Neutrality issues** – Platforms give preferential treatment to selected sellers that are few in numbers but have a huge influence in terms of volume they sell. This comes at a cost of retail sellers.
- **Privacy issues** – The committee observed that there has been misuse of customer data by e-commerce companies.

What are the recommendations?

- Formulate a policy which clearly defines marketplace and inventory-based models of e-commerce.
- Certain e-commerce platforms need greater scrutiny (as is applicable in other countries). It recommends India should select **"gatekeeper"** platforms of a specific scale that require more stringent supervision.
- **DPIIT** should address issues such as maintaining a **level playing field** between small businesses and e-commerce giants and **provide technical support to small** and **local businesses**.
- At the same time, e-commerce companies should also be mandatorily registered with DPIIT.
- The committee recommended that market place e-commerce entities should not sell goods that it owns or controls, not have any direct or indirect relationship with sellers who sell on the platform and be prohibited from licensing their brand to third-party sellers on the platform.
- E-commerce entities that operate beyond a certain threshold must appoint chief compliance officer and setup grievance redressal mechanism.

Social Justice

Internet Shutdowns

News: Recently, a report published by the Office of the United Nations High Commissioner for Human Rights (OHCHR) named Internet shutdowns: Trends, causes, legal implications and impacts on a range of human rights, stated that shutting down the internet affects people's safety & well-being, hampers information flow and harms the economy.

About:

- Internet shutdowns are measures taken by a government or by any entity on behalf of a government, to intentionally disrupt access to and the use of information and communications systems online.
- Governments across the world have resorted to shutting down the internet citing a range of reasons.
- India blocked or disrupted internet connections 106 times and at least 85 of India's internet shutdown episodes were in Jammu & Kashmir.
- Almost half of all shutdowns recorded by civil society groups from 2016-2021 were carried out in the context of protests and political crises, with 225 shutdowns recorded during public demonstrations relating to a vast range of social, political or economic grievances.

Impact of Internet Shutdown:

- It causes major economic costs for all sectors, disrupting financial transactions, commerce and industry. The World Bank recently calculated that Internet shutdowns in Myanmar alone had cost nearly USD 2.8 billion from February-December 2021, reversing economic progress made over the previous decade.
- It undermines learning outcomes and interferes with education planning and communication among teachers, school administrators and families.
- Such disruptions undermine or eliminate access to digital tools that are critical for campaigning, promoting public discussion, conducting voting and overseeing the electoral processes.
- Internet shutdowns have a profound effect on the ability of humanitarian actors to provide assistance. Supply chains and the flow of information critical to the delivery of goods and services can be disrupted.
- Impact on mobilizing urgent medical care, disrupting the delivery of essential medicines and maintenance of equipment, disrupting essential mental health assistance.

Anuradha Bhasin v. UOI (2020)

- According to the Supreme Court observation in the above verdict, the internet shutdowns do not violate Article 19 of the Indian constitution.
- It acts as a reasonable restriction and it should only be enacted if there is a genuine threat to public safety or national security. Certain balancing tests should be carried out and only if extremely necessary, the government should proceed with this extremely restrictive step.

Way Forward:

- The report accepts that because the visible impact of internet shutdowns is few and far, it becomes one of the biggest hindrances to reversing the unfavorable trend.
- The report urged the states to prevent unnecessary shutdowns, maximize internet access and remove possible obstacles.
- It also called upon companies to speedily share information on disruptions and ensure that they take all possible lawful measures to prevent shutdowns they have been asked to implement.

Signal School Project

News: With the mantra of 'Bhiksha Nahi Shiksha' under the Signal School project, by Ahmedabad Municipal Corporation poor children who are deprived of education, who are begging or who have dropped out of school in the middle will get education facilities.

About:

- The signal school bus is equipped with a blackboard, table and chair for teachers, LCD TV, WiFi, CCTV, drinking water, and a mini fan.
- Children will also be given other facilities provided in municipal schools, lunch, and health check-ups under the school health program, and will be brought into the mainstream at a nearby school after one year.
- Such initiatives work towards a socially oriented approach and inculcate education culture in the deprived children so as to ensure no child in the society is deprived of education and the child of the needy and poor family does not have to drop out of education even in adverse circumstances.

You may refer to following link to know more about the Project - https://youtu.be/wwHJHOxPMA8

Take Home Ration – Good Practices throughout States and UT's

News: Recently, a report titled-Take Home Ration-Good Practices throughout the State/Union Territories was released by NITI Aayog and the World Food Program.

What is Take Home Ration?

- The government of India provides Take Home Ration under the Supplementary Nutrition component of the Integrated Child Development Services (ICDS) to fill the gap in nutrition among children as well as Pregnant and Lactating Women (PLW).
- It offers fortified rations for use at home, provided in two ways: Take-Home Rations and Hot-Cooked Meals at Anganwadi Centers.
- It's given as raw ingredients or in packets that have already been cooked.

Key Highlights:

- The report presents a set of good and innovative practices adopted in the implementation of the Take Home Ration value chain by the States and UTs.
- The government adopted innovative models to reach remote areas.
- It appreciated the production, formulation, delivery, labelling, packaging, supervision, quality control, and changes in social and behavioural norms adopted by the Government by JAN BHAGIDARI, and sourcing local networks of Anganwadi's.

What are similar Government schemes?

- National Health Mission
- PM Poshan
- National Nutrition Strategy

Way Forward:

- The THR programme needs to be strengthened more in order to meet the nutritional goals in a timely manner.

Fighting Undernutrition through Government Meal Programmes

News: An inter-ministerial committee has recommended that protein-rich food items e.g., Eggs be legally mandated in meals given through food safety programmes in schools and anganwadis under National Food Security Act (NFSA), 2013.

Need:

- The Covid-19 pandemic is likely to have 'aggravated the silent crisis' of undernutrition in India.
- National Family Health Survey-5 (NFHS-5) has documented a rise in the 'rates of child undernutrition, stunting and wasting in most of the states', along with an increase in the prevalence of anaemia among pregnant women and those of reproductive age
- Currently, states bear the cost of supplementary provisions. For example, eggs are served in mid-day meals in 13 states and three UTs as part of 'additional food items'.

Inter-ministerial committee's suggestions:

- It recommended including protein-rich food items like eggs, nuts and legumes, as well as micronutrients like calcium, iron, zinc, folate and vitamin A be legally mandated in meals.
- The report states that those who do not consume eggs may be provided 'double the proposed quantity of nuts and seeds'.
- The report calls for inclusion of 'micro-nutrients' under the National Food Security Act, 2013. At present, it quantifies nutrition per meal in terms of calories and protein only.

You may refer the following link to know more about features of NFSA, 2013 - https://dfpd.gov.in/nfsa.htm#:~:text=Salient%20features%20of%20the%20National,kg%20per%20person%20per%20month.

Findings and Recommendations of PSC on Education Sector

News: The Parliamentary Standing Committee carried out a review of education standards, accreditation process, research, examination reforms and academic environment in India's higher education institutes.

Key Findings:

- The higher education department of the Union ministry of Education informed the committee that only 30% of the universities and 20% of the colleges are in the accreditation system. Less than 9,000 colleges out of a total of 50,000 colleges are accredited.
- Many deemed universities, in order to make quick money, have started Open Distance Learning courses undermining qualitative research work.
- Several state universities regularly fail to carry out assessments smoothly, often reporting instances like question paper leaks and rampant cases of copying.

Recommendations:

- Issues faced by NAAC and the National Board of Accreditation (NBA), which recognises courses offered by higher education institutions, should be analysed and worked on.
- The norms for frequency and periodicity of the accreditations be defined so that institutions do not develop a tendency to carry the score for years without a review, which leads to complacency and undermines quality mechanisms.
- The committee recommends that the parameter of the institution's exam management competency be also considered as a mandatory norm towards consideration of accreditation.
- It also suggested strict actions, including derecognition, for higher institutions involved in malpractices in collaboration with coaching centres. All universities and colleges must be scored on how foolproof their examinations are.
- To encourage more funding, it suggested 'donations by individuals, alumni and institutions' should be 100% tax deductible.
- It also noted that there was an urgent need to revisit and revamp the norms for starting online courses.
- With regard to Open Distance Learning courses, the committee strongly recommended adequate measures to curb such tendencies after carefully examining the options.

State Ranking Index for NFSA 2022

News: Union Food and Consumer Affairs Minister released the 'State Ranking Index for NFSA' 2022 during a conference of State Food Ministers on 'Food and Nutrition Security of India'.

Key Findings:

- Odisha is in the first position, followed by Uttar Pradesh and Andhra Pradesh.
- Among the special category States (the Northeastern States, Himalayan States, and the Island States), Tripura has obtained the first rank. Himachal Pradesh and Sikkim are in the second and third positions.
- The findings from the exercise revealed that most States and Union Territories have fared well in digitisation, Aadhaar seeding, and ePoS installation, which reiterates the strength and scale of the reforms.
- States and Union Territories have to improve their performance in a few areas, such as conducting and documenting social audits thoroughly. Operationalising functions of State food commissions across States and Union Territories.

Why does the Index matter?

- The current version of the Index **measures the effectiveness** of NFSA implementation majorly through operations and initiatives under TPDS (Targeted Public Distribution System).
- Ranking will lead to **healthy competition** among States under the NFSA, also known as the food law, under which the Centre provides highly subsidized foodgrains to nearly 80 crore people.

What are the issues?

- It does not cover programs and schemes implemented by other ministries and departments under the NFSA.
- The index shows only the efficiency of TPDS operations, it does not reflect the level of hunger, or malnutrition in state or UT.
- The Index focuses on NFSA and TPDS reforms, which can be standardized across the States and Union Territories.

World Population Prospects, 2022

News: According to the 2022 edition of the United Nations' World Population Prospects (WPP), India is projected to surpass China as the world's most populous country in 2023.

About WPP:

- The Population Division of the UN has been publishing the WPP in a biennial cycle since 1951.
- Each revision of the WPP provides a historical time series of population indicators starting in 1950.
- It does so by taking into account newly released national data to revise estimates of past trends in fertility, mortality or international migration.

Key Findings:

- **Population is growing but the pace is declining**
    - The global population is expected to grow to around 8.5 billion in 2030, 9.7 billion in 2050 and 10.4 billion in 2100.
    - In 2020, the global growth rate fell under 1% per year for the first time since 1950.
- **The population of elderly is increasing** - The share of the global population aged 65 years or above is projected to rise from 10% in 2022 to 16% in 2050.
- **Population growth varies across different regions**
    - More than half of the projected increase in global population up to 2050 will be concentrated in just eight countries: The Democratic Republic of the Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines and the United Republic of Tanzania.
    - The 46 Least Developed Countries (LDCs) are among the world's fastest-growing.
- **Demographic Dividend**

- A sustained drop in fertility has led to an increased concentration of the population at working ages (between 25 and 64 years), creating an opportunity for accelerated economic growth per capita.
- This shift in the age distribution provides a time-bound opportunity for accelerated economic growth.
- **Impact of International Migration**
  - International migration is having an important impact on population trends for some countries.
  - Over the next few decades, migration will be the sole driver of population growth in high-income countries.

Key Findings related to India:

- India's growth rate stood at 2.3 % in 1972, which has dropped down to less than 1% now. In this period, the number of children each Indian woman has during her lifetime has come down from about 5.4 to less than 2.1 now. This means that Indian has attained the Replacement Fertility Rate, at which a population exactly replaces itself from one generation to the next.
- Fertility rates have been declining, so have mortality rates with increased access to healthcare and advances in medicine. Population of 0-14 years and 15-24 years will continue to decline while those of 25-64 and 65+ will continue to rise for the coming decades.
- This reduction of premature mortality for successive generations, reflected in increased levels of life expectancy at birth, has been a driver of population growth in India.

Recommendations of the Report:

- Countries with ageing populations should take steps to **adapt public programmes** to the growing proportion of older persons, including by improving the sustainability of **social security and pension systems** and by establishing **universal health care** and long-term care systems.
- To maximize the potential benefits of a favourable age distribution, countries **need to invest** in the **further development** of their **human capital** by ensuring access to health care and quality education at all ages and by promoting opportunities for productive employment and decent work.
- For those already in the 25-64 age bracket, **there is a need for skilling**, which is the only way to ensure they are more productive and have better incomes.

NIRF Rankings 2022

News: Recently, the Ministry of Education has released 7th Edition of National Institutional Ranking Framework (NIRF) Rankings 2022.

Key Findings:

- Indian Institute of Technology (IIT), Madras, is yet again the top higher educational institute in the country followed by the Indian Institute of Science (IISc), Bengaluru, and IIT Bombay, according to the Ministry of Education's National Institutional Ranking Framework (NIRF) 2022.
- This is the seventh consecutive edition of NIRF. It ranks colleges, universities and research institutions and also provides an overall ranking of all of them combined.
- Institutes are also ranked across seven subject domains, namely engineering, management, pharmacy, law, medical, architecture and dental.
- Participation in the NIRF was voluntary in the initial years; it was made compulsory for all government-run educational institutions in 2018.
- The Education Minister said, the rankings that accreditation and assessment of every higher education institution will be made mandatory and all institutions will have to be part of the NIRF ranking system.
- The two accreditation systems – National Assessment and Accreditation Council for institutional accreditation (NAAC) and the National Board of Accreditation for programmes (NBA) will be merged and institutes will have to have either NAAC accreditation or NIRF rank to be able to receive government funds.
- Soon there will be a system for accreditation of schools in the country.

What are the key parameters for evaluation?

- Outreach and Inclusivity – special emphasis on representation of women.
- Graduation Outcome – It forms the ultimate test of the effectiveness of the core teaching/learning.
- Teaching Learning and Resources
- Research and Professional practice
- Perception

GOAL 2.0

News: Recently, Ministry of Tribal Affairs and Meta have launched the second phase of the GOAL Programme (GOAL 2.0).

About:
- GOAL (Going Online as Leaders) was launched as a pilot project in May 2020 and it was completed by December 2021.
- It aimed at digital empowerment of tribal youth and women through the concept of mentor and mentee.
- The programme is fully funded by Meta (Facebook India).
- Trainings were provided for three pillars - Communication & Life Skills, Enabling Digital Presence and Leadership & Entrepreneurship.
- GOAL 2.0 will be open to all people from tribal communities.

What will be the objectives?
- The program aims to upskill and digitally enable tribal youth via Facebook live sessions and Meta Business Coach, a digital learning tool.
- There will be special focus on more than 10 lakh members of 50000 Van Dhan Self Help Groups who will be digitally trained with regard to market demand, packaging, branding and marketing of their products.
- The GOAL 2 will enable maximum participation and percolation of benefits of the training within the tribal youth with provision of Chatbot, need based on line sessions from Industry experts in different fields as per requirements from the mentees.

Which ministries will be involved?
- The Ministry of Tribal Affairs in coordination with the Ministry of Electronics and Information Technology, will be providing 6 digital classes in each of the 175 Eklavya Model Residential Schools (EMRS) selected under the program.
- The project is being implemented by The Education and Research Network, which is an autonomous organization under the Ministry of Electronics and Information Technology (MeITY).

Right to Safe Abortion

News: Denying an unmarried woman the right to a safe abortion violates her personal autonomy and freedom, the Supreme Court held in an order.

Key observations made by Supreme Court:
- A Bench led by Justice D.Y. Chandrachud was hearing the appeal of a woman who wanted to abort her 24-week pregnancy after her relationship failed and her partner left her.
- The lower court had taken an "unduly restrictive view" that her plea for a safe abortion was not covered under the Medical Termination of Pregnancy Act as the pregnancy arose from a consensual relationship outside wedlock.
- Chastising the lower court, the Bench said live-in relationships had already been recognised by the Supreme Court. There were a significant number of people in social mainstream who see no wrong in engaging in pre-marital sex.
- The law could not be used to quench "notions of social morality" and unduly interfere in their personal autonomy and bodily integrity.

- The court noted that an amendment to the Act in 2021 had substituted the term 'husband' with 'partner', a clear signal that the law covered unmarried women within its ambit.
- A woman's right to reproductive choice is an inseparable part of her personal liberty under Article 21 of the Constitution. She has a sacrosanct right to bodily integrity.

Performance Grading Index for Districts

News: The 1st ever report on PGI-D for the year 2018-19 and 2019-20 was released to grade schools in Indian districts.

Who has released the index?

- With a view to assess the performance of school education systems at the District level, the Department of School Education and Literacy (DoSE&L), the Ministry of Education has created an index for comprehensive analysis.

Key Findings:

- The PGI-D report graded 725 districts in 2018-19 edition and 733 districts in 2019-20.
- The report showed that 33 States and UTs have improved their PGI score in 2019-20 compared to the previous year with Andaman and Nicobar Islands, Punjab and Arunachal Pradesh have improved their score by more than 20%.
- Rajasthan leads the way in performance in school education. Three districts namely Sikar, Jhunjhunu and Jaipur from Rajasthan achieved the second grade, while the number of districts in the third Uttam grade rose from 49 to 86 during 2018-29 and 2019-20.
- The only two states, namely Madhya Pradesh and Chhattisgarh have scored less than 2018-19.
- The top 5 achievers in PGI 2019-20 includes Punjab, Chandigarh, Tamil Nadu, Andaman & Nicobar Islands and Kerala.
- As per the report, none of the districts attained highest grade 'Daksh' in both 2019-20 and 2018-19 indicating that there is scope for the districts to further improve their performance in future years.

What is the PGI-D Structure?

- The PGI-D structure comprises of tidal weightage of 600 points across 83 indicators, which are grouped under 6 categories.
- Following are the categories – Outcomes, effective classroom transaction, infrastructure facilities and Student's entitlements, School safety, Child protection, Digital learning and governance process.
- PGI-D grades the districts into ten grades – **Daksh** is the Highest achievable Grade, which is for Districts scoring more than 90% of the total points in that category or overall.
- The lowest grade in PGI-D is called **Akanshi-3** which is for scores upto 10% of the total points. Ultimate objective of PGI-D is to help the districts to prioritize areas for intervention in school education and thus improve to reach the highest grade.

What was the need for PGI?

- Based on the success of State PGI, 83-indicator-based PGI for District (PGI-D) has been designed to grade the performance of all districts in school education.
- This grading system is expected to help the state education departments to understand and identify the gaps at the district level and further, improve their performance in a decentralized manner. The index is also responsible for indicating the areas (score-wise) where a district needs to improve.

What is the source of Data collection?

- Unified District Information System for Education (UDISE), National Achievement Survey (NAS) of NCERT, and Shagun portal of DoSEL.

International Relations

Outcomes of the G7 Summit

News: The Summit of G-7 leaders, the group of the world's "most industrialised economies", was held in Germany last week, where India along with Indonesia and a few other countries, was a special invitee.

Key Outcomes:

- **Statement Commitment on Ukraine**
  - G-7 countries underlined their condemnation of what they called "Russia's illegal and unjustifiable war of aggression against Ukraine" and said they will support Ukraine "for as long as it takes" with financial, humanitarian, military, and diplomatic support.
- **Statement on Global Food Security**
  - G-7 parties remained on target to raise $100 billion and lift 500 million from malnutrition by 2030. Here too the reference to Russia stopping Ukrainian wheat and other grains from being exported- G7 will provide $4.5 bn to help Ukraine produce and export.
- **Partnership for Global Infrastructure and Investment**, plan to mobilise $600 billion over the next five years to narrow the global investment gap- in a message to China and concerns over unsustainable debt creations.
- Statements on Climate change and on **Just Transition partnerships** between the G7 and India, Indonesia, South Africa, Senegal and Vietnam to ensure they are able to keep global warming levels between 1.5 and 2 degrees celcius.
- **Statement on Resilient democracies**, which India also signed on to, committing to ensure free and fair elections, protection of civil society, promoting human rights online and offline, and achieving gender equality.
- To overcome the current COVID-19 pandemic, G7 will build on its provision of over 1.175 billion vaccine doses since the last meeting in 2021. G7 countries also decided to prevent, prepare, and respond to future pandemics and health challenges including through the G7 Pact for Pandemic Readiness.

India at G7 Summit:

- Although India is not a member of G7, it was called as a guest to attend the summit.
- PM Modi participated in a session, 'Investing in a Better Future: Climate, Energy, Health and Food security' and Resilient Democracies Document was signed.
- India highlighted its soft power on global stage through Gift diplomacy. The PM had gifted each G7 leader with a traditional Indian art.
- India stopped short to endorse the Partnership for Global Infrastructure and Investment.
- India did not make any direct reference on Ukraine.
- India's tightrope walk between the West and Russia-China has just become more difficult- the G7 statement indicates a point of no-return between the two blocs, even if the much needed Russia-Ukraine ceasefire is worked out.
- More scrutiny of India's economic links with Russia including the import of Russian oil, now hitting about 25% of India's imports, Coal and Cement, as well as payment mechanisms being explored to subvert western sanctions.

Fujian

News: Recently, China unveiled its first indigenous aircraft carrier, the new-generation Fujian (Type 003). China now has the most number of aircraft carriers after the U.S.

About:

- The Fujian has been named after China's eastern coastal province which lies across from Taiwan.

- The Fujian joins two other carriers currently operated by China — Shandong (Type 001), commissioned in 2019, and the Liaoning (Type 002), bought second-hand from Ukraine in 1998.
- The Type 003 carrier more technologically advanced than its predecessors Shandong and Liaoning.

What are its features?

- The Fujian's displacement is 80,000 tonnes, much more than the existing Chinese carriers, and comparable to U.S. Navy aircraft carriers.
- The Fujian has been fitted with the latest launch technology which is the Electromagnetic Aircraft Launch System (EMALS), first developed by the U.S. Navy.
- It also has a straight flat-top flight deck for take-offs and landings

What is EMALS?

- It is a catapult system which helps to provide the extra push to aircrafts. Once the catapult is released, the aircraft attached to the catapult moves forward with great speed in a short time, which helps it to gain the speed required to take off before it reaches the end of the runway.
- There are two types of catapult systems, one being steam powered, and other electromagnetic ones called EMALS.
- While the former uses steam pressure to fire catapults, EMALS uses linear induction motors. The electromagnetic force generated is used to launch the aircraft.
- Compared to steam catapults, EMALS is more reliable, requires less maintenance, recharges faster, doesn't take up much space on a carrier and is energy-efficient.

**What about India's Aircraft carriers?**

- **INS Vikramaditya** - It is the Indian Navy's largest aircraft carrier and warship converted from the Russian Navy's decommissioned Admiral Gorshkov/Baku. It works on a Short Take-Off But Arrested Recovery, or STOBAR mechanism with an angular ski-jump.
- **INS Vikrant** - India's second aircraft carrier named INS Vikrant, set to be commissioned later this year, will use the CATOBAR system to launch aircraft. Its construction propelled India into a select group of countries having capabilities to build state-of-the-art aircraft carriers.

Critical Minerals Investment Partnership

News: Recently, India and Australia decided to strengthen their partnership in the field of projects and supply chains for critical minerals.

What are Critical Minerals?

- Critical minerals are elements that are the building blocks of essential modern-day technologies and are at risk of supply chain disruptions.
- Based on their individual needs and strategic considerations, different countries create their own lists. However, such lists mostly include graphite, lithium and cobalt, which are used for making EV batteries; rare earth that is used for making magnets and silicon which is a key mineral for making computer chips and solar panels.
- India's Department of Science and Technology, in collaboration with the Council on Energy, Environment and Water, drafted the Critical Minerals Strategy for India in 2016, with a focus on India's resource requirements till 2030. The Indian Critical Minerals Strategy has identified 49 minerals that will be vital for India's future economic growth.
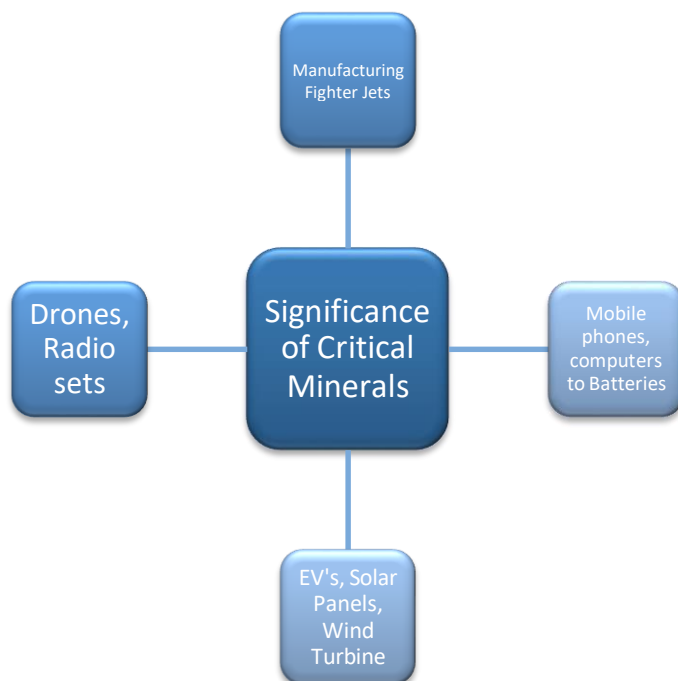
Reasons why they are considered Critical source:

- **Critically important towards Transition to Green Energy** - As countries around the world scale up their transition toward clean energy and a digital economy, these critical resources are key to the ecosystem that fuels this change. Any supply shock can severely imperil the economy and strategic autonomy of a country over-dependent on others to procure critical minerals.
- **Complex Challenges** - These supply risks exist due to rare availability, growing demand and complex processing value chain. Many times, the complex supply chain can be disrupted by hostile regimes, or due to politically unstable regions.
- **Increased Demand** - According to the United States (US) Government, as the world transitions to a clean energy economy, global demand for these critical minerals is set to rapidly increase by 400-600% over the next several decades, and, for minerals such as lithium and graphite used in EV batteries, demand will increase by even more as much as 4,000%. They are critical as the world is fast shifting from a fossil fuel-intensive to a mineral-intensive energy system.

What threats does China pose to the world in this sector?

- As per the 2019 US Geological Survey (USGS) Mineral Commodity Summaries report, China is the world's largest producer of 16 critical minerals.
- The level of concentration is even higher for processing operations, where China has a strong presence across the board. China's share of refining is around 35% for nickel, 50-70% for lithium and cobalt, and nearly 90% for rare earth elements.
- China also controls cobalt mines in the Democratic Republic of Congo, from where 70% of this mineral is sourced.
- China, according to a report on the role of critical minerals by the International Energy Agency (IEA), was responsible for some 70% and 60% of global production of cobalt and rare earth elements, respectively, in 2019.
- Thus, increased dependence on China will hurt major economies if steps are not taken today to become self-reliant.

How do countries around the world plan to overcome this issue?

- In 2021, the US ordered a review of vulnerabilities in its critical minerals supply chains and found that an over-reliance on foreign sources and adversarial nations for critical minerals and materials posed national and economic security threats. Hence, US has shifted its focus on expanding domestic mining, production, processing and recycling of critical mineral.

- India has set up KABIL or the Khanij Bidesh India Limited, a joint venture of three public sector companies, to ensure a consistent supply of critical and strategic minerals to the Indian domestic market. It ensures the mineral security of the nation; it also helps in realising the overall objective of import substitution.
- The United Kingdom (UK) unveiled its new Critical Minerals Intelligence Centre to study the future demand for and supply of these minerals.

CAATSA sanctions

News: US House of Representatives has passed a legislative amendment that approves a waiver to India against the punitive CAATSA sanctions for its purchase of the S-400 missile defence system from Russia to help deter aggressors like China.

About:
- CAATSA authorizes the US administration to impose sanctions on countries that purchase major defence hardware from Russia.
- Countering America's Adversaries through Sanctions Act (CAATSA)'s core objective is to counter Iran, Russia and North Korea through punitive measures.
- It was passed in 2017 in response to Russia's annexation of Crimea (2014) and its alleged meddling in the 2016 US presidential elections.
- Sanctions that may be imposed include prohibition on loans, prohibition of Export-Import bank assistance, prohibition on procurement of goods or services, denial of visas to persons.
- Ro Khanna, the US representative from California's 17th congressional district said, "The United States must stand with India in the face of escalating aggression from China."
- The US has already imposed sanctions on Turkey under the CAATSA for the purchase of a batch of S-400 missile defense systems from Russia.

What is S-400 missile system?
- The S-400 Triumf is a mobile, surface-to-air missile system developed in the 1990s.
- It is the most dangerous operationally deployed modern long-range SAM (MLR SAM) in the world, considered much ahead of the US-developed Terminal High Altitude Area Defense system (THAAD).
- India signed a USD 5 billion deal with Russia (in 2018) to buy five units of the S-400 air defence missile systems.

To know more about how S-400 missile system works, what military components it includes and how it can help the country, we highly recommend to click the following link - https://www.youtube.com/watch?v=8JdQOCa_t-s

China's rise prompts for rethink on Nuclear Policy

News: In a recent article by C.Raja Mohan, he gives few suggestions on what India-Japan can do to counter an aggressive China.

What is the need for nuclear deterrence?
- Rising Chinese nuclear military power: Some estimates say China's arsenal could grow to 1,000 warheads by 2030 from about 350 now.
- China has taken a muscular approach to its territorial disputes, including with India and Japan.
- China's tactics of salami slicing and coercive diplomacy have come into sharp view in the East China Sea that Beijing shares with Japan and the vast Himalayan frontier with India.
- Russia-Ukraine war has made it clear that Ukraine giving up its nuclear arsenal was a wrong move.

What concerns India-Japan?
- Indian and Japanese capacity to deter China is eroding steadily thanks to the problems with India's minimum deterrence posture and the US nuclear umbrella over Japan.

- In the wake of the nuclear tests of 1998, India quickly announced a policy of minimum deterrence and a doctrine of no first use of nuclear weapons.
- India and Japan have long presented themselves as champions of nuclear disarmament.
- India is a nuclear weapon power and Japan is not (but it relies on the US nuclear umbrella for its security)

What needs to change?

- C.Raja Mohan suggests to go for the "INFRUS" agreement between India, France and the US (similar to the AUKUS agreement). Under this US should midwife an agreement where France would help India accelerate the development of an Indian underwater deterrent based on ballistic missile carrying submarines (SSBN) as well as nuclear attack submarines (SSN).
- US should review its attitude towards India's Nuclear programme. In the past, the US insisted on constraining India's nuclear weapon programme. Today a strong Indian nuclear deterrent against China is critical for the geopolitical stability of Asia and the Indo-Pacific and in the US interest.
- While Japan's priority is to transform its conventional forces, India might need to consider both conventional and nuclear modernisation.
- India also must rethink on its no-first use (NFU) nuclear policy in an evolving environment.

General Studies – 3

Economic Development

1. Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.
2. Inclusive growth and issues arising from it.
3. Government Budgeting.
4. Major crops-cropping patterns in various parts of the country, - different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.
5. Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System- objectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.
6. Food processing and related industries in India- scope' and significance, location, upstream and downstream requirements, supply chain management.
7. Land reforms in India.
8. Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.
9. Infrastructure: Energy, Ports, Roads, Airports, Railways etc.
10. Investment models.

Technology

11. Science and Technology- developments and their applications and effects in everyday life.
12. Achievements of Indians in science & technology; indigenization of technology and developing new technology.
13. Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

Environment & Bio-diversity

14. Conservation, environmental pollution and degradation, environmental impact assessment.

Disaster Management & Security

15. Disaster and disaster management.
16. Linkages between development and spread of extremism.
17. Role of external state and non-state actors in creating challenges to internal security.
18. Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security; money-laundering and its prevention.
19. Security challenges and their management in border areas - linkages of organized crime with terrorism.
20. Various Security forces and agencies and their mandate.

Economic Development

Financial Stability Report

News: Reserve Bank of India (RBI) released its bi-annual Financial Stability Report (FSR).

Key Findings:

- **Positive news on NPA**
    - The asset quality of the banking system has improved with the gross non-performing assets (GNPA) ratio declining from 7.4 per cent in March 2021 to a six-year low of 5.9 per cent in March 2022.
    - Banks have reduced the GNPA ratio through recoveries, write-offs and reduction in slippages.
- **Sufficient capital buffer**
    - According to the RBI's report, banks, as well as non-banking financial institutions, have sufficient capital buffers to withstand shocks, and support from it during Covid helped banks arrest their GNPA ratio.
- **Provision Coverage Ratio**
    - It improved to 70. 9 per cent in March 2022 from 67.6 per cent a year ago.
    - PCR is the percentage of funds that a bank sets aside for losses due to bad debts.
    - A high PCR can be beneficial to banks to buffer themselves against losses if the NPAs start increasing faster.

What are the concerns raised by RBI?

- RBI Governor termed cryptocurrencies as a 'clear danger' and anything that derives value based on make-believe, without any underlying, is just 'speculation under a sophisticated name'.
- The report cautioned that the advent of fintech has exposed the banking system to new risks such as safeguarding of data privacy, cyber security, consumer protection, competition and compliance with AML (anti-money laundering) policies. India has the highest fintech adoption rate globally (87 per cent), receiving funding of $8.53 billion during 2021-22.
- US rate hike, threat of looming recession there, ongoing Ukraine crisis and oil price rise will continue to have adverse impact on the Indian economy.

Financial Services Institutions Bureau

News: The government has transformed Banks Board Bureau (BBB) into Financial Services Institutions Bureau (FSIB) by making some amendments.

What is BBB and its Composition?

- It was set up in February 2016 as an autonomous body based on the recommendations of the RBI-appointed Nayak Committee.
- It was part of the Indradhanush Plan.
- It will make recommendations for the appointment of whole-time directors as well as non-executive chairpersons of Public Sector Banks (PSBs) and state-owned financial institutions.
- The Ministry of Finance takes the final decision on the appointments in consultation with the Prime Minister's Office.
- Banks Board Bureau comprises the Chairman, three ex-officio members i.e Secretary, Department of Public Enterprises, Secretary of the Department of Financial Services and Deputy Governor of the Reserve Bank of India, and five expert members, two of which are from the private sector.

What is Financial Services Institutions Bureau?

- The Financial Services Institutions Bureau will select the chiefs of public sector banks and insurance companies.
- The FSIB will have the clear mandate to issue guidelines and select general managers and directors of state-run non-life insurers, general insurers and Financial Institutions.

- FSIB will be the single entity for making recommendations for appointments of WTD (Whole-time Director) and NEC (Non-executive Chairman) in Public Sector Banks, India Private Limited company and Financial Institutions.
- The Appointments Committee of Cabinet (ACC) has approved the appointment of Bhanu Pratap Sharma as Initial chairperson of FSIB for two years. He was the former Chairman of BBB.
- The ACC has asked the Department of Financial Services to carry out necessary modifications in the Nationalized Banks (Management and Miscellaneous Provisions) Scheme of 1970/1980 with the approval of the Finance Minister, and then notify the government resolution for establishing FSIB as a single entity

What was the need for an overhaul?

- Delhi high court last year observed that the bureau was not a competent body to recommend appointments at PSU general insurers, and held that circulars enabling BBB to select general managers and directors of PSU insurers were not legally valid.
- Despite the BBB's good work, recruitment to a higher level has been slow. Also, BBB's extended two-year term ended, and new recruitments can restart only when a new body is in place.

DESH Bill

News: The government plans to table the Development of Enterprise and Service Hubs (DESH) Bill to overhaul the special economic zones (SEZ) legislation.

What has called for the need to replace existing SEZ Act?

- WTO's dispute settlement panel has ruled that India's export-related schemes, including the SEZ Scheme, were inconsistent with WTO rules since they directly linked tax benefits to exports.
- Countries aren't allowed to directly subsidize exports as it can distort market prices.

How is DESH Bill different?

- The DESH legislation goes beyond promoting exports and has a much wider objective of boosting domestic manufacturing and job creation through 'development hubs'.
- These hubs will no longer be required to be net foreign exchange positive cumulatively in five years (i.e, export more than they import) as mandated in the SEZ regime, and will be allowed to sell in the domestic area more easily.
- The hubs will, therefore, be WTO-compliant.
- DESH Bill also provides for an online single-window portal for the grant of time-bound approvals for establishing and operating the hubs.

Shades of Co-operative Federalism:

- Larger role for states - In the SEZ regime, most decisions were made by the commerce department at the Centre. Now, states will be able to participate and even directly send recommendations for development hubs to a central board for approval.
- State boards – Such boards would be set up to oversee the functioning of the hubs. They would have the powers to approve imports or procurement of goods and monitor the utilization of goods or services, warehousing, and trading in the development hub.

Steps taken to ease selling in Domestic market:

- Companies can sell in the domestic market with duties only to be paid on the imported inputs and raw materials instead of the final product.
- In the current SEZ regime, duty is paid on the final product when a product is sold in the domestic market.
- Alternatively, there is no mandatory payment requirement in forex, unlike in the case of SEZs.
- As per the bill, the government may impose an equalization levy on goods or services supplied to the domestic market to bring taxes at par with those provided by units outside.

The Global Findex Database 2021

News: Recently, the World Bank has released 'The Global Findex Report 2021'. The Global Findex surveys over 125,000 adults in 123 economies during Covid-19 to better understand how people use formal and informal financial services and digital payment.

Key Findings:

- **Status on account ownership**
  - The account ownership worldwide increased by 50 % to reach 76 % of the global adult population.
  - Recent growth in account ownership has been widespread across dozens of developing economies and most of the newly account opened in India and China.
- **Access to Formal banking**
  - Largest share of people without formal banking live in India and China.
  - Woman are excluded from formal banking as they lack original forms of identification, do not own mobile phone and lack understanding about forms of technology.
- **Impact of Pandemic**
  - The pandemic facilitated towards shift to use of digital payment for paying bills.
- Government, private employers and financial providers helped expand financial access and usage among the unbanked by lowering barriers and improving infrastructure. Financial inclusion has become a cornerstone for both short-term relief and sustainable recovery efforts since the Covid-19 pandemic.
- Adults in developing countries are more likely to worry about finances than adults in high-income countries. Concerns around medical expenses are highest in Sub-Saharan Africa and South Asia, where 64 % of adults are very worried and the lowest in East Asia and the Pacific, where 38 % of adults are very worried.

Way Forward:

- As to move out of the pandemic and as governments seek to consolidate the momentum and expand access to digital banking services, policies must factor in protections for the most vulnerable, including women, the poor and those with limited educational attainment or financial literacy.
- The gender gap in mobile access must be addressed to ensure equitable progress on financial inclusion.

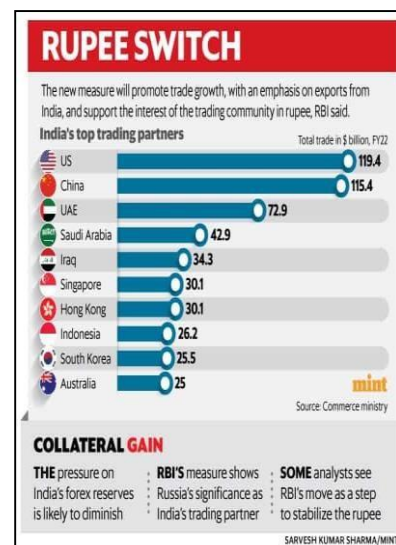# RBI allows Global Trade Settlements in Rupees

News: In order to facilitate trade with sanctions-hit Russia, RBI has allowed global trade settlements in Indian rupees for domestic traders. Banks will need RBI approval to use the new system.

How will it work?

- Russian banks will have to open Vostro accounts in India, and whenever exports or imports take place, that account will be debited or credited.
- Indian importers will make payments in rupees, to be credited to the Vostro account of the correspondent bank of the partner country.
- Indian exporters will be paid the export proceeds in rupees from the balances in Vostro account of the partner country.

Benefits of the move:

- **Expedite Transactions between 2 countries** - Following the sanctions, payments to any Russian entity, including those that haven't been sanctioned, have been taking longer than usual because of enhanced due diligence.
- **Save significant Foreign currency and reduce Trade Deficit** - It is a good move as far as India is concerned. Since we import more than we export, we will save foreign currency under the new arrangement. For instance, under normal circumstances, we would have had to pay Russia in dollars for oil purchases, which can now be done through the rupee-rouble route.

RUPEE SWITCH

The new measure will promote trade growth, with an emphasis on exports from India, and support the interest of the trading community in rupee, RBI said.

India's top trading partners — Total trade in $ billion, FY22

Country	Total trade
US	119.4
China	115.4
UAE	72.9
Saudi Arabia	42.9
Iraq	34.3
Singapore	30.1
Hong Kong	30.1
Indonesia	26.2
South Korea	25.5
Australia	25

Source: Commerce ministry

COLLATERAL GAIN

THE pressure on India's forex reserves is likely to diminish : RBI'S measure shows Russia's significance as India's trading partner : SOME analysts see RBI's move as a step to stabilize the rupee

SARVESH KUMAR SHARMA/MINT

- **Values Russia-India partnership** - The opening of this trade settlement route shows Russia's importance as India's trading partner in the face of increasing pressure from Western countries to cut links.
- **Improves scope of trade with neighboring countries** - Several countries including Iran, Sri Lanka and some in Africa and Latin America are facing forex shortages. As such, the new mechanism will help India promote its exports in these countries.
- **Avoid Sanctions** - With the new payment mechanism in place, India will be able to avoid sanctions placed on several countries such as Russia and Iran.

Yield inversion, Soft landing and Reverse Currency War

News: The above 3 key terms are likely to appear frequently in the coming days and weeks. We discuss about what they mean, and why they are significant now.

What is Bond yield curve inversion?
- Bonds are instruments through which governments (also corporations) raise money from the people. They are a good way to understand the risk-free interest rate in that economy.
- The yield curve is the graphical representation of yields (profit) from bonds. E.g. If one was to take the US government bonds of different tenures and plot them according to the yields they provide, one would get the yield curve.
- The chart alongside provides a sense of different types of yield curves.

What is upward sloping yield curve?
- Under normal circumstances any economy would have an upward sloping yield curve. It means, if one lends for longer duration or as one buys bonds of longer tenure – one gets higher yields. If you're staying invested for a longer tenure it essentially means you are expecting higher returns. However, longer duration also means a greater risk of failure.
- **When does bond yield curve becomes inverted?**
    - There are times when the bond yield curve becomes inverted. For instance, bonds with a tenure of 2 years end up paying out higher yields (returns/ interest rate) than bonds with a 10-year tenure.
    - Such an inversion of the yield curve essentially suggests that investors expect future growth to be weak. Let us now under how does the mechanism works.
- **How does it work?**
    - When investors feel buoyant about the economy they pull the money out from long-term bonds and put it in short-term riskier assets such as stock markets. In the bond market, the prices of long-term bonds fall, and their yield (effective interest rate) rises. This happens because bond prices and bond yields are inversely related.
    - However, when investors suspect that the economy is heading for trouble, they pull out money from short-term risky assets (such as stock markets) and put them in long-term bonds. This causes the prices of long-term bonds to rise and their yields to fall.
    - Over the years, inversion of the bond yield curve has become a strong predictor of recessions. In the current instance, the US Fed (their central bank) has been raising short-term interest rates, which further bumps up the short-end of the yield curve while dampening economic activity.

What is soft landing?
- When a central bank is successful in slowing down the economy without bringing about a recession, it is called a soft-landing that is, no one gets hurt. But when the actions of the central bank bring about a recession, it is called hard-landing.
- Given the massive gap between the current US inflation rate over 9% and the Fed's target inflation rate of 2%, most observers expect that the Fed would have to resort to such aggressive monetary tightening that the US economy will end up having a hard landing.

What is reverse currency war?
- The aggressive raising of interest rates by the Fed is causing more and more investors to rush to put money in the US. The dollar has become stronger than all other currencies because dollar is more in demand than those currencies.

- On the face of it, this should make other countries happy because the relative weakness of their local currency against the dollar makes their exports more competitive. The US has often accused other countries of manipulating their currency which means keeping it weaker against the dollar in order to enjoy a trade against the US. This used to be called 'currency war'.
- However, today, every central bank is trying to counter the US Fed and raise interest rates themselves in order to ensure their currency doesn't lose too much value against the dollar. This has been termed 'reverse currency war'. For example, India being import dependent, a weaker currency would mean a higher import bill and therefore RBI is trying to defend Indian Rupee against Dollar.

Indian Rupee falls past 80 against Dollar

News: The Indian rupee breached the exchange rate level of 80 to a US dollar recently for the 1st time.

What is the Rupee exchange rate?

- The rupee's exchange rate vis-à-vis the dollar is essentially the number of rupees one needs to buy for $1. This is an important metric to buy not just US goods but also other goods and services (say crude oil) trade which happens in US dollars.

What is causing the Rupee to fall?

- Imports have become more expensive. Prices of key commodities like oil have shot up. India pays for these items in dollars and since dollar is more expensive, imports are more expensive.
- Loss of investments. India has been losing Foreign investors. This year alone they have pulled close to 30 Billion dollars from the equity market and this has further weakened the rupee.
- When investors are pulling money out of the Indian market, there is fall in forex reserve and also less dollar in the Indian market would mean, the value of dollar against the rupee would increase thereby depreciating the rupee.
- Other reasons such as war in Ukraine, global supply shortages and rising inflation globally has also contributed in Rupee's fall.
- Rupee has been depreciating for a while and recent turn of events have made it look worse.

How will it impact the economy and you?

- Under normal circumstances, rupee depreciation is good for the current account deficit because it leads to higher exports. But at present, India is already facing high inflation and continued depreciation may be making matters worse.
- Costlier imports (because of a weaker rupee) add to the cost-push inflation and bump up the domestic inflationary process.
- Electronic items such as mobile phones will become more expensive, Foreign travel will become more expensive and most importantly Foreign education will just pinch the Indian parents even more harder who would be wanting to send their children abroad for higher education.
- However, as mentioned earlier exporters will stand to benefit. Also, those sending remittances will also benefit as they will be sending more rupees if they use the dollar.

What is RBI doing on its part to defend the Rupee?

- It has started selling dollars from its reserves. When the Central bank sells a dollar it swaps it for the rupee and the result is that demand for the Indian currency increases, so its price also increases and that's how the central bank is trying to boost the Rupee.

How is Rupee faring against other currencies?

- The Indian rupee is doing well compared to other currencies.
- It has gained 13% in this year against Yen, Pound, Euro, Swiss Franc, Canadian Dollar and Swedish Krona.

Thus, when we look at the big picture the fall of Rupee does not look bad but most of us worry about our own pockets first and the Rupee's fall is hurting it considerably. India needs to do more to stabilize it as the road ahead looks gloomy.

Strengthening Pharmaceuticals Industry

News: The Ministry of Chemicals & Fertilisers has launched Schemes for 'Strengthening Pharmaceuticals Industry' (SPI) keeping in view the strategic role of MSMEs (Micro, Small and Medium Enterprises).

About:

- The Scheme provides for credit linked capital and interest subsidy for Technology Upgradation of MSME units in pharmaceutical sector, as well as support of up to Rs 20 crore each for common facilities including Research centre, testing labs and ETPs (Effluent Treatment Plant) in Pharma Clusters.
- The MSME unit will have the option to choose from either Capital subsidy or Interest subvention.
- SIDBI (Small Industries Development Bank of India) is the Project management Consultant for implementing the scheme.

Key components:

- Pharmaceutical technology upgradation assistance schemes – It will facilitate pharmaceutical MSME's with proven track records to upgrade their existing technologies.
- Assistance to pharma industries for Common Facilities scheme - It will strengthen the existing pharmaceutical clusters' capacity for sustained growth. It provides for an assistance of up to 70 % of the approved project cost or Rs 20 crore, whichever is less.
- Pharmaceutical and Medical devices promotion and development scheme - It will involve preparation of study reports on topics of importance for the Indian pharma and medical device industry. The scheme is aimed at creating a database of pharma and medical device sectors

Objectives and Signficance:

- Aimed at enhancing India's capabilities in the pharmaceuticals sector with an objective to make it much more competitive in terms of both quality and cost and also aimed at making Indian pharma MSMEs, a part of Global supply chain.
- It will further strengthen our existing infrastructure facilities and promote sustainable growth of our clusters.
- The scheme will address the rising demand in terms of support required to existing Pharma clusters and MSMEs across the country to improve their productivity, quality and sustainability.
- It will increase investment, encourage research and innovation and enable the industry to develop futuristic products and ideas.

Bank Nationalisation – Was it the right move?

News: 2022 marks 53 years since Prime Minister Indira Gandhi nationalized 14 Banks. The current government intends to bring legislative changes in current session of Parliament to enable it privatize some Public sector banks.

What is Nationalization?

- Nationalization is the process in which the government of a country or a state takes control of a specific company or industry.
- The post-1967 period saw a series of radical economic policies such as the nationalization of the 14 biggest commercial banks (1969), insurance (1972), coal industry (1973), an effort to nationalize wholesale wheat trade (1973), the takeover of 'sick' companies, etc.
- The government aimed to take away the control from a few private players and expand the banking coverage to rural India so that sectors such as agriculture and small industries could get better credit facilities, thus creating a new class of entrepreneurs.

How did Nationalization process disrupt the Indian economy?

- The strategy of nationalization together with import-substitution-industrialization (ISI) and 'Licence Quota Raj' stifled entrepreneurship and innovation.
- It led to lesser competition between the public sector and private sectors, this has again led to the bureaucratic attitude in the functioning of PSUs, Lack of initiatives and responsibility, populist pressures, irresponsible trade unionism, red-tapism, etc.

- India's policy of nationalization and 'protectionist' inward-looking economy' failed to take advantage of globalization that created East Asian miracle economies. The implication of it was that India's export shrank from 2.4% (1948) to 0.42 in 1980.
- Government expenditure kept rising due to the proliferation of subsidies and grants, salary increases with no relationship to efficiency or output, overstaffing, and other 'populist measures. As there was lack of performance audit, finance from the public banks and PSUs failed to accomplish large public interest.

How has Nationalization process impacted in the current scenario?

- NPA crisis is considered the legacy of nationalization of banks of the 1970s and 80s. Government ownership and political interference reduced the accountability of banks and the twelve public-sector banks (PSBs) recorded gross NPAs worth Rs 5.47 lakh crore, more than twice the NPA of 19 private banks in 2020. The nationalized banks are either operating under losses or experiencing falling dividends
- The government has still not been able to close down all the nationalized 'sick' PSUs, thus draining taxpayer's money.
- The insurance sector is facing issues of low penetration (only 3.76% of overall insurance penetration in India), public sector monopoly, low non-life insurance (less than 1%), and poor financial health of public sector insurers.
- Economic Survey review of bank nationalization (2020) finds that every rupee of taxpayer money invested in PSBs fetches a market value of just 71 paise (in contrast private sector banks fetches a market value of Rs 3.70)
- As per Nayak committee report (2014) the PSB have poor financial position, their selection process is compromised and non-transparent, are under reeling stress of high NPA's and governance structure is abysmal.

However, Nationalization process has helped in many ways. Not everything went wrong with the move. Following are some of the ways how it helped our economy:

- Higher penetration of banking in rural areas and underdeveloped sectors. From just 8,262 bank branches (1969) the number rose to 30,303 in 1979.
- Higher penetration coupled with liberal credit availability by banks led to India's growth story, particularly during the Green revolution. Credit to rural areas had seen a twenty-fold increase.
- The element of Priority sector lending which included setting aside 40% of banks net bank credit for agriculture, micro and small enterprises, education, housing and for 'weaker sections' has improved social indicator performance in India to a good extent.
- The rates of domestic savings and investment increased rapidly from 10% in the 1950s to 20% by the 1980s.
- After the nationalization of the coal industry in India, India never witnessed a demand-supply gap until 1991.
- There has been a significant increase in the investment of the banks in government and other approved securities in recent years.
- The huge expansion of PSUs created job opportunities, giving employment to a vast number of educated youths in the country.
- Success of "JAM Trinity": JAM stands for Jan-Dhan, Aadhaar and Mobile number. The initiative would have been a non-starter had there been only private banks and no PSBs in the country. Of the total 46 crore beneficiaries, only 1.3 crores have accounts in private sector banks which is just 2.82%.

Thus, conceptually nationalization was a good idea as it pushed for redistribution of wealth, job creation, and financial inclusion. However, efforts should have been taken to improve efficiency and make PSUs competitive as was done by China.

GST Council

News: Recently, at the 47th meeting of the Goods and Services Tax (GST) Council, chaired by Union Finance Minister, officials approved hiking the rates for some goods and services while removing exemptions for several mass consumption items to simplify the rate structure.

About:

- The Goods and Services Tax regime came into force after the Constitutional (122nd Amendment) Bill was passed by both Houses of Parliament in 2016.
- The GST Council is a joint forum of the Centre and the states.
- It was set up by the President as per Article 279A (1) of the amended Constitution.
- The members of the Council include the Union Finance Minister (chairperson), the Union Minister of State (Finance) from the Centre.
- Each state can nominate a minister in-charge of finance or taxation or any other minister as a member.

Function of Council:

- The Council, according to Article 279, is meant to "make recommendations to the Union and the states on important issues related to GST, like the goods and services that may be subjected or exempted from GST, model GST Laws".
- It also decides on various rate slabs of GST.

What are the key changes in GST rates now?

Withdrawal Of Exemptions/Concession Rates

	Old Rate	New Rate
Cheques	Nil	18%
Maps and charts	Nil	12%
Petroleum/Coal bed methane	5%	12%
Science & tech instruments	5%	Applied rate
E-waste	5%	18%

Changes in GST rates

	Old Rate	New Rate
Tailoring of Textiles	5%	12%
E-waste	5%	18%
Printing, writing or drawing ink	12%	18%
Knives, spoons, forks, etc	12%	18%
Power driven pumps, etc	12%	18%
Machines/Chakki for grains	5%	18%
Machines for eggs/fruit/milk	12%	18%
LET lamps/circuits, etc	12%	18%
Solar water heater	5%	12%
Drawing/marking instruments	12%	18%
Prepared/finished leather	5%	12%
Job works for leather/clay	5%	12%
Contracts for roads/rail, etc	12%	18%
Ostomy/ortho appliances	12%	5%
Tetra pack	12%	18%
Cut and polished diamonds	0.25%	1.50%
Transport by ropeways	18%	5%*
Renting of trucks	18%	12%
Foreign component of tour for foreigners exempt from GST		

*With ITC

Exemptions Withdrawn

Services by RBI, IRDA, Sebi, FSSAI, GSTN

Renting of residential dwelling to business entities

Fumigation in warehouse of agricultural produce

Services provided by cord blood banks

Storage or warehousing of commodities that attract tax

No exemption on scientific and technical instruments supplied to public-funded research institutes

Hotel accommodation priced upto ₹1,000/day to be taxed at 12%

Room rent (excluding ICU) exceeding ₹5,000 per day per patient in hospitals

Tax exemption on training or coaching in recreational activities

Ease Of Compliance

Council has allowed amendments in GSTR3B

Officers can raise tax demands for FY18 till September 2023

Increase in number of portals for registering e-invoices

Timeline for filing GSTR 4 for FY22 extended without late fees by composition dealers

Significance of GST:

- Increased tax compliance and discourages tax evasion
- Creation of a 'unified common market'
- It will boost export and manufacturing sector
- Reduces corruption

Concerns around GST:

- Multiple Tax Rates.
- Sectors such as petroleum, real estate, electricity duties remain outside the purview of GST.
- Though rates are rationalized, there is still 50 % of items are under the 18 % bracket.
- While GST scrapped multiplicity of taxes and cesses, a new levy in the form of compensation cess was introduced for luxury and sin goods.
- The GST legislation requires the filing of the GST annual returns by specified categories of taxpayers along with a GST audit. But, filing annual returns is a complex and confusing one for the taxpayers.

Way Forward:

- Addressing the contentious issues will, first and foremost, require bridging the trust deficit between the Centre and states. The spirit of cooperative federalism, often advocated by the ruling dispensation, must be upheld.
- The trust deficit can be bridged only through acts of good faith. The Union government should commit to the states that it will not resort to cesses and surcharges that are outside the shareable pool of revenues. It must resolve to honour the revenue guarantee commitment to the states. It must respect and uphold the true spirit of not just fiscal federalism but political and constitutional federalism too.

Science & Technology

'POEM' Platform

News: ISRO successfully launched the PSLV Orbital Experimental Module or 'POEM'.

About:

- The PSLV Orbital Experimental Module is a platform that will help perform in-orbit experiments using the final, and otherwise discarded, stage of ISRO's Polar Satellite Launch Vehicle (PSLV).
- POEM is carrying six payloads, including two from Indian space start-ups Digantara (for making the map of space radiations, debris, and orbits) and Dhruva Space (for full-stack satellite development, launch, deployment, operation and maintenance services).
- The inclusion of the two laid the ground for more public-private partnerships, to be facilitated by the Indian National Space Promotion and Authorization Center (IN-SPACe).

What is PSLV?

- Polar Satellite Launch Vehicle (PSLV) is a four stage rocket where the first three stages fall back into the ocean, and the final stage (PS4) after launching the satellite into orbit ends up as a stage junk.
- The PSLV rocket platform is India's workhorse, with an ability to send relatively lighter satellites to polar orbits. These spacecrafts are on a north-south orbit around the planet, as opposed to a genosynchronous orbit for which Isro uses the heavier GSLV rocket.

PSLV-C53

About:

- The four-stage, 44.4m tall PSLV-C53 rocket that blasted off from the second launch pad of Satish Dhawan Space Centre, placed the three Singaporean satellites – DS-EO, NeuSAR and SCOOB-1 – in an intended orbit of 570km.
- It is designed to orbit the DS-EO satellite along with two other co-passenger satellites from Singapore.
- The mission proposes to demonstrate the utilisation of the spent upper stage of the launch vehicle as a stabilised platform for scientific payloads subsequent to the separation of the satellites.

Large Hadron Collider

News: The world's most powerful particle collider, the Large Hadron Collider (LHC), will begin smashing protons into each other at unprecedented levels of energy beginning July 5.

About LHC:

- The Large Hadron Collider is a giant, complex machine built to study particles that are the smallest known building blocks of all things.
- LHC is a 27-km-long track-loop buried 100m underground on the Swiss-French border.
- In its operational state, it fires two beams of protons almost at the speed of light in opposite directions inside a ring of superconducting electromagnets.
- The magnetic field created by the superconducting electromagnets keeps the protons in a tight beam and guides them along the way as they travel through beam pipes and finally collide.
- The particles are so tiny that the task of making them collide is akin to firing two needles 10 km apart with such precision that they meet halfway.
- Since the LHC's powerful electromagnets carry almost as much current as a bolt of lightning, they must be kept chilled. It uses liquid helium to keep its critical components ultra-cold at minus 271.3 degrees Celsius, which is colder than interstellar space.

Experiments at LHC so far:

- This is the LHC's third run, it will operate round-the-clock for four years at unprecedented energy levels of 13 tera electron volts. (An electron volt is the energy given to an electron by accelerating it through 1 volt of electric potential difference).
- Scientists are aiming to be delivering 1.6 billion proton-proton collisions per second for the ATLAS and CMS experiments.
- ATLAS - Largest general purpose particle detector experiment at the LHC.
- CMS - One of the largest international scientific collaborations in history, with the same goals as ATLAS, but which uses a different magnet-system design.

Achievements of LHC:

- **God Particle' discovery** - Scientists at CERN had announced the discovery of the Higgs boson or the 'God Particle' during the LHC's first run.
- This led to Peter Higgs and his collaborator François Englert being awarded the Nobel Prize for physics in 2013.
- **The Higgs boson** is the fundamental particle associated with the Higgs field, a field that gives mass to other fundamental particles such as electrons and quarks.
- **'New Physics' beyond Standard Model** - After the discovery of the Higgs boson, scientists have started using the data collected as a tool to look beyond the Standard Model, which is currently the best theory of the most elementary building blocks of the universe and their interactions.

What next?

- Physicists want to use the collisions to learn more about the Universe at the smallest scales, and to solve mysteries such as the nature of dark matter.
- The LHC's goal is to allow physicists to test the predictions of different theories of particle physics.
- Technology found in particle accelerators is already used for certain types of cancer surgery etc.

Direct-Seeded Rice

News: Recently, the state of Punjab was unable to achieve its target in the water-saving method (direct-seeded rice).

About DSR:

- Also known as Broadcasting seed technique, it is a water-saving method of sowing Paddy.
- Here, seeds are directly drilled into the fields. In contrast to the traditional water-intensive method of transplanting rice seedlings from a nursery to waterlogged fields, this method saves groundwater.
- There is no nursery preparation or transplantation involved in this method.
- Farmers have to only level their land and give one pre-sowing irrigation.

Advantages:

- **Requires fewer manpower** - DSR can solve labour shortage problems because like the traditional method it does not require a paddy nursery and transplantation of 30 days old paddy nursery into the main puddled field.
- **Increase in Yield** - According to the results from research trials and farmers' field survey, after this technique the yield is one to two quintals per acre higher than puddled transplanted rice.
- **Improves Groundwater Level** - It offers avenues for ground water recharge as it prevents the development of hard crust just beneath the plough layer due to puddled transplanting. It matures 7-10 days earlier than the puddle transplanted crop, therefore giving more time for management of paddy straw.

Why Punjab could not achieve its target?

- **Warmer months** - High temperatures and deficient rainfall are mainly to blame. The temperature was in the range of 47-48 degrees Celsius on some days, whereas the ideal temperature is 42-43°C during the period.
- **Hesitance shown by Farmers** - Due to a lack of support from the government in the form of providing a good variety of weeds, and unable to supply uninterrupted electricity during the sowing season of DSR

that's why farmers found it very difficult to irrigate the field using an electric motor. Also, because the wheat crop had already failed the farmers in Punjab were reluctant to show their support for DSR.

- **Other issues** - It includes closed canals, erratic electricity supply for operating tube wells for irrigation, and issues of weeds and rats. Water availability was a challenge due to deficient to no rainfall in many parts of the state of Punjab during May.

Dark Matter

News: Recently, a highly sensitive experiment named LUX-ZEPLIN (LZ) has been used to detect dark matter in the universe in the U.S.

What is Dark Matter?

- Dark matter is made up of particles that do not have a charge, meaning they do not interact through electromagnetic interactions.
- These particles are 'dark', namely because they do not emit light, which is an electromagnetic phenomenon, and 'matter' because they possess mass like normal matter and interact through gravity.
- All interactions in the universe are a result of four fundamental forces acting on particles - strong nuclear force, weak nuclear force, electromagnetic force and gravitation.
- Only 5% of the entire visible universe is made up of all matter and the rest of 95% is dark matter and dark energy.
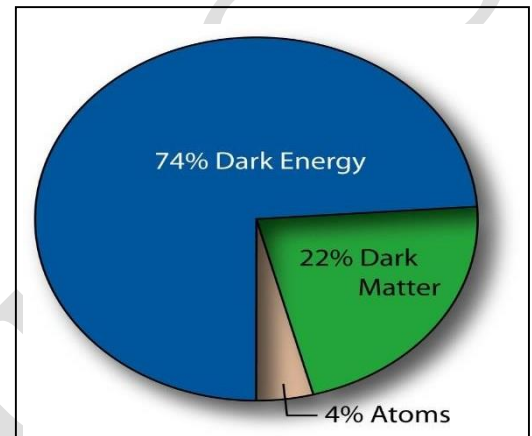
Evidence for Dark Matter:

- **By observing the rotation of galaxies** - There are discrepancy observed in how stars revolve around the galaxy from the center to the periphery than what should be the ideal path. This has been contributed to the presence of dark matter along the path.
- **By the observations of the Bullet Cluster of galaxies** - The Bullet cluster is formed through the merging of two galaxy clusters. The merger didn't take place as per the observable calculations, signifying the presence of another massive matter particle, 'the dark matter'.

What is Dark Energy?

- Dark Energy is a theorized type of energy that exerts a negative, repulsive force, acting in the opposite direction of gravity.
- It is causing the rate of expansion of our universe to accelerate over time, rather than to slow down. That's contrary to what one might expect from a universe that began in the Big Bang.

To read more about the same you may click on the following link - http://secretsoftheuniversefilm.com/dark-matter-and-dark-energy-explained-infographic/

James Webb Telescope

News: The first image from NASA's new space telescope offers the deepest look of the cosmos ever captured.

About:

- Infrared observatory that will be much more powerful than the presently deployed Hubble space telescope.
- JSWT will observe in near-infrared light rather than light in the visible part of the spectrum (unlike Hubble) and thus it will have a much greater capacity to see obscure stars and galaxies
- It is a joint venture of NASA (US), ESA (Europe), and CSA (Canada)
- Webb was formerly known as the "Next Generation Space Telescope" (NGST) and it was renamed in 2002 after a former NASA administrator, James Webb.

Significance:

- Part of the image is light from not too long after the Big Bang, which was 13.8 billion years ago.
- James Webb can see backwards in time to just after the Big Bang by looking for galaxies that are so far away that the light has taken many billions of years to get from those galaxies to our telescopes.
- JSWT has the largest mirror in space and it will look deeper into the universe and thus further back in time than is possible with a presently deployed telescope such as Hubble.
- Mysteries such as what made the universe expand so quickly less than a nanosecond after the Big Bang.
- It will explore the dark age of the universe.
- Understand the formation of the planetary system and look for signs of life on exoplanets. JSWT can achieve it with much greater accuracy owing to its large mirror and superior Infrared Spectrograph instrument.
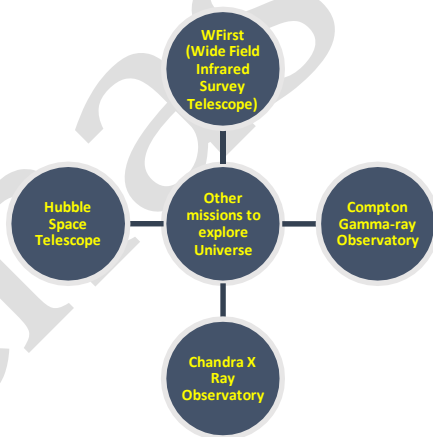
WHO's report on AMR Vaccines

News: WHO has released its 1st report on vaccines being developed to prevent infections caused by AMR bacteria. The report aims to guide investments and research into feasible vaccines to mitigate AMR.

What is AMR?

- Antimicrobial resistance occurs when microbes evolve mechanisms that protect them from the effects of antimicrobials drugs. This makes infections harder to treat.
- All classes of microbes can evolve resistance. Fungi evolve antifungal while viruses evolve antiviral resistance.

Key Findings of the Report:

- The silent pandemic of antimicrobial resistance is of major growing public health concern (resulting in the death of nearly 5mn people yearly)
- Vaccines are still effective against Pneumococcal disease (Streptococcus pneumonia), Hib (Haemophilus influenzae type b) Tuberculosis (Mycobacterium tuberculosis) and Typhoid fever (Salmonella Typhi).
- Current Bacillus Calmette-Guérin (BCG) vaccines against tuberculosis (TB) do not adequately protect against TB, therefore the development of more effective vaccines against TB should be accelerated.

Recommendation given by WHO:

- Equitable and global access to the vaccines that already exist.
- The lessons from Covid 19 vaccine development and mRNA vaccines offer unique opportunities to explore for development of vaccines against bacteria
- Need to overcome challenges such as pathogens associated with hospital-acquired infections (HAI), difficulty in defining target population(s) among all admitted hospital patients, the cost and complexity of vaccine efficacy trials and the lack of regulatory and/or policy precedent for vaccines against HAIs.
- Vaccine development is expensive, and scientifically challenging, and is associated with high failure rates, and therefore, the need for support from the government and private sector.

To understand more about Antimicrobial resistance you may click on following link - https://www.biomerieuxconnection.com/2018/07/12/explain-antimicrobial-resistance-friends-family-infographics/

Monkeypox

News: Recently, the WHO (World Health Organisation) has Declared Global Health Emergency and sounded the highest alarm on the Monkeypox Virus.

What are the implications of declaring it Global health emergency?

- Declaring a global emergency means the monkeypox outbreak is an "extraordinary event" that could spill over into more countries and requires a coordinated global response.
- The virus has spread to "non-endemic countries". This virus has spread rapidly to many countries that have not seen it before.
- Three criteria for declaring a public health emergency of international concern have been met as per WHO. The three criteria for such a declaration are that it is an "Extraordinary Event," that it "Constitutes a Public Health Risk" to other States through the international spread of disease and that it "potentially requires a coordinated international response."

About Monkeypox:

- Monkeypox is a **viral zoonotic disease** with symptoms similar to smallpox, although with less clinical severity.
- **Symptoms** - Infected people break out in a rash that looks a lot like chicken pox. But the fever, malaise, and headache from Monkeypox are usually more severe than in chicken pox infection.
- **Transmission** - Primary infection is through direct contact with the blood, bodily fluids, or cutaneous or mucosal lesions of an infected animal. Eating inadequately cooked meat of infected animals is also a risk factor. Human-to-human transmission can result from close contact with infected respiratory tract secretions, skin lesions of an infected person or objects recently contaminated by patient fluids or lesion materials. Transmission can also occur by inoculation or via the placenta (congenital monkeypox).
- **Treatment** - There is **no specific treatment** or **vaccine** available for Monkeypox infection. But the European Union has recommended a Small Pox Vaccine, Imvanex to treat monkeypox after the WHO declared monkeypox a global health emergency.

What are previously declared emergencies by WHO- Covid-19, West African Ebola (2014), Zika Virus (2016) and Polio.

Environment & Bio-diversity

Forest Conservation (Rules), 2022

News: Recently, the Ministry of Environment, Forest and Climate Change (MoEFCC) has issued the Forest (Conservation) Rules, 2022.

What are the Provisions of Forest Conservation (Rules), 2022?

- **Formation of Committees** - It constituted an Advisory Committee, a regional empowered committee at each of the integrated regional offices and a screening committee at State/Union Territory (UT) government-level.
- **Time Frame** – A fixed time for quicker review of each project. For example, The Project Screening Committee will meet at least twice every month and will advise the state governments on projects in a time bound manner.
- **Regional Empowered Committee** - It will examine all the linear projects (e.g. roads, highways, etc) involving land up to 40 hectares and the use of forest land up to 0.7 canopy density.
- **Compensatory Allowance** - If the state already has over two-thirds area under green cover or over one-third area under forest cover, then CA could be taken in other states/UTs where the cover is less than 20%.
- States are given the responsibility of settling forest rights of forest dwellers (Forest Rights Act, 2006) and allowing diversion of forest land.

Other Initiatives for Forest Conservation:
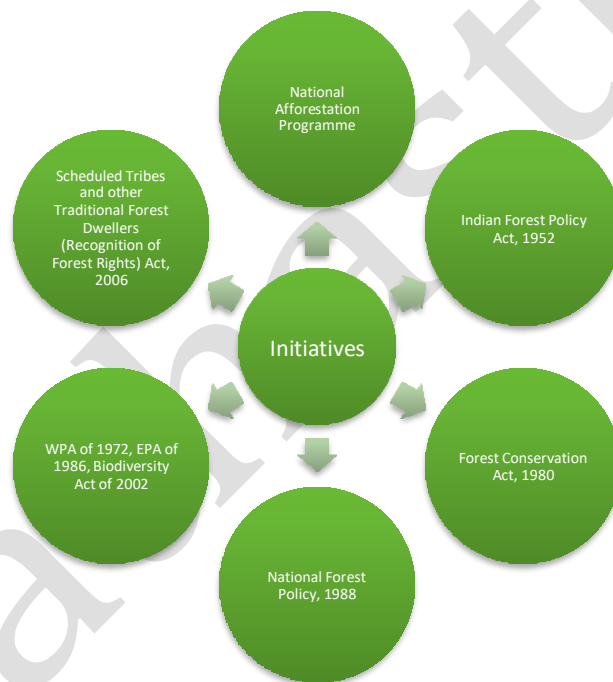
More about Forests in India:

- According to India State of Forest Report, 2021, the Total Forest and Tree cover is now 7,13,789 square kilometres, **21.71%** of the country's geographical area, an **increase** from 21.67% in 2019.
- Forest Cover (Area-wise): **Madhya Pradesh> Arunachal Pradesh> Chhattisgarh> Odisha> Maharashtra.**
- The forests are categorized into **Reserve Forests > Protected Forests > Village Forests**

Constitutional Provisions protecting Forests:

- Through the 42nd Amendment Act, 1976 Forests and Protection of Wild Animals and Birds were transferred from State to Concurrent List.

- Article 48 A in the DPSP, mandates that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.
- Article 51 A (g) of the Constitution states that it shall be the Fundamental Duty of every citizen to protect and improve the natural environment including forests and Wildlife.

Alternatives to Plastic

News: A Niti Ayog report has suggested on plastic alternatives or technologies making plastic degradable.

Findings of Report:

- India produces 3.47 million tons of plastic waste per annum (according to CPCB report) with per capita waste growing from 700 grams to 2500 grams over the last 5 years. Unfortunately, only a small amount of this waste gets recycled. 60% is collected for recycling and the remaining 40% is littered in the environment as waste.
- Goa, Delhi & Kerala have reported the highest per capita plastic waste generation, while Nagaland, Sikkim and Tripura have reported the lowest per capita plastic waste generation.
- Globally, 97-99% of these plastics are derived from fossil fuel feedstock while the remaining 1-3% come from bio (plant) based plastics

What are its recommendations?

- Develop emerging technologies. For example, additives can make plastics biodegradable polyolefins, such as polypropylene and polyethylene
- Use of **Bio-plastics** as a cost-effective alternative to plastics. Given the significant potential overall and the promise of recent innovations, increased investment in the development and application of biodegradable plastic is required to move towards a sustainable plastics economy.
- Recognizing the contribution of the Informal sector and vulnerable groups in recycling waste.
- Strengthening waste minimization through Extended Producer Responsibility.
- Levelling and collection of compostable and biodegradable plastics.
- Disclose data on waste generation, collection and disposal.
- It is important avoid greenwashing. Greenwashing refers to the process of conveying misleading information about how a company's products are more environmentally sound.

Innovative approaches to minimize plastic waste:

- In Sikkim, plastic waste is used in road construction.
- DRDO lab DFRL has developed technology for biodegradable cutlery.
- In Tamil Nadu, collection efficiency of plastic waste is 92%.
- In Junagadh, an eco-friendly café, run by Sarvoday Sakhi Mandal was opened which offers food when you give plastic to them. For example, one kg of plastic waste will get you one plate of poha. More the plastic, bigger the plate.
- Edible seaweed cups in Indonesia. Seaweed can grow up to 60 times faster than land-based plants, making it an important carbon sink.
- In 2020, a Scotland-based paper manufacturing company developed a sustainable wood-based alternative to plastic packaging.

SDG Report 2022

News: A recent UN SDG index says, all 17 SDGs, are in jeopardy due to the climate crisis, the COVID-19 pandemic and an increase in the number of conflicts across the world.
- The 2022 SDG Index is topped by three Nordic countries – Finland, Denmark and Sweden – and all top 10 countries are European countries.
- India ranked at 121.

Key Findings:

- Performance on SDG 1 (No Poverty) and SDG 8 (Decent Work and Economic Growth) remain below pre-pandemic levels in many low-income countries (LICs) and lower-middle-income countries (LMICs).
- The pandemic itself has emerged as one of the biggest threats to several SDGs, pointing at 15 million "excess deaths" directly or indirectly due to the novel coronavirus by 2021.
- Economic shocks due to the worldwide health emergency pushed 93 million into poverty in 2020 alone, undoing 'more than four years' work at alleviating poverty. It also affected the education and healthcare services for millions. Immunization, for example, has dropped for the first time in a decade even as deaths from malaria and TB have risen.
- Progress on climate and biodiversity goals is also too slow, especially in rich countries.
- Greenhouse gas emissions are set to rise 14 per cent over a decade.
- The pandemic and the Russia-Ukraine war have already led to a lowering of global economic growth projections by 0.9 percentage points, the statement highlighted, flagging the conflict for harming in more ways than one - Raising food and fuel prices, hampering global supplies and trade and tumbling financial markets.

Key suggestions of SDG Report:

- G20 countries should unambiguously finance developing countries.
- IMF and credit rating agencies need to redesign the assessments of debt sustainability.
- Developing countries need to strengthen their debt management and creditworthiness.
- G20 countries must increase the lending capacity and annual flows to the Multilateral development banks.

How has India fared with its SDG efforts?

- India's preparedness for SDG has worsened over the years in comparison with other countries.
- Major Challenges include Ensuring decent work (SDG 8).
- India's performance on climate action (SDG 13) has slipped from 2019-2020.
- However, India has made progress on goals such as SDG 2 (No hunger), SDG 3 (on health) and SDG 6 (clean water and sanitation).

IPBES Assessment Report on Wild Species

News: Intergovernmental Science-policy platform on Biodiversity and Ecosystem Service (IPBES) released its report on the sustainable use of wild species of plants, animals, fungi and algae around the world.

What is IPBES?

- It is an independent intergovernmental body, established by member States in 2012, with the objective to strengthen the research, evidence-based policy making for the conservation and sustainable use of biodiversity.
- Secretariat – Bonn, Germany
- What work does it do? – Assessment, policy support, capacity building and knowledge sharing.

Key Findings:

- **Impact on the biodiversity and wild species ecosystem**
  - Major impact is through Climate change, landscape and seascape changes, pollution and invasive alien species impact
- **Unsustainable exploitation**
  - It is the main threat to wild species in marine ecosystems and the second greatest threat to those in terrestrial and freshwater ecosystems.
  - Unsustainable hunting is the main threat to wild mammal species.
  - Unsustainable logging and gathering are one of the main threats for several plant groups, notably cacti, cycads, and orchids as well as other plants and fungi harvested for medicinal purposes.
- **On livelihood**
  - Small-scale fisheries support over 90% of the 120 million people and about half of the people involved in small-scale fisheries are women.
  - The report finds that 34% of marine wildlife is overfished.
  - 50,000 wild species globally can meet the needs of billions of people.
  - 70 per cent of the world's poor population was directly dependent on wild species.
- **On indigenous people** - Sustainable use of wild species is central to its identity, existence and livelihood.

Key Recommendations:

- The report noted that indigenous people and local communities used local knowledge, practices and spirituality for the sustainable use of wild species. They respected nature and only took what they needed.
- Effective regulations are extremely crucial and without them, unsustainable use and trade would increase, which may lead to population collapse.
- Sustainable use of wild species can meet the needs of billions.
- Integration of diverse value systems, equitable distribution of costs and benefits, changes in cultural norms and social values and effective institutions and governance systems would facilitate the sustainable use of wild species in future.

Ramagundam Floating Solar Power Project

News: Recently, the final 20 MW of the 100 MW Ramagundam floating solar PV project's commercial operation date was recently announced. With this, the 100 MW Ramagundam floating solar PV project in Telangana is declared operational. It is the largest project of its kind in India.

About:

- It is endowed with advanced technology and Environment-friendly features.
- The project spreads over 500 acres of the

reservoir. Divided into 40 blocks, each having 2.5 MW. Each block consists of one floating platform and an array of 11,200 solar modules.

- The solar modules are placed on floaters manufactured with HDPE (High-Density Polyethylene) material.
- The entire floating system is anchored through special HMPE (High Modulus Polyethylene) rope to the dead weights placed in the balancing reservoir bed.
- This project is unique in the sense that all the electrical equipment including inverter, transformer, HT panel, and SCADA (Supervisory Control and Data Acquisition) are also on floating Ferro cement platforms.

What are floating solar panels?

- These are Photovoltaic (PV) modules mounted on platforms that float on water reservoirs, lakes, and where conditions are right seas and oceans.
- These platforms are typically moored on calmer bodies of water, such as ponds, lakes or reservoirs.
- These installations are relatively quick to construct, silent to run and require no land levelling or removal of vegetation.

What are the benefits of such projects?

- Minimum land is required therefore it helps conserve environment.
- With presence of floating solar panels, evaporation of water will be controlled. Thus, it also helps conserve water.
- The water body underneath the solar modules helps in maintaining their ambient temperature, thereby improving their efficiency and generation.
- Helps reduce coal consumption and limits carbon dioxide emission.

What are the limitations of such projects?

- More money is required to install floating solar panels than a traditional PV system. One of the main reasons is because the technology is relatively new, thus requires specialized knowledge and equipment.
- Many floating solar installations are large-scale, and they provide electricity to large communities, companies, or utility companies. Hence, choosing rooftop installation or ground-mounted solar is more practical.
- Developing floating solar projects requires a thorough understanding of water-bed topography and its suitability for setting up anchors for floats.

Environment Impact Assessment (EIA) Rules

News: The Ministry of Environment, Forests and Climate Change has notified amendment to the Environment Impact Assessment (EIA) Rules

What is EIA?

- It is one of the tools available with the planners to achieve the goal of harmonizing development activities with the environmental concerns.
- EIA integrates the environmental concerns in the developmental activities right at the time of initiating for preparing the feasibility report.

What has changed now?

- Any project which is 100 km from the Line of Control, among other locations, will be exempted from an environmental clearance before construction.
- Thermal power plants up to 15 MW based on biomass or non-hazardous municipal solid waste using auxiliary fuel such as coal, lignite or petroleum products up to 15 per cent have also been exempted.
- Ports which exclusively deal in fish handling, and cater to small fishermen, will be exempted from environmental clearance.
- Other projects exempted are Toll plazas that need more width for the installation of toll collection booths, and expansion activities in existing airports without an increase in the airport's existing area.

What is the importance of EIA?

- Make all the stakeholders aware of the environmental and socio-economic impact of the project
- EIA provides for the impact assessment well before the project is implemented.

- Helps to eliminate or minimize the adverse impact of developmental projects
- EIA encourages the adaptation of mitigation strategies in the developmental plan
- Protects the biodiversity of the environment by suggesting alternative safe project designs and methods.
- EIA produces an environmental management plan and summary for the non-tech general public.

Indian Antarctic Bill 2022 passed

News: The Lok Sabha passed the Indian Antarctica Bill, 2022 under its obligations as a signatory to the Antarctic Treaty.

Key Provisions of the Bill:

- It will apply to any person, foreigners, corporations, firms, vessels or aircraft that is a part of an Indian expedition to Antarctica.
- The Bill prohibits certain activities in Antarctica including nuclear explosion or disposal of radioactive wastes, introduction of non-sterile soil and discharge of garbage, plastic or other substance into the sea which is harmful to the marine environment.
- Conducting a nuclear explosion in Antarctica will be punishable with an imprisonment of 20 years which may extend to life imprisonment and a fine of at least Rs 50 crore.
- Drilling for mineral resources or introducing non-native animals or plants in Antarctica without a permit will be punishable with imprisonment of up to seven years and a fine between Rs 10 lakh and Rs 50 lakh.

The Antarctic Treaty Main Points

1 - No military use
2 - Freedom of scientific investigation
3 - Free exchange of scientific plans and data
4 - Any territorial claims put on hold
5 - Nuclear free zone
6 - Applies to land but not seas
7 - All stations open to inspection by other nations
8 - National laws apply to citizens not to areas
9 - The treaty may be modified at any time, requires unanimous agreement of treaty nations
10 - All treaty nations to ensure no-one carries out acts against the treaty

- The central government may notify one or more Sessions Courts to be the Designated Court under the Bill and specify its territorial jurisdiction to try offences punishable under the Bill.
- A Central Committee will be appointed which would comprise of 10 members (to be nominated from various ministries) + two experts (on the Antarctic) + chairman (Secretary of the Ministry of Earth Science). They will give permits, ensure compliance and review information provided by parties to the treaty. Private tours and expeditions to Antarctica would be prohibited without a permit or written authorization by a Member country. Permit can be granted only after the environmental impact assessment and waste management plan have been prepared.
- It creates an Antarctic fund for the welfare of Antarctica research work and the protection of the Antarctica environment.

Need for the legislation:

- As India is a signatory to the Antarctic Treaty since 1983 it made it essential for us to make a set of laws which covers portions of the continent where India has had its research bases.
- We are also signatory to treaties such as Convention on Conservation of Antarctic Marine Living Resources and the Commission for Conservation of Antarctic Marine Living Resources.
- These laws will help India's courts deal with disputes committed in part of Antartica, thus help build our credibility.

Wild Cheetah will return to India after 7 decades

News: Last Wednesday, India and Namibia signed a historic memorandum of understanding (MoU) on translocation of cheetahs to India for a period of 5 years, which can be renewed for successive 5-year periods, unless either party terminates the agreement. Conservationists in India are skeptical of the plan's success and fear it will detract attention from the conservation of other endangered species in need of translocation, like the Asiatic lion.
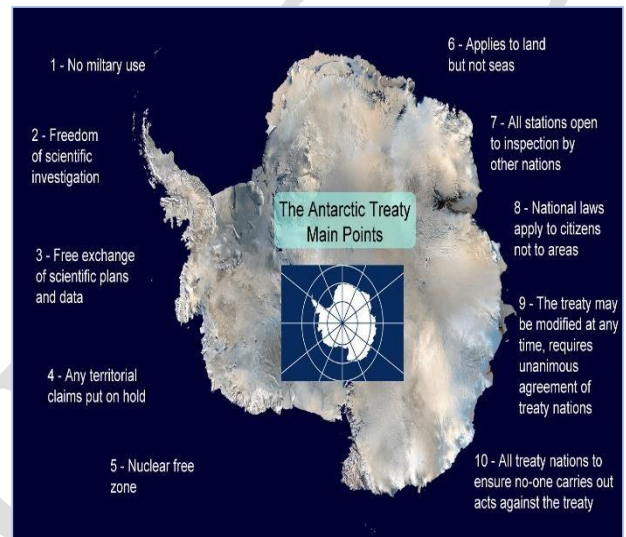
Why is India pushing for re-introduction of Cheetah?

- First reason is to re-establish the ecosystem function role of the cheetah in representative areas of its former range and contribute to the global effort towards the conservation of the cheetah as a species. Bringing the Cheetah back will make India the only country with five species of big cats: tiger, lion, leopard, snow leopard and cheetah.
- Cheetah reintroduction will boost and enhance living conditions of the local communities in and around the landscapes where the cheetah is likely to be introduced through increased revenues from ecotourism and associated activities.
- Top predators regulate all levels in a food chain and are considered as umbrella species for the food chain. Cheetah can be a charismatic flagship and umbrella species to garner resources for restoring open forest ecosystems and bringing back the balance in the food web.
- It will enhance India's capacity to sequester carbon through ecosystem restoration activities in cheetah conservation areas and thereby contribute towards the global climate change mitigation goals.

What are the challenges associated with relocation?

- Reintroduced species experience increased vulnerability to influences of drift, selection, and gene flow evolutionary processes due to their small sizes, and climatic and ecological differences between source and native habitats.
- African Cheetahs need long open spaces to run. Indian parks tend to be much smaller than those in Africa, offering less chance for such free movement.
- Studies in Africa have shown that female cheetahs are solitary and roam vast distances whereas male defend smaller territories and mate when females pass through, creating breeding issues.
- There also remains to be seen whether large predators such as cheetahs, lion, tigers and leopards will be able to co-exist within the same environment. There is no real life experience to draw upon to prove the theory yet. Some studies in Africa have shown that the leopards have hunted down cheetahs as prey, and similar fears are being expressed for Kuno, which has about 50 leopards in and around core area, where Cheetahs will be introduced.
- For Cheetah's habitat to be adequately protected, many villages will have to be relocated, which will certainly impact the locals and cause disturbance and migration.

Getting back cheetah is a milestone in India's wildlife management history that started in 1973 with declaration of first tiger reserve. The Cheetah project is an experiment worth pursuing to improve forest and wildlife management. Whether it succeeds or fails, the future will tell.

India has added 5 more Ramsar Sites

News: India has designated five (5) new wetlands of International importance, which include three wetlands (Karikili Bird Sanctuary, Pallikaranai Marsh Reserve Forest & Pichavaram Mangrove) in Tamil Nadu, one (Pala wetland) in Mizoram and one wetland (Sakhya Sagar) in Madhya Pradesh, making a total of 54 Ramsar sites in the country.

What are Ramsar Sites?

- A Ramsar site is a wetland of international importance under the Ramsar Convention, which is also known as the 'Convention on Wetlands' an intergovernmental environmental treaty established by UNESCO in 1971, and named after the city of Ramsar in Iran, where the convention was signed that year.
- The Ramsar Convention on Wetlands defines wetlands as 'areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters'.
- Sunderbans in West Bengal is the largest Ramsar site in India.

- India's Ramsar wetlands are spread over 11,000 sq km which is around 10% of the total wetland area in the country across 18 States.

Details about new Ramsar Sites:
- **Karikili Bird Sanctuary** (Tamil Nadu): The sanctuary is spread over a five-kilometre-wide belt and is home to cormorants, egrets, grey heron, open-billed stork, darter, spoonbill, white lbnis, night herons, grebes, grey pelican among others.
- **Pallikaranai Marsh Reserve Forest** (Tamil Nadu): One of the last remaining natural wetlands, the marsh drains in an area of 250 square kilometres encompassing 65 wetlands. The Pallikaranai Marsh is one of the few natural coastal aquatic habitats that qualify as a wetland in India.
- **Pichavaram Mangrove** (Tamil Nadu): One of the last mangrove forests in the country. It has an island of a vast expanse of water covered with mangrove forests.
- **Sakhya Sagar** (Madhya Pradesh): Created from the Manier river in 1918, Sakhya Sagar is located near Madhav National Park.
- **Pala Wetland in Mizoram** (Mizoram): It is home to a wide range of animals, birds, and reptiles. Its geographical location falls under the Indo-Burma biodiversity hotspot and is therefore rich in animal and plant species. The lake is a major component of the Palak Wildlife Sanctuary and it supports the major biodiversity of the sanctuary.

UN guidelines to protect children displaced by Climate Change

News: United Nations-backed agencies have issued guidelines to provide the first-ever global policy framework to protect children displaced due to climate change.

What are the guiding principles?
- The landmark guidelines were launched by the International Organisation for Migration (IOM), the UN Children's Fund (UNICEF), Georgetown University and the United Nations University.
- The Guiding Principles for Children on the Move in the Context of Climate Change contain a set of nine principles that address the unique vulnerabilities of children who have been uprooted. The guidelines cover both internal as well cross-border migrations.
- The Guiding Principles have been developed to safeguard the rights and well-being of children moving in the context of climate change.

Following are the Principles:
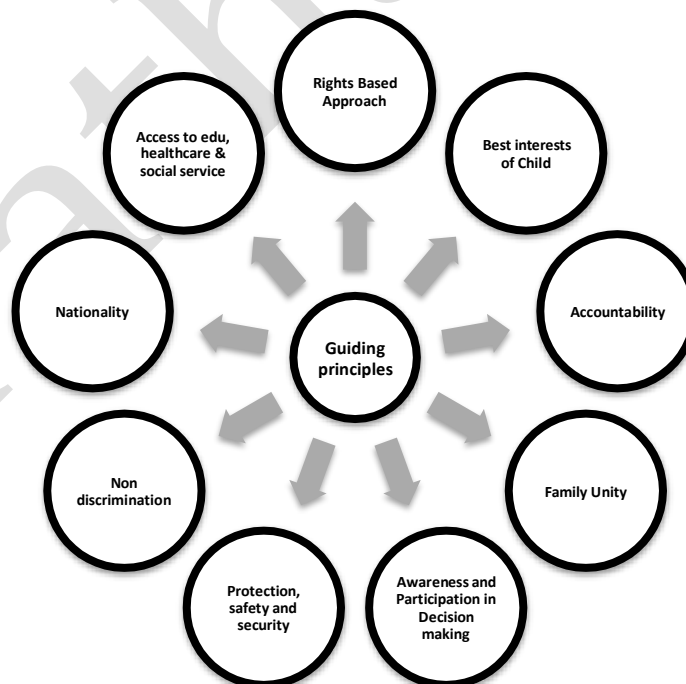
The above mentioned guiding principles are to be used by local and national governments, civil society organisations and other international organizations groups working with children on the move in context with climate change. **Please note - Some of the principles can be used by you in your mains answers under the headline 'UN guidelines for children displaced by events of Climate change'. Such points can fetch you extra marks.**

Banni Grasslands

News: The Gujarat Forest department will restore 10,000 hectares of the Banni grasslands in the coming year, and every year in the coming decade. Under Bonn declaration, India's endeavour is to reach the target of restoring 26 million hectares of degraded land by 2030.

About:

- It is the largest grassland (accounting for 45% of pastures in Gujarat) in Asia situated near the Great Rann of Kutch in Gujarat.
- Two ecosystems, wetlands and grasslands, are mixed side by side in Banni.
- It is dominated by low-growing plants, forbs and graminoids, many of which are halophiles (salt-tolerant).
- It is a Reserve Forest (most restricted forest; local people are prohibited unless specifically allowed by a Forest Officer in the course of the settlement.
- Maldharis are a tribal herdsmen community inhabiting Banni.
- It is one of the last remaining habitats of the cheetah in India and a possible reintroduction site for the species.
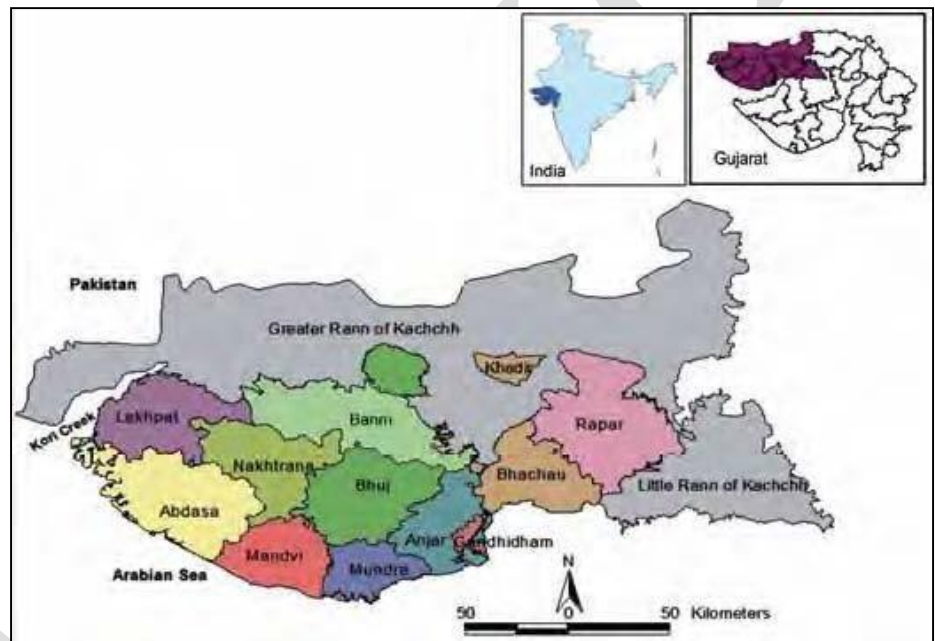
Highly recommend you to click on the following link which talks about how India lost its finest Banni Grasslands to an exotic species called Prosopis Juliflora https://youtu.be/hUagl_YR0v4

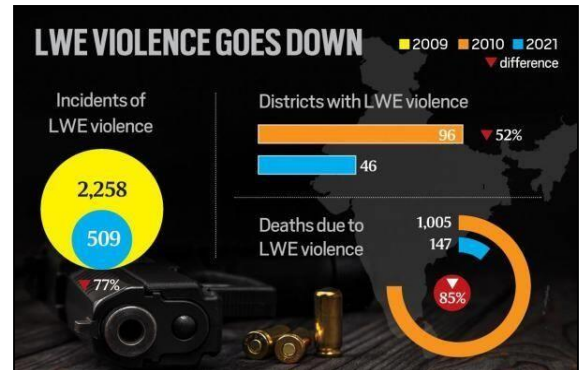# Security & Disaster Management

LWE violence goes down

News: Recently, during question hour in Lok Sabha, the Ministry of Home Affairs provided data related to left extremism in India.
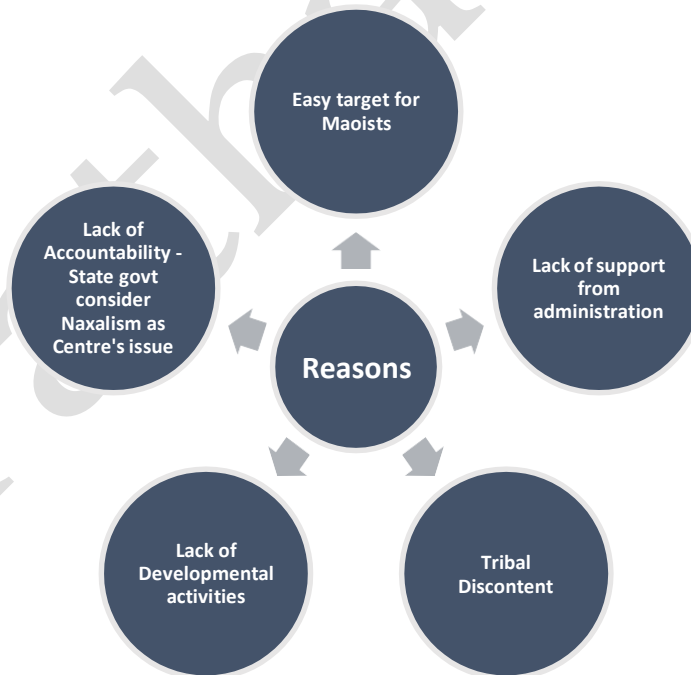
What is LWE?

- LWE organizations are the groups that try to bring change through violent revolution. They are against democratic institutions and use violence to subvert the democratic processes at the ground level.
- These groups prevent the developmental processes in the least developed regions of the country & try to misguide the people by keeping them ignorant of current happenings.

Key Facts as released by MHA:

- The incidents of Naxal violence in the country have dropped by 77 % between 2009 and 2021, and deaths of security force personnel due to Maoist violence have more than doubled in Chhattisgarh in the past three years.
- Similarly, the resultant deaths (civilians + security forces) have reduced by 85 % from an all-time high of 1,005 in 2010 to 147 in 2021.
- In states, Chhattisgarh tops the countrywide figure for deaths of security personnel, as it accounted for 90% of all security personnel deaths in the country, followed by Jharkhand which recorded 5 personnel deaths.
- There has been a decrease in the geographical spread of violence as only 46 districts reported LWE-related violence in 2021, compared to 96 districts in 2010.
- The number of districts generating almost 90% of LWE violence, classified as the most LWE-affected districts, decreased from 35 in 2018 to 30 in 2021.

Reasons behind Left Wing Extremism:

- Easy target for Maoists
- Lack of Accountability - State govt consider Naxalism as Centre's issue
- Lack of support from administration
- Lack of Developmental activities
- Tribal Discontent

Way Forward

- Government must ensure couple of things, security of the peace-loving people and the development of the naxalism-affecting regions. In addition, it must also allow better integration of local police wherever

possible along with armed forces on special operations as the former are well aware of the topography of the region and language. They can assist the armed forces in a proactive way.

Anti-Maritime Piracy Bill

News: Government has come up with Anti-Maritime Piracy Bill 2019 will bring the UN Convention on the Law of the Sea into domestic law and enable Indian authorities to take action against piracy on the high seas.

About:

- India currently does not have legislation on matters of piracy on the high seas.
- India ratified the UN Convention on the Law of the Sea in 1995 but was yet to enact it through the bill.
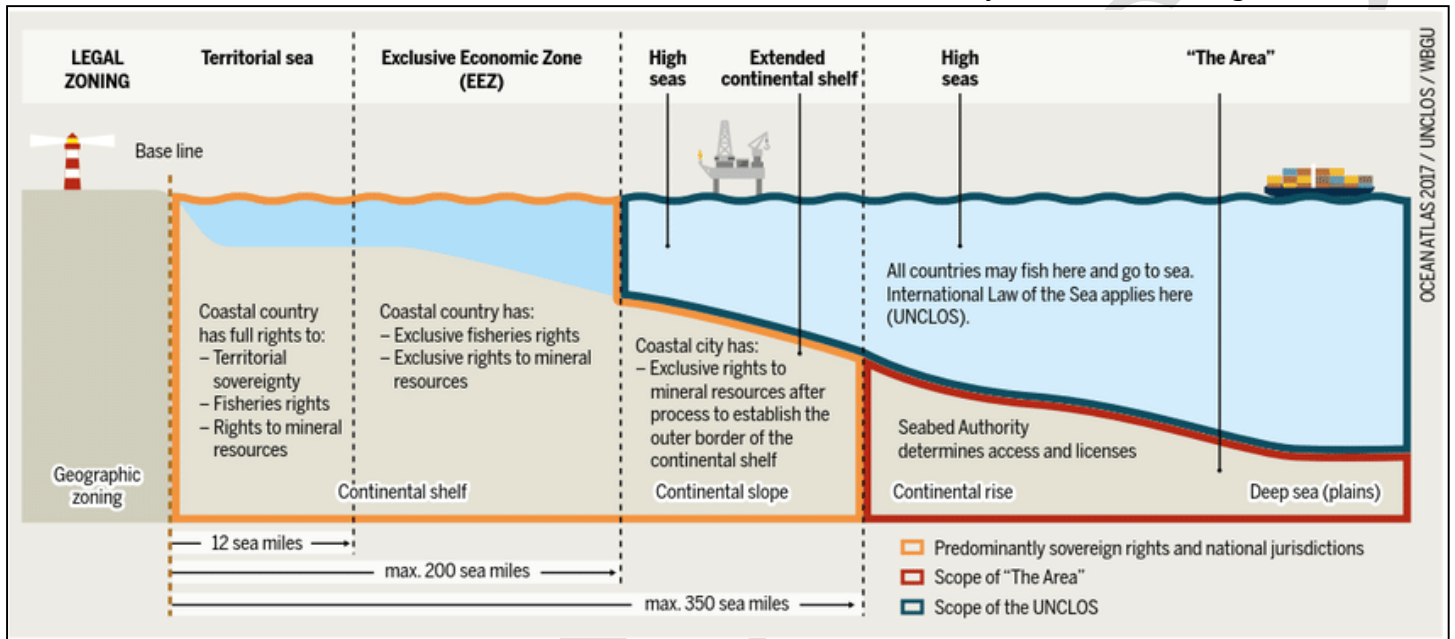
Key Provisions:

- Piracy is defined as an act of violence or detention by the crew or passengers of a private vessel or private aircraft on high seas, directed against another vessel or aircraft and/or people or property on board.
- The Bill will apply to the sea beyond the Exclusive Economic Zone (EEZ), that is, beyond 200 nautical miles from India's coastline. However, it is unclear if it will apply to the EEZ that extends between 12 and 200 nautical miles from the coast of India.
- For committing acts of piracy, the convicts shall be punished with imprisonment for life or death in case the act of piracy itself causes the death or attempts to cause the death of another person. Participating in or assisting acts of piracy will be punishable with up to 14 years of imprisonment and a fine.
- The central government, in consultation with the Chief Justice of the concerned High Court, may notify the Sessions Courts to be the Designated Courts under this Bill.
- It includes extraditable offences which means that the accused can be transferred to any country for prosecution with which India has signed an extradition treaty.
- The presumption of guilt will be on the accused if the accused is in possession of arms, explosives and other equipment which were used or intended for use in committing the offence, there is evidence of use of force against the ship's crew or passengers, and there is evidence of the intended use of bombs and arms against the crew, passengers or cargo of a ship.

What is the need for the Bill?

- Previously, pirates were prosecuted under the Indian Penal Code, 1860 (IPC). However, India's sovereignty is delimited by the outer boundary of its territorial waters that is 12 nautical miles from the coast. Acts of piracy committed by a foreigner outside India's territorial waters cannot be an offence under the IPC, and those accused in piracy cases have been acquitted due to the lack of jurisdiction.

- The Gulf of Aden has been one of the deadliest areas in the oceans due to a large number of piracy incidents. Due to an increased naval presence in the Gulf of Aden, it has been observed that piracy operations are shifting towards the east and south, which increases their proximity to India's west coast.

National Investigation Agency

News: The National Investigation Agency (NIA) has taken over the probe into the killing of tailor Kanhaiyya Lal (48) in Rajasthan's Udaipur over a social media post supporting suspended leader Nupur Sharma.
Now, the Union Home Ministry has handed over to the agency the investigation of a similarly executed murder of pharmacist Umesh Kolhe in Maharashtra.

About:

- The National Investigation Agency (NIA) was constituted under the National Investigation Agency (NIA) Act, 2008.
- It is a central agency which investigates and prosecutes offences which:
  - Affects the sovereignty, security and integrity of India, security of the State, and friendly relations with foreign States.
  - Against atomic and nuclear facilities.
  - Smuggling in High-Quality Counterfeit Indian Currency.
- It implements international treaties, agreements, conventions and resolutions of the United Nations, its agencies and other international organizations.
- Its objective is also to combat terror in India.
- It acts as the Central Counter-Terrorism Law Enforcement Agency.
- It has its HQ at New Delhi and Branches at Hyderabad, Guwahati, Kochi, Lucknow, Mumbai, Kolkata, Raipur and Jammu.
- The schedule of the NIA Act specifies a list of offences which are to be investigated and prosecuted by the NIA. These include offences under Acts such as the Atomic Energy Act, 1962, and the Unlawful Activities Prevention Act, 1967 etc.
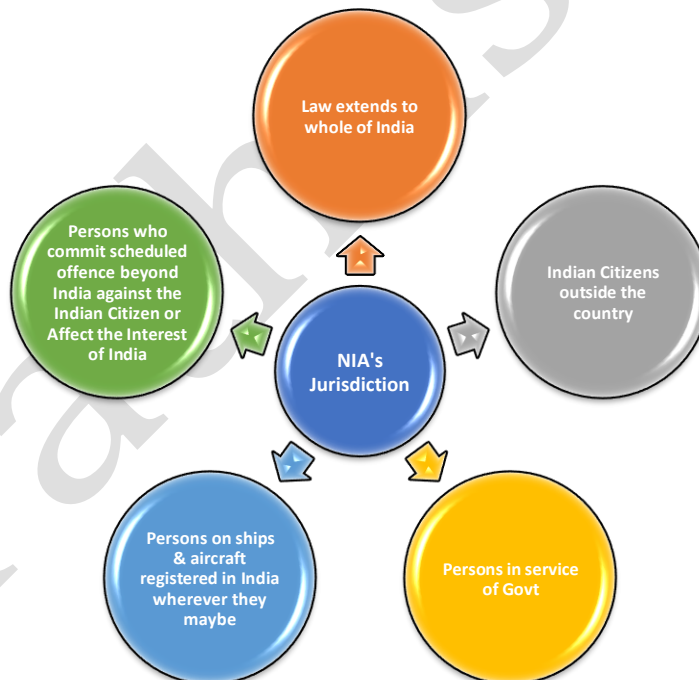
How does NIA take up a probe?

- **Referral through State Government** - As provided under Section 6 of the Act, State governments can refer the case pertaining to the scheduled offences registered at any police station to the Central government (Union Home Ministry) for NIA investigation.

- **Central Government asks the agency to act** - After Assessing the details made available, the Centre can then direct the agency to take over the case. State governments here are required to extend all assistance to the NIA.
- **When scheduled offence is outside India** - Where the Central government finds that a scheduled offence has been committed at any place outside India to which this Act extends, it can also direct the NIA to register the case and take up an investigation.
- While investigating a scheduled offence, the agency can also investigate any other offence that the accused is alleged to have committed if the offence is connected to the scheduled offence.

Indian Defence exports record new highs

News: India's defence exports for 2021-22 were estimated at Rs 13,000 crore, the highest ever. The U.S. was a major buyer, as also nations in Southeast Asia, West Asia and Africa.

Key Observations:
- The private sector accounted for 70% of the exports, while public sector firms accounted for the rest.
- Earlier, the private sector used to account for 90% but now the share of defence public sector units had gone up.
- While India's defence imports from the U.S. have gone up significantly in recent years, Indian companies have been increasingly becoming part of the supply chains of U.S. defence companies.
- In January 2022, India signed a USD 374.96-million deal with the Philippines, its single biggest defence export order, for the supply of three batteries of shore-based anti-ship variant of the BrahMos supersonic cruise missile.
- India has imposed a phased import ban on 310 different weapons and systems during the last two years, which helped boost export. These weapons and platforms will be indigenized in phases over the next five to six years.
- The increased partnership with the private sector has led to a substantial rise in defence exports.

Status of India's Defence Exports:
- Defence exports are a pillar of the government's drive to attain self-sufficiency in defence production.
- Over 30 Indian defence companies have exported arms and equipment to countries like Italy, Maldives, Sri Lanka, Russia, France, Nepal, Mauritius, Sri Lanka, Israel, Egypt, UAE, Bhutan, Ethiopia, Saudi Arabia, Philippines, Poland, Spain and Chile.
- The exports include personal protective items, defence electronics systems, engineering mechanical equipment, offshore patrol vessels, advanced light helicopters, avionics suits, radio systems and radar systems.

Other Initiatives related to Defence:
- Defence Production and Export Promotion Policy 2020 - The DPEPP 2020 is envisaged as an overarching guiding document to provide a focused, structured and significant thrust to defence production capabilities of the country for self-reliance and exports.
- Positive Indigenization - For the first time the government is putting a ban on itself to import any item, the Government wants to empower the indigenous industry. There are two positive indigenization lists of 101 items and 108 items that range from platforms to weapon systems to sensors to the entire plethora of items.
- Strategic Partnership Model - It allows Indian companies to collaborate with foreign OEMs and get transfer of technology, get the capability to build, manufacture india and sustain those projects in india.

You may click on the following link of 'Gravitas Live with Palki' on Wion news channel which discusses about India's potential in the arms export and how other nations look towards India's defence capabilities for their security interests - https://www.youtube.com/watch?v=tcpARzs-XoY&t=1630s
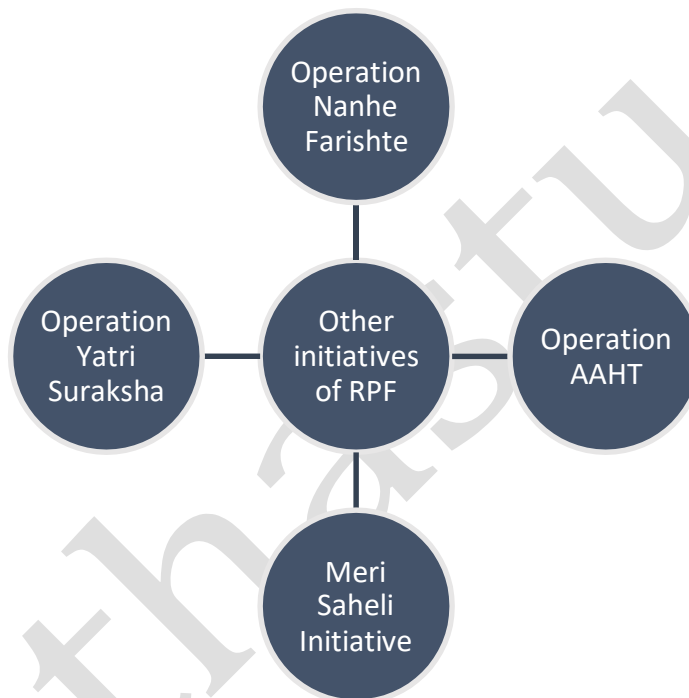
Operation NARCOS

News: Recently, the Railway Protection Force recovered narcotics products valued over Rupees. 7.40 Crore under Operation NARCOS.

About:

- In order to bring attention to the menace of Narcotic Drugs and Psychotropic Substances, a month-long pan India drive against smuggling of narcotics through rail was launched under code name Operation 'NARCOS' in the month of June-2022.
- RPF intensified its checks in trains and in identified black spots across the country in coordination with Narcotics Control Bureau and other Law Enforcement Agencies to target drug peddlers involved in this illegal trade.

About RPF:

- The contingent of RPF is an Armed Force of the Union of India. It is a security force under the ownership of Indian Railways, Ministry of Railways.
- It has been entrusted with the responsibility for the safety of railway property.

Operation Nanhe Farishte

Operation Yatri Suraksha — Other initiatives of RPF — Operation AAHT

Meri Saheli Initiative

Payroll Automation for Disbursement of Monthly Allowance

News: Recently, the Ministry of Defense inaugurated PayRoll Automation for Disbursement of Monthly Allowances (PADMA), an automated Pay and Allowances module for the Indian Coast Guard.

About:

- PADMA is an automated platform leveraging latest technology which will provide seamless and timely disbursal of Pay and Allowances to around 15,000 Indian Coast Guard personnel.
- This module has been developed under the aegis of the Defense Accounts Department and will be operated by Pay Accounts Office Coast Guard, Noida.
- The launch marked the beginning of the Centralized Pay System (CPS), the foundation of which is being laid down by the Defense Accounts Department Headquarters to provide one stop pay accounting solutions for all organizations under the Ministry.

- Launch of PADMA will strengthen the Digital India Vision. Also, it is an 'Atmanirbhar Bharat' initiative as the entire module has been designed and developed by Indian entrepreneurs assisted by domain experts.

Centralized and Decentralized Payment System:
- Centralized Payment Systems in India are Real Time Gross Settlement (RTGS) and National Electronic Funds Transfer (NEFT) systems, both owned and operated by the Reserve Bank.
- The decentralised payment systems will include clearing houses managed by RBI (Cheque Truncation System (CTS) centres as well as other banks (Express Cheque Clearing System (ECCS) centres and any other system as decided by RBI from time to time.

Indian Cost Guard and its Functions:
- It is a maritime law enforcement and search and rescue agency of India with jurisdiction over its territorial waters including its contiguous zone and exclusive economic zone.
- It comes under the under the Ministry of Defense.
- The concept of forming ICG came into being after the 1971 war.
- The blueprint for a multidimensional Coast Guard was conceived by the visionary Rustamji Committee.
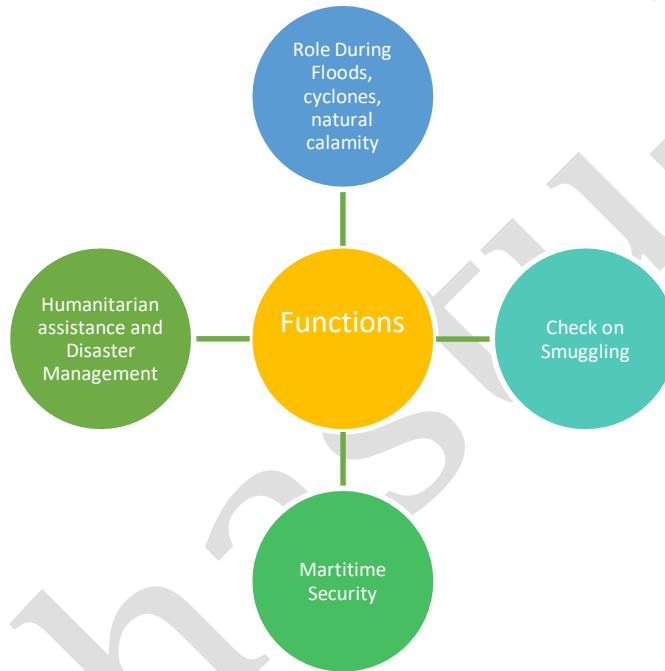
General Studies – 4

Ethics, Integrity & Aptitude

1. Ethics and Human Interface: Essence, determinants and consequences of Ethics in-human actions; dimensions of ethics; ethics - in private and public relationships. Human Values - lessons from the lives and teachings of great leaders, reformers and administrators; role of family society and educational institutions in inculcating values.
2. Attitude: content, structure, function; its influence and relation with thought and behaviour; moral and political attitudes; social influence and persuasion.
3. Aptitude and foundational values for Civil Service, integrity, impartiality and non-partisanship, objectivity, dedication to public service, empathy, tolerance and compassion towards the weaker-sections.
4. Emotional intelligence-concepts, and their utilities and application in administration and governance.
5. Contributions of moral thinkers and philosophers from India and world.
6. Public/Civil service values and Ethics in Public administration: Status and problems; ethical concerns and dilemmas in government and private institutions; laws, rules, regulations and conscience as sources of ethical guidance; accountability and ethical governance; strengthening of ethical and moral values in governance; ethical issues in international relations and funding; corporate governance.
7. Probity in Governance: Concept of public service; Philosophical basis of governance and probity; Information sharing and transparency in government, Right to Information, Codes of Ethics, Codes of Conduct, Citizen's Charters, Work culture, Quality of service delivery, Utilization of public funds, challenges of corruption.
8. Case Studies on above issues

What are the Ethical Values we can learn from Madam President?

News: India will have its first Adivasi President in Droupadi Murmu. President Murmu is an inspired choice, given her identity as a Santhal woman. She has a life-time of experience in politics and in governance.

More about Madam President:

- Born in 1958, in the Uparbeda panchayat in Odisha's Mayurbhanj district, she was the first woman in the area to go to college. She started out as a teacher before entering into Odisha politics.
- In 1997, the BJP fielded Murmu for the Rairangpur Municipal Council elections and she was elected as a Councillor - green-signalling her spiralling political career. The greenhorn councillor took her job seriously, people were taken aback to see Murmu leading from the front, hands-on on the roads, solving civic problems and other basic issues, when most elected representatives notoriously "vanish" post-polls!
- She was elected twice to the Odisha Assembly in 20000 and 2009 and was also a minister in the coalition government formed by the BJP and BJD, led by Naveen Patnaik from 2000 to 2004.
- Later, she became Governor of Jharkhand from 2015 to 2021.

What are the ethical values we can learn from Madam President?

- **Simplicity** – She belonged to a humble background and despite having risen in her political and social status, she has maintained her humility and simplicity of lifestyle.

- **Extraordinary Dedication and Commitment** – Madam President's personal story includes the loss of two children and her husband while continuing with her commitment to public service. It is this dedication coupled with loss that makes her story so moving.
- **Compassion and Environmental ethics** – She founded the 'Shyam, Lakshman, Sipun Memorial Residential School for Tribal Girls' in her erstwhile family home and donated most of her ancentral assets. She has donated blood over 100 times and planted 1,000 saplings in different places, displaying her eco-friendly streak.
- **Hope and Inspiration** – Her life story will give inspiration to generations of Indians for they will believe that if her rise is possible, so is theirs.
- **She is no pushover** – When she was the Governor of Jharkhand, in November 2016, two amendment bills were sent to her for approval by the BJP government. The amendments were to the old Chotanagpur Tenancy and Santhal Pargana Tenancy Acts that would allegedly ensure easy transfer of land for industrial use. The amendments were protested by tribal communities and many delegations called on the governor. Eight months later, in June 2017, the governor returned the bills, noting that she would not let injustice flow from her pen.
- **Empowerment** – Being a woman from a tribal family she fought all odds to get an education and enter into politics. She will remain as an inspiration for millions of tribal girls wanting to do good in life.

In the Mahabharata, the name Draupadi is derived from Drupada (her father) which means "pillar". The President of India is intended to be a pillar of constitutional strength for her people. It is perhaps most apt then, that our President Madam is named Droupadi.

Short News for Prelims

National Statistics Day

News: June 29, is national 'Statistics Day', in 'recognition of the contributions made by Prof. Prasanta Chandra Mahalanobis, the 'Plan Man' of India.

Why is he known as Father of Indian Statistics?

- Mahalanobis believed data to be instrumental in efficient planning for national and human development.
- Mahalanobis established the Statistical Laboratory within the Baker Laboratory at Presidency College.
- In 1933, Mahalanobis founded **Sankhyā,** the Indian Journal of Statistics.
- Founded the Indian Statistical Institute.
- The World Bank and the United Nations now use the methods pioneered by him.

Blue Deal

News: A 'Blue Deal' is being promoted at the 2022 United Nations Ocean Conference to enable the sustainable use of ocean resources for economic growth.

About:

- It includes global trade, investment, and innovation to create a sustainable and resilient ocean economy, according to the UN Conference on Trade and Development (UNCTAD).
- Coastal and island developing nations can benefit from the sustainable development of the ocean economy, including fisheries and aquaculture, coastal tourism, maritime transport, offshore renewable energy, ecosystem services, and marine genetic resources.
- It can create jobs and generate revenue for these nations

CDRI

News: Government has announced the categorization of Coalition for Disaster Resilient Infrastructure (CDRI) as an 'International Organization' and the signing of the Headquarters Agreement (HQA) with CDRI for granting it the exemptions, immunities and privileges under the United Nations (Privileges & Immunities) Act, 1947.

How does it help?

- It will provide CDRI with an independent and international legal persona so that it can efficiently and effectively carry out its functions internationally.
- Deputing experts to other countries
- Deploying funds globally
- Making available technical expertise to assist countries
- Leveraging international engagement to foster disaster-resilient infrastructure

G-SEC Yields

News: On June 30, 2022, the government said that it had decided to keep interest rates on small savings instruments unchanged for the July-September quarter, defying expectations of a hike in rates given the sharp rise in government security (G-sec) yields over the last three months.

About:

- G-secs, or government securities or government bonds, are instruments that governments use to borrow money. Governments routinely keep running into deficits that is, they spend more than they

earn via taxes. That is why they need to borrow from the people.
- But G-secs are different from everyday lending between two private individuals or entities.
- For one, G-secs carry the lowest risk of all investments. After all, the chances of the government not paying back your money are almost zero. It is thus the safest investment one can make.
- The other ways in which G-Secs are different are in the manner in which they are structured, and how their effective interest rates (also called yields) are calculated.

Ashadhi Bij

News: Kutchi community of Gujarat celebrates their new year on this day.

About:
- Ashadhi Bij falls on the second day of Shukla paksha or waxing phase of the moon in Ashada month of the Hindu calendar.
- Devotees worship Lord Ganesha, Goddess Lakshmi and other regional deities and organize satsangs, musical competitions, and other cultural programs on Ashadhi Beej.
- The festival is associated with the beginning of rains in the Kutch region of Gujarat.
- During Ashadhi Bij, the moisture in the atmosphere is checked to predict which crop would do best in the coming monsoon.

World Drug Report 2022

News: UN Office on Drugs and Crime (UNODC) has released World Drug Report 2022.

Key Findings:
- India is the world's single-largest opiate market. Opiates coming from Afghanistan have increased thereby increasing trafficking and associated organised crimes.
- Around the World, rate of drug consumption has increased. Compared to the previous decade there has been a 26% increase. The increase is more rapid in women than men.
- Drug production and trafficking have increased
- The Middle East and Sout-East Asia are emerging grounds for synthetic drugs manufacturing

- Environmental Impact - Deforestation (due to cocoa cultivation), Waste generation (in synthetic drug manufacturing)

IDIOT Syndrome

About:
- The Internet Derived Information Obstructing Treatment (IDIOT) syndrome medically called **cyberchondria** is when people blindly trust medical information available online and stop their treatment abruptly thus leading to making treatment for any disease hard for doctors.
- Due to innovations in technology, the expectations of people and patients on doctors are increasing.

Windfall Tax

News: Government slapped a windfall tax on domestic crude oil producers, imposed export duties on petrol, diesel and aviation turbine fuel (ATF), and hiked the import duty on gold in efforts to reduce pressure on the rupee, rein in the current account deficit (CAD), and increase the domestic supply of petroleum products.
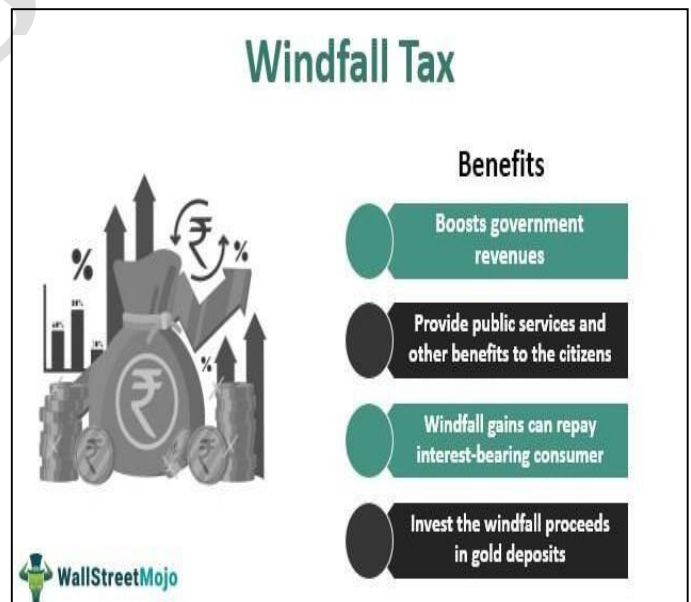
What is a windfall tax?
- A windfall tax is a higher tax rate on sudden big profits levied on a particular company or industry.
- Domestic producers sell crude oil to domestic refineries at international parity prices, thus making windfall gains.

- For example, ONGC reported bumper profits in the March quarter (when international prices soared to a near 14-year high of $139 per barrel).
- The windfall tax on oil produced within India and fuel exported overseas will make up for more than three-fourths of the revenue that the government lost when it cut excise duty on petrol and diesel to cool soaring inflation.
- India on July 1 joined a select league of nations globally that have taxed windfall gains accruing to oil companies from soaring energy prices.

Kai Chutney

News: In Odisha, scientists are now fine-tuning their research to make a presentation for the Geographical Indications (GI) registry of Kai chutney.

About:
- Applied under food category, the GI tag will help develop a structured hygiene protocol in the preparation of Kai chutney for standard wider use. Geographical Indications labels enhance the reputation and value of local products and support local businesses.
- People often keep a safe distance from red weaver ants as their sting inflicts a sharp pain and reddish bumps on the skin. Despite this, weaver ants are popular among the tribes of Mayurbhanj district in Odisha for the mouth-watering dish made of them which is the Kai chutney.
- This savoury food item, rich in proteins, calcium, zinc, vitamin B-12, iron, magnesium, potassium, sodium, copper, fibre and 18

amino acids, is known to boost the immune system.
- Weaver ants, Oecophylla smaragdina, are abundantly found in Mayurbhanj throughout the year. They make nests with leaves of host trees.

Australopithecus

News: The fossils of our earlier human ancestors, located in a cave in South Africa, are a million years older than previously understood according to a new study published in the journal Proceedings of the National Academy of Science on June 27.

About:
- The researchers analysed the fossilised remains of Australopithecus from Sterkfontein caves and argued they lived at the same time as their East African counterparts like the famous Lucy, complicating the way scholars have understood human evolution.
- Australopithecus, meaning 'southern ape', was a group of hominins or now-extinct early humans, that was closely related to and almost certainly the ancestors of modern humans.
- They inhabited the planet 4.4 million to 1.4 million years ago, likely encompassing a time period longer than our own genus, Homo. Their fossils have been found across sites in eastern, northern, central and southern Africa.

Sterkfontein Caves
- The **'Cradle of Humankind'** is a 47,000-hectare paleoanthropological site, declared a World Heritage Site by UNESCO. Located 40 km northwest of Johannesburg, it contains a complex system of limestone caves, where a significant number of hominin fossils have been found.
- Within this complex lies Sterkfontein, a complex system of caves that holds a long history of hominin occupation and contains the largest number of Australopithecus fossils in the world.

You may refer the following link to know more - https://www.livescience.com/south-african-fossils-human-evolution

Chakma Tribe

News: The National Human Rights Commission (NHRC) has asked the Deputy Commissioner of Arunachal Pradesh's Changlang district to submit an action-taken report (ATR) on a complaint alleging harassment and false prosecution of some Chakma villagers.
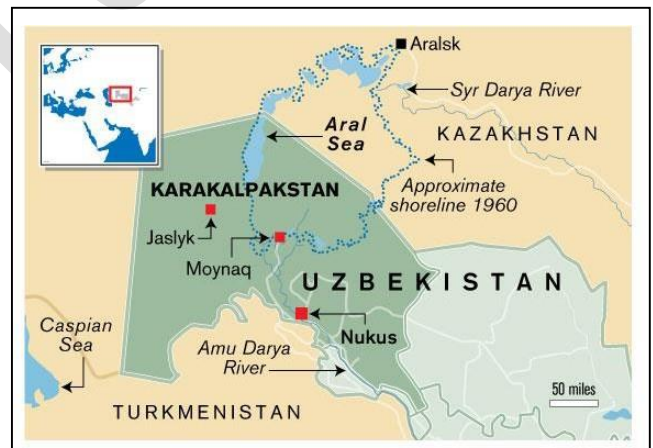

About:

- The Chakma people are a tribal group from the eastern-most regions of the Indian subcontinent.
- They are the largest ethnic group in the Chittagong Hill Tracts region of southeastern Bangladesh, and the second-largest in Mizoram, India (Chakma Autonomous District).
- Other places in Northeast India also have significant Chakma populations.
- Around 60,000 Chakma people live in Arunachal Pradesh, India; a first generation migrated there in 1964 after the Kaptai Dam tragedy.
- Another 79,000 Chakmas live in Tripura, India, and 20,000-30,000 in Assam, India.

Karakalpaks

News: At least 18 people were killed and 243 wounded during last week's government crackdown on protests in Uzbekistan's autonomous province of Karakalpakstan. The protests had broken out in response to the government's plan to restrict the region's long-held autonomy.

About:

- The name Karakalpakstan is derived from the Karakalpak people, an ethnic minority group of around 2 million. Karakalpak translates to '**black hat'**, referring to their traditional headgear.
- The Karakalpaks consider themselves to be a **distinct cultural group in Uzbekistan**. Their **Turkic language – Karakalpak** is closely related to Kazak. Their separate language is a crucial aspect of their cultural identity.
- In their genealogical narrative, the Karakalpaks claim to share a common point of origin with the neighbouring Kazakhs, Uzbeks and Turkmen, but believe that over time they diverged from the others. This narrative marks the Karakalpaks as culturally separate from their neighbouring groups.
- When Uzbekistan declared its independence from the Soviet Union in August 1991, Karakalpakstan was formally recognized as an **autonomous republic** in Uzbekistan's constitution of 1992, and has **the right to secede from on the basis of a nation-wide referendum.**

Nairobi Flies

News: Recently, after coming into contact with Nairobi flies, approximately 100 students in East Sikkim have reported skin infections.

About:

- They are species of insect native to East Africa.
- They are orange and black in colour and thrive in areas with high rainfall, as has been seen in Sikkim in recent weeks.
- Like most insects, they are attracted to Bright lights.

How do they affect humans?

- These insects usually don't bite but if they are disturbed during their stay on human skin, they could release a potent acidic substance that can cause burn on human skin.
- The released substance is called Pederin and it can cause irritation on the skin, which leads to lesions or unusual marks or coloring of the skin.

TiHAN

News: Ministry of Science & Technology has inaugurated **'Technology Innovation Hub on Autonomous Navigation'** or TiHAN, in IIT-Hyderabad, which is a first "Autonomous Navigation" facility. It is seen as one of the steps toward India's vision of 'Atmanibhar Bharat', 'Skill India' and 'Digital India'.

About:

- It is a multidisciplinary initiative, which aims at making India a global player in the futuristic and next-generation "Smart Mobility" technology.
- The multi-departmental initiative includes researchers from electrical, computer science, mechanical and aerospace, civil, mathematics.
- At present, there is no such testbed facility in India to evaluate the autonomous navigation of vehicles. Therefore, it is envisioned to address this gap by developing a fully functional and exemplary testbed facility dedicated to Connected Autonomous Vehicles (CAVs).

Importance:

- It will provide a unique platform for high quality research between academia, industry and R&D labs both at the national and international level, thus making India a global leader in autonomous navigation technologies.
- India's mobility sector is one of the world's largest markets and the TiHAN - IITH will be the source of futuristic technology generation for autonomous vehicles.

Why is Australia killing its Honeybees?

News: Australian authorities have killed millions of honeybees over the past two weeks in an effort to stop a potentially catastrophic parasite plague named Varroa mite.

About Varroa mite:

- Its parasitic insect infects and feeds on honeybees, often known as the varroa destructor. The small pests, which are reddish-brown in colour, have been capable of eradicating entire colonies of honeybees.
- They frequently circulate amongst bees as well as through beekeeping supplies like removed combs.
- Although Varroa mites can feed and live on adult honey bees, they primarily feed and reproduce on larvae and pupae in developing brood, causing malformation and weakening as well as virus transmission.
- As the mite population in bee colonies grows, the symptoms become more severe. In general, heavy infestations result in crippled bees, impaired flight performance, a lower rate of return to the colony after foraging, and reduced colony productivity.

India Animal Health Summit 2022

News: Shri Parshottam Rupala, Union Minister of Fisheries, Animal Husbandry and Dairying inaugurated First India Animal Health Summit 2022 at NASC Complex, New Delhi.

About:

- It is being organized by Indian Chamber of Food and Agriculture (ICFA) and the Agriculture Today Group to understand the significance of animal health towards the broader objective of the country's food and nutrition security, rural incomes and prosperity and overall economic development.
- The two-day event will host a plethora of panel discussions ranging from topics such as Animal Health policy initiatives to Business environment & investment opportunities in the Animal Health sector. The deliberations evolved will later be documented and presented to authorities.

RBI's intervention to boost Forex Inflows

News: The Reserve Bank of India (RBI) announced a slew of temporary measures aimed at boosting foreign exchange inflows, including a doubling in the overseas borrowing limit for corporates and removal of interest rate ceilings for NRIs' foreign currency deposits.

About:

- The move comes as persistent capital outflows and a widening trade deficit have led to a sharp depreciation in the Indian rupee to new lows against the dollar.
- In order to further diversify and expand the sources of forex funding so as to mitigate volatility and dampen global spillovers, it has been decided to undertake measures to enhance forex inflows while ensuring overall macroeconomic and financial stability.

What are the measures taken?

- The banks have been exempted from maintaining the stipulated Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR) on incremental FCNR(B) and NRE term deposits mobilised up to November 4.
- It also freed banks to temporarily raise fresh FCNR(B) and NRE deposits without reference to extant regulations on interest rates, with effect from July 7 and up to October 31, 2022.

- To encourage foreign portfolio investment into debt, the RBI said the choice of government bonds available for investment under the fully accessible route (FAR) would be widened.
- The RBI also temporarily doubled the annual limit for External Commercial Borrowings (ECB) to $1.5 billion or its equivalent.

Please note you may remember some of the facts mentioned above and add it in your answers on questions that may ask about role that RBI plays in checking outflow of valuable foreign investments or to maintain forex reserves.

States Startup Ranking 2021

News: The results of the 3rd edition of Ranking of States on Support to Startup Ecosystems were released by the Ministry of Commerce and Industry.

STATES' START-UP RANKING 2021

Category	State
Best performer	Gujarat, Karnataka
Top performers	Kerala, Maharashtra, Odisha, Telangana
Leaders	Assam, Punjab, Tamil Nadu, Uttarakhand, Uttar Pradesh
Aspiring leaders	Chhattisgarh, Delhi, Madhya Pradesh, Rajasthan
Emerging start-up ecosystems	Andhra Pradesh, Bihar

Trade minister Piyush Goyal said ONDC has the power to spawn thousands of start-ups

About:

- The Start-up India initiative of the Government of India envisages to build a robust Start-up ecosystem in the country for nurturing innovation and providing opportunities to budding entrepreneurs.
- The Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry has been conducting the States' Start-up Ranking Exercise since 2018.

Key Findings:

- Gujarat and Karnataka appeared as the Best Performers in the States category.

- Meghalaya top among UTs and North-eastern States category.
- Kerala, Maharashtra, Orissa and Telangana won the Top Performers award among states category.
- Jammu and Kashmir appeared as the Top Performer among UTs and NE states category.

Fields Medal 2022

News: Recently, Ukrainian mathematician Maryna Viazovska along with other three mathematicians received the prestigious Fields Medals. Fields medal is often described as the Nobel Prize in mathematics.

About:

- The Fields Medal is awarded every four years to one or more mathematicians under the age of 40.
- Fields Medal is awarded at the International Congress of the International Mathematical Union (IMU).
- IMU is an international non-governmental and non-profit scientific organization.
- The purpose of IMU is to promote international cooperation in mathematics.
- Fields medal is awarded to recognize outstanding mathematical achievement for existing work and for the promise of future achievement.

Indian-Origin Winners:

Among the more than 60 mathematicians who have been awarded the Fields Medal since 1936, there are two of Indian origin:

- Akshay Venkatesh of the Institute for Advanced Study at Princeton (2018)
- Manjul Bhargava of the Department of Mathematics at Princeton University (2014).

Derecho

News: Recently, a few States of US were hit by a storm system called a Derecho, turning Sky Green. They mostly occur across central and eastern parts of the United States.

About:

- A Derecho is 'a widespread, long-lived, straight-line windstorm' that is associated with a 'band of rapidly moving showers or thunderstorms'.
- The name comes from the Spanish word 'la derecha' which means 'straight'.
- Straight-line storms are those in which thunderstorm winds have no rotation unlike a tornado. These storms travel hundreds of miles and cover a vast area.
- It is a warm-weather phenomenon that generally occurs in June and July.

Why does the sky turn green?

- Severe thunderstorms result in a 'green sky' due to light interacting with the huge amount of water they hold.
- The big raindrops and hail scatter away all but the blue wavelengths due to which primarily blue light penetrates below the storm cloud.
- This blue then combines with the red-yellow of the afternoon or the evening sun to produce green.

Open Acreage Licensing Policy

News: Ministry of Petroleum and Natural Gas Launches Open Acreage Licensing Programme Bid Round-VIII.

About:

- Open Acreage Licensing Policy (OALP) along with the National Data Repository (NDR) was launched in June 2017 as the key driver to accelerate the Exploration and Production (E&P) activities in India.

- Under OALP, companies are given the freedom to carve out areas they want to explore oil and gas. The areas sought are then put on auction.
- The successful roll-out of the HELP regime, followed by OALP Bid Rounds, has led to an increase in exploration acreages in India.

What does HELP stand for?

- HELP which replaced the erstwhile New Exploration Licensing Policy (NELP) in 2016. Here,
  - Exploration blocks shall be awarded on a continuous basis through e-bidding in a transparent manner.
  - It followed the Revenue sharing model instead of Profit-sharing for hydrocarbon exploration.
  - Unified license for all types of hydrocarbons.
  - Freedom to carve out acreages of choice under OALP bid rounds.
  - Full marketing and pricing freedom of gas.

Gigamesh

News: A women-led startup develops deep-tech for reliable low-cost internet services to rural areas.

About:

- GigaMesh is an innovative wireless network solution that can give optical fibre-like speed internet services to suburban and rural areas at a cheaper cost
- It has been developed by Astrome, a women-led startup.
- The deep tech startup incubated at the Indian Institute of Science(IISc), Bangalore, and supported by the DST-ABI Woman Startup Program of the Department of Science and Technology (DST).

Digital Nomads Visa

News: Indonesia has announced "Digital Nomad Visas" for travellers, to attract more foreign tourists.

Who are Digital Nomads?

- They are people who work remotely while travelling to different places and spending their earned income in the country they are travelling to.

- Unlike regular remote workers, who tend to stay in one geographic area, digital nomads travel and explore while working.
- The Digital Nomad Visa would allow remote workers to stay in Indonesia, including Bali, tax-free.
- Indonesia aims to bring in over 3.6 million overseas travelers into the country over the next year to explore spiritual retreats as well as the eco-tourism of Indonesia.

Red Pandas

News: Singalila National Park launches a programme that aims to release about 20 red pandas in a period of five years.

About:

- IUCN Status – Endangered
- Falls under Schedule I of the Indian Wildlife Protection Act 1972
- Red pandas are shy, solitary and arboreal animals and are considered an indicator species for ecological change.
- They are also one of the most iconic species in terms of their importance to global conservation.
- The red panda's survival is crucial for the eastern and north-eastern Himalayan subalpine coniferous forests and the eastern Himalayan broadleaf forests. (2200-4800m under dense bamboo)
- It is also the state animal of Sikkim.

Singalila National Park

- It is a national park located on the Singalila ridge at an altitude of 7000 feet above sea level, in the Darjeeling district of West Bengal.
- It is well known for trekking route to Sandakphu that runs through it.

Jawbone Fragment

News: A jawbone fragment discovered in northern Spain last month could be the oldest known fossil of a human ancestor found to date in Europe.

About:

- The researchers said the fossil found at an archaeological site in the Atapuerca mountain range was about 1.4m years old.
- Until now, the oldest hominid fossil found in Europe was a jawbone found at the same site in 2007 that was determined to be 1.2m years old.
- **Atapuerca** holds one of the richest records of prehistoric human occupation in Europe.

Please note to remember places such as Atapuerca. UPSC has a tendency to ask questions on such lesser known places.

Azores High

News: An extremely large 'Azores High' (a subtropical weather phenomenon) has resulted in abnormally dry conditions across the western Mediterranean.

About:

- Azores High is a subtropical high-pressure system that extends over the eastern subtropical North Atlantic and Western Europe during winter.
- It is associated with anti-cyclonic winds in the subtropical North Atlantic. It is formed by dry air aloft descending the subtropics and coincides with the downward branch of the Hadley Circulation.

IS4OM

News: ISRO launches the world's first facility to track space debris, and safeguard assets. The ISRO system for Safe and Sustainable Operations and Management (is4om).

About:

- IS4OM is ISRO's holistic approach to ensure the **safety of space assets** and **sustaining the utilization of outer space for national development.**

Why was it needed?

- In response to the ever-growing space object population and the risk of collisions in space, it undertakes observation and monitoring of space objects and space environment, processing the observations for orbit determination, object characterization and cataloguing, analysis of space environment evolution, risk assessment, and mitigation, and data exchange and collaboration.
- **Prevent** a **rising concern** about **Kessler Syndrome**, which states that a collision in space due to pollution could increase the number of space debris, increasing the number of potential collisions due to the multiplying space debris.

POP-FAMEs

News: Now researchers at Berkeley Lab have coaxed bacteria into directly producing a new biofuel with an energy density significantly higher than jet fuel.

About:

- The new fuel candidate molecules are known as polycyclopropanated fatty acid methyl esters (POP-FAMEs), and they're made up of seven sets of cyclopropane rings.
- The researchers identified natural cyclopropane-producing bacteria in a family called Streptomyces, then copied the associated gene clusters into other bacteria that are more lab-friendly.
- The end result was POP-FAME molecules that the team called fuelimycins, which only require one further chemical processing step to turn them into a ready-to-burn fuel.

Potential use:

- The increased energy density could help vehicles go farther on a single tank, or reduce the amount of fuel needed for rocket launches, saving more space and weight for cargo.
- At the same time, producing the fuels from bacteria cuts right down on their environmental impact.

Nord Stream

News: There is a fear that the recent shutdown of Nord Stream 1, (Germany's main source of gas from Russia) may be extended by Russia in retaliation against the current sanctions against Russia.

About:

- Nord Stream 1 is a 1,224 km underwater gas pipeline that runs from Vyborg in northwest Russia to Lubmin in northeastern Germany via the Baltic Sea.
- The pipeline is the primary route through which its gas enters Germany and then travels west and southwards through onshore links to other European countries.

- Nord Stream 2 Pipeline that would have doubled the flow of Russian gas to Germany was suspended in February 2022 (due to the Russian invasion of Ukraine)

ICSE initiative on Child Abuse

News: India's Central Bureau of Investigation has joined Interpol's International Child Sexual Exploitation (ICSE) initiative that will allow it to collaborate with investigators in other countries for detecting child sexual abuse online and identifying abusers, victims, and crime scenes from audio-visual clips using specialised software.

About:

- The ICSE database uses video and image comparison to analyse Child Sex Exploitation Material (CSEM) and make connections between victims, abusers and places.
- The database avoids duplication of effort and saves precious time by letting investigators know whether a series of images have already been discovered or identified in another country, or whether it has similar features to other images.
- Statistics show that in India, every 155 minutes, a child under 16 years of age is raped. Parents of sexually abused children are scared to tell anyone due to fear of being shamed in society.
- Previously, CBI had set up 'Online Child Sexual Abuse and Exploitation Prevention/Investigation (OCSAE) unit for using CSEM data.

Fertilizers Flying Squad

News: Department of fertilizers has instituted a dedicated officer known as a 'fertilizer flying squad' to check any diversion, black marketing or adulteration of fertilizers.

Why the need for such squad?

- About 10 lakh tonnes (the worth around 6000 cr) of agriculture-grade urea (despite the need for coating) is getting diverted for industrial use every year.

- The subsidized urea is getting diverted mainly to industries.
- The agriculture-grade urea is neem-coated while technical-grade urea is not. The neem-coating is removed through some chemical process and then the urea is used for industrial purposes
- India's annual domestic demand for urea is around 350 lakh tonnes, of which 260 lakh tonnes are locally produced while the remaining is imported.
- There is an annual requirement of around 13-14 lakh tonnes of technical-grade urea for industrial usage, of which only 1.5 lakh tonnes are produced in the country.
- Application of Urea – In industries such as resin/glue, plywood, crockery, moulding powder, cattle feed, dairy and industrial mining explosives.

HPV Vaccine

News: Cervavac, a vaccine developed by the Serum Institute of India (SII), has recently acquired market authorization from the Drugs Controller General of India (DGCI).

- It is India's first Quadrivalent Human Papillomavirus Vaccination (qHPV) designed to protect women from cervical cancer.

About Cervical Cancer:

- Cervical cancer is a prevalent sexually transmitted infection.
- It's a type of cancer that occurs in the cells of the cervix, the lower part of the uterus that connects to the vagina.
- It is mostly caused by long-term infection with particular forms of HPV.
- It is the second most prevalent cancer form and the second leading cause of cancer death in women of reproductive age (15-44).
- According to the World Health Organization's International Agency for Research on Cancer, India accounts for roughly one-fifth of the global burden, with 1.23 lakh cases and around 67,000 fatalities every year.

How will the new vaccine help?

- It's based on VLP (Virus-Like Particles), similar to the Hepatitis B vaccination, and gives protection by producing antibodies against the HPV virus' L1 protein.
- It is said to be effective against four strains of the virus - Type 6, Type 11, Type 16 and Type 18.
- A quadrivalent vaccine is a vaccine that works by stimulating an immune response against four different antigens, such as four different viruses or other microorganisms.
- It has a significant potential to eliminate cervical cancer and it would be helpful if it will be included in national HPV vaccination efforts and offered at a lower cost than existing vaccinations.
- After the DGCI approval, it would enable the government to procure vaccines in bulk in order to vaccinate around 50 million girls aged between 9 to 14 years.
- The vaccine is extremely effective only when it's administered before the first sexual intercourse.

Jute Mark India Logo

News: Government launches 'Jute Mark India' logo to promote jute products.

About:

- The Jute Mark India (JMI) scheme will provide the collective identity and assurance of origin and quality for traditional jute and jute products. The JMI would therefore be a hallmark of powerful creative work that defines the jute product with quality, distinguishes it from the competition and connects it with customers.
- The certification is expected to boost the domestic market and exports of jute products from India.

World's Great Places of 2022

News: Indian city Ahmedabad and the state of Kerala have been mentioned in TIME magazine's list of the world's greatest places of 2022.

Why Ahmedabad?

- India's first UNESCO World Heritage City
- Cultural tourism - Ancient landmarks and contemporary innovations, Gandhi Ashram, Navratri (longest dance festival in the world)
- Ahmedabad's Gujarat Science City, a "sprawling entertainment centre and theme park", unveiled three major attractions last year, including a 20-acre nature park to educate the public on local flora as well as provide new spaces for playing chess and practicing yoga.

Why Kerala?

- Kerala is one of India's most beautiful states
- Spectacular beaches and lush backwaters, temples, and palaces, it's known as "God's own country"
- Kerala is boosting motor-home tourism
- State's first caravan park, Karavan Meadows, opened in Vagamon, a scenic hill station.

Build-Operate-Transfer Model

News: For new projects, NHAI will prefer the build-operate-transfer model.

About:

- Under this model, private partner is responsible for design, build and operation (during the contractual period) and the player transfers back the facility to the public sector. This method is most widely used by governments.
- The developers will be recouping the investments by way of user charges or tolls charged from customers using the facility.
- The BOT (toll) model was the preferred model for road projects, accounting for 96% of all projects awarded in 2011-12. But this progressively reduced to nil.
- When the private company didn't had incentives post-2011, the government shifted to the EPC and HAM models to plug the funding gap. The return to BOT could be a big positive for the sector.

Namsai Declaration

About:

- This declaration is signed between the states of Assam and Arunachal Pradesh on July 15, 2022, at Namsai, Arunachal Pradesh to minimize the border dispute between the two states in respect of 123 villages placed before the Local Commission by Arunachal Pradesh.
- According to the declaration, all border issues between Assam and Arunachal Pradesh will be confined to those raised before the local commission in 2007.

Sodium-Ion Battery

News: Recently, University of Houston scientists developed an electrolyte that contributes significantly to making sodium ion batteries more commercially viable. Such battery may soon be an alternative to lithium-ion batteries.

**What is sodium-ion battery and its benefits?**

- They are rechargeable batteries which require sodium ion movement between electrodes during the charging and discharging of the battery, the cathode for these batteries is manufactured from sodium.
- It's cheaper to produce than their lithium counterparts because of the abundance of the raw materials required to make them.
- They are energy dense, non-flammable, and operate well in colder temperatures.
- Further they can store more energy per unit weight, this could make them well-suited for larger applications such as electric vehicles.
- They are less likely to experience thermal runaway, a condition that can cause fires in lithium-ion batteries.

Key Findings of the Study:

- The study concluded that with the help of the novel electrolyte, ambient temperature solid-state sodium-sulfur battery technology can be employed for grid-level energy storage systems.
- The novel structural and compositional design methodologies establish a new paradigm for the creation of safe, low-cost, energy-dense, long-life solid-state sodium batteries.

Mascot 'Jagriti'

News: The Department of Consumer Affairs on Friday launched a mascot 'Jagriti' to 'empower consumers and generate awareness of their rights'.
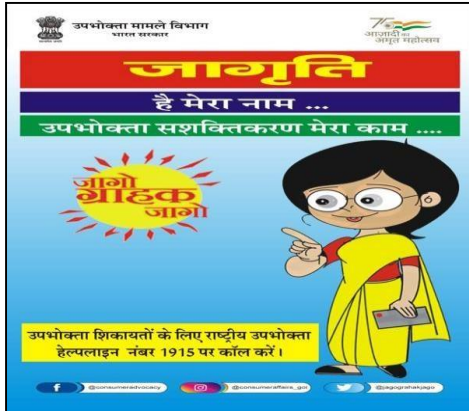
About:

- It will spread awareness about consumer rights, the consumer protection act 2019, Hallmarking, the provision of weights and measures act etc.
- Other initiatives – 'Jago Grahak Jago' campaign, National Consumer Helpline (NCH), Consumer welfare fund.

Chimeric Antigen Receptor T-Cell therapy
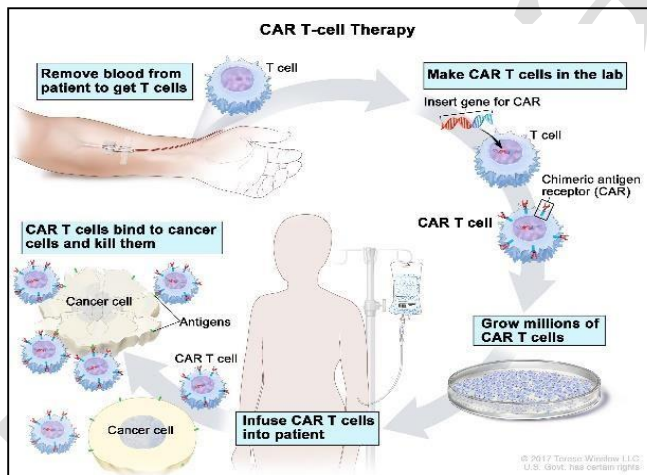
About:

- Chimeric antigen receptor T cells are T cells that have been genetically engineered to produce an artificial T cell receptor for use in immunotherapy. Chimeric antigen receptors are receptor proteins that have been engineered to give T cells the new ability to target a specific protein.

- It is used to treat certain blood cancers, and it is being studied in the treatment of other types of cancer.
- T cells are part of the immune system and develop from stem cells in the bone marrow. They help protect the body from infection and may help fight cancer.

Asiatic Black Bears

News: Scientists have calculated the density and population of Asiatic black without identifying individual animals through hair samples or camera trap images using a relatively new statistical model known as the Spatial Presence-Absence Model.

About:

- IUCN Status – Vulnerable
- Listed in Appendix I of CITES listing
- Listed in Schedule I of the Indian Wildlife Protection Act, 1972.
- A white 'V' mark on its chest is its unique feature which distinguishes it from the Sloth bear.
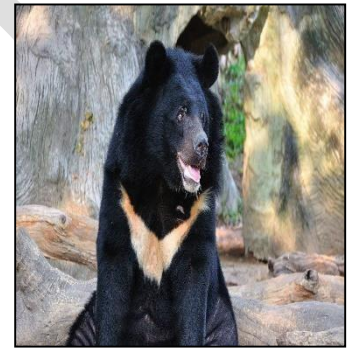
Habitat

- Mountainous and heavy forested areas across Southern Eastern Asia.
- In India it is found in mountainous regions (1200 m to 3300 m) in all the Himalayan states and in Mizoram, Meghalaya and Tripura.

Henley Passport Index 2022

News: The Henley Passport Index has recently released the list of the World's Most Powerful Passports for the year 2022, where it has ranked all the world's 199 passports according to the number of destinations their holders can access without a prior visa.

Key findings:

- This year's passport rankings 2022 reveal that Japan has bagged the top spot among 199 countries, while India remains ranked at the 87th spot.

- The ranking is based on data from the International Air Transport Association, which maintains the world's largest database of travel information, and it is enhanced by extensive, ongoing research by the Henley & Partners Research Department.
- The Japanese passport provides hassle-free entry to 193 countries, while Singapore and South Korea both provide entry to 192 countries.
- The Henley Passport Index uses 17 years of data and helps the government, as well as the global authorities, assess the value of citizenships of different countries.

Digital Banks

News: NITI Aayog Releases Report on Digital Banks.

About:

- NITI Aayog's report makes a case and offers a template and roadmap for a licensing and regulatory regime for digital banks. It focuses on avoiding any regulatory or policy arbitrage and offers a level playing field to incumbents as well as competitors.

Recommendation – The report recommends a carefully calibrated approach, comprising following steps:

- Issue of a restricted digital bank license (to a given applicant) (the license would be restricted in terms of volume/value of customers serviced and the like).
- Enlistment (of the licensee) in a regulatory sandbox framework enacted by the Reserve Bank of India.
- Issue of a 'full-scale' digital bank license (contingent on satisfactory performance of the licensee in the regulatory sandbox, including salient, prudential and technological risk management).

Namaste Scheme

News: Minister of State for Housing and Urban Affairs Kaushal Kishore said, the Government has formulated a National Action Plan for Mechanized Sanitation Ecosystem- NAMASTE scheme for cleaning of sewers and septic tank.

About:

- The scheme is a joint venture of Department of Drinking Water and Sanitation, Ministry of Social Justice and Empowerment and the Ministry of Housing and Urban Affairs.
- It aims to achieve outcomes like zero fatalities in sanitation work in India, no sanitation workers come in direct contact with human faecal matter and all Sewer and Septic tank sanitation workers have access to alternative livelihoods.
- The Ministry has shortlisted type of machineries and core equipments required for maintenance works, safety gear for Safai Mitras.

Sannati

News: The Archaeological Survey of India has now taken up conservation work at this important Buddhist site near Kalaburagi. It is an ancient Buddhist site on the bank of the Bhima river near Kanaganahalli in the Kalaburagi district of Karnataka.
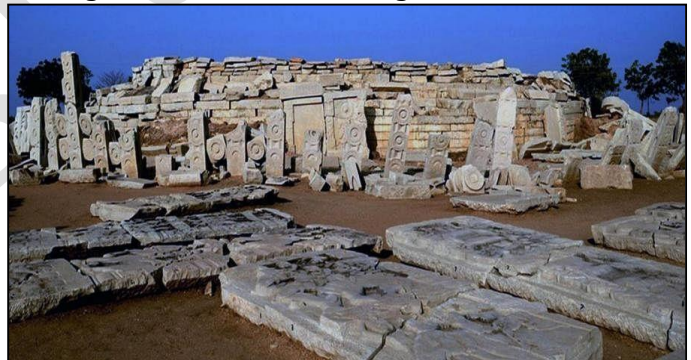
About:

- The Kanaganahalli excavation opened up many marvels such as:
- Magnificent Maha Stupa, which was referred to as Adholoka Maha Chaitya (the Great Stupa of the netherworlds) in the inscriptions and,
- The stone portrait of Emperor Ashoka, surrounded by his queens and female attendants considered to be the only surviving image of the Mauryan Emperor which had the inscription 'Raya Asoko' in Brahmi on it.

Marburg Virus

News: It is in the same family as the Ebola virus disease. In other words, Marburg is as deadly as Ebola and so far, no treatment or vaccine has been found to treat/cure/prevent from the disease.

About:

- According to the World Health Organisation, Marburg is a highly infectious viral disease that leads to haemorrhagic fever, with a fatality ratio of up to 88%.
- MVD outbreaks have been reported in many African countries in the past, including Kenya, Congo, Angola, South Africa, and Uganda.

How is it transmitted?

- Human infection with Marburg virus disease initially results from prolonged exposure to mines or caves inhabited by Rousettus bat colonies, as per WHO.
- Once a human is infected with the Marburg virus, it can spread through direct contact with the blood, secretions, or other bodily fluids of infected people, and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids.

What are the symptoms?

- A person infected with Marburg virus suffers from high fever, severe headache, muscle pain, abdominal pain, and cramping. Nausea and vomiting can also begin on the third day of infection. Diarrhoea can persist for a week.

Diagnosis and Treatment

- There are various methods to confirm the presence of Marburg virus in an individual and these diagnostic methods include antibody enzyme-linked immunosorbent assay (ELISA), antigen detection tests, serum neutralization tests, reverse-transcriptase polymerase chain reaction (RT-PCR) assay, and virus isolation by cell culture.
- There is no specific treatment for Marburg Virus Disease yet. However, a range of potential treatments including immune and drug therapies, blood products are currently being evaluated, as per WHO.

Chin Refugees

News: Persecution by Myanmar's Tatmadaw, a junta regime has led to the exodus of half a million of Myanmar's people (including 50,000 ethnic Chin) from Myanmar.

About:

- Chin, a group of tribes of Mongol origin, occupy the southernmost part of the mountain ranges separating Myanmar (Burma) from India.
- Both Mizo and Chin communities (predominantly Christian) share a common history. Both come from the same larger Zo tribe, therefore share a strong ethnic bond predating India's Independence.
- There is a Free Movement Regime (FMR)2018 between India and Myanmar that allows both communities on either side to go up to 16 km on the other side and stay up to 14 days.

Why has there been difference of opinion between Central government and state government in Mizoram?

- According to the Central government, the Chin refugees are not 'refugees' but are rebels who continue to extend support to rebel groups in Myanmar.
- So, MHA advised the state government to take appropriate action to prevent a possible influx into Indian territory.
- The Centre directed the North-eastern states bordering Myanmar that they do not have powers to grant 'refugee status to any foreigner'.
- However, the Mizoram government has defied the MHA orders to 'detect and deport refugees'.

MIST Submarine Cable system

News: Expert appraisal Committee under the Ministry of forest has
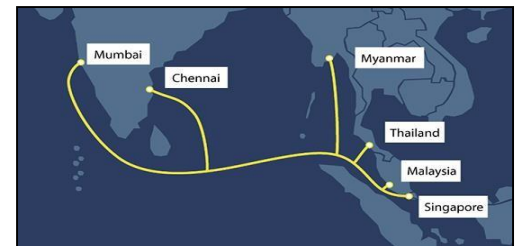
given the coastal Regulatory Zone clearance for the 8100 KM long Myanmar/Malaysia-India-Singapore Transit (MIST) Submarine cable System connecting Tuas (Singapore) to Mumbai.

What is Submarine Cable?

- A submarine cable system consists of a communication cable laid on the sea bed between cable landing stations (CLS) on the land to carry telecommunication signals across stretches of ocean. Submarine cable systems generally use optical fibre cables to carry international traffic.
- MIST will directly connect Singapore, Malaysia, Myanmar, Thailand and India (Mumbai and Chennai) and deliver a design capacity of more than 216 terabits per second (Tbps).

India-UK MOU

News: India and the UK sign MoU on Mutual Recognition of Academic Qualification to facilitate student mobility and academic collaboration between Higher Education Institution (HEIs).

About:

- In May 2021, during the Virtual Summit between Prime Ministers of India and UK, a comprehensive Roadmap to 2030 was adopted for an enhanced bilateral cooperation between the two countries. Both sides also agreed to a new Enhanced Trade Partnership.
- Education forms an important pillar of this roadmap. In light of India's National Education Policy 2020 (NEP 2020), the two sides agreed to expand educational by agreeing to a mutual recognition of academic qualifications.
- This is a landmark moment in our bilateral educational relations as signing of this MoU would enable smoother student mobility between the two countries and help in developing stronger institutional collaboration and widen the scope of academic and research collaboration between the Higher Education Institutions of both countries.

Low temperature thermal desalination technology

News: A Desalination Plant has been developed by National Institute of Ocean Technology (NIOT), that will convert the saline or saltish seawater into drinking water. This technology has been successfully demonstrated in Lakshadweep islands.
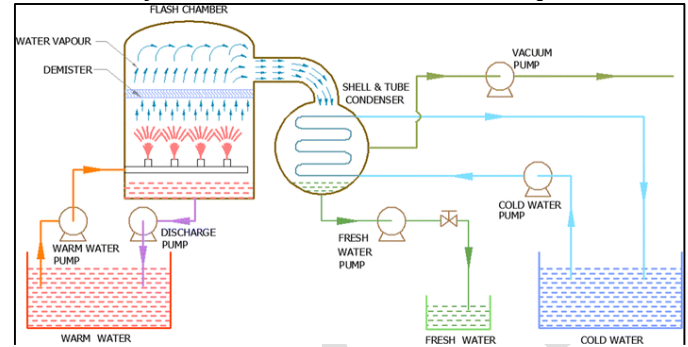
What is LTTD Technology?

- Low-temperature thermal desalination (LTTD) is a technique for desalination. It works on the notion that; water evaporates at lower temperatures, at low pressures. It utilizes vacuum pumps for creating a low pressure and low-temperature environment, resulting into evaporation of water at a temperature gradient of 8 °C. Cooling water is supplied from deep sea depths, which is pumped up to condense evaporated water vapor. We get purified water from the resulting condensate.

Features of Desalination Plant:

- The Desalination Plant is based on Low Temperature Thermal Desalination (LTTD) technology.
- The LTTD technology converts the salt or saline water into potable drinking water.
- LTTD technology was suitable for Lakshadweep islands, because there is a temperature difference of 15 degrees Celsius between sea surface water and deep-sea water, as required by the technology.

Safety aspects of Toys

News: Bureau of Indian Standards has published 10 Indian Standards on safety aspects of Toys related to physical safety, safety against chemicals, flammability, electrical safety.

What is BIS?

- BIS is the National Standard Body of India for the harmonious development of the activities of standardization, marking and quality certification of goods.
- The Bureau of Indian Standards (BIS) Act 2016 establishes the Bureau of Indian Standards (BIS) as the National Standards

Body of India. It has included a new area for standardization such as repair or recall of goods, Alternate fuels, E-mobility, Medical Devices, Smart Cities, Digital Technologies and New and Renewable energy.

About safety aspect of Toys:

- Seven of these Standards are the part of Quality Control Order (QCO) on 'Safety of Toys' mandates that toys for children under 14 years of age bear ISI Mark
- No person is permitted to manufacture, import sell or distribute, store, hire, lease or exhibit for sale toys which do not bear ISI Mark under a license from BIS.
- Before the license is granted, toys undergo stringent tests for various physical, chemical and electrical safety requirements to ensure that they are safe for children.

Migratory Monarch Butterfly

News: The migratory monarch butterfly (Danaus plexippus plexippus), known for its spectacular annual journey of up to 4,000 kilometres across the America, has entered the IUCN Red List of Threatened Species as **Endangered**, threatened by habitat destruction and climate change.

About:

- The endangered migratory monarch butterfly is a subspecies of the monarch butterfly (Danaus plexippus). The native population, known for its migrations from Mexico and California in the winter to summer breeding grounds throughout the United States and Canada, has shrunk between 22 per cent and 72 per cent over the past decade.

What has contributed to its collapse?

- Legal and illegal logging and deforestation to make space for agriculture and urban development has already destroyed substantial areas of the butterflies' winter shelter in Mexico and California, while pesticides and herbicides used in intensive agriculture across the range kill butterflies and milkweed, the host plant that the larvae of the monarch butterfly feed on.
- Climate change has significantly impacted the migratory monarch butterfly and is a fast-growing threat; drought limits the growth of milkweed and increases the frequency of catastrophic wildfires, temperature extremes trigger earlier migrations before milkweed is available, while severe weather has killed millions of butterflies.

You can quote examples like Migratory monarch butterfly in your essays or GS paper where impact of Climate Change on environment, species or humans is asked. Quoting such examples adds value to your answers. To read more about the topic and know how community is working together to conserve such butterfly species you may refer to following link - https://swarajyamag.com/science/migratory-monarch-butterflies-are-now-an-endangered-species

Kargil Vijay Diwas

News: The Kargil Vijay Diwas is commemorated every 26th July in India, to observe India's victory over Pakistan in the Kargil war for ousting Pakistani forces from their occupied positions and mountain tops of Northern Kargil district in Ladakh in 1999.

Background:

- After the Indo-Pak war of 1971, there had been many military conflicts.

- Both the countries conducted nuclear tests in 1998 which further escalated tensions and finally the Kargil War in 1999.
- Kargil War, also known as the Kargil conflict, was fought between May-July of 1999 in the Kargil (now a district in the UT of Ladakh) district of Jammu and Kashmir along the Line of Control (LoC) in which India got the victory.
- In the year 1999, India and Pakistan signed the Lahore Agreement to mutually resolve the Kashmir issue in a peaceful manner. However, the Pakistani troops began infiltrating toward the Indian side of the Line of Control (LoC) under Operation Badr, hoping to cut off Indian Troops in Siachen.
- The Indian Army responded by launching **Operation Vijay.**
- On 3rd May 1999, Pakistan started this war when it had infiltrated into the high altitudes in the rocky mountainous region of Kargil with around 5,000 soldiers and captured it.
- When the Indian Government got the information about it, 'Operation Vijay' was launched by the Indian army to throw back the intruders who had treacherously occupied Indian Territory.

Snow Leopard

News: Recently, a study conducted by Zoological Survey of India (ZSI) under National Mission on Himalayan Studies highlighted relation between habitat uses by Snow Leopard, Siberian ibex and blue sheep. It aimed at examining how the predator used habitat in presence or absence of its prey species and vice-versa.

About:
- **Scientific name – Panthera uncia**

- Snow leopard act as an indicator of the health of the mountain ecosystem in which they live, due to their position as top predator in the food web.
- IUCN Status – **Vulnerable**
- Listed in Schedule I of Indian Wildlife Protection Act, 1972.
- They have a vast but fragmented distribution across the mountainous landscape of central Asia, which covers different parts of the Himalayas such as Ladakh, Himachal Pradesh, Uttarakhand, and Sikkim.

Lumpy Skin Disease

News: Over 1000 animals have died in Gujarat due to the infectious lumpy skin disease.

About:
- Lumpy skin disease (LSD) is an infectious disease in cattle caused by a virus of the family Poxviridae, also known as the Neethling virus.
- The disease is characterized by fever, enlarged superficial lymph nodes and multiple nodules (measuring 2–5 centimetres (1–2 in) in diameter) on the skin and mucous membranes (including those of the respiratory and gastrointestinal tracts).
- It is transmitted by blood-feeding insects, such as certain species of flies and mosquitoes, or ticks.
- Lumpy skin disease virus is capable of infecting humans with direct transmission without the need for an insect vector; most probably by inhalation and certainly by direct contact with infected materials, infected persons [man to man], and as laboratory-acquired infection.

Steps taken by Gujarat Government:
- Till now, over three lakh animals have been vaccinated against the disease.

- Along with this, the survey and analysis of lumpy skin diseases has also been started in which survey and vaccination work is being done through 192 veterinary officers and 438 livestock exports. A 24-hour toll free number has also been started by the Gujarat government, in which the cattle owners can call the number 1962 and get information.
- If a case is detected in any village then all animals are being vaccinated on a large scale within a radius of 5 km. Companion Lumpy Skin Disease is spread through the virus in animals like cows and buffaloes. Shelter home is also being started for lumpy virus affected cattle.

Alibag White Onion gets GI Tag

About:
- Farmers in Alibag claim that white onions have been grown here for centuries using only traditional and genuine seeds. Locals have learned and mastered the skills required for white onion cultivation.
- According to farmers, Alibag's geo-climatic conditions distinguish it from other white onion-producing areas, and this is why Alibag white onion has developed a distinct taste, flavour, and shape.
- The GI tag provides a distinct identity to the white onion, which has medicinal properties and has been grown in a traditional manner for a long time. Farmers will benefit directly because the white onion will command a higher price as a result of the GI tag.

How long is registration of GI tag valid?
- The registration of a geographical indication is valid for a period of 10 years.
- It can be renewed from time to time for a further period of 10 years each.
- In India, Geographical Indications registration is administered by the Geographical Indications of Goods (Registration and Protection) Act, 1999 which came into force with effect in September 2003.
- The first product in India to be accorded with GI tag was Darjeeling tea in the year 2004-05.

Sakurajima Volcano

News: Recently, the Sakurajima Volcano erupted on Japan's major western island of Kyushu. In 2021, the Fukutoku-Okanoba Submarine Volcano exploded in the Pacific Ocean, off Japan.
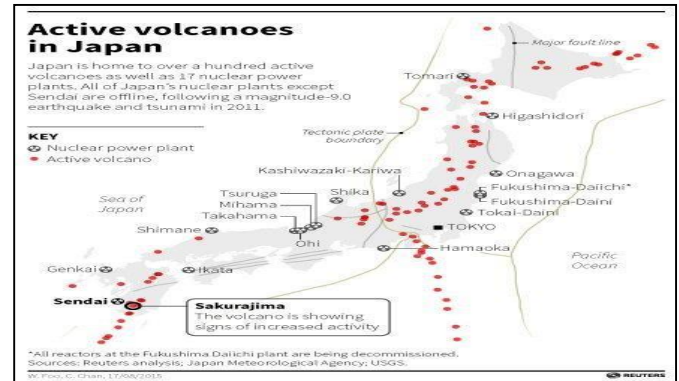
About:
- Sakurajima is one of Japan's most active volcanoes and eruptions of varying levels take place on a regular basis.
- It is an active stratovolcano.
- The largest historical eruptions of Sakurajima took place during 1471-76 and in 1914. Its eruption has been recorded since the 8th Century.
- Due to its frequent deposition of ash on Kagoshima, and due to its explosive potential, it is considered as one of the very dangerous volcanoes.