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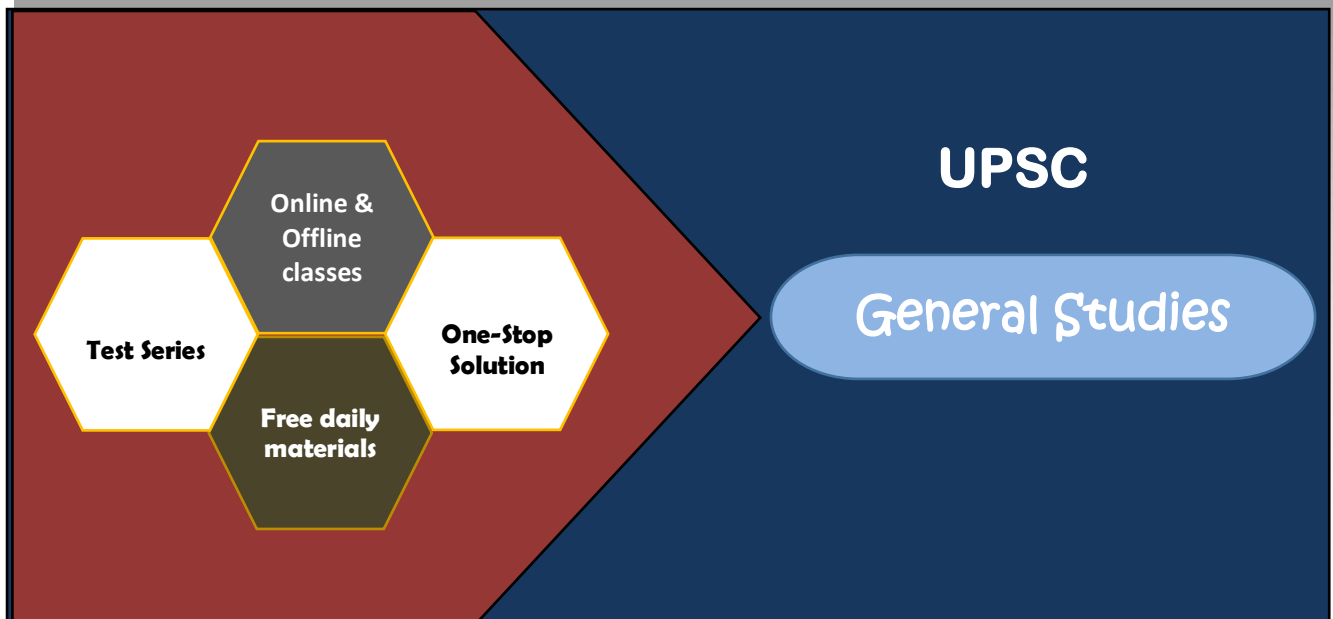
Monthly current affairs magazine

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THE HINDU & INDIAN EXPRESS**



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GS 2 : Polity, Governance, International Relations

1. India's 1991 liberalisation leap and lessons for today

Context:

- In light of the historic economic contraction of the Indian economy induced by the COVID-19 pandemic and calls for economic reforms to revive growth, the article discusses the 1991 economic reforms and the road ahead for India.

Background:

Pre-reform era:

- The Indian economy before the 1991 reforms was based on strict regulation and could be characterized as a **controlled system**.
- The public sector accounted for a significant proportion of the economy with the so-called **critical sectors reserved for the public sector despite their lacklustre performance**.
- The private sector was not allowed to participate in a number of so-called critical sectors. In other sectors too, the private sector's participation was highly regulated and dependent on obtaining industrial licences from the administration. This had given rise to a system popularly referred to as the **Licence Raj**.
- Over 860 items were reserved exclusively for small-scale producers, including many that had very high export potential. This robbed the economy of potential advantages of production at scale offered by bigger industries.
- **Imports were very strictly controlled** to protect scarce foreign reserves and also to protect the domestic producers from import competition. **Foreign Direct Investment (FDI) was also discouraged**.
- Such a controlled system was not suitable for encouraging enterprise or innovation.

1991 Economic Reforms:

- The 1991 economic reforms marked **significant liberalization of the Indian economy** including measures such as liberalization of industrial licencing, increased privatization and moving to a flexible exchange rate, etc. It **focussed on industrial, trade and financial sector reforms**.
 - The 1991 reforms with their emphasis on privatization aimed to **unleash the energies of the private sector** to accelerate economic growth.

- Economic liberalization **encouraged enterprise and innovation in the economy.**
- The emphasis on globalization ensured India was able to **become part of the global supply chains** and gain advantages from it.
- The 1991 economic reforms resulted in significant gains for India.
 - The GDP growth averaged 7% in the 25 years from 1992 to 2017, compared with an average of 5% in the preceding ten years and 4% in the preceding 20 years.
 - The 1991 reforms, though they mainly emphasized economic growth, did ensure an adequate flow of benefits to the poor. **As the economic growth accelerated, poverty declined.**
 - Between 2004-05 and 2011-12, about 140 million people were pulled above the poverty line.

Shortcomings of the 1991 reforms:

- Though the reforms were hugely successful a lot remains to be done.
 - The **reforms envisaged in the financial sector remain an unfinished business** as is evident from the ongoing crisis in the financial system of India, plagued by the NPA crisis.
 - **Social sectors like health and education haven't improved commensurate with the economic growth.**
 - The development strategy has failed to suitably acknowledge and deal with the **environmental impact of economic growth.**
 - **Key factor market reforms in areas of labour and land remain an unfinished business.** This seems to be holding up further investment into the Indian economy. The attempts made to introduce land and labour reforms have faced opposition from several sections.

Concerns:

- The article expresses concerns over several developments in the recent past.

Increasing import tariffs:

- As against the progressive lowering of import tariffs over the years, there has been a reversal of this trend over the past few years.
- While this appears to be in line with rising protectionism globally, it could hamper India's stated ambition to become part of global supply chains and adversely impact India's ability to play a greater role in world trade.

Decision to stay out of RCEP:

- India decided to stay out of the **RCEP [Regional Comprehensive Economic Partnership]**, based on the fear of flooding of cheap products from countries like China, a member of RCEP.
- This marks a departure from India's attempt to move from "Look East" to "Act East" and also its attempts to become part of the global supply chains.

Employment concerns:

- The spectre of **jobless growth** has been a matter of great concern in the recent past.
 - Jobless growth is an economic phenomenon in which a macroeconomy experiences growth while maintaining or decreasing its level of employment.
 - A jobless growth economy indicates the existence of changes to the fundamental basis of work for everyone. In India, this could be observed in the change from being a predominantly agricultural economy to the services sector playing a significant role.
 - While some workers will do well, as they have the skills and training that growing industries require, others face long-term unemployment or underemployment and will be unable to find work until they obtain new skills.
- The substantial slowdown in GDP growth after 2016-17 led to employment actually falling from 474 million in 2011-12 to 469 million in 2018-19. **Open unemployment has increased.**

COVID-19 induced economic shock:

- According to provisional National Income estimates, **GDP contracted by 7.3% in 2020-21**. Many analysts say this underestimates the contraction as the adverse impact on the informal sector is not captured.
- This sharp fall in the GDP has led to a **contraction in total employment**. The pandemic has led to severe income and job losses adversely impacting the livelihood opportunities of several families in India.

Recommendations:

- India needs to get back to 7% to 8% growth if we want to make progress on poverty reduction and provide enough jobs for our growing labour force. In this respect, the article makes the following recommendations.

Addressing structural issues:

- Indian industry has to deal with **poor infrastructure, poor logistics and time-consuming trade procedures**, which reduce its price competitiveness in the global markets. These have to be addressed at the earliest.

On import duties:

- Given that the raising of import duties will also raise costs in the economy, the administration must desist from doing so.
- The government should engage with Indian industry and other experts to come to an agreement on what the average level of duties should be and how it should be reduced over time.
- India should **move to an average duty rate of about 7%, gradually narrowing the range of variation across products and eliminating duty reversals.**

RCEP membership:

- Instead of avoiding membership of multilateral trade platforms like RCEP over fears of competition, India should focus on **improving the competitiveness of its domestic industries.**
- To tackle unfair competition from China, India should consider imposing **anti-dumping duties** on China.
 - An anti-dumping duty is a tariff that a domestic government imposes on foreign imports that it believes are priced below fair market value.

Free Trade Agreements:

- Given the increasing tendency of major developed countries to engage in bilateral negotiations over multilateral forums, India too should adapt to this new reality and focus on **expediting its FTAs with the U.S., Europe and the U.K.**
- This can help ensure market access for India amid the growing levels of protectionism being observed.
- India should also consider a **give and take approach during these negotiations** balancing the current and future potential of such FTAs.

2. Google removed 59,350 posts in April

Context:

Google has submitted its **first monthly transparency report** as required under the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**.

Details:

- Google's transparency report says that it removed 59,350 pieces of content from its social media platforms in April 2021, following over 27,700 complaints received from individual users in India.
- About **96% of the complaints received were related to issues of copyright**, followed by trademark, defamation, legal, counterfeit and circumvention.
- Information Technology Rules, 2021 was enacted by the government in February 2021 and came into force in May.
- The rules **require social media platforms with more than 50 lakh users in India to publish a compliance report every month** mentioning the details of complaints received and action taken.

New Information Technology Rules

The new Rules have been passed under Sections 69A(2), 79(2)(c) and 87 of the Information Technology Act, 2000. These new rules supersede the previously enacted Information Technology (Intermediary Guidelines) Rules 2011.

- The Rules aim to provide a robust complaint mechanism for the users of social media and over-the-top (OTT) platforms to address their grievances.
- They place special emphasis on the protection of women and children from sexual offences on social media.
- The rules stress the point that online content publishers and social media intermediaries should follow the Constitution of the country and subject themselves to domestic laws.
- With these rules, India joins other international regimes that have provisions for digital media regulation and provides a comprehensive mechanism for the protection of digital media consumers.

IT Rules Background

In 2018, the Supreme Court had observed that the Indian Government may frame necessary guidelines to eradicate child pornography, rape and gangrape imageries, videos and sites in content hosting platforms and other applications.

- In 2020, an Ad-hoc committee of the Rajya Sabha submitted its report on the issue of social media pornography and its effect on children and society as a whole. The report recommended tracing the originator of such content.

- In 2020, the GOI also brought OTT platforms under the ambit of the Information and Broadcasting Ministry.

Details:

- The Information Technology (Guidelines for Intermediaries and Digital Media Ethics Code) Rules, 2021 also mandate that social media and messaging platforms will have to adhere to new requirements in assisting investigative agencies of the government.
- The Electronics and Information Technology Minister called it a soft-touch oversight mechanism to deal with issues such as the persistent spread of fake news and other misinformation.

Broadly, what do the new rules require digital platforms to do?

- The broad themes of the guidelines revolve around grievance redressal, compliance with the law, and adherence to the media code.
- Social media platforms will have to appoint a grievance officer to deal with users' complaints.
- The platforms whose registered users in India are above the threshold notified by the government must appoint a 'Chief Compliance Officer', who will have to ensure that the rules are followed.
 - The officer shall be liable in any proceedings relating to any relevant third-party information, data or communication link made available or hosted by that intermediary.
 - The intermediaries will also have to appoint a nodal contact person for 24×7 coordination with law enforcement agencies.
- A social media intermediary would have to enable the identification of the first originator of the information on its computer resource as may be required by a judicial order.
- For digital publishers of news and current affairs as well as video streaming services, an identical three-tier structure for grievance redressal has been mandated.
 - This structure will look into grievances in relation to a Code of Ethics, which is listed in the appendix to the rules.
 - Among other things, the Code of Ethics includes the 'Norms of Journalistic Conduct' as prescribed by the Press Council of India, as also content that shall not be published and the Programme Code under the Cable Television Networks (Regulation) Act, 1995.
 - The guidelines also require streaming services to classify content based on its nature and type.

3. Small doses

Context:

- Recently announced **financial stimulus package** to tackle the disruptions caused by the second wave of the COVID-19 pandemic.

Significance:

- The package will help **ease the pressure on sectors hit hard by the pandemic like the MSME sector and tourism** by extending **loan guarantees and concessional credit**. Enhancing loan guarantees will perhaps give risk-averse lenders more confidence in extending loans when the credit:deposit ratio has hit a multi-year low.
- Additional spending of ₹15,000 crore to ramp up paediatric healthcare, with guarantees for **₹50,000 crore low-interest loans for health projects** in the hinterland, is critical to cope with future pandemic waves as they will allow the **ramping up of available healthcare capacities**.

Concerns:

- The article argues that the relief package for the second COVID-19 wave falls short of expectations.
 - **The direct expenditure from the government is minimal**. Of the total ₹29 lakh crore, nearly ₹2.68 lakh crore of this is in the form of credit guarantees.
 - As the **direct stimulus to demand is abysmal**, the package will do little to help raise demand for goods and services in the economy which is a necessity for economic revival under current circumstances.
 - Weak demand is a bigger concern for the industry this year as **high inflation and an uncertain job market** have led to reluctance among the consumers to spend.
 - The provision of free visas is unlikely to gain traction till India has a firmer grip on the pandemic by providing vaccines for all, including for those under 18.

Recommendations:

- The administration should consider providing some form of **income support for the vulnerable sections in rural and urban areas**. This will not only help ease the pressure off such families and prevent them from falling into poverty but will also help generate demand in the economy for the revival of growth.

- The article also suggests that the government must **take adequate measures to bring down the high fuel prices**. Such a move will help dampen inflation, empower RBI to lend greater support to growth and leave a little more money in people's hands to spend.

4. 9 European nations clear SII jab

Context:

Nine European countries have given recognition to the Covishield vaccine produced by the Serum Institute of India (SII).

Details:

- The European Union (EU) has started the "Green Pass" facility, which will allow people vaccinated with an authorised set of vaccines to travel within its zone, covering 26 countries.
- India has raised concerns with the EU for **not recognising Indian vaccines Covishield and Covaxin for the Green Pass**.
- The **nine countries' move is a national move by them** and not by the EU, headquartered in Brussels.
 - The EU member-states that have recognised Covishield include Austria, Germany, Slovenia, Greece, Iceland, Ireland and Spain.
- Estonia has authorised all vaccines approved by GoI.
- Switzerland (Non-EU member) has also approved Covishield.

Note:

The World Health Organization (WHO) has said that **any COVID-19 vaccine it has authorised for emergency use should be recognised by countries as they open up their borders to inoculated travellers**.

5. India seeks Maldivian govt. action on 'repeated attacks' in media

Context:

India has sought Maldivian government action on persons behind media reports and social media posts attacking the dignity of its resident diplomats.

Background:

- President Ibrahim Mohamed Solih's government is seen to be a close ally of India, with enhanced development and defence cooperation since 2018.
- However, some government critics are **sceptical of greater military ties with India.**
- In May 2021, an announcement made in India, on the **Cabinet clearing a proposal to set up a second mission in the Maldives, sparked concern among sections.**
- This prompted a renewed **"#Indiaout" campaign on Maldivian social media.**

Details:

- The High Commission of India said the **repeated attacks on resident diplomats were motivated, malicious and increasingly personal.**
- It urged the Foreign Ministry to take steps to ensure **enhanced protection of the Mission and its officials.**
- It urged the authorities to ensure action, in accordance with International Law and Maldivian Law against the perpetrators for **gross violations of the Vienna Convention of Diplomatic Relations.**

Vienna Convention of Diplomatic Relations:

- Vienna Convention of Diplomatic Relations is an international treaty that **defines a framework for diplomatic relations between independent countries.**
- It was **adopted in 1961** by the United Nations Conference on Diplomatic Intercourse and Immunities held in Vienna, Austria.
- It specifies the **privileges of a diplomatic mission** that enable diplomats to perform their functions without fear of coercion or harassment by the host country.
 - This forms the **legal basis for diplomatic immunity.**

6. In last academic year, only 22% schools had Internet

Context:

Union Education Minister has released the **Report on Unified Information System for Education Plus (UDISE+) 2019-20** for School Education in India.

(UDISE+) Report:

- UDISE+ report collates data from more than 15 lakh schools across India.
- The Department of School Education and Literacy (DoSEL) has developed the UDISE+ system.
- The UDISE+ system of **online data collection** was developed in 2018-19 to overcome the issues related to manual data filling in paper format and subsequent feeding at the block or district level, which was in practice from 2012-13.
- Being an online application, UDISE+ has a number of entry-level checks built in the data entry module at all levels in real-time. That helps to improve data quality and speed up data entry and its verification.
- UDISE+ data is **hosted on the server of the National Informatics Centre (NIC)**.

Key Findings:

- **The Gross Enrolment Ratio (GER)** at all levels of school education **has improved in 2019-20** compared to 2018-19.
 - 98% of students in Classes 1-8 attended school, though the GER for secondary and senior secondary students stood at 78% and 51% respectively.
- Efforts have been made to ensure universal accessibility of education for persons with disabilities.
 - **The enrolment of Divyang students** has increased by 6.52% (2018-19).
- **Pupil-Teacher Ratio (PTR)** has improved at all levels of school education.
- Between 2012-13 and 2019-20, the **Gender Parity Index (GPI)** at both **Secondary and Higher Secondary levels have improved**.
 - At present, the **GPI is 1 or more at all levels of school education**.
- In 2019-20, **more than 90% of schools in India had hand wash facilities** as compared to only 36.3% in 2012-13.
- In the academic year that ended with school closures due to COVID-19, **only 22% of schools in India had Internet facilities**.
- Among **government schools, less than 12% had Internet** in 2019-20, while **less than 30% had functional computer facilities**.
 - This affected the kind of **digital education options** available to schools **during the pandemic**, as well as **plans for hybrid learning** in the days ahead.
 - UDISE+ data makes clear the **digital divide**. The **internet connectivity divide** is even starker.

Gross Enrolment Ratio

- The Gross Enrolment Ratio (GER) compares the enrolment in a specific level of education to the population of the age group which is age-appropriate for that level of education.
- Eg: The GER of primary level is student enrolment in classes 1 to 5 expressed as a percentage of the population in the age group 6-10 years.
- GER greater than 100% might indicate the presence of over or underage children in a particular level of education.

Gender Parity Index

- The Gender Parity Index (GPI) of GER shows whether the representation of females in school education is in line with the representation of girls in the population of the corresponding age group.
- GPI value 1 or more shows that the GPI is favourable to the girls, while a GPI of less than 1 shows relative underrepresentation of girls in that specific level of school education.

Pupil Teacher Ratio

- The Pupil Teacher Ratio (PTR) at different levels of education show the availability of adequate number of teachers for teaching the children enrolled at different levels of education.
- A reduction in the PTR indicates that one teacher has to teach less number of children, resulting in improvement in quality of teaching.

7. Envisioning the post-pandemic smart city

Context:

- The article analyzes the smart cities scheme and suggests necessary changes in approach and implementation in the post-pandemic world.

Background:

Challenges in urban areas:

- India's cities have had to face the challenges of infrastructure deficits, inadequate water supply, waste management, sewerage and transport arrangements, high levels of pollution and, with climate change, frequent extremes of floods and drought.

Smart Cities Mission:

Smart City:

- The traditional understanding of smart cities involves a **technocentric vision**, with sensors everywhere, smart homes, high levels of connectivity, massive and ubiquitous data collection by various agencies, and a continuous flow of useful information to citizens.
- These will help governments allocate resources optimally and take timely decisions to raise efficiency and improve standards of living.

Progress of the scheme:

- Over the years, Smart Cities Mission projects converged with other infrastructure programmes such as **AMRUT**, the Atal Mission for Rejuvenation and Urban Transformation and **the PMAY (Urban)**, the Pradhan Mantri Awas Yojana, for housing.
- The smart cities mission has also got support from international agencies to adopt best practices on mobility and transport, energy and reducing carbon emissions.
- The latest official count shows that 5,924 mission projects worth ₹1,78,500 crore have been tendered under the Smart Cities Mission.

Smart Cities Mission

Recommendations for the post-pandemic phase:

- The experience of the COVID-19 pandemic is a clear indication that the pathway for 'smart cities' needs to change and in this direction, the article suggests the following measures.

Focus on health:

- The COVID-19 pandemic has exposed the lack of adequate health facilities in urban areas.
- One component of the smart cities mission scheme, **the Integrated Command and Control Centres (ICCCs)**, is a good example worth considering. These centres functioned as "war rooms" for COVID-19, and helped cities in fighting the pandemic through information dissemination, improving communication, predictive analysis and supporting effective management.
- Such a system should be replicated and expanded further to ensure that citizens have access to useful information like health alerts, vaccinations, hospital beds and topical advice.

Mobility related:

- The article suggests that **pedestrianisation should be encouraged** over motorisation where the **priority should be to move people rather than vehicles**.
- The available road spaces should be appropriately apportioned for bicycles as they are relatively safe and is capable of complementing public transport for last-mile connectivity.

Environmental sustainability:

- The development of the cities should appropriately **consider the environmental impact (climate change audit) and take remedial measures**.
- Additionally, there should also be an emphasis on **preserving existing wetlands, lakes while also creating new urban gardens and water bodies**.
- Such a “**green and blue**” city would mean less destructive flooding, more water to harvest and lower peak temperatures.

Making it more democratic:

- Democratising smart cities planning has to **ensure every section of society has a voice in the process** of selection and monitoring of projects undertaken in the mission.
- Given the ground-level awareness of the situation, the people will be able to better articulate their needs and this will help ensure better utilization of funds for the scheme.

Social aspects of a smart city:

- As against the traditional techno-centric vision of a smart city, the article also recommends a **social dimension to such smart cities** wherein there should be ample common spaces that allow for the people to intermingle.

Conclusion:

- The pandemic has come as a remarkable opportunity to review the paradigm of smart cities.
- Going forward the mission will have to **frame the plans around people and nature and avoid expensive technological solutionism**.

8. Net Loss

In the light of the stark digital divide in India's school education system, the article talks about the need for the Centre to **provide Internet links to all schools as an essential service.**

Details:

- Education Ministry's **Unified District Information System for Education Plus (UDISE+) 2019-20** highlights the country's digital divide in school education, reflected by the **absence of computers and Internet access on campus.**
- With the **advent of hybrid learning even ahead of the coronavirus crisis** online access and computers are essential to make the **learning process more engaging.**

Issue:

- When the pandemic hit, it became painfully evident that most students had to rely on remote learning.
- Many students faced the double jeopardy of **not possessing their own computing devices and smartphones at home**, and their schools struggling without adequate digital infrastructure.
- In remote areas, particularly in the Northeast, many had to travel closer to mobile phone towers to access the Internet on shared phones to get their lessons.

Findings of the UDISE+ Report:

- The latest data confirm that **a mere 22% of schools across the country on average had Internet access**, while **government institutions fared much worse at 11%.**
- On the second metric of **functional computer access**, the **national average was 37%** and for **government schools, 28.5%.**
- Also, the range of deficits reflects deep asymmetries: 87.84% of Kerala schools and 85.69% in Delhi had an Internet facility, compared to 6.46% in Odisha, 8.5% in Bihar, 10% in West Bengal and 13.62% in Uttar Pradesh.

Way Forward:

- Pandemic has **compelled all countries to evaluate hybrid education models**, with a mix of lessons delivered virtually now and on campus later.

- Students and teachers not being able to use computers and the Internet is acknowledged to be a **form of deprivation** just as the **inability to attend in-person classes**.
- In such a multi-layered process, there should not be a further delay in **bringing computers and the Internet to all schools**.
- The **Centre must explore all options**, such as the **National Broadband Mission, the BSNL network and other service providers, to connect schools**.
- Besides public funding, communities, corporates and hardware makers can use **recycling and donation options**.
- The upcoming **5G standard with the benefit of high wireless bandwidth** may also be able to help bridge the gap quickly.

9. In centenary backdrop, this is no hand of peace

Context:

As the Communist Party of China celebrates the 100th-anniversary celebrations of its foundation, an atmosphere of unpredictability persists as regards India-China relations.

Issues:

- While the situation in Eastern Ladakh currently remains tense, the bloodiest clash in recent decades that occurred in the Galwan Heights is still fresh in India's memory.
- After some progress in talks, matters have since reached a stalemate.
- Meanwhile, there is new information on China's operations in the border regions across Ladakh.
 - China is raising new militia units comprising local Tibetan youth for **high-altitude warfare near Eastern Ladakh**.
 - The new **Mimang Cheton** units are similar to **India's elite and decades-old Special Frontier Force consisting of persons of Tibetan origin**.

Global concerns:

- Many nations have begun **expressing concern about the threat posed by China** to the existing world order.
- In the recent past, G-7 and North Atlantic Treaty Organization, have criticised China for its **military ambitions and the threat it posed to world peace**.

- It has been condemned globally for its actions in the **South and East China Seas, its treatment of its Uighur Muslim minority, and its actions in Hong Kong.**

Finding explanation for China's behaviour vis-à-vis India:

- In the late 1950s and 1960s, **China's then Chairman, Mao Zedong, dealing with a difficult situation** on account of his ill-conceived policies and programmes, **embarked on his campaign to attack India.**
 - Mao's actions were intended **partly to divert attention from China's internal turmoil at the time.**
- Another instance of this kind would be **Deng Xiaoping's behaviour following the Tiananmen Square movement** in the 1980s.

Current Scenario:

- **Xi Jinping is seen as Mao's clone**, someone who seeks to achieve the same kind of dominance over the CPC.
- He is **seeking to consolidate his power and achieve a pre-eminence of the kind enjoyed by Chinese Emperors in the past.**
- However, China's misadventure in the Ladakh heights in 2020, **exposed certain shortfalls with regard to the mechanisation of China's People's Liberation Army (PLA).**
- It **diminished China's hopes of becoming fully mechanised by the time the PLA celebrates its centenary in 2027.**
- Much of the blame for the situation is being attributed to Mr. Xi, given the extent of concentration of power in his hands.
- Besides, several of Mr. Xi's other ideas have run into difficulties. However, the extent of **inner-party tensions is little known to the world outside**, given the **opacity of Chinese society**, but the existence of dissidence within the CPC is known.
- What may be aggravating Chinese leadership concerns at this time is that the **world is seemingly tilting towards India** at this juncture.
 - India is regarded as more sophisticated, diplomatically, and more flexible, ideologically, compared to China.

Conclusion:

All the events in the recent past, tensions between India and China, Xi's ambitious foreign policy suggest that **India should expect, prepare for, more situations of this kind, with many more provocations coming from China.**

10. Unjust green

Context:

The European Union (EU) has started the “Green Pass” facility formally called the EU Digital COVID Certificate (EUDCC).

- The Green pass will **allow people vaccinated with an authorised set of vaccines to travel within its zone**, covering **26 countries**.

Issue:

- EU’s decision has set off a storm of protest from several quarters including India.
- **Indian vaccines** Covishield and Covaxin **have not been recognised** for the Green Pass by the European Medicines Agency (EMA) that sets the guidelines.
- **Russia and China** have also raised concerns as their vaccines have also **not been given the conditional marketing authorisation**.
- There appears to be a **hint of racism in the action** as the EMA list only includes vaccines already used by Europe and North America.

India’s Arguments:

- India’s External Affairs took up the exclusion strongly with EU authorities, particularly the case of Covishield, which is made under licensing and certification from AstraZeneca, and cleared by WHO.
- India argues that the entire idea of **vaccine passports** would **leave developing nations and the global south at a disadvantage, as they have restricted vaccine access**.
- African Union and the Africa CDC have issued a letter of protest on green pass calling Covishield the backbone of the COVAX alliance’s programme, which has been administered in many African countries.

Recent developments:

- Following India’s vocal protests, and its subtle threat to impose reciprocal measures, at least **a third of the EU has said they would recognise Covishield**.
 - The EMA list is not binding, and countries can choose to include others individually.

Concerns:

- While the fact that a few of the EU members have accommodated India's concerns is welcome, there are **still some hurdles before Indian travellers**.
- **Most of these countries are not at present accepting Indian travellers at all, as no non-essential travel is allowed to EU countries.**
- The spread of the **Delta variant, first identified in India**, has meant further travel restrictions.
- Indians who have taken doses of Covaxin will need to **wait until it receives WHO clearance**.

Way Forward:

- As more nations complete their vaccine programmes, they will seek to tighten their border controls with vaccine passports and longer quarantines in order **to curtail the spread of new variants**.
- It is necessary for the Government to **keep up with these actions worldwide, and raise its voice against discriminatory practices**.
- Furthermore, India's priority must be to **vaccinate as many Indians as possible**.

11. Can't act against NGO for not submitting returns, Centre told

Context:

The **Delhi High Court has restrained the Centre from taking any coercive steps against an NGO** for being **unable to submit its annual return** due to a discrepancy in the new form prescribed for declaring foreign contributions.

Details:

- The court's order came on a petition by an NGO receiving foreign contributions in accordance with the protocol set out in the **Foreign Contribution Regulation Act, 2010 (FCRA)**.
- **Section 18 of the FCRA requires the beneficiary of the foreign contribution to file an intimation before the Central government regarding the contributions received.**
- It complained of the peculiarities in the new **FC-4 form**, in which returns regarding foreign contributions received by it are required to be filed.
- Also, in September 2020, the Centre made it mandatory for all NGOs to **receive foreign contributions only at the New Delhi Main Branch of the State Bank of India (SBI)**.
- The Delhi HC said that the citizen cannot be penalised for a discrepancy in the form prescribed by the Centre.

12. What lies ahead for Afghanistan after U.S. exit?

Context:

- As part of the U.S.'s plan to withdraw its troops from Afghanistan by September 11, **the U.S. troops departed from the Bagram Air Base** that had helped coordinate its long drawn war in Afghanistan. This effectively **marks the end of their military operations in the country.**

Background:

The U.S.-Taliban deal:

- In a bid to end its war in Afghanistan, the **US reached a deal with the Taliban in February 2020.**
- The deal dealt with four aspects of the conflict – violence, foreign troops, intra-Afghan peace talks and the use of Afghan soil by terrorist groups such as al-Qaeda and the Islamic State.
- While the **Taliban promised to reduce violence, join intra-Afghan peace talks and cut all ties with foreign terrorist groups,** the U.S. pledged to **withdraw all its troops.**

Concerns:

Stalemate between Taliban and Afghan government:

- The envisaged **intra Afghan peace talks haven't made any breakthrough** and the peace process has reached a stalemate.

Continuing violence:

- The Taliban though reduced hostilities against foreign troops, but have continued to **attack Afghan forces.**
- Afghanistan has also witnessed a series of **targeted killings** of journalists, activists and other civil society figures over the past many months.

Increasing Taliban influence:

- Ever since the U.S. troops began pulling out on May 1, the **Taliban have made rapid territorial advances.** The number of districts under its control has increased.
- The American withdrawal has turned the balance of power in the battleground in favour of the Taliban.

- As per the American intelligence community has concluded, Kabul could fall within six months to the Taliban.

India's stakes:

- The article welcomes **India's changed stance in engaging with the Taliban** given the most likely probability of Taliban playing a critical role in Afghanistan in the coming years.
- The three areas of interest in engaging with the Taliban include:
 - Protecting **India's investments** in Afghanistan
 - Preventing a future Taliban regime from being **used by Pakistan to suppress India's strategic reach in Afghanistan**
 - To thwart the **threat of Pakistan-backed anti-India terrorist groups** getting support from the Taliban.

13. EU's 'Green Passport'

Context:

- **EU Digital COVID Certificate (EUDCC) or the "Green Passport"** system proposed by the European Union.

Details:

- The EUDCC, or the Green Passport which would basically be a digital QR code, **would attest a person as being vaccinated against COVID-19**. It also attests if the person has had a recent negative test and/or is considered immune having previously contracted the illness and having recovered.
- This EUDCC has been recognised by **all 27 EU countries, as well as Switzerland, Liechtenstein, Iceland and Norway for intra-EU travel**.
 - Although not members of the EU, countries like Norway, Iceland, Switzerland and Liechtenstein are also part of what is referred to as the Schengen zone.
 - **Schengen Area** signifies a zone where 26 European countries, abolished their internal borders, for the free and unrestricted movement of people, in harmony with common rules for controlling external borders.

Concerns:

- The recognized list of vaccines **excludes Indian-made Covishield and Covaxin**, among others. This could adversely impact the prospects of Indian travellers to Europe.
- The move to implement the EUDCC has also given rise to concerns that these vaccine passports would be tantamount to **discriminating against travellers from developing countries with limited access to vaccines**.
 - Covishield has been distributed to 95 countries, mainly low- and middle-income countries of the global South.

India's response:

- The Indian government has warned that **India would initiate reciprocal harsh quarantine measures against countries** that discriminated against Indians.
- India has suggested that **all Indian-approved vaccines should be given recognition worldwide**, and has recommended certifying of such passengers via the Co-WIN website.

WHO's stand:

- In the recently published '**Policy considerations for implementing a risk-based approach to travel in the context of COVID-19**', the WHO categorically states that vaccine passports should not be made mandatory for travel and should be optional.

Recent developments:

- Following India's criticism, some nations have agreed to accept Indian vaccines also.

14. OPEC+ seeks consensus on oil output

Context:

- OPEC+ deliberations on oil output policy.

Background:

- Responding to oil demand destruction caused by the COVID crisis, OPEC+ had agreed in 2020 to cut output with plans to phase out the curbs by the end of April 2022.

OPEC+:

- The Organization of the Petroleum Exporting Countries (OPEC) and its allies as a grouping are known as OPEC+.
- It is a **grouping of oil-producing nations, made up of the OPEC members and 10 other non-OPEC members** including Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Russia, South Sudan and Sudan.

Details:

- While top producers like Saudi Arabia and Russia have been pushing to increase output, The United Arab Emirates has been blocking some aspects of the proposals.
- This has resulted in a failure to reach a deal on oil output policy.

Concerns:

- Without a deal, the OPEC+ could **limit supply even as rising oil prices are slowing economic recovery from the novel coronavirus crisis**.
 - The restrained production will not help bring down oil prices that have soared to 2-1/2 year highs up 40% compared to last year.
- The rise in oil prices is also **contributing to global inflation** which could dampen demand in the economy, thus slowing the economic recovery process.

15. China goes malaria-free with multi-pronged health strategy

Context:

- In the context of the **World Health Organization (WHO) declaring China “malaria-free”**, the article analyses China’s health strategy vis-à-vis malaria and the lessons it can offer India’s own efforts against malaria.
 - The “malaria-free” certification from the WHO requires four consecutive years of reporting no local cases.
 - China is the first country in the Western Pacific region to be declared malaria-free in more than 30 years.

Background:

Malaria:

- **Malaria is a mosquito-borne disease caused by a parasite.**
 - It is typically transmitted through the bite of an infected **Anopheles mosquito**. Infected mosquitoes carry the **Plasmodium parasite**

(**Plasmodium vivax**) When this mosquito bites a human, the parasite is released into the bloodstream.

- Malaria is typically found in tropical and subtropical climates where the parasites can live. It is **most prevalent in Africa, followed by Asia and Latin America**. It also affects people in the Middle East and Europe albeit to a much smaller degree.
- The number of malaria cases worldwide in 2019 was around 229 million, according to the World Malaria Report in 2020, with 409,000 lives lost to the mosquito-borne disease.
- The 2020 report said the majority of cases were reported in Africa, while **India and Southeast Asia recorded a significant drop**. Cases in India fell from approximately 20 million to 6 million, according to the report.

Details:

- China followed a **multi-pronged health strategy** that was able to entirely eliminate indigenous cases of malaria that once a major public health problem in China with millions of cases reported annually.
- Some of the major aspects of this strategy involved the following:

Mosquito control:

- **Targeting mosquito breeding grounds and using of insecticide spraying** have been a major aspects of China's mosquito control efforts.

Robust surveillance:

- The WHO has attributed a lot of credit to **China's '1-3-7 strategy'** for its success in tackling malaria.
 - "1-3-7 strategy" refers to a one-day deadline to report a malaria diagnosis, confirming a case and determining the spread by the third day, and measures taken to stop the spread by the seventh day, along with continued surveillance in high-risk areas.
- China has also **strengthened its laboratory networks** with quality laboratory equipment, which has let it detect cases of malaria in a fast and effective manner.
- This approach has allowed China to **detect cases early and prevent its spread**.

Robust public health system:

- Strong political commitment to strengthen the national health systems has been a major factor of strength in the fight against the disease.

- China's public health system offering **free of charge diagnosis and treatment of malaria** has played a major role in bringing down cases drastically.

Anti-malarial medicines:

- **The discovery of artemisinin under "the 523 project"** and its use in artemisinin-based combination therapies has provided one of the most effective antimalarial drugs.

Human resources:

- With assistance from the Global Fund to Fight AIDS, Tuberculosis and Malaria starting in 2003, China **stepped up training, staffing** to deal with the handling of the malaria disease. This has ensured the required human resources for the fight against Malaria.

Other interventions:

- China has been using **insecticide-treated nets** widely and distributed them free of cost to people living in vulnerable areas.

16. J&K administration bans drones in Srinagar

What's in News?

The Jammu and Kashmir administration **banned the sale, use and possession of unmanned aerial vehicles in Srinagar.**

Background:

- Recently, two Indian Air Force personnel were injured in a drone attack on the Air Force Station in Jammu.
 - Two explosives-laden drones had crashed into the airbase.
 - Suspicious sightings of UAVs **triggered a security alert.**

Details:

- The order was **issued under Section 144 of the CrPC.** Violation of the guidelines would **attract punitive action.**

- The government departments are allowed to use drones for mapping, surveys and surveillance in agricultural, environment conservation and disaster mitigation sectors.

17. Assam woman gets bail in sedition case

What's in News?

An Assam woman was **booked for sedition** for having lunch on a tablecloth resembling the Indian flag.

- She was also charged under the **Prevention to Insults of National Honour Act, 1971**.

Note:

- The display of the National Flag is governed by the provisions of two acts viz. **Emblems and Names (Prevention of Improper Use) Act, 1950** and **Prevention of Insults to National Honour Act, 1971**.
- Further, the government issues non-statutory instructions from time to time.
- The Flag Code of India serves as a single reference point about how to properly hoist the flag of India with due honour.
- **The Flag Code of India itself is not an act of parliament**. It is a set of laws, practices and conventions that apply to the display of the national flag of India.

Sedition:

- Section 124A, IPC states: "Whoever, by words, either spoken or written, or by signs, or by visible representation, or otherwise, brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection towards, the Government established by law in India, shall be punished with imprisonment for life, to which a fine may be added; or, with imprisonment which may extend to three years, to which a fine may be added; or, with fine."
- According to the law, **disaffection includes disloyalty and all feelings of enmity**. However, disapprobation (criticism) of the **measures or administrative action** of the government to obtain their alteration by **lawful means is not an offence**.

- It is classified as “**cognisable**” and “**non-bailable**” – the accused cannot get bail as a matter of right, but is subject to the **discretion of the session’s judge**.

18. The problem now with the military synergy plan

Context:

- In the light of the ongoing deliberations of the **high-level committee for consultations on the creation of integrated tri-service theatre commands**, the article suggests a few recommendations in that direction.

Details:

- The aim of the proposed integrated theatre commands is to bring about jointness and synergy in operations among the different military forces which would **increase the effectiveness of the forces** even while **reducing the cost of their operations** through the elimination of duplication and wasteful practices or processes.

Recommendations:

National security strategy:

- The article argues that it is first essential to have a national security strategy.
- A **well-defined national security strategy** can help come up with appropriate military strategies, doctrines and required capabilities. That would help define the structures required for the conduct of synergised operations with the requisite communications and training requirements in the proposed integrated theatre commands.

Deliberations on the structure:

- The structure and functioning of the proposed integrated theatre commands should be finalized after **adequate deliberations and discussions with all stakeholders**. This will iron out any differences upfront and produce an effective, integrated theatre command.
- Thus **consultative strategizing is a prerequisite before a concrete structure is put in place**.

Joint planning:

- **Joint planning and training with war-gaming** should be prioritized. This will help the forces figure out the required structures with suitable command, control and communications for a future integrated theatre command.

Institutionalised structure:

- Integrated theatre commands require an **institutionalized higher defence organisation**, like the erstwhile Defence Committee of the Cabinet (DCC).
- This will help ensure **regular dialogue between the political and military leadership**, thus helping avoid knee-jerk responses during crises.

19. Crafting a unique partnership with Africa

Context:

- In the light of the **recent visit of the Indian External Affairs Minister to Kenya**, the article analyzes the **potential of India-Africa cooperation in agriculture** even as China has been exponentially deepening its relationship with African nations.

Background:

- The relations between India and Africa have long historical roots right from ancient times up until the anti-colonialism struggle. This historical solidarity has today grown into a modern partnership.
- **Africa is considered a foreign policy priority by India** for many reasons and its engagement with the African continent has been multifaceted.

India-Africa agricultural cooperation:

- Africa supplies a **vast basket of agricultural goods to India** dominated by items such as fruits, nuts, grains and pulses.
- India's outreach to African nations in terms of agricultural cooperation currently includes the following **institutional and individual capacity-building initiatives**.
 - India-Africa Institute of Agriculture and Rural Development in Malawi
 - Supply of machinery and provision of soft loans
- Indian farmers have **purchased over 6,00,000 hectares of land for commercial farming** in Africa.

- There is a substantial presence of **Indian entrepreneurs in the African agricultural ecosystem.**
- A unique example of cooperation and partnership in the agricultural sector is the case of the Kerala government trying to meet its requirement for raw cashew nuts from countries in Africa. There are also proposals to create a **jointly-owned brand of Africa-Kollam cashews.**

Significance of the cooperation:

- With **65% of the world's uncultivated arable land**, employing over 60% of the workforce, and accounting for almost 20% of Sub-Saharan Africa's GDP, **agriculture is critical to Africa's economy.**
- **African agriculture is plagued by obsolete methods and technologies.** India's cooperation and partnership through sharing of necessary resources and knowledge can go a long way in providing a much-needed boost to the critical agricultural sector in Africa.
- This cooperation is also crucial given the possible **business prospects** that they can give rise to and to provide credible alternatives to the increasing involvement of Chinese stakeholders in the sector.
- The putting to use of the unexplored potential of Africa in the agricultural sector will go a long way in ensuring **not only Africa's food security but also global food security.**

Chinese engagement in Africa:

Deepening of Chinese influence in Africa:

- Currently, **China is among Africa's largest trading partners and its single biggest creditor.**
- Chinese companies have been implementing critical infrastructure projects in Africa and its venture capital funds are investing in African fintech firms, while other smaller enterprises are expanding across the width and breadth of Africa.

Reasons for Chinese interest in Africa:

- The exponential growth in the China-Africa economic ties and its **attempts to emerge as an alternative to traditional western powers** is primarily driven by the following factors:
 - Ensuring access to **Africa's natural resources and its untapped markets.**
 - Chinese-built industrial parks and economic zones in Africa are emerging as new destinations for low-cost, labour-intensive

manufacturing units that are relocating from China. Thus they seem to be **new avenues for Chinese production centres**.

- Chinese operations in Africa are important to accumulate global experience in management, risk and capital investments. This would be a valuable experience as China's model, if successful here, could be heralded as a **replica for the larger global south**.
- The Chinese engagement will help them dominate the market in the long run thus offering a unique opportunity to **build 'brand China'**.

Engagement in the agricultural sector:

- Though Chinese entities have been active in Africa's agricultural landscape for decades now, the nature, form and actors involved have undergone substantial change.
 - Chinese firms are **introducing advanced agri-tech** like drone technology in countries like Zambia.
 - Over 20 **Agricultural Technology Demonstration Centers (ATDCs)** have been set up in Africa. These centres are involved in developing new crop varieties and increasing crop yields. These ATDCs partner with local universities, conduct workshops and classes for officials and provide training and lease equipment to smallholder farmers.
 - Chinese companies are **purchasing large-scale commercial farms**.
 - Chinese corporations are also entering the agri-infrastructure sector.
 - African agriculture experts, officials and farmers are provided **opportunities to augment skills and be trained in China**.

Challenges in the relation:

- The highly insular Chinese diaspora in Africa, the **large trade imbalance mainly in favour of the Chinese, looming debt**, increasing competition with local businesses and a negative perception around China have had a negative impact on the relations between China and African nations.
- Larger commercial farms run by Mandarin-speaking managers and the presence of small-scale Chinese farmers in local markets have further aggravated these stresses.

Recommendations for India:

Prioritizing agricultural cooperation:

- The future of India-Africa cooperation is agriculture.
- Indian congruence with African countries in the agriculture sector is expanding. It is vital to **prioritize and channel resources into augmenting partnerships in agriculture**.

Countering Chinese moves in the region:

- While India's Africa strategy exists independently, it is important to be **cognizant of China's increasing footprint in the region** and India should desist from neglecting Chinese engagement in African agriculture.
- India should frame appropriate policies and implement them to counter the Chinese moves in the region.
 - State governments and civil society organisations need to be encouraged to **identify opportunities and invest directly in the agricultural sector of Africa**.
 - Indian industries need to be incentivized to tap into African agri-business value chains and measures need to be taken to **link Indian technology firms and startups with partners in Africa**.
 - A thorough impact assessment needs to be conducted of the existing capacity-building initiatives in agriculture being taken up by India in Africa. The **development partnership needs to be in line with African priorities**.

20. SC aghast that Section 66A of IT Act is still used

Context:

The Supreme Court found it distressing that people were still booked and tried under **Section 66A of the Information Technology (IT) Act** even **six years after it struck down** the provision as **unconstitutional** and a **violation of free speech**.

Section 66A of IT Act:

- Section 66A gave authorities the power to arrest anyone accused of **posting content on social media that could be deemed 'offensive'**.
- It provided punishment for **sending offensive messages through communication services**.
- Under the section, a **conviction** could fetch a maximum of **three years in jail and a fine**.
- In **Shreya Singhal v. Union of India (2015)**, the Supreme Court in 2015 had **scrapped Section 66A** of the IT Act, 2000.
- The court ruled that as it **did not distinguish between speech that was merely "offensive or annoying"** and that which was **guilty of inciting a disruption of public order**, Section 66A was liable to have a **chilling effect on free speech**.

Way Forward:

- The **number of cases** registered under Section 66A had actually **increased post the judgment**.
 - A mechanism needs to be set in place to disseminate the Shreya Singhal judgment to **every police station and trial court in the country**.
- There is **no clear definition** of what constitutes **“hate speech” in the IPC**.
- Legally, **for criminal sections to be invoked against a speech** it has to lead to **violence or disturbance of law and order**.
- Given the increasing threat posed by hate speech, the need of the hour is to **define “hate speech”**.

21. Will a national judiciary work?

Background:

- Many law commissions and the judiciary in many cases have called on the administration to consider and implement **All India Judicial Services (AIJS)**.
 - The idea for an ‘All India Judicial Service (AIJS)’ was first proposed by the **14th Report of the Law Commission of India in 1958**, aimed at creating a centralised cadre of District Judges.
 - In the **All-India Judges case in 1992** the apex court had opined that the recommendations of the Law Commission on the setting up of AIJS should be examined and implemented. Similar opinions were expressed in the All India Judges Association Vs. Union of India (2002) case as well.
- **In 2019 there had been a consultative process for the creation of the All India Judicial Service (AIJS)**.
 - While a few states and high courts supported the proposal, most rejected it or are yet to respond.
- In this context, the article analyzes the feasibility of the All India Judicial Service.

All India Judicial services:

- The AIJS envisages **recruiting officers for subordinate courts through a national entrance test**.
- Those who clear the pan-India test would be appointed by high courts and the State governments.

Constitutional perspective:

- **Article 233(1) of the Constitution** states that appointments, posting and promotion of, district judges in any State shall be made by the Governor of the State in consultation with the corresponding High Court.
- **Article 312 (1)** empowers Parliament to make laws for the creation of one or more All-India Services, including an AIJS, common to the Union and the States.
- **The 42nd Constitutional amendment** in 1976 shifted the domain of administration of justice constitution and organisation of all courts, except the Supreme Court and the High Courts into the concurrent list from the previous state list.

Arguments in favour of AIJS:

- The AIJS will help **remove any scope for judicial or executive intervention in the appointments to the lower judiciary** and result in increased transparency in the appointment process.
- It will help **streamline the appointment process** of the lower judiciary. This will allow the vacancies to be filled without any unnecessary delay.
- AIJS will give an opportunity for induction of suitably qualified fresh legal talent selected through a proper all-India merit selection system and will thus help **strengthen the overall justice delivery system in India.**

Concerns with respect to AIJS:

- The article expresses concerns over certain aspects of the proposed AIJS:

Against the principle of federalism:

- Under the envisaged AIJS, the fundamental power of the States to make rules and govern the appointment of district judges would rest with the union government.
- The AIJS would lead to a scenario where the Union government's powers would increase at the cost of the state governments.
- This will go **against the principle of federalism and the basic structure doctrine.**

Concerns for the subordinate judiciary:

- Another aspect of concern is that the operationalization of the AIJS could **severely curtail the promotional avenues of the subordinate judiciary.**
- Currently, fifty per cent of the posts of district judges are to be filled by promotion from the subordinate judicial service. This will decrease with direct recruitment under the proposed AIJS.

Concerns over language proficiency:

- Another fundamental concern would be **the language barrier**.
- Since cases in lower courts are argued in local languages, there are apprehensions as to how a person from a particular state can hold a hearing in another state that has a completely different language.
- Judges recruited through a centralized process may not know the local languages of the States in which they are posted. The lack of understanding of the local language and customs **could affect the quality of judgments**.

Fears over social implications:

- Most States have a reservation policy in force for marginalised and deprived sections of society in the lower judiciary. The reservation in these states is higher than that envisaged in the AIJS, thus there are fears that such sections may lose by the implementation of the AIJS.
 - Tamil Nadu provides for a roster-based reservation of 69%, of which 30% is for women.

22. Vacancies send a wrong signal

Context:

- The article analyzes the various **concerns associated with the appointment process to important constitutional and administration posts**.

Concerns:

Long delay in appointments:

- The article expresses concerns over the long delays in appointing people to critical posts.
 - The post of the **Chairman of the National Human Rights Commission** and the post of the **Director of the Central Bureau of Investigation (CBI)** was kept vacant for a long time.
 - The **retirement of Chief Election Commissioner (CEC), amidst the ongoing elections** in West Bengal had resulted in a scenario where the Election Commission was left with only two members. Any disagreement on any issue between the two members would have led to a situation wherein a solution would have become difficult.
 - The National Council of Educational Research and Training, which is largely responsible for chalking out the education policy of the country has been functioning without a chief. Nearly half of the 40 Central universities are functioning without regular Vice-Chancellors.

Apprehensions over the appointment process:

- Apart from the concerns over avoidable delays in appointment to top posts, there are also concerns over the process of appointment to some of these posts.
 - One such example being **the appointment of Election Commissioners**. The Association for Democratic Reforms (ADR) had filed a public interest litigation in the Supreme Court demanding the appointment of Election Commissioners by a committee rather than by the Union government.

Assigning of additional charge of multiple departments:

- Officials have been handed additional charges of multiple departments despite each being critical in their own respects.

Negative fallout:

Impact on governance:

- Leaving top posts in the government unoccupied **affects the organization's effectiveness and thus has a deleterious impact on governance in general.**

Demoralizing effect on officials:

- Delays in promotions and appointments also tend to demoralize the officials who await promotions after vacancies arise.

Questions on the credibility of important institutions:

- The lack of a consultative process in the appointment to Election Commission give rise to chances of potential executive interference in their functioning and thus **adversely impacts the perception of neutrality** of this important institution in a democracy like India.

Impact on performance of the institutions:

- The handing of additional charges of multiple departments to a single person will have an adverse impact on the efficiency of such departments given the lack of attention that such departments would receive from the appointed head.

Recommendations:

Time bound process:

- Appointments to higher echelons must be announced well in time. A time frame needs to be worked out to **announce top appointments at least a month in advance** and the nominee should be enabled to take charge soon after the retirement of the predecessor. This will help **avoid any interregnum**.

Well laid guidelines:

- **Well laid guidelines for promotion will help keep out political considerations from the appointment process.** This will **help increase the transparency** in the appointment process which will only augur more respect for the institutions involved.

Broadbasing appointment process:

- For appointment to top constitutional posts the process should be **made more consultative**.
- For example in the case of appointment of Election Commissioners, the recommendations of the Law Commission can act as a way forward. The Law Commission, its report of March 2015, held that it was “imperative” that the appointment became a “consultative process,” given the “importance of maintaining the neutrality” of the ECI and shielding the CEC and Election Commissioners “from executive interference.”
- The Law Commission had made two specific recommendations.
 - The **appointment of all the Election Commissioners (including the CEC) should be made by the President in consultation with a three-member collegium or selection committee**, consisting of Prime Minister, Leader of the Opposition of the Lok Sabha (or the leader of the largest opposition party in the Lok Sabha in terms of numerical strength) and Chief Justice of India.
 - **The elevation of an Election Commissioner should be on the basis of seniority**, unless the collegium or the committee, for reasons to be recorded in writing, finds such Commissioner unfit.
- The article suggests further expanding the proposed high-powered committee given the limited powers that the Opposition leader has in the selection process.

23. ‘Super censorship’: MPs’ panel grills Ministry

Context:

- The Standing Committee on Information and Technology has questioned the officials of the Ministry of Information and Broadcasting on the **draft Cinematograph (Amendment) Bill 2021**.

Background:

- The draft Cinematograph (Amendment) Bill 2021 proposes amendments aimed at tackling the menace of piracy and also introduces some **changes with respect to the process of certification**.
 - The amendment would grant **revisionary powers to the Government** on account of violation of Section 5B(1) of the Act.
 - **Section 5B(1)** states that a film shall not be certified for public exhibition if, in the opinion of the authority competent to grant the certificate, the film or any part of it is against the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality, or involves defamation or contempt of court or is likely to incite the commission of any offence.
 - Also, the Central Government may, if it considers it necessary so to do, **direct the Chairman of the Board to re-examine the film**.
- The Bill has been placed in the public domain and called for public comments.

Concerns:

Super censorship:

- Some prominent filmmakers have criticized the bill over the **provision that allows the government to order recertification of films already certified by the Central Board of Film Certification (CBFC)**. They have called it a kind of “super censorship”.

Unnecessary concentration of power:

- The government’s move to allow it the power to ask for recertification amounts to unnecessary concentration of such powers especially when there are already existing penal provisions in this regard.
 - If any person or group feels that a film or part of it hurts their sentiment or imperils the country, it can be challenged in the judiciary.

Against Judicial orders:

- The High Court of Karnataka in **KM Shankarappa Vs. Union of India** case stated that the Central Government **cannot exercise revisional powers in**

respect of films that are already certified by the Board. This has also been upheld by the Supreme Court.

- The proposed amendments run contrary to the above judicial precedents.

Counter arguments:

Reasonable restriction upon freedom of speech and expression:

- The government's stand has been that the proposed amendments derive their standing from **Article 19(2) of the Constitution** which are non-negotiable.
- Article 19(2) of the Constitution imposes **reasonable restrictions upon the freedom of speech and expression** in the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement of any offence.

Help deal with violation of Section 5B(1):

- Sometimes complaints are received against a film that allude to violation of Section 5B(1) of the Cinematograph Act, 1952 after a film is certified. The new amendments would help deal with such cases.

Check on arbitrary use of powers:

- The government's stand is that the **Ministry itself will have no powers to censor any film**, but it will only allow the Ministry to return the film for recertification.
- The government has also stated that such a **clause would be invoked only when the content of a film impinged on the security and integrity of the nation**, this would act as a restriction against the arbitrary use of such powers.

Power of the legislature to legislate new laws:

- The Legislature may, in certain cases, overrule or nullify the judicial or executive decision by enacting appropriate legislation.

24. Bengal passes resolution to set up Council

Context:

- The **West Bengal Assembly has passed a resolution to set up a Legislative Council** with a two-thirds majority.

Details:

- The resolution for the Legislative Council was moved **under Article 169**.

Article 169:

- Article 169 of the Indian Constitution deals with the abolition or creation of Legislative Councils in states.
- Clause (1) states that **Parliament may by law provide** for the abolition of the Legislative Council of a State having such a Council or for the creation of such a Council in a State having no such Council, if the **Legislative Assembly of the State passes a resolution** to that effect by a majority of the total membership of the Assembly and by **a majority of not less than two thirds of the members of the Assembly present and voting**.
- Clause (3) states that such a law shall be deemed to be **an amendment of the Constitution for the purposes of Article 368**.

25. 'Tele-law services empowering voiceless'

Context:

- The recent event to mark the coverage of more than **nine lakh beneficiaries of the government's tele-law scheme**.

Background:

Tele-law:

- Through this initiative, the **Department of Justice has partnered with NALSA and CSC e-Governance Service India Limited** for mainstreaming legal aid to the marginalised communities through Common Services Center (CSC).
- Tele-Law means the **use of communications and information technology for the delivery of legal information and advice**. This e-interaction between lawyers and people would be through the video-conferencing infrastructure available at the CSCs.
- The concept of Tele-Law is to facilitate the delivery of legal advice through a panel of lawyers stationed at the State Legal Services Authorities (SALSA) and CSC. The project initiates to connect citizens with lawyers through telephone and video conferencing facilities by the **Para-Legal Volunteers** stationed at identified 50,000 CSCs.

- Presently, the tele-law programme is operational in 633 districts.

Significance:

- It will help provide **access to affordable and quality legal advice** across the country including those in the rural areas.
- By improving access to legal advice for women, the facility could also become a source of **gender justice and empowerment**.
- Tele-law has the potential to **foster inclusive justice delivery and strengthening rule of law across the country**.

26. Challenging negative social norms

Context:

- In the context of the upcoming **World Population Day on July 11**, the article analyzes the challenges for India in terms of demographic management and suggests certain measures in that direction.

Background:

- India is currently enjoying what is referred to as a **demographic dividend**. **Half of India's population is under 29 years of age**. This significant proportion of young people in the total population will help drive India's economic growth.
- However, for India to be able to enjoy the fruits of this demographic dividend the young population must not only be healthy, knowledgeable and skilled but must also be provided with the rights and choices to develop to their fullest potential, including, sexual and reproductive health and rights (SRHR).

Sexual and reproductive health and rights (SRHR):

- Sexual and reproductive health and rights or SRHR is the **concept of human rights applied to sexuality and reproduction**.
- Apart from ensuring **good sexual and reproductive health via access to quality healthcare facilities**, the definition of SRHR would also encompass a broader range of issues such as violence, stigma and **respect for bodily autonomy**.
 - SRHR include issues like abortion, HIV and other STIs, maternal health and rights, contraceptive access, gender-based violence, discrimination and stigma, and more.

- SRHR is a **critical aspect of human well being** given that it greatly impacts the psychological, emotional and social well-being of individuals.

India's progress:

- **India's population growth has been stabilizing.** The overall fertility rate has been decreasing. The **Total Fertility Rate (TFR)**, presently at 2.2 children, will soon reach replacement level (2.1).
 - Notably, despite the decline in overall fertility, the population will continue to grow because of the effect of 'population momentum'.
- In the last two decades, India has made **substantial gains with SRH indicators.**
 - There has been a marked **improvement in the rate of institutional delivery.**
 - There has been a **decline in maternal mortality ratio (MMR)** from 327 in 1999-2001 to 113 per 100,000 live births in 2016-18.
- Data from the National Health Family Survey 5 for the year 2019-20 (NFHS-5) notes **improvement in contraceptive prevalence in most States.** This marks a significant shift in family planning methods considering the earlier emphasis on forced sterilization efforts.

Concerns:

Lack of universal access to SRHR:

- **Pervasive negative social norms, health system barriers and gender inequality have hindered universal access to SRHR.**
 - As per a 2021 report from the Guttmacher Institute, around two million adolescent girls (15-19 years) each year had a pregnancy, and of these, nearly 63% were unwanted or unintended. This points to **inadequate information and access to SRH services** for this age group.
 - According to NFHS-4, in girls aged 15-19 years, 22.2% had an **unmet need for contraception.**

Uneven progress:

- The TFR remains higher than the national average of 2.2 children among **women who live in rural areas** and a majority of them living **in the poorer States.**
 - This is indicative of the poor social status of rural women who have very little formal education and economic power given their poor income levels.

Social norms as an impediment:

- **Early marriage of girls** is a big challenge in India. 26.8% of women aged 20-24 years are married before they turn 18.
- Many girls and women face **gender-based violence and harmful practices** that are socially sanctioned and rooted in social norms, beliefs and practices that deny women their bodily autonomy.

Challenges posed by the pandemic:

- The COVID-19 pandemic has led to serious gaps and challenges in the provision of information and services on sexual and reproductive health (SRH).

Recommendations:

Universal access to SRHR:

- There is the need to ensure universal access to SRHR as envisioned under the **Programme of Action of the 1994 International Conference on Population and Development (ICPD)**.

Avoiding coercive methods:

- Prescriptive or coercive methods, such as one- or two-child norms, have rarely worked well anywhere for long as is evident from the experience of China in demographic management. Rather, the people should be empowered to take suitable measures.

Placing the youth and women at the centre of policymaking:

- Youth, women and girls must be placed at the centre of policymaking and services given the positive ripple effect that it can generate. **Turning the focus on women and youth** could lead to better health outcomes.
 - Young people, and adolescent girls, in particular, must be provided access to education, relevant skills, information and services to make healthy choices, including those related to SRH.
 - Women must be empowered to make informed choices about their sexual and reproductive health.

Recognizing women rights:

- India's population stabilisation strategy must be formulated **keeping in mind the rights of women and girls**. Women must have a greater say in choosing their family size.

- Empowerment to make their own choices will lead to better health outcomes among women and girls as this will allow them to prevent unintended pregnancy or give birth with the help of a skilled birth attendant.
- **Changing social norms** would be the biggest challenge to address in this direction.
- Governmental programmes like **Beti Bachao Beti Padhao (BBBP)**, has played a significant role in challenging the existing regressive social norms and similar efforts should be taken going ahead.

Additional information:

- India has slipped to 140th rank among 156 countries in **the World Economic Forum's 2021 Global Gender Gap Report**.

27. Judge recuses from Mamata's election case

Context:

Justice Chanda has **recused himself from hearing the petition** filed in the Calcutta High Court by West Bengal Chief Minister Mamata Banerjee **challenging the Assembly poll result in Nandigram** but **imposed a fine of Rs 5 lakh on her**.

Recusal

- Recusal is the **act of abstaining from participation in an official action** such as a legal proceeding due to a conflict of interest of the presiding court official or administrative officer.
- It is the **withdrawal of a judge, prosecutor, or juror from a case on the grounds that they are unqualified to perform legal duties because of a possible conflict of interest or lack of impartiality**.

As noted by the Supreme Court in the NJAC judgment, a judge may be required to step down in one of two scenarios:

- **Cases of presumed bias**, where the judge has a pecuniary interest in the outcome of a case (extended, through the Pinochet judgment to other similar non-pecuniary interests); or
- **Cases of apparent bias**, where a reasonable, fair-minded observer would believe there is a real possibility that the judge is biased.

28. Issues with the UAPA and role of judiciary

Context

Father Stan Swamy passed away at a private hospital in Mumbai on July 5. Fr. Swamy was arrested by the National Investigation Agency (NIA), under the **Unlawful Activities (Prevention) Act (UAPA)**.

How Supreme Court judgment leaves the scope for misuse of UAPA

- The Supreme Court's April 2019 decision in National Investigation Agency vs Zahoor Ahmad Shah Watali on the interpretation of the UAPA has affected all downstream decisions involving the statute.
- This decision has created a new doctrine.
- According to the decision, in considering bail applications under the UAPA, **courts must presume every allegation made in the First Information Report to be correct.**
- Further, bail can now be obtained only if the **accused produces material to contradict the prosecution.**
- In other words, **the burden rests on the accused to disprove the allegations**, which is virtually impossible in most cases.
- The decision has essentially **excluded the admissibility of evidence at the stage of bail.**
- By doing so, it has effectively **excluded the Evidence Act itself**, which arguably makes the decision unconstitutional.
- Due to the Supreme Court judgment, **High Courts have their hands tied**, and must perforce refuse bail, as disproving the case is virtually impossible.
- The Delhi High Court recently granted bail to three young activists arrested under UAPA in a conspiracy relating to the 2020 riots in Delhi.
- The Supreme Court reportedly expressed surprise and gave the direction that the decision will **"not to be treated as precedent by any court"** to give similar reliefs.

Misuse of the UAPA

- With such high barriers of proof, it is now impossible for an accused to obtain bail, and is in fact a convenient tool to put a person behind bars indefinitely.
- This is being abused by the government, police and prosecution liberally: now, all dissenters are routinely implicated under charges of sedition or criminal conspiracy and under the UAPA.
- In multiple instances, evidence is untenable, sometimes even arguably planted, and generally weak overall.
- But as a consequence of UAPA being applied, the accused cannot even get bail.

Way forward

- If we want to prevent the misuse, the decision in the Watali case must be urgently reversed or diluted, otherwise, we run the risk of personal liberties being compromised very easily.

Conclusion

The provision of the act leaves the scope for misuse and therefore judiciary and legislature need to take steps to provide safeguards to prevent the misuse.

29. Indemnity issues hold up U.S. vaccine donation

Context:

Despite the announcement by the USA to donate 80 million doses of American-made COVID-19 vaccines to dozens of countries including India, the **vaccines are being held up by regulatory issues over indemnity (waiver of liability)**.

Details:

- The U.S. had announced the distribution of 80 million doses as part of its “**COVID-19 Global Response and Recovery Framework**”.
- The indemnity would be used as a **legal defence to protect the U.S. firms**, which have pointed out that they cannot take responsibility for cold-chain lapses and transportation problems within India.

Background:

- Pfizer and Moderna have been **demanding indemnity as a pre-condition to enter into supply contracts with India**.
- Local manufacturer Serum Institute of India (SII) is also seeking the same.
- The government said it was **considering the requests**, and is **yet to take a decision**.

What is indemnity?

- The indemnity will **protect manufacturers from any potential civil-legal liability or immunity from being sued by people for any unforeseen complications arising from their COVID-19 vaccine**.

Why are manufacturers demanding indemnity?

- The vaccines were developed at record speed and were approved for emergency use.
- As the processes were expedited, there is a possibility of **potential unknown side-effects**.
- Therefore, the vaccine makers have demanded the **governments to support them by providing them indemnity**.

Pfizer enjoys such immunity in the US, UK and most other countries where it is supplying COVID-19 vaccines.

What happens in case the Government allows indemnity?

- Indemnity is only a contractual arrangement between the vaccine manufacturer and the government will be privy.
- In case people suffer from a grave injury, disability and death linked to the vaccine, **indemnity doesn't stop people from suing the manufacturer**.
- Liability under the legislation will be intact. They can **recover the losses contractually from the government**.

Way Forward:

- There is a need to strengthen **adverse event following immunisation (AEFI) reporting and investigations**.
- Government must be more **transparent on indemnity arrangements**.
- At present, there is no compensation mechanism available for COVID-19 vaccine linked serious adverse events or for that matter any vaccine.
- Public health activists say the government should **create a compensation mechanism**.

30. Tracking fugitives everywhere

Context:

- **An increasing number of accused people are absconding** to avoid being convicted.

Concerns:

Lack of efforts to pursue fugitives:

- Though the police department does initiate proceedings for attachment of property and declaration of the accused as proclaimed offenders, the **efforts**

being made to pursue fugitives – domestically or internationally – have been few and far between.

- This goes against the spirit of the law of the land where criminals escape being punished merely by shifting out of the country or place of residence.

Lack of a domestic tracking or database system:

- Unlike the Interpol Notices which has allowed for some form of a system for tracking criminals worldwide, there is **no coordinated system or database for tracking criminals or wanted persons domestically**.
- In the absence of such a system, it is relatively easy for criminals to go undetected.

Lack of a coherent law:

- Indian law on extradition is spread across the Indian Penal Code as well as various laws pertaining to narcotic drugs, Information Technology, hijacking, etc.
- **The lack of a coherent law to deal with fugitives has been a major lacuna in extraditing such offenders.**

Recommendations:

National database:

- There is an urgent need for the **creation of a nationwide database of wanted persons, accessible to multiple stakeholders** like police agencies, passport and immigration authorities and the public.

Fugitive tracking system:

- India should consider implementing a **nation-wide system of 'Wanted Persons Notices'**, to help track fugitives domestically. India could draw valuable inputs from the highly successful U.S.'s inter-State extradition and fugitive tracking system.

Better integration among the various stakeholders:

- Though the **Crime and Criminal Tracking Network and Systems and the National Intelligence Grid** are efforts in the right direction, there is the need for more integration to make them more effective.
- There needs to be enhanced integration between immigration agencies, State police agencies, Interpol-New Delhi, the External Affairs Ministry and the

Home Ministry and central investigation and intelligence agencies to track and trace fugitives both domestically and internationally.

International collaboration and cooperation:

- India should share its 'wanted' database with other nations on a reciprocal basis or through treaties.
- India should consider signing relevant **bilateral and multilateral conventions on criminal matters** which would help it plug legal infirmities in the extradition process.

Consolidate multiple laws:

- All relevant legal processes and requirements should be incorporated into one consolidated law.

Specialized agency:

- A specialized set-up needs to be put in place to deal with all issues pertaining to fugitives, from investigation to extradition.
- This could involve an **Integrated International Cooperation Division (IICD) at the helm with corresponding linkages with fugitive tracking units at the State level.**

31. Panel report on data Bill hangs fire

Context:

In the recent cabinet expansion, five members of the Joint Committee on Personal Data Protection Bill, including its chairperson have been inducted into the Council of Ministers. This has raised questions over the long-pending report of the panel.

Details:

- The **Personal Data Protection Bill** was introduced in December 2019 in the **Lok Sabha**.
- The bill seeks to provide **protection of the personal data of individuals**.
- It was **referred to the joint parliamentary panel**, in February 2020. It is yet to submit its report.
- Ten of the 30 members of the committee had moved amendments against a provision (Clause 35) in the legislation **giving power to the Central**

government to exempt any agency of government from the application of the Act.

- Invoking “sovereignty and integrity of India”, “public order”, “friendly relations with foreign states” and “security of the state”, the **legislation gives powers to the Central government to suspend all or any of the provisions of this Act for government agencies.**
- It was argued that this **clause makes the entire Act pointless.**

Personal Data Protection Bill, 2019:

Evolution of the bill:

K.S. Puttaswamy case:

- The need for a more robust data protection legislation came to the fore in 2017 post the **Supreme Court’s landmark judgment in Justice K.S. Puttaswamy (Retd) v. Union of India, that established the right to privacy as a fundamental right.**
- In the judgment, the Court called for a data protection law that can effectively protect users’ privacy over their personal data.

B.N. Srikrishna committee:

- Consequently, the Ministry of Electronics and Information Technology formed a Committee of Experts under the Chairmanship of Justice (Retd) B.N. Srikrishna to suggest a draft data protection law.
- The Bill, in its current form, is a revised version of the draft legislative document proposed by the Committee.

Significance:

- The proposed regime under the Bill would be different from the existing regime in the following ways.

All-encompassing regime:

- The Bill seeks to **apply the data protection regime to both government and private entities across all sectors.**

Equal emphasis on both data security and privacy:

- The Bill seeks to emphasise both data security and data privacy. This will require the entities to not only maintain security safeguards to protect personal data, but will also require them to fulfill a set of data protection

obligations and **transparency and accountability measures** that govern how entities can process personal data to uphold users' privacy and interests.

Rights of the users:

- The Bill seeks to **give users a set of rights over their personal data and means to exercise those rights**. The bill will empower the user to obtain information about the different kinds of personal data that an entity has about them and how the entity is processing that data.

Data Protection Authority:

- The Bill seeks to create an **independent and powerful regulator known as the Data Protection Authority (DPA)**.
- The DPA will monitor and regulate data processing activities to ensure their compliance with the regime. Also the DPA will give users a channel to seek redress when entities do not comply with their obligations under the regime.

Concerns:

- Some provisions in the Bill create cause for concern about the regime's effectiveness.

Wide exemptions to government agencies:

- The Bill provides wide exemptions to government agencies.

32. The bar on criticism that muzzles the advocate

Bar council of India

- It was established by Parliament under the Advocates Act, 1961.

Functions:

- To lay down standards of professional conduct and etiquette for advocates.
- To lay down the procedure to be followed by its disciplinary committee and the disciplinary committees of each State Bar Council.
- To safeguard the rights, privileges and interests of advocates.
- To promote and support law reform.
- To promote legal education and to lay down standards of legal education. This is done in consultation with the Universities in India imparting legal education and the State Bar Councils.

- To recognise Universities whose degree in law shall be a qualification for enrolment as an advocate. The Bar Council of India visits and inspects Universities, or directs the State Bar Councils to visit and inspect Universities for this purpose.

Context

- The Bar Council of India (BCI) has introduced changes in the rules that govern the professional conduct and etiquette of advocates.
- The objective of these amendments is to improve the Standards of Professional Conduct.

Details

- The notification said an Advocate shall conduct himself/herself as a gentleman/gentle lady in his/her day to day life and he/she shall not do any unlawful act.
- He/she shall not make any statement in the Print, Electronic or Social Media, which is indecent or derogatory, defamatory or motivated, malicious or mischievous against any Court or Judge or any member of Judiciary, or against State Bar Council or Bar Council of India.
- Nor shall any Advocate engaged in any willful violation, disregard or defiance of any resolution or order of the State Bar Council or Bar Council of India and any such act/conduct shall amount to misconduct.

Penalty for rule violation

- The act of criticism shall result in suspension or removal of membership of such members from the Bar Council.
- Advocates who violate the rules can be disqualified from contesting in bar association or council elections for any period of time, “depending on the gravity of the misconduct”.

Exception

- However, the notification clarified that a healthy and bonafide criticism made in good faith, shall not be treated as a “misconduct”.

Temporary hold

- After the amendments were notified cases were filed in various high courts questioning the changes.
- It is currently being reviewed by a committee comprising senior advocates, members of bar associations and the Bar Council of India.

- The amendments also require the Chief Justice of India's approval before coming into effect, which has not yet been obtained.

Concerns

- These rules run counter to constitutional guarantees of free speech and the freedom of profession.
- This will have a debilitating impact on the advocates and their careers could be in trouble.

Conclusion

- Advocates are the torch bearers of change and question the redundant practices prevalent in the justice delivery system. Therefore, before such rules are considered it has to be reviewed, as such rules may have a chilling effect on freedom of speech.

33. Judges should not act like emperors, says SC

Context:

The Supreme Court said that the judges should not behave like emperors and summon government officials instantly without a good reason.

Details:

- The SC bench noticed that a practice had developed in certain High Courts to call officers **instantly to exert direct or indirect pressure**.
- The SC has prescribed modesty and humility to judges by asking them **not to cross the line of separation of powers between the judiciary and the executive** and call officers to court unnecessarily.
- It observed that summoning of officers frequently is not appreciable at all and it is liable to be condemned in the strongest words.
- It noted that at times, when officials have to travel great distances and wait for hours in court, their **official work was delayed**, creating an **extra burden on the officer**.
- It argued that the courts have the power of the pen, which is more effective than the presence of an officer in Court. If any particular issue arises for

consideration before the Court, and the advocate representing the State is not able to answer, it is advised to write such doubt in the order and give time to the State or its officers to respond.

34. Terrain, facilities will affect delimitation in J&K, says ECI

Context:

Delimitation in Jammu and Kashmir.

J&K delimitation exercise:

- Delimitation is the act of redrawing the boundaries of a constituency that votes for a Lok Sabha seat on the **basis of population change over a period of time.**
- In the erstwhile state of Jammu and Kashmir (prior to August 5, 2019), the delimitation of Lok Sabha seats was governed by the Indian Constitution, but the delimitation of its Assembly seats was governed separately by the Jammu and Kashmir Constitution and Jammu and Kashmir Representation of the People Act, 1957.
- **Jammu and Kashmir was kept out of the delimitation exercise** when it was carried out in the rest of the country between **2002-2008.**
- **After the abrogation of Article 370** on August 5, 2019, Jammu and Kashmir lost its special status and became a Union Territory.
- **A delimitation commission was constituted** and asked to carve out Assembly and Parliament seats.
- Jammu and Kashmir has been **under the Centre's rule since June 19, 2018,** following the collapse of the coalition government.
- The first consequence of the completion of the delimitation exercise would be the **restoration of the political process and eventually holding assembly polls in the UT.**
- It will be only **after the completion of the delimitation exercise that the elections for the Assembly will be held.**

Details:

- The Jammu and Kashmir Delimitation Commission will **base its final report on the 2011 Census.**

- It will take into account the **topography, difficult terrain, means of communication and convenience** available while **delimiting seven additional seats for the 83-member Assembly of the Union Territory (UT)**.
 - The earlier delimitation panels did not acknowledge the difficult terrains and people's difficulties.
- The Commission will also specify the number of seats to be reserved for the SCs and the STs in the Legislative Assembly of the U.T.
 - It will be for the **first time that seats will be reserved for the STs in J&K**.
 - J&K has already seven seats reserved for SC people, mainly in the Kathua-Samba belt in the Jammu region.
 - It will be for the first time that STs, including **Bakerwals and Gujjars, will get reservations in this delimitation exercise**.
- The **24 seats reserved for Pakistan-occupied Jammu and Kashmir (PoJK)** would **not be delimited** in this process.

35. A perception shift in relations between Sri Lanka and China?

Context:

China is coming under increasing public scrutiny in Sri Lanka.

China's assistance to Sri Lanka:

- China has topped the charts in **providing crucial and timely support for Sri Lanka**.
- In addition to sanctioning loans and a **currency swap facility worth more than \$2 billion since the pandemic struck**, China also announced a **\$90 million grant to Sri Lanka in October 2020**.
- China's earlier grant projects in Sri Lanka are also built as large public spaces. Eg: Bandaranaike Memorial International Conference Hall in Colombo, Nelum Pokuna Mahinda Rajapaksa Theatre.
- Former President Maithripala Sirisena had requested China for the grant and the China-Sri Lanka Friendship Hospital facility was built within 30 months.
 - The hospital is built with a **Chinese grant of \$60 million** and is said to be one of the largest in South Asia for nephrology care.

Details:

- China is under more public scrutiny in the island nation than ever before. **The growing scepticism of China, in public discourse and the media, is relatively new.**
- The sentiment came to the fore when the Sri Lankan government passed a controversial bill governing the China-backed Colombo Port City.
- Recently, controversies erupted over **signboards in public places and government offices that included mandarin while excluding Tamil**, a national language in Sri Lanka.

What has changed in how Sri Lankans perceive their country's relationship with China?

- Sri Lanka has maintained friendly relations with maritime nations, including China, since ancient times. **Such relations have always had a sense of strategic content.**
- However, the **traditional friendship between Sri Lanka and China** has now become more nuanced with unique, unprecedented characteristics in the bilateral relationship, **displaying a special partnership**, especially at the level of two governments.
- While the **port city is a good investment for Sri Lanka**, many in the island nation see it as a **Chinese colony**.
- The port city bill was passed **without discussions with all domestic stakeholders and consensus**.

Conclusion:

- The Tamils in Sri Lanka acknowledge India's geopolitical concerns. They are of the sentiment that **India is immediate family and China is a distant relative**.
- Opposition parties in Sri Lanka assert that China must **acknowledge the Tamils** and also that **Sri Lanka is a diverse country with different ethnic and religious groups, not an entirely Sinhala-Buddhist country**.

36. Cauvery and the row over Mokedatu project

Context:

- Differences between the states of Karnataka and Tamil Nadu over the proposed **Mokedatu project**.

Background:

Mekedatu project:

- The Karnataka state government has proposed the Mekedatu dam project in the **Cauvery Basin**.
 - Originally proposed as a **hydropower project**, the revised Mekedatu dam project apart from **catering to the drinking water needs of the Bengaluru Metropolitan City and surrounding areas** will also **help regulate the flow to Tamil Nadu** on a monthly basis, as stipulated by the Tribunal and the Supreme Court.
 - The Cauvery Water Disputes Tribunal, and the subsequent Supreme Court Judgement have made allocations of Cauvery waters to all the riparian States – Karnataka, Kerala and Tamil Nadu, apart from the Union Territory of Puducherry. It has also stipulated “tentative monthly deliveries during a normal year” to be made available by Karnataka to Tamil Nadu.
- Tamil Nadu has challenged this move by Karnataka in the Supreme Court and impressed upon the union government not to grant Centre’s clearance for the project.
 - Tamil Nadu’s argument is that the building of the proposed project as close as 4 kms to the border will **allow the Karnataka state to impound and divert flows from “uncontrolled catchments” to itself** and this it claims goes against the order of the water disputes tribunal verdict which had already considered this component of uncontrolled flows by making allocation of the river waters.

Recommendations:

- The Cauvery river water sharing has become an emotive and political issue over the years and any future interventions must be guided by pragmatism.
 - A possible solution to this new development would be to get **both states to agree to the idea of a joint execution, operation and maintenance of the project** or through a third party’s participation.
 - The project if it is agreed to must be implemented after **addressing relevant environmental concerns**.

37. What makes the UAPA so stringent?

Context:

- The death of Father Stan Swamy in judicial custody, has brought into focus **the Unlawful Activities (Prevention) Act (UAPA)**.

Background:

Origin of the UAPA:

- In the light of the increasing calls for secession in the mid-1960s, **the Unlawful Activities (Prevention) Act, was passed in 1967.**
- It was envisaged as a stringent law to provide for effective prevention of unlawful activities of individuals and associations.
 - The Act provided for declaring an association or a body of individuals “unlawful” if they indulged in any activity that included acts and words, spoken or written, or any sign or representation, that supported any claim to bring about “the cession of a part of the territory of India”, or its “secession”, or which questions or disclaims the country’s sovereignty and territorial integrity.

Amendments over the years:

- Subsequent to the repealing of the Prevention of Terrorism Act (POTA), 2002, **the UAPA was expanded to include aspects under terrorism through the 2004 amendments.**
- The 2012 amendments sought to bring the UAPA in line with various requirements of the Financial Action Task Force indulged in combating money laundering and terrorism financing.
- The 2013 amendment extended the ban on unlawful organisations to five years from the previous two year period
- In 2019, the Act was amended to empower the government to designate individuals as terrorists.
- Subsequent to the above amendments the **scope of the law has expanded over the years.** It now covers aspects such as punishment for terrorist acts and activities, acts threatening the country’s security, including its economic security and provisions to prevent the use of funds for terrorist purposes, including money laundering. It is now the **main Anti terrorism law in India.**

Concerns:

Stringency of the law:

- The stringency of the law has raised **concerns over the right to life and liberty of the accused under the UAPA**.
 - The UAPA provisions differ considerably from the regular criminal laws. The UAPA modifies the Code of Criminal Procedure (CrPC) to make it **more stringent**. It provides provisions for longer remand periods as well as judicial custody.
 - The law also makes it more difficult to obtain bail. Under Section 43D(5) of the Act, bail cannot be granted to a suspect if the court is of the opinion that there are reasonable grounds to believe that the charges are prima facie true. This provision is liable for misuse and could **render it almost impossible for anyone to obtain bail until the completion of the trial**.

Against individual rights:

- The provisions of the act give the state authority vague **powers to detain and arrest individuals** who it believes to be indulged in terrorist activities. This gives state more powers vis-a-vis **individual liberty guaranteed under Article 21 of the constitution**.

Increase in use:

- There has been a steep **increase in the use of the UAPA law**.
 - According to the data provided by the Ministry of Home Affairs (MHA), there has been over 72% increase in the number of persons arrested under the UAPA (Unlawful Activities [Prevention] Act) in 2019 compared to the year 2015.

Potential for misuse:

- There has been **very low conviction rate** with respect to cases under UAPA. This is probably indicative of the misuse of the act.
 - According to data presented by the Union Home Ministry only 2.2 % of cases registered under the Unlawful Activities (Prevention) Act between the years 2016 and 2019 ended in convictions by the court.

38. Are COVID-19 curbs telling on immune systems?

Context:

- Amid the gradual easing of lockdowns, some countries are reporting a **higher number of respiratory infections**, including unseasonal diseases such as influenza and the respiratory syncytial virus (RSV).

Immunity debt:

- Experts have attributed this spike in respiratory infections to what is being called the “immunity debt” brought on by **non-pharmaceutical interventions (NPIs)** put in place to reduce the spread of the SARS-CoV-2 virus.
 - The NPIs included measures such as social distancing, use of masks, and hand hygiene.
- **The constant exposure to infectious agents boosts the immune response in the human body.** In the absence of this, there is a possibility that there could be **unseasonal outbreaks with greater severity than usual.** This is a major concern for infant population in particular.
- Disruptions to the seasonal transmission patterns of these diseases may have consequences for the timing and severity of future outbreaks.

39. A Kerala model for an anti-discrimination law

Background:

Discrimination in India:

- Incidents of **discrimination against individuals based on religion, caste, ethnicity, marital status, gender, sexual orientation and even eating preferences** have become common in society.
- This manifests itself in various forms including housing discrimination, discrimination in employment, etc.

Challenges:

Lack of legal recourse:

- The absence of proper legal recourse for those who suffer from discrimination only makes matters worse for the victim.

Social stigma:

- Despite some existing laws and judicial precedents, the **existing social stigmas act as a hurdle in countering the existing discriminational attitude in Indian society.**
 - Example – Even though **Section 377 of the Indian Penal Code** was watered down by the Supreme Court of India to exclude consensual relations between adults of the same sex, social prejudice against members of the LGBTQIA+ community remains strong.

Lacunae in existing provisions:

- While **Article 15(1) of the Constitution of India** prohibits the state from discriminating against individuals on the basis of characteristics such as religion, race, caste, sex and place of birth, it **does not bar private individuals or institutions** from doing so.
- Also, it **does not expressly list ethnicity, linguistic identity, nationality, marital status, sexual orientation, disability,** physical appearance and other personal characteristics as prohibited grounds of discrimination.

New forms of discrimination:

- **Intersectional discrimination** – discrimination on the basis of the intersection of personal characteristics, such as that faced by Dalit women, has a bigger impact on the victims.
- Discrimination operates on a wide variety of grounds in which while some have a direct impact, others have an indirect impact that is hard to notice. Such **indirect discriminations are hard to address.**

Recommendations:

Anti-discrimination law:

- A **comprehensive anti-discrimination legal framework** is required to fill the existing legal lacunae.
 - It should bring within its mandates **both private and public entities.**
 - **All forms of discrimination** should be acknowledged and dealt with in the law.
- Such a bill must balance the anti-discrimination mandate with other rights guaranteed by the Constitution and it could be restricted in pursuance of a legitimate objective.
- The article suggests that the States should lead the way, by enacting anti-discrimination laws in their respective jurisdictions. The anti-discrimination

law should **prescribe civil penalties** for those who engage in discriminatory practices.

Institutional set up:

- There should be **appropriate institutions outside the judiciary to adjudicate complaints of discrimination and to provide policy recommendations to the State government.**

Affirmative action:

- The anti-discrimination efforts should be complemented via **affirmative action to empower the historically marginalised sections of society.**

Conclusion:

- Though an anti-discrimination law is not a panacea for the **problems of inequality and social prejudice that are deeply rooted in our society**, it is still a necessary step in this direction.

40. Shaping a trilateral as Rome looks to the Indo-Pacific

Context:

- The recent **India-Italy-Japan trilateral**, organised by the Italian embassies in India and Japan.

Background:

Indo-Pacific region dynamics:

- The Indo-Pacific region is marked by challenges such as the geographical vastness of the area, **complex regional geopolitical problems, increasingly assertive behaviour of the Chinese in the region** and beyond and the **lack of robust multilateral organizations** to deal with the existing challenges.
- More and more countries have been reaching out to India as part of their Indo-Pacific strategy. India has also expressed great interest in forging new partnerships with like-minded countries interested in preserving peace and stability in the Indo-Pacific. **India has been engaging with key western nations as part of its own Indo-Pacific strategy** which is not only aimed at enhancing India's centrality in the region but also an attempt to counter China's increasing assertiveness.

- Countries that share similar values and face similar challenges are coming together to create purpose-oriented partnerships based on trade and security interests.

Details:

- Recently, **Italy** too, shedding its historic neglect of the region in its foreign policy realm has **signalled its intention to enter the Indo-Pacific geography, by seeking to join India and Japan in a trilateral partnership.**
- Italy has also expressed its intention to strengthen its otherwise below potential bilateral relations with India.
- This marked change in Italy's actions is based on the following factors:
 - **Risks emanating from China's strategic competitive initiatives** and the threat it poses to the EU in general and Italy in specific.
 - The **potential benefits that could accrue from a robust India-Italy bilateral relation.**

Significance:

- The India, Italy and Japan trilateral initiative could be used as a forum to foster and consolidate a strategic relationship between the three countries, and specifically, expand India-Italy bilateral relations. **The strengthening of the India-Italy partnership can help consolidate the EU-India strategic relationship further.**
- A strategic trilateral between India, Italy and Japan has, in the medium to long term, a lot of potential.
 - The **compatible economic systems** of the three countries could help create a virtuous and mutually beneficial contribution to the reorganisation of the global supply chains.
 - In the **security realm**, Italy, through its presence in the western Indian Ocean (anti-piracy operations off the coast of Somalia), could easily complement the India-Japan Indo-Pacific partnership.
 - That all three countries share the same values and the same rules-based world view could help them **coordinate at multilateral organizations.**

Recommendations:

Need for a clear strategy:

- Though the efforts towards the trilateral are welcome, they should be backed by appropriate efforts to institutionalize it. The three countries need to **define a common economic and strategic agenda.**

Comprehensive engagement:

- The trilateral cooperation should induce a strategic dialogue that should **include the economic, security and political dimensions.**

Conclusion:

- In the pushback against China, strategic cooperation between India, Italy and Japan can ensure a free and open Indo-Pacific.

41. Tapping on the potential of the youth

Context:

- In the context of **World Population Day on July 11**, the article analyzes India's demographic dividend.
 - World Population Day is marked on July 11 every year to focus attention on the importance of population-related issues. It was first observed by **the United Nations Development Programme (UNDP)** in 1989.

Demographic dividend of India:

- India's 'demographic dividend' **represents the potential for economic growth based on the age structure of the population.**
 - **Over 62% of India is aged between 15 and 59 years**, and the median age of the Indian population is less than 30 years. This significant proportion of young people in the total population will help drive India's economic growth.
- The 2020 UNDP report as well as a study conducted by The Lancet point out that as against the earlier fears of population explosion, **the Indian population would stabilize earlier than expected most likely in the next 12 years.**
- Thus the window available to India to leverage its 'demographic dividend' is narrower than earlier estimates and it is thus critical that India focuses its attention on safeguarding adolescents and young people's well-being to reap the benefits of the demographic dividend.
 - **At 253 million, India's adolescent population is among the largest in the world.**

Challenges in reaping demographic dividend:

Underfunded education sector:

- India's underfunded education system is inadequately equipped to provide the right education and skills to young people.
 - **Public expenditure on education in India constituted 4.4% of GDP in 2019 and only 3.4% of GDP in 2020.**
 - India stands 62nd in terms of public expenditure per student.
- Such an underfunded system would be plagued by **issues such as poor infrastructure, poor teacher-student ratio** which will, in turn, have a negative **impact on the learning outcome of the children.** This would adversely impact their employability or productivity.

Poor health indicators:

- Despite some commendable progress with respect to health indicators such as **infant mortality, stunting and under-nutrition levels in the child population of India**, the number continues to be higher than the global average or in comparison to countries at similar developmental stages as India.
- Unhealthy children would grow up to become unhealthy citizens which will not only impede their ability to a good living but also have a marked impact on the nation's progress.

Impact of the pandemic lockdowns:

- The impact of the pandemic on adolescents has been severe.
 - In India, more than 32 crore students have been affected by the **shutdown of schools** due to the pandemic induced lockdowns. This has severely **impacted the learning process of the students.**
 - The school lockdowns have also **affected the nutritional security** of a large number of children from poor households who are dependent on the mid-day meal scheme for their nutrition.
 - Studies have indicated that school closures have had a serious **impact on the mental well-being of children**, with around 17% of young people likely to be suffering from anxiety and depression during the pandemic.

Gender perspective:

- The impact of the COVID-19 pandemic-induced crisis on adolescent girls has been huge.
 - Around 158 million school girls have been impacted by the closure of schools. Many of those who have dropped out are unlikely to go back to school.

- India has registered an alarming **rise in the early marriage of girls** during the pandemic which could be attributed to the increased poverty levels during the pandemic.
- There has also been an **increase in gender-based violence**. Restricted mobility due to lockdowns puts girls at risk of violence at home at the hands of caregivers or partners.
- Adolescent girls continue to be at high risk during current times, given their vulnerability to abuse and trafficking.

Recommendations:

Ensuring continuum of the education process:

- The administration should balance the risks of transmission through children with the harm of prolonged school closures and **plan for a gradual re-opening of schools with appropriate precautions in place**.
- Opening schools with a **mix of online and offline options** could be an important step to addressing the learning needs and mental well-being of adolescents.

Collaborative efforts:

- Recognizing the long-standing effects that the pandemic could have on adolescents and youth, **collaborative actions by key ministries, government agencies, and civil society** is the need of the hour with special emphasis on inter-sectoral collaboration.
 - Example – Collaboration between the Ministry of Health and Family Welfare and the Education Ministry.
- Coordination across departments can enable better solutions and greater efficiencies in tackling the challenges that our adolescents face.

Focussed efforts directed at adolescent girls:

- The Ministry of Education should take necessary steps to **ensure that adolescents girls continue their education during the pandemic and return to schools when they reopen**.
- The Ministry of Health and Family Welfare must take appropriate steps to help adolescents safeguard their health through **continued access to menstrual hygiene products and strengthening outreach to girls in need via existing helplines**.

Conclusion:

- For India to be able to enjoy the fruits of this demographic dividend, the young population must be healthy, knowledgeable and skilled.
- Improving the lives of our adolescents in mission mode would not only improve their lives but also generate a virtuous cycle with healthier and educated young adults contributing substantially to securing India's future. Thus **India's welfare hinges on its young people's well-being.**

42. Tracing the decline of U.S. power

Context:

- The article analyzes the **change in U.S. foreign policy approach over the years** and its impact on the U.S.' standing in global affairs.

Background:

Phase of pragmatism in US foreign policy:

- Between the **period of 1970 to 1990s**, U.S. foreign policy was guided by the philosophy of realist pragmatism.
- Through **Henry Kissinger's visit to China in July 1971**, the U.S. chose to ignore the huge human rights violations in China during the Cultural Revolution (1966-76) and **chose to engage with China** in a bid to counter the Soviet Union. This came despite the large deviations in their respective world views and ideologies.

Phase of liberal idealism in US foreign policy:

- In the **post-Cold War era**, US foreign policy seems to be guided by the philosophy of liberal idealism.
- This phase has witnessed **U.S. intervention in many countries like Afghanistan, Iraq, etc.** guided by its **paternalistic responsibility to world peace and stability**. US has also taken great measures to **expand NATO into the former Soviet bloc**.

Analysis of the foreign policy approach:

- The article laments the switch from realist pragmatism to liberal idealism in the U.S. foreign policy approach based on the following arguments.

Success of the moral pragmatism phase:

- Kissinger's visit to Beijing in July 1971 is widely regarded as a major move that swung the 'correlation of forces' in America's favour and led to the ultimate **victory over the Soviet Union**.
- Despite the overwhelming pragmatism in its foreign approach during the pre-1991 phase, there was **scope for liberalism too** as witnessed in US support to democratic struggles.

Failures of the liberal idealism phase:

- The article argues that the abandonment of Kissingerian realist pragmatism has **weakened the U.S. both domestically and externally**.
- The lack of focus on its own domestic development due to an excessive focus on global affairs has resulted in a scenario where its own **economic global dominance is at stake**.
- The U.S. military interventions in different nations have not only resulted in huge civilian casualties in these countries, but have also **resulted in the loss of life of U.S. army personnel and cost trillions of dollars to the American exchequer**.

Conclusion:

- Pointing to the adverse impact of abandoning realist pragmatism and switching to liberal idealism, the article suggests a **return to Kissingerian realist pragmatism to manage and counter the threat posed by a rising China**.

43. China says it 'drove away' U.S. warship

Context:

China's military said it "drove away" a U.S. warship that **illegally entered Chinese waters near the Paracel Islands**.

Background:

- On July 12, 2016, the **Permanent Court of Arbitration in the Hague** ruled that **China had no historic title over the South China Sea**.
- In its 2016 ruling, it had also said **China had interfered with traditional Philippine fishing rights at Scarborough Shoal** and breached the country's sovereign rights by exploring for oil and gas near the Reed Bank.
- However, **Beijing has not accepted the ruling**.

- The date of the recent event marks the anniversary of an international court ruling that held Beijing had no claim over the South China Sea.

Details:

- The islands are claimed by China, Taiwan and Vietnam, which require either permission or advance notification before a military vessel passes through.
- Hundreds of other islands, reefs and atolls in the resource-rich waterway are **contested by Brunei, China, Malaysia and the Philippines, with China claiming rights to resources within its so-called nine-dash line, or most of the region.**
- It is a critical global sea route **and China continues to coerce and intimidate Southeast Asian coastal states, threatening freedom of navigation** in the throughway.

US response:

- The US Navy has said that it **asserted navigational rights and freedoms in the vicinity of the Paracel Islands consistent with international law.**
- It said that, under international law, the **ships of all states enjoy the right of innocent passage through the territorial sea.**
- It said that by engaging in **innocent passage** without giving prior notification, the **U.S. challenged these unlawful restrictions imposed by China, Taiwan and Vietnam.**

44. Losses forced closure of dairy farms, Lakshadweep tells HC

Background:

Policies introduced by Lakshadweep Administrator Praful Khoda Patel through the **Draft Lakshadweep Development Authority Regulation 2021 (LDAR)** in the Union Territory had evoked criticisms from various quarters and also had sparked protests in the union territory.

Details:

- The **affidavit was filed by the Lakshadweep administration** in response to a public interest litigation petition **challenging the reforms proposed in the islands.**
- The Lakshadweep administration has told the Kerala High Court that:
 - After a detailed analysis, it was felt imprudent to continue the dairy farms, **suffering a huge loss of more than ₹90 lakh per year.**

- The decision to shut them had **no relation to the proposed Animal Preservation Regulation.**
- The affidavit said the decision to disengage excess casual employees from various establishments was to **prevent loss to the exchequer.**

The draft Lakshadweep Development Authority Regulation (LDAR), 2021 will **require ratification from the Union Home Ministry and the Cabinet before it is implemented.**

45. Making welfare conditional is a stamp of coercion

Context

- On World Population Day, Uttar Pradesh chief minister unveiled the new population policy for 2021-2030
 - It is an annual event, observed on July 11 every year
 - The day is dedicated to focusing on the importance of population issues.

Details

- In the new population policy, a target has been set to bring the birth rate to 2.1 per thousand population by 2026 and to 1.9 by 2030.
- It promotes a two-child policy, violation of which would mean people will be debarred from contesting local body elections, applying for government jobs or receiving any government subsidy.
 - The Uttar Pradesh government will give promotions, increments, concessions in housing schemes and others perks to employees who adhere to population control norms, and have two or less children.
 - For those who are not government employees and still contribute towards keeping the population in check, will get benefits in like rebates in taxes on water, housing, home loans etc.
- As per the policy, efforts will be made to increase accessibility of contraceptive measures under the family planning programme and provide a proper system for safe abortions.
- Care of the elderly, and better management of education, health, and nutrition of adolescents between 11 to 19 years has also been ensured in the policy

Implementation

- The Uttar Pradesh government plans to set up a state population fund to implement the measures.
- The provision of this legislation shall apply to a married couple where the boy is not less than 21 years of age and the girl is not less than 18.

Concerns

- The policy is in conflict with the central Government submission in the Supreme Court where it said “international experience shows that any coercion to have a certain number of children is counter-productive and leads to demographic distortions”.
 - The Government further confirmed that India was committed to its obligations under international law, including the principles contained in the International Conference on Population and Development Programme of Action, 1994.

Supreme Court’s view

- In *Suchita Srivastava & Anr vs Chandigarh Administration* (2009), the Court found that a woman’s freedom to make reproductive decisions is an integral facet of the right to personal liberty guaranteed by Article 21.
 - “It is important, to recognise that reproductive choices can be exercised to procreate as well as to abstain from procreating”.
- Multiple judgments have also pointed that a person’s autonomy over their body as an extension of the right to privacy

Aborting the girl child

- In a hope to have a male child, families may abort the daughters to comply by the two child policy.
- It may lead to a proliferation in sterilisation camps, illegal abortion clinics, which may further harm the mothers.

Alternative Strategies

- The success of southern states in containing population growth indicates that economic growth as well as attention to education, health and empowerment of women work far better to Disincentivize larger families than punitive measures.
 - In areas with high poverty, low economic growth and fewer educated women, fertility levels tend to be higher.

Conclusion

- Any government interested in supporting fertility decline, thus, must work on the education and empowerment of women

46. Interference an investigating officer can do without

Issue:

There have been **growing instances of subordinate judicial officers, and High Courts directing the investigating officer to arrest a particular individual** in relation to the commission of a crime. The article explains why such judicial interference in an investigation is undesirable.

Details:

- Recently, the Supreme Court of India observed that **the courts have no authority to direct an investigating officer to in turn direct the arrest of any particular individual** connected with a crime.
- Contrary to this, certain incidents **justify further curbs on the police authority to investigate an established crime**. Example:
 - Horrific murder of a citizen, George Floyd by a Minneapolis police officer in the United States.
 - June 2020 episode in Sattankulam, Tamil Nadu, where a 58-year-old father and his 31-year-old son died, subject to police brutality.
- However, the article asserts that this issue should be examined in the background of **growing instances of interference of judicial officers into an investigation which could widen the government and public distrust of the police**.

Effects of Judicial Interference in Investigation:

- Court interference cannot be seen as an intervention. Interference in the day-to-day investigation is not only undesirable but is also **not sanctioned by law**.
- There are instances of **courts bullying police officers** with respect to the **arrests made in relation to a crime**.
 - Such directions are a **threat to criminal justice ethics** because the bedrock of British jurisprudence is the principle “**accused is presumed to be innocent till he is proved guilty**”.
 - Directing an investigating officer to go ahead with an arrest even before he has scrutinised the evidence collected is unsustainable in law.
- The direction to the police with regard to arrests during a criminal investigation is **harmful to police morale and cuts at the roots of field policing**.

- A lack of faith in police ability and integrity **will make grass-root level policemen even more arbitrary** than now and could lead them into **carrying out questionable actions that will cast aspersions on an officer's ability to think for himself.**

Why is Judicial Interference in Policy Inquiry Unnecessary?

- The Code of Criminal Procedure (CrPC) **vests sufficient discretion in the investigating officer** to take such decisions as arrests, searches, dropping of further action after registering a first information report (FIR).
- Police are a well-established hierarchy that is **obligated to ensure objectivity during a criminal investigation.**
 - Every investigation is supervised by at least two immediate senior officers.
 - In the more important cases, there are a few more levels.
 - It is their duty to ensure that every investigation is handled lawfully and impartially.
- Every police station should **register a complaint under the relevant sections of a statute the moment a cognisable offence is made out in the complaint.**
- There is another safeguard against police misconduct. **The CrPC makes it obligatory** for the investigating officer **to write a diary that details the action taken every day following FIR registration.**

Way Forward:

- Besides the Supreme Court (in whom the Constitution vests enormous authority and discretion which are not questionable), the **lesser courts should not give directions in the matter of arrests and searches.**
- **Where supervisory officers fail in their duty** because of sheer inaction or buckle under external pressure, **they deserve to be pulled up by courts.** But not before they are found guilty of indifference or wrongdoings.

Conclusion:

A humane view of police conducts and a larger scope for freedom of action in the standard operating procedures followed is necessary especially when the police investigate complicated crimes.

47. Ending the impasse

Context:

Meeting between India's External Affairs Minister S. Jaishankar and his Chinese counterpart Wang Yi in Dushanbe, Tajikistan.

Background:

- **India-China relationship has been under strain** for over a year.
- Their last meeting in Moscow took place in the **aftermath of the Galwan Valley clash.**
- A political agreement then **paved the way for both sides to disengage** in February 2021.
- However, the agreements in **Galwan and Pangong Lake** where both sides have put in place **no-patrolling zones**, have **not been followed** at other disputed sites in **Depsang, Demchok, Gogra and Hot Springs.**
- The **crisis on the Line of Actual Control (LAC) remains unresolved**, and **tens of thousands of soldiers from both sides still remain deployed in forward areas.**
- Peace on the border provided the foundation for the development of ties since 1988 when the post-1962 freeze ended.
- The **unresolved situation has been visibly impacting the relationship in a negative manner.**

Issue:

- In the recent meeting at Dushanbe, **Wang called for boundary disputes to be kept in an appropriate place while expanding the positive momentum of bilateral cooperation.**
- Wang also said that Beijing's strategic judgment on China-India relations remains unchanged.
- China, which was **earlier equally concerned** after India's counter-deployments to take the heights of the Kailash Range, **appears to be in no hurry to restore the status quo.**

Way Forward:

- India has made it clear that **normalcy cannot be possible without disengagement and de-escalation.**
 - It has signalled its intent with measures including **scrutiny on Chinese investments – bilateral trade.**

- However, bilateral trade is booming beyond pre-pandemic levels owing to huge imports of medical supplies.
- At this stage, **India must take a stand to underline its resolve on restoring the status quo.**
- China must demonstrate its willingness to resolve the boundary dispute by **resuming negotiations on the LAC at the earliest.**
- For a reset in India-China relations and to ward away distrust in all the other spheres of bilateral relations, **a full restoration of peace and de-escalation on the borders is necessary.**

48. India needs a renewed health-care system

Context:

Following the recent cabinet shuffle, India has got a new Union Health Minister.

The article talks about the **need for rebuilding trust in public health** through a **renewed healthcare system** in the country that lays its focus on the core **lessons learnt from the pandemic** as well as **ensures widespread positive impacts extending much beyond the COVID-19 situation.**

The availability of functional public health systems is of utmost importance. This can be illustrated through a case study.

- Maharashtra and Kerala currently have the highest number of COVID-19 cases in India.
- Their **economic situation is similar** as their per capita Gross State Domestic Product (GSDP) is similar.
- However, their COVID-19 **case fatality rates are hugely different** – 0.48% for Kerala and 2.04% for Maharashtra.
- The primary reason for such divergence is likely to be the huge differences in the **effectiveness of public health systems.**
- **Kerala has per capita two and a half times more government doctors**, and an **equally higher proportion of government hospital beds** when compared to Maharashtra.
- Besides, Kerala allocates per capita over one and half times higher funds on public health every year.

- Despite Maharashtra having a large private healthcare sector, its **weak public health system has proved to be a critical deficiency.**

Robust government healthcare services in Kerala have translated into:

- **More effective outreach**
- **Timely testing**
- **Early case detection and more rational treatment for COVID patients**

What should be the new focus?

Attention to National Health Mission:

- A programme that requires the immediate attention of the Health Minister is the **National Health Mission (NHM)**.
 - Since 2017-18, Union government allocations for the NHM have declined in real terms, resulting in inadequate support to States for core activities such as immunisation.
 - These systemic gaps affect the delivery of COVID-19 vaccination.

Doubling the Healthcare budget allocation:

- Furthermore, the **condition of the National Urban Health Mission (NUHM) remains pathetic.**
 - Central allocation for the NUHM is ₹1,000 crore, which amounts to **less than ₹2 per month per urban Indian.**
- As per the Parliamentary Standing Committee recommendations, the Government must allocate ₹1.6-lakh crore for public health during the current year for reaching National Health Policy targets.
- **Doubling the present central health Budget** could enable major strengthening of health services in rural and urban areas across the country.

Private sector regulation:

- There is a need to **regulate rates and standards of care in the private sector.**
- Massive hospital bills have caused untold distress even among the middle class.
 - COVID-19 care costs ₹1 lakh to ₹3 lakh per week in large private hospitals.
 - Panic due to drug shortages was significantly linked with major overuse of medicine by unregulated private hospitals (Eg: Remdesivir).
- Learning from stark market failures during the COVID-19 pandemic, **comprehensive regulation of private health care** must be a critical agenda for the new Health Minister.

Implement Clinical Establishments (Registration and Regulation) Act (CEA):

- The central government must on priority take necessary steps to promote the **implementation of the Clinical Establishments (Registration and Regulation) Act (CEA)**.
- CEA was **passed in 2010** and is presently applicable to 11 States across India.
- This Act is not effectively implemented due to a **major delay in notification of central minimum standards, and failure to develop the central framework for the regulation of rates**.

Stop further Privatisation of Healthcare:

- NITI Aayog has recently published the document, 'Investment Opportunities in India's Healthcare Sector' **promoting further privatisation of health care**.
- With proposals for handing over public hospitals to private operators, public health services that were hitherto free of cost, would begin to be charged for.
- This can prove to be detrimental in the current situation considering that **India already has one of the most privatised health systems in the world**.
- The Health Minister must **assert his authority to stop further privatisation**, which might benefit healthcare corporates and be damaging for ordinary people.

Conclusion:

Neglect of public health systems can mean large-scale, avoidable losses of lives; hence, **public health services must be upgraded rapidly and massively as a topmost priority**. Building people's trust in public health systems is important as it would help in overcoming vaccination hesitancy while strengthening the **promotion of healthy behaviours necessary to deal with the pandemic**.

49. Midday meals leave a long-lasting impact: study

Context:

A study on the **inter-generational benefits of the midday meal scheme** published in Nature Communications.

Mid day meals scheme

- The scheme **guarantees one meal to all children in government and aided schools and madrasas supported under Samagra Shiksha.**
- It was **launched in the year 1995** as the National Programme of Nutritional Support to Primary Education (NP - NSPE). In **2004, the scheme was relaunched** as the Mid Day Meal Scheme.
- It is a **centrally sponsored scheme**, hence cost is shared between the centre and the states.

Issue:

- In India, **more than one in three Indian children are stunted**, or too short for their age, reflecting **chronic undernutrition**.
 - Stunting i.e, **low height for age, is caused by long-term insufficient nutrient intake and frequent infections.**
 - Stunting generally **occurs before age two, and effects are largely irreversible.**
- While nutritionists argue that **maternal health and well-being is the key** to reducing stunting in their offspring, the **focus has been on boosting nutrition for young children.**

Key Findings:

- By 2016, the prevalence of stunting was significantly lower in areas where the scheme was implemented in 2005.
- The scheme was associated with **13-32% of the improvement** in the **height-for-age** z-scores in India between 2006 and 2016.
- Girls who had access to free lunches provided at government schools had **children with a higher height-to-age ratio than those who did not.**
- The study noted that interventions to improve maternal height and education must be implemented years before those girls and young women become mothers.
- The linkages between midday meals and lower stunting in the next generation were **stronger in the lower socio-economic strata** and likely work through women's education, fertility, and the use of health services.

50. Sensitive and precise

Context:

- The **Trafficking in Persons (Prevention, Care and Rehabilitation) Bill, 2021**, is likely to be tabled in the ongoing monsoon session of Parliament.
 - The Bill aims at **preventing and countering trafficking in persons** and has provisions for care, protection and rehabilitation to the victims. It envisages the creation of a supportive legal, economic and social environment for the victims of human trafficking.

Human trafficking:

- Human Trafficking is the **illegal trade in human beings** for the purposes of commercial sexual exploitation, prostitution or forced labour.

Constitutional provision:

- **Article 23 of the Indian Constitution** deals with the aspect of **prohibition of traffic in human beings and forced labour**.
 - Article 23 of the Indian Constitution deals with the **Right against Exploitation**.
- As per clause (1) of Article 23, traffic in human beings and begar and other similar forms of forced labour are prohibited and any contravention of this provision shall be an offence punishable in accordance with the law.

Measures taken so far:

- As per the provisions enshrined in the Constitution, the government had passed the **Immoral Traffic (Prevention) Act** in 1956, which continues to be the main legislation for the prevention of trafficking for commercial sexual exploitation.
- **India has also ratified the United Nations Convention on Transnational Organised Crime (UNTOC)** which has as one of its Protocols, Prevention, Suppression and Punishment of Trafficking in Persons, particularly Women and Children. Various actions have been taken to implement the convention and as per Protocol, Criminal Law Amendment Act, 2013 has been enacted wherein human trafficking has specifically been defined.

Notable aspects of the bill:

- The Bill has expanded the area under coverage to **include offences taking place, not only within India but also outside it.**
- The draft legislation envisages **the setting up of anti-trafficking committees at the State and national levels** to implement the proposed provisions.

Concerns associated with the proposed legislation:

Powers envisaged for the NIA:

- The proposal to hand the **responsibility of investigation in trafficking crimes to the NIA** has been criticized for the following two reasons:
 - This could further **burden the already stretched NIA.**
 - This also amounts to an **attack on federalism**, given that this will only decrease the power of local enforcement agencies with respect to the implementation of the proposed provisions.

Very broad definition of human trafficking:

- Another key criticism of the Bill has been its broad definitions of victims and **failure to distinguish consensual sexual activity for commerce from human trafficking.** This would end up criminalising sex work and victimisation of the already exploited.

Overzealous provisions:

- Various civil society activists and legal experts have criticised some overzealous provisions adopted by the draft legislation to counter human trafficking.
 - **Reporting of offences has been made mandatory** with penalties for non-reporting.
 - The **proposal of the death penalty** for various forms of aggravated trafficking offences.
- Though societies and governments must have zero tolerance for human trafficking, the use of overzealous provisions as those proposed risks **the adoption of a purely legal and punitive approach to solve what is essentially a socio-economic problem.**

Failure to acknowledge root causes:

- In its current form, the draft Trafficking in Persons (Prevention, Care and Rehabilitation) Bill, 2021 seems to be inadequate to stamp out human trafficking given its failure to acknowledge the contributing factors to human trafficking, including **vicious poverty, debt, lack of opportunity, and ineffectiveness/inefficiency of the development schemes.**

For more related information on the proposed legislation, refer to the following article:

Conclusion:

- **Tackling human trafficking needs a wholesome approach** that is cognizant of the causative factors.

51. Oxfam report highlights sharp inequalities in health indicators

Context:

India Inequality Report 2021: India's Unequal Healthcare Story has been published by Oxfam India.

Key Findings:

- India's **low spending on public healthcare systems and focus on supporting private healthcare** has led to **serious inequalities in access to healthcare**, especially during the Covid 19 pandemic.
- The average medical **expenditure per hospitalisation case has tripled between 2004 and 2017**, making it difficult for poorer and rural households.
- Rural India houses 70 percent of the population, while it has 40 percent of hospital beds.
- **Sharp inequalities exist** across different caste, religious, class and gender categories on various health indicators.
- The General category is better off than SCs and STs, Hindus are better off than Muslims, the rich are better off than the poor, men are better off than women, and the urban population is better off than the rural population" **on most health determinants, interventions and indicators including access to improved, non-shared sanitation facilities.**
- Vaccination drive against Covid-19 **ignores the country's digital divide.**
- Despite improvement in child immunisation, the **rate of immunisation of girls continues to be below that of the male child**; immunisation of children in urban areas is more than those in rural areas; and **immunization of SCs and STs is behind that of other caste groups.**
- **While women's literacy** has improved across social groups over the years, **SC and ST women lag behind the general category** by 18.6% and 27.9% respectively.

- There exists a **gap of 55.1% between the top and bottom 20% of the population** in 2015-16.
- The Oxfam report has **marked the state of Kerala as a success story** in the handling of the COVID-19 pandemic.

Note:

- Oxfam is a **confederation of independent charitable organizations** focusing on the alleviation of **global poverty**.
- It was **founded in 1942** and is led by **Oxfam International**.

52. Speedy trial a fundamental right: HC

Context:

The Bombay High Court has said “**speedy trial is a fundamental right**”.

Details:

- The comments were made **highlighting the issue of people languishing in prisons waiting for the trial to begin**.
- The right to a speedy trial is a fundamental right **inherent under Article 21 of the Constitution** which provides for the **right to life and personal liberties**.
- The Constitution of India provides that, **whenever there is a violation of fundamental rights, a person can move to the Supreme Court under Article 32 and to the High Court under Article 226 of the Constitution**.

Need for Speedy trial:

- **Both the prisoner and his guard equally suffer** human rights violations in case of delayed trials.
 - The undertrial prisoner, who is yet to get his day in court, suffers the most, **languishing behind bars for years without a hearing**.
- Speedy trial remains one of the best ways to remedy the **unwarranted phenomenon of overcrowding of prisons**.
- Speedy trial is important to ensure justice as well as undue and oppressive imprisonment and ensures **dispensation of justice by providing fair and just trial to all its citizens**.
- ‘Justice delayed is justice denied’ is the cornerstone in delivering justice.

53. Pegasus is India's Watergate moment

Context:

- 'Pegasus Project' report produced by the collaborative investigation of journalists from around the world has given rise to **speculations of extensive surveillance by the Indian government.**

Associated laws and agencies involved in surveillance activities in India:

- Currently, the laws authorising interception and monitoring of communications are Section 92 of the CrPC (for call records, etc.), Rule 419A of the **Telegraph Rules**, and the rules under **Sections 69 and 69B of the IT Act.**
- A limited number of agencies are provided powers to intercept and monitor.

Threat posed by excessive surveillance:

- While a small amount of surveillance is necessary for national security, excess and arbitrary surveillance is dangerous. Excessive and unaccountable surveillance **imperils privacy, freedom of thought, of speech**, and has a chilling effect on people's behaviour.
- It also goes **against the rule of law** which forms the bedrock of constitutional liberal democracies like India.

Concerns associated with surveillance in India:

- Despite the repeated claims from the government that all its surveillance is authorised and justified, the article points out serious concerns associated with surveillance activities carried out by intelligence agencies in India.
 - There are **numerous examples of surveillance powers being misused** for personal and political gain, and to harass opponents and have nothing to do with national security or organised crime. There have been even reports of non-state actors misusing police contacts to tap phone calls for personal reasons. Despite such reports, there are a few examples of people being held legally accountable for such unlawful surveillance.
 - **Required legal procedures are often not followed** while undertaking surveillance operations.
 - There is a complete **lack of oversight** of the executive's sole power to carry out surveillance activities. There is no entity to ensure that the surveillance is necessary and proportionate.

- There is very little clarity on the applicability of the available legal options for undertaking surveillance. Indeed, it is unclear when the Telegraph Act applies and when the IT Act applies.
- A limited number of agencies are provided powers to intercept and monitor. However, there are often different lists offered by different sources on what these agencies are. Thus, it is unclear which entities count as intelligence and security agencies. Also, post the K.S. Puttaswamy judgment, **most of India's intelligence agencies are "potentially unconstitutional"**, since they are not constituted under a statute passed by Parliament.
- The various **surveillance programmes such as CMS, TCIS, NETRA, CCTNS, have not been authorized by any statute**, and thus fall short of the Judiciary's test for reasonable restrictions on the invasion of privacy as noted in the 2017 K.S. Puttaswamy judgment.

Important observations made in the K.S. Puttaswamy judgment:

- Any invasion of privacy could only be justified if it satisfied the following three tests:
 - The restriction must be by law
 - It must be necessary and proportionate
 - It must promote a legitimate state interest (e.g., national security)

Recommendations:

- There is a need for appropriate **international regulation of the sale of tools like spyware.**
- Likening the recent development to the U.S's Watergate scandal, the article calls for similar measures taken in the U.S. to **reform its intelligence and surveillance system.** There is a need to ensure that **surveillance in India is made accountable.** The various measures which might be taken in this direction include the following:
 - The various intelligence agencies in India must be provided with a **legal framework for their existence and functioning.**
 - A standing committee of Parliament on intelligence must be created to ensure a certain degree of legislative oversight over the operations of the various intelligence agencies. The **functioning of the various intelligence agencies must be brought under parliamentary oversight and scrutiny.** This could play a vital role in ensuring their accountability and them being respectful of civil liberties.
- Intelligence gathering needs to be professionalised and made **non-partisan.**

- Necessary measures need to be taken to ensure that **civil liberties and rule of law are protected and balanced against the need for surveillance activities in the national interest.**

54. UNESCO Delists Liverpool of Its World Heritage Status

Why in News

Recently, the city of Liverpool, England has been removed from UNESCO's (United Nations Educational, Scientific and Cultural Organization) list of world heritage sites.

- Earlier six Indian places were added to the **tentative list of UNESCO's world heritage sites.**

Key Points

- **Liverpool:**
 - The port city was **included in the prestigious list for its architectural beauty** and in recognition of its role as **one of the world's most important ports** during the **18th and 19th centuries.**
 - It was **named a World Heritage Site in 2004**, joining cultural landmarks such as the Great Wall of China, the **Taj Mahal**, and the Leaning Tower of Pisa.
 - The city is only the **third place to be removed from the prestigious list.**
- **Reasons for Delisting:**
 - The **new buildings including a football stadium** undermine the attractiveness of its Victorian docks and were destroying the **heritage value of its waterfront.**
 - The over development would **irreversibly damage the heritage of the historic port.**
- **Other Delisted Sites:**
 - **Wildlife sanctuary in Oman in 2007.**
 - **Reason:** poaching and habitat loss.
 - **Dresden Elbe valley in Germany in 2009.**
 - **Reason:** A four-lane motorway bridge was built over the river.

World Heritage Site

▪ **About:**

- A World Heritage Site is a place that is **listed by UNESCO for its special cultural or physical significance**. The list of World Heritage Sites is maintained by the international 'World Heritage Programme', administered by the **UNESCO World Heritage Committee**.
- It seeks to **encourage the identification, protection and preservation of cultural and natural heritage** around the world considered to be of outstanding value to humanity.
- This is embodied in an **international treaty called the Convention concerning the Protection of the World Cultural and Natural Heritage**, adopted by UNESCO in **1972**.
 - It provides a **framework for international cooperation in preserving and protecting cultural treasures** and natural areas throughout the world.

▪ **Types:**

- **Cultural heritage sites** include historic buildings and town sites, important archaeological sites, and works of monumental sculpture or painting.
- **Natural heritage sites** are restricted to natural areas.
- **Mixed heritage sites** contain elements of both natural and cultural significance

▪ **Sites in India:**

- India has **38 world heritage sites**, including **30 cultural properties, 7 natural properties and 1 mixed site**. The latest one included is **Jaipur city, Rajasthan**.

55. Secrecy of Vote must in any election: SC

The Supreme Court has again held that in any election, be it to Parliament or State legislature, the maintenance of secrecy of voting is “a must”.

What is the Secret Vote?

- The secret vote/ secret ballot is a voting method in which a voter’s choices in an election or a referendum are anonymous.
- It aims for forestalling attempts to influence the voter by intimidation, blackmailing, and potential vote-buying.
- The system is one means of achieving the goal of political privacy.

What did the Supreme Court rule?

- Secrecy is a part of the fundamental right of freedom of expression.
- The confidentiality of choice strengthens democracy.

- The principle of secrecy of ballots is an important postulate of constitutional democracy, the court said.
- It is the policy of the law to protect the right of voters to the secrecy of the ballot.
- Even a remote or distinct possibility that a voter can be forced to disclose for whom she has voted would act as a positive constraint and a check on the freedom to exercise of the franchise.

Voter's discretion is allowed

- A voter can also voluntarily waive the privilege of non-disclosure.
- The privilege ends when the voter decides to waive the privilege and instead volunteers to disclose as to whom she had voted.
- No one can prevent a voter from doing. Nor can a complaint be entertained from any, including the person who wants to keep the voter's mouth sealed as to why she disclosed for whom she voted said the court.

56. Empowering nature with biocentric jurisprudence

Context

In a recent ruling, the Supreme Court of India has sought to move away from an anthropocentric basis of law.

Biocentrism Vs. Anthropocentrism

- **Anthropocentrism** argues that of all the species on earth humans are the most significant and that all other resources on earth may be justifiably exploited for the benefit of human beings.
- The philosophy of **biocentrism** holds that the natural environment has its own set of rights which is independent of its ability to be exploited by or to be useful to humans.
- Biocentrism often comes into conflict with anthropocentrism.

Supreme Court of India upholds biocentric principles

- The Great Indian Bustard is a gravely **endangered species**, with hardly about 200 alive in India today.
- The overhead power lines have become a threat to the life of these species as these birds frequently tend to collide with these power lines and get killed.
- Recently, the Supreme Court in **M.K. Ranjitsinh & Others vs Union of India & Others**, said that in all cases where the overhead lines in power projects

exist, the governments of Rajasthan and Gujarat shall take steps forthwith to install bird diverters.

- In protecting the birds, the Court has **affirmed and emphasised the biocentric values of eco-preservation.**
- A noteworthy instance of the application of anthropocentrism in the legal world is in that of the “Snail darter” case in the United States.
- The Supreme Court of the United States of America in Tennessee Valley Authority vs Hill, had held that since the “Snail darter” fish was a specifically protected species under the Act, the executive could not proceed with the reservoir project.

Human role in extinction of species

- About 50 years ago, there were 4,50,000 lions in Africa. Today, there are hardly 20,000.
- Indiscriminate monoculture farming in the forests of Borneo and Sumatra is leading to the **extinction of orangutans.**
- Rhinos are hunted for the so-called medicinal value of their horns and are slowly becoming extinct.
- From the time humans populated Madagascar about 2,000 years ago, about 15 to 20 species of Lemurs, which are primates, have become extinct.
- The compilation prepared by the **International Union for Conservation of Nature** lists about **37,400 species that are gravely endangered;** and the list is ever growing.

Evolution of Right of Nature laws in Constitutions

- Pieces of legislation are slowly evolving that fall in the category of the “Right of Nature laws”.
- These seek to travel away from **an anthropocentric basis of law to a biocentric one.**
- The **Constitution of India** is significantly silent on any explicitly stated, binding legal obligations we owe to our fellow species and to the environment that sustains us.
- It is to the credit of the Indian judiciary that it interpreted the enduring **principles of sustainable development** and read them, inter alia, into the precepts of **Article 21 of the Constitution.**
- In September 2008, Ecuador became the first country in the world to recognise “Rights of Nature” in its Constitution.
- Bolivia has also joined the movement by establishing Rights of Nature laws too.
- In November 2010, the city of Pittsburgh, Pennsylvania became the first major municipality in the United States to recognise the Rights of Nature.

- These laws, like the Constitution of the countries that they are part of, are still works in progress.

Conclusion

In times like this the Supreme Court's judgment in M.K. Ranjithsinh upholding the biocentric principles of coexistence is a shot in the arm for nature conservation. One does hope that the respective governments implement the judgment of the Court.

57. Dying Declaration

Context: Recently, a special Central Bureau of Investigation (CBI) court awarded two policemen life sentences for the custodial death of a murder accused on the basis of the 'Dying Declaration' made by the victim prior to his death.

About Dying Declaration:

- Section-32(1) of Indian Evidence Act, 1872, defines dying declaration as a statement written or verbal of relevant facts made by a person, who is dead. It is the statement of a person who had died explaining the circumstances of his death.
- This is based on the maxim 'nemo mariturus presumuntur mentri' i.e. a man will not meet his maker with a lie on his mouth.
- The general rule under Section 60 of the Act is that all oral evidence must be direct - he heard it, saw it or perceived it.

Rules for Admission of Dying Declaration:

The grounds of admission under a dying declaration have been based on two broad rules:

- The victim being generally the only principal eye-witness to the crime.
- The sense of impending death, which creates a sanction equal to the obligation of an oath in a court.

Recording Dying Declaration:

- Anyone can record the dying declaration of the deceased as per law. However, a dying declaration recorded by a Judicial or Executive Magistrate will add an additional strength to the prosecution case.

- A dying declaration may in several cases be the “primary piece of evidence to prove the genesis of occurrence”.
- The only requirement for such a declaration to be held perfectly accountable in court is for the victim to volunteer the statement and be of conscious mind.
- The person who records the dying declaration must be satisfied that the victim is in a fit state of mind.

Situations Where Court Does Not Accept it as a Evidence:

- Though a dying declaration is entitled to great weight, the accused has no power of cross-examination.
- This is the reason the courts have always insisted that the dying declaration be of such a nature as to inspire full confidence of the court in its correctness.
- The courts are on guard to check if the statement of the deceased was a result of either tutoring, prompting or a product of imagination.

Need of Corroboration (Supporting Evidence):

- Several judgments have noted that it is neither rule of law nor of prudence that dying declaration cannot be acted upon without corroboration.
- If the court is satisfied that the dying declaration is true and voluntary it can base conviction on it, without corroboration.
- Where a dying declaration is suspicious, it should not be acted upon without corroborative evidence because a dying declaration does not contain the details as to the occurrence.
- It is not to be rejected, equally merely because it is a brief statement. On the contrary, the shortness of the statement itself guarantees truth.

Validity of Medical Opinion:

- Normally the court, in order to satisfy whether the deceased was in a fit mental condition to make the dying declaration, can look up the medical opinion.
- But where the eye witness has said that the deceased was in a fit and conscious state to make this dying declaration, the medical opinion cannot prevail.

58. Needed, a more unified Asian voice for Afghanistan

In news: In the backdrop of US pull out of troops from Afghanistan, three recent meetings are turning the spotlight on the Central Asia’s role in dealing with the situation in Afghanistan

- Shanghai Cooperation Organisation (SCO) contact group on Afghanistan

- SCO Defence Ministers in Tajikistan,
- Central and South Asia conference on regional connectivity in Uzbekistan

Concerns for India in Central Asia

- The same powers that invaded Afghanistan post 9/11, and declared the Taliban leadership as UNSC-designated terrorists, are now advocating talks with the Taliban
- India's original **hesitation in opening talks with the Taliban** has cut India out of the current reconciliation process.
- The end of any formal dialogue between **India and Pakistan** since 2016 and trade since 2019, have resulted in Pakistan blocking India's over-land access to Afghanistan
- **India's alternative route through Chabahar**, though operational, cannot be viable or cost-effective also long as U.S. sanctions on Iran are in place.
- India's boycott of the Chinese Belt and Road Initiative (BRI) make another route to Afghanistan off-limits.
- U.S. has announced a new, surprise formation of a "Quad" on regional connectivity – U.S.-Uzbekistan-Afghanistan-Pakistan that does not include India
- All the above portends to India's narrowing window of engagement in Central Asia.

What are the calculation of Central Asian neighbours?

- **Necessity of Afghanistan for access to Ocean:** First is that prosperity for these land-locked countries can only flow from access through Afghanistan to the closest ocean, i.e. the Indian Ocean.
- **Need for Taliban's Support:** Second, all transit through Afghanistan depends on guarantees of safe passage from the Taliban, backed by the group's mentors in Pakistan. Therefore, Central Asian countries have been at the forefront of mediation of talks with Taliban.
- **Alignment with China:** Third, all five Central Asian Countries are now a part of China's BRI. Tying their connectivity initiatives with Beijing's BRI will bring the double promise of investment and some modicum of control over Pakistan.

Given the above, New Delhi's room for manoeuvre with the five Central Asian countries on Afghanistan appears limited.

Way Ahead for India

- **Realizing Common Concerns:** India and the Central Asian States share common concerns about an Afghanistan overrun by the Taliban and under

Pakistan's thumb: the worries of battles at their borders, safe havens for jihadist terror groups inside Afghanistan and the spill-over of radicalism into their own countries.

- **Supporting Afghan Government:** India to work with Central Asian states, and other neighbours to shore up finances for the Afghanistan government to ensure that the government structure does not collapse
- **Fighting Terror:** As part of the SCO's Regional Anti-Terrorist Structure (RATS), India must also step up its engagement with the Central Asian countries on fighting terror.
- **Supporting Afghan Defence Forces:** India can support the Afghan National Defense and Security Forces (ANDSF) where it needs it most: in terms of air power.
- **Engaging with Pakistan:** India's reluctant discussions with the Taliban leadership make little sense unless a less tactical and more strategic engagement with Pakistan is also envisaged.

59. Striking down of the 97th Amendment needs to be taken in right spirit

Context

In *Union of India vs Rajendra N. Shah*, the Supreme Court of India partially struck down the 97th Constitutional Amendment.

Background of the 97th Constitutional Amendment

- The 97th Constitutional Amendment came into effect from February 15 2012.
- The amendment added "cooperative societies" to the **protected forms of association** under Article 19(1)(c), elevating it to a **fundamental right**.
- It also inserted **Part IXB in the Constitution** which laid down the **terms by which cooperative societies would be governed**, in more granular detail than was palatable.

Why was the Amendment struck down?

- The Constitution can be amended only by the procedure provided in **Article 368**.
- The amendment procedure requires a majority of the total strength of each of the Houses of Parliament and two-thirds majority of those present and voting.
- A proviso to the Article lists out some articles and chapters of the Constitution, which can be amended only by a special procedure.

- The **special procedure** requires that the amendment will also have to be **ratified by the legislatures of half of the States**.
- It is precisely on the grounds of **violation of this additional requirement** that the 97th Constitutional Amendment was challenged.
- The Gujarat High Court struck down the amendment in 2013 on the grounds that it had failed to comply with the requirements under **Article 368(2)** by virtue of not having been ratified by the States and had also given an additional finding that the 97th Amendment **violated the basic structure of the Constitution**.
- The Union Government challenged the Gujarat High Court judgment before the Supreme Court, arguing that the amendment neither directly nor effectively changed the scheme of **distribution of powers between the Centre and the States**.
- The court took the example of the 73rd and 74th Amendments which were similar in impact on the legislative power of the States, **had been passed by the special procedure** involving ratification by State legislatures.
- **Procedural lacuna:** The court noted that the procedure had not been followed in this case.
- The Supreme Court clarified that it does not go into the question of the amendment being **violative of the basic structure** of the Constitution.
- The judgment makes a distinction between cooperative societies operating in one State and **multi-State cooperative societies** and holds that while a ratification by half the State legislatures would have been necessary insofar as it applies to cooperative societies in one State.

Increasing control of the Union government

- Union government has been acquiring **incrementally greater control** of cooperative societies over the years.
- Cooperative banks have been brought under the purview of the Reserve Bank of India.
- Union Government recently established **Union Ministry for Cooperation**.

Issues with Central control over cooperative sector

- **Domain of States:** The idea that the cooperative sector ought to be controlled at the State level and not at the central or Union level goes back all the way to the Government of India Act, 1919 which placed **cooperatives in the provincial list**.
- **Part of State list: Entry 32 of the State List in the Seventh Schedule** of the Constitution confer power on the State legislatures to make laws pertaining to incorporation, regulation and the winding up of cooperative societies.

- The cooperative sector has always been in the **domain of the States or provinces**.
- **Different organising principles:** The organising principles and mechanism of these cooperatives **differ from area to area** and depend on the industry or crop which forms the fulcrum of the cooperative.
- **Homogeneity nor require: Homogeneity** in this area would only result in the creation of round holes in which square pegs no longer fit.
- They also would not really serve to break the control some political interests have taken over cooperatives.

Conclusion

It is best that the Government takes this judgment in the right spirit and stays away from further meddling in the cooperative sector, notwithstanding the creation of the new Ministry.

60. Legislators indulging in vandalism cannot claim immunity: SC

The Supreme Court held that **legislators who indulge in vandalism** cannot claim parliamentary privilege and immunity from criminal prosecution.

Background:

- The SC **dismissed the appeals** by Kerala government to **withdraw criminal case** against the leaders who **destroyed public property** and disrupted a Budget speech on the State Assembly floor in 2015.

Observation by the Supreme Court:

- Parliamentary privileges and immunities are **not 'gateways'** for legislators to claim exception from the law of the land, especially criminal law.
- **Vandalism** on the Assembly floor could **not be equated** with the **right to protest** by Opposition legislators.
- **Destruction of public property** could not be equated with the **exercise of freedom of speech**.
- Legislators should **act within the parameters** of the public trust imposed on them to do their duty.
- Engaging in **acts of violence** inside the Assembly could hardly be in the "larger public interest" and cannot be considered as "legitimate" protests.

Parliamentary Privilege:

- Parliamentary privileges are **special rights, immunities and exemptions** enjoyed by the two Houses of Parliament, their committees and their members.
- **Rationale:** To secure the independence and effectiveness of their actions and protect the members from any obstruction in the discharge of their parliamentary responsibilities.
- The parliamentary privileges are also extended to **persons who are entitled to speak and take part** in the proceedings of a House of Parliament or any of its committees.
 - These include the attorney general of India and Union ministers.
- Parliamentary privileges **do not extend to the President of India** who is also an integral part of the Parliament.

Classification of Parliamentary privileges:

- They can be classified into two broad categories:
 - **Collective privilege:** Enjoyed by each House of Parliament collectively.
 - **Individual privilege:** Enjoyed by the members individually.

Collective Privileges:

- Parliament has the **right to publish** its reports, debates and proceedings and also the **right to prohibit others** from publishing the same.
- It can **exclude strangers** from its proceedings and **hold secret sittings** to discuss some important matters.
- It can **make rules to regulate its own procedure** and the conduct of its business and to adjudicate upon such matters.
- It can **punish members** as well as outsiders for breach of its privileges or its contempt by reprimand, admonition or imprisonment (also suspension or expulsion, in case of members).
- It has the **right to receive immediate information** of the arrest, detention, conviction, imprisonment and release of a member.
- The **courts are prohibited** to inquire into the proceedings of a House or its committees.
- No person (either a member or outsider) can be arrested, and no legal process (civil or criminal) can be served **within the precincts of the House** without the permission of the presiding officer.

Individual Privileges:

- They cannot be arrested **during the session of Parliament** and 40 days before the beginning and 40 days after the end of a session.

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

GS 3 : Economy, Science and Technology, Environment

1. What is the Human Genome Project?

Since the release of the draft human genome sequence in 2001, sections were left unsequenced, and some sequence information was incorrect. Now, two decades later, we have a much more complete version.

What is the human genome sequence?

- The human genome sequence is contained in our DNA and is made up of long chains of “base pairs” that form our 23 chromosomes.
- Along our chromosomes are the base pair sequences that form our 30,000 genes.
- All humans share a great degree of similarity in their genome sequences – the same genes are ordered in the same manner across the same chromosomes.
- Each of us is unique (except for identical twins) in terms of the exact base pair sequence that makes up our genes and thus our DNA/chromosomes.
- It is this similarity that, in a genetic sense, defines us as “human” and the specific variation that defines us as individuals.

The Human Genome Project

- As early as the 1980s, momentum was gathering behind activities that supported, and would eventually define, the Human Genome Project.
- Conversations had turned into workshops that likened characterization of the human genome to characterization of the human anatomy that had centuries earlier revolutionized the practice of medicine.

- In 1990, with continued support from the US and widespread international collaboration and cooperation, the \$3 billion dollar Human Genome Project was launched.
- The project aimed to determine the sequence of the human genome within 15 years.
- By 2000 (well ahead of schedule) a working draft of the human genome was announced.
- This was followed by regular updates and refinements and today we all have access to a human “reference genome sequence”.

Why did it take 20 years?

- Much of the newly sequenced material is the “heterochromatic” part of the genome.
- This is more “tightly packed” than the euchromatic genome and contains many highly repetitive sequences that are very challenging to read accurately.
- These regions were once thought not to contain any important genetic information but they are now known to contain genes that are involved in fundamentally important processes such as the formation of organs during embryonic development.
- Among the 200 million newly sequenced base pairs are an estimated 115 genes predicted to be involved in producing proteins.

Two key factors made the completion of the human genome possible:

1. Choosing a very special cell type

- The new sequence was created using human cells derived from a very rare type of tissue called a complete hydatidiform mole, which occurs when a fertilized egg loses all the genetic material contributed to it by the mother.
- Most cells contain two copies of each chromosome, one from each parent and each parent’s chromosome contributing a different DNA sequence.
- A cell from a complete hydatidiform mole has two copies of the father’s chromosomes only, and the genetic sequence of each pair of chromosomes is identical.
- This makes the full genome sequence much easier to piece together.

2. Advances in sequencing technology

- A new method called “shotgun sequencing”, involved breaking the genome into very small fragments of about 200 base pairs, cloning them inside bacteria, deciphering their sequences, and then piecing them back together like a giant jigsaw.

- This was the main reason the original draft covered only the euchromatic regions of the genome – only these regions could be reliably sequenced using this method.
- The latest sequence was deduced using two complementary new DNA-sequencing technologies.

Is the genome now completely sequenced?

- Well, no. An obvious omission is the Y chromosome, because the complete hydatidiform mole cells used to compile this sequence contained two identical copies of the X chromosome.
- However, this work is underway and the researchers anticipate their method can also accurately sequence the Y chromosome, despite it having highly repetitive sequences.
- Even though sequencing the (almost) complete genome of a human cell is an extremely impressive landmark, it is just one of several crucial steps towards fully understanding humans' genetic diversity.

What's next?

- The next job will be to study the genomes of diverse populations (the complete hydatidiform mole cells were European).
- Once the new technology has matured it will be better positioned to make a more significant impact on our understanding of human history, biology and health.
- Both care and technological development are needed to ensure this research is conducted with a full understanding of the diversity of the human genome to prevent health disparities.

2. Four years of GST Regime

The Prime Minister has lauded Goods and Services Taxes (GST) on its completion of 4 years and said it has been a milestone in the economic landscape of India.

What is GST?

- GST is an indirect tax that has replaced many indirect taxes in India such as excise duty, VAT, services tax, etc.
- The Goods and Service Tax Act was passed in Parliament on 29th March 2017 and came into effect on 1st July 2017. It is a single domestic indirect tax law for the entire country.
- It is a comprehensive, multi-stage, destination-based tax that is levied on every value addition.

- Under the GST regime, the tax is levied at every point of sale. In the case of intra-state sales, Central GST and State GST are charged. All the inter-state sales are chargeable to the Integrated GST.

What are the components of GST?

There are three taxes applicable under this system:

1. **CGST:** It is the tax collected by the Central Government on an intra-state sale (e.g., a transaction happening within Maharashtra)
2. **SGST:** It is the tax collected by the state government on an intra-state sale (e.g., a transaction happening within Maharashtra)
3. **IGST:** It is a tax collected by the Central Government for an inter-state sale (e.g., Maharashtra to Tamil Nadu)

Advantages Of GST

- GST has mainly removed the cascading effect on the sale of goods and services.
- Removal of the cascading effect has impacted the cost of goods.
- Since the GST regime eliminates the tax on tax, the cost of goods decreases.
- Also, GST is mainly technologically driven.
- All the activities like registration, return filing, application for refund and response to notice needs to be done online on the GST portal, which accelerates the processes.

Issues with GST

- High operational cost
- GST has given rise to complexity for many business owners across the nation.
- GST has received criticism for being called a 'Disability Tax' as it now taxes articles such as braille paper, wheelchairs, hearing aid etc.
- Petrol is not under GST, which goes against the ideals of the unification of commodities.

3. What are Gamma Ray Burst (GRB) Explosion?

The emission from the most notable Gamma Ray Burst (GRB) explosion away from 4.5 billion light-years has been traced by Indian researchers.

What are GRB Explosions?

- GRBs are immensely energetic explosions that have been observed in distant galaxies.

- They are the brightest and most energetic electromagnetic events known to occur in the universe.
- Bursts can last from ten milliseconds to several hours.
- After an initial flash of gamma rays, a longer-lived “afterglow” is usually emitted at longer wavelengths (X-ray, ultraviolet, optical, infrared, microwave and radio).
- The intense radiation of most observed GRBs is thought to be released during a supernova or superluminous supernova as a high-mass star implodes to form a neutron star or a black hole.

What makes GRB special?

- The explosions are both extremely energetic (a typical burst releases as much energy in a few seconds as the Sun will in its entire 10-billion-year lifetime) and extremely rare.
- All observed GRBs have originated from outside the Milky Way galaxy, although a related class of phenomena, soft gamma repeater flares, are associated with magnetars within the Milky Way.
- It has been hypothesized that a gamma-ray burst in the Milky Way, pointing directly towards the Earth, could cause a mass extinction event.

4. Can India avoid a telecom duopoly?

India’s telecom sector: From monopoly to hyper-competition

- India’s telecom market has seen monopoly as well as hyper-competition.
- Twenty-five years ago, the government alone could provide services.
- Ten years later, there were nearly a dozen competing operators. Most service areas now have four players.
- However, the possible exit of the financially-stressed Vodafone Idea would leave only two dominant players-Airtel and Jio in the telecom sector.
- A looming duopoly, or the exit of a global telecommunications major, are both worrying.
- They deserve a **careful and creative response**.

Why it matters

- Competition has delivered relatively **low prices, advanced technologies, and an acceptable quality of services**.
- There is **a long way to go in expanding access as well as network capacity**.
- For example, India is ranked second globally – after China – in the number of people connected to the internet.
- However, it is also **first in the number of people unconnected**.

- Over **50% of Indians are not connected to the internet**, despite giant strides in network reach and capacity. India tops aggregate mobile data usage.
- However, its **per capita or device data usage is low**.
- It has an impressive 4G mobile network, however, its fixed network – **wireline or optical fibre – is sparse and often poor**.
- 5G deployment has yet to start and will be expensive.
- Filling the **gaps in infrastructure and access will require large investments and competition**.
- The exit of the Vodafone-Idea will hurt both objectives.
- The closure of Vodafone Idea is an arguably greater concern than the fading role of BSNL and MTNL.
- The government companies are yet to deploy 4G and have become progressively less competitive.
- Vodafone Idea, on the other hand, **still accounts for about a quarter of subscriptions and revenues** and can boast of a quality network.

Way out

1) Strategic partnership with BSNL-MTNL

- A possible way out could be to combine the resources of the MTNL and BSNL and Vodafone Idea through a **strategic partnership**.
- Creative government action can save Vodafone Idea as well as improve the competitiveness of BSNL and MTNL.
- It could help secure government dues, investments, and jobs.

2) Develop resale market

- Global experience suggests that well-entrenched incumbents have massive advantages.
- New players are daunted by the large investments.
- However, regulators and policymakers have other options to expand choice for telecom consumers.
- Their counterparts in mature regulatory regimes – e.g., in the European Union – have helped develop **extensive markets for resale**.
- Recognising the limited influence of smaller players, regulators mandate that the incumbent offer wholesale prices to resellers who then expand choice for end-users.
- A key barrier to resale is India's **licence fee regime** which requires licence-holders to share a proportion of their revenues with the government.

Conclusion

It would be tragic if India's telecom-access market was to be reduced to only two competing operators, as we have a long way to go. The government needs to consider the implications of the situation arising due to the exit of one of the major players in the sector.

5. New Source of Gravitational Waves Discovered

Why in News

Recently, **LIGO Scientific Collaboration (LSC)** has made the **discovery of gravitational waves from a pair of neutron star-black hole (NS-BH) mergers.**

- The reverberations from these two objects were picked up using a **global network of gravitational wave detectors**, the most sensitive scientific instruments ever built.
- Until now, the **LIGO-Virgo Collaboration (LVC)** was only able to observe collisions between pairs of black holes or neutron stars. The **NS-BH merger is a hybrid collision.**

Black Hole

- A black hole is a **place in space where gravity pulls so much that even light can not get out.** The gravity is so strong because matter has been squeezed into a tiny space.
- **Gravitational waves are created** when two black holes orbit each other and merge.

Neutron Stars

- Neutron stars **comprise one of the possible evolutionary end-points of high mass stars.**
- Once the core of the star has completely burned to iron, energy production stops and the core rapidly collapses, squeezing electrons and protons together to form neutrons and neutrinos.
- A **star supported by neutron degeneracy pressure is known as a 'neutron star'**, which may be seen as a pulsar if its magnetic field is favourably aligned with its spin axis.

Key Points:

- **About the Gravitational Waves:**
 - These are **invisible ripples in space** that form when:

- A star explodes in a **supernova**.
- Two big stars orbit each other.
- Two **black holes** merge.
- Neutron star-Black hole (NS-BH) merges.
- They **travel at the speed of light** (1,86,000 miles per second) and squeeze and stretch anything in their path.
 - As a gravitational wave travels through space-time, it causes it to stretch in one direction and compress in the other.
 - Any object that occupies that region of space-time also stretches and compresses as the wave passes over them, though very slightly, which can only be detected by specialized devices like LIGO.
- **Theory and Discovery:**
 - These were proposed by **Albert Einstein in his General Theory of Relativity**, over a century ago.
 - However, the first **gravitational wave** was actually detected by LIGO only in 2015.
- **Detection Technique:**
 - As the **two compact and massive bodies orbit around each other**, they come closer, and **finally merge, due to the energy lost in the form of gravitational waves**.
 - The Gravitational Waves signals are buried deep inside a lot of background noise. To search for the signals, scientists use a **method called matched filtering**.
 - In this method, **various expected gravitational waveforms predicted by Einstein's theory of relativity, are compared with the different chunks of data** to produce a quantity that signifies how well the signal in the data (if any) matches with any one of the waveforms.
 - Whenever this match (in technical terms "**signal-to-noise ratio**" or **SNR**) is **significant (larger than 8), an event is said to be detected**.
 - **Observing an event in multiple detectors** separated by thousands of kilometers almost simultaneously gives scientists increased confidence that the signal is of astrophysical origin.
- **Importance of Discovery:**
 - **A neutron star has a surface** and black hole does not. **A neutron star is about 1.4-2 times the mass of the sun** while the other black hole is much more massive. **Widely unequal mergers** have very interesting effects that can be detected.
 - Inferring from data as to how often they merge **will also give us clues about their origin and how they were formed**.
 - These observations **help us understand the formation and relative abundance of such binaries**.

- Neutron stars are the densest objects in the Universe, so these findings can also help us understand the behaviour of matter at extreme densities.
- Neutron stars are also the most precise 'clocks' in the Universe, if they emit extremely periodic pulses.
- The discovery of pulsars going around Black Holes could help scientists probe effects under extreme gravity.
- **LIGO Scientific Collaboration (LSC):**
 - LSC was founded in 1997 and currently made up of more than 1000 scientists from over 100 institutions and 18 countries worldwide.
 - It is a group of scientists focused on the direct detection of gravitational waves, using them to explore the fundamental physics of gravity, and developing the emerging field of gravitational wave science as a tool of astronomical discovery.
 - **LIGO Observatories:** The LSC carries out the science of the LIGO Observatories, located in Hanford, Washington and Livingston, Louisiana as well as that of the GEO600 detector in Hannover, Germany.
 - **Other Observatories:**
 - **VIRGO:** Virgo is located near Pisa in Italy. The Virgo Collaboration is currently composed of approximately 650 members from 119 institutions in 14 different countries including Belgium, France, Germany, Hungary, Italy, the Netherlands, Poland, and Spain.
 - **The Kamioka Gravitational Wave Detector (KAGRA):** The KAGRA detector is located in Kamioka, Gifu, Japan. The host institute is the Institute of Cosmic Ray Researches (ICRR) at the University of Tokyo.
 - This interferometer is underground and uses cryogenic mirrors. It has 3 km arms.

LIGO-India Project

- The LIGO-India observatory is scheduled for completion in 2024, and will be built in the Hingoli District of Maharashtra.
- LIGO India is a planned advanced gravitational-wave observatory to be located in India as part of the worldwide network.
 - The LIGO project operates three gravitational-wave (GW) detectors.
 - Two are at Hanford in the State of Washington, north-western USA, and one is at Livingston in Louisiana, south-eastern USA.
- The LIGO-India project is an international collaboration between the LIGO Laboratory and three lead institutions in the LIGO-India consortium:

Institute of Plasma Research, Gandhinagar; IUCAA, Pune; and Raja Ramanna Centre for Advanced Technology, Indore.

- It will significantly improve the sky localisation of these events.
- This increases the chance of observation of these distant sources using electromagnetic telescopes, which will, in turn, give us a more precise measurement of how fast the universe is expanding.

6. What is the 'Heat Dome' causing record temperatures in USA?

A US city has recorded the highest temperatures as high as 46-degree Celsius part due to the historic heatwave that lasted as a result of a phenomenon referred to as a "heat dome".

What is a Heat Dome?

- To understand what causes a heat dome, one should liken the Pacific Ocean to a large swimming pool in which the heater is turned on.
- Once the heater is on, the portions of the pool close to the heating jets will warm up faster and therefore, the temperature in that area will be higher.
- In the same way, the western Pacific ocean's temperatures have increased in the past few decades and are relatively more than the temperature in the eastern Pacific.
- This strong change in ocean temperature from the west to the east is what a team of scientists believe is the reason for the heat dome.
- This occurs when the atmosphere traps heat at the surface, which encourages the formation of a heatwave.
- To compare, the reason that the planet Venus is the hottest in the Solar System is that its thick, dense cloud cover traps the heat at the surface, leading to temperatures as high as 471 degrees Celsius.

Is this heat wave a result of climate change?

- It cannot be said for sure if the heatwave is a direct result of global warming.
- Scientists are usually wary of linking climate change to any contemporary event mainly because of the difficulty in completely ruling out the possibility of the event having been caused by some other reason.
- Similarly, scientists who have been studying the climate tend to agree that the heat waves occurring today are more likely to be a result of climate change for which humans are responsible.

7. Global Cybersecurity Index 2020

India has made it to the top 10 in Global Cybersecurity Index (GCI) 2020 by ITU, moving up 37 places to rank as the tenth best country in the world on key cybersafety parameters.

Global Cybersecurity Index

- GCI assessment is done on the basis of performance on five parameters of cybersecurity including legal measures, technical measures, organizational measures, capacity development, and cooperation.
- The performance is then aggregated into an overall score.
- For each of the five aspects, all the countries' performance and commitment are assessed through a question-based online survey, which further allowed for the collection of the supporting evidence.

India's progress

- As per the ranking, India has moved up by 37 places to rank as the tenth best country in the world.
- The US topped the chart, followed by the UK and Saudi Arabia tied on the second position, while Estonia was ranked third in the index.
- India has also secured the fourth position in the Asia Pacific region, underlining its commitment to cybersecurity.

Its significance

- The affirmation by the UN body of India's efforts on cybersecurity comes just ahead of the sixth anniversary of Digital India on July 1.
- India is emerging as a global IT superpower, asserting its digital sovereignty with firm measures to safeguard data privacy and online rights of citizens.

8. Rural power solutions even other States can emulate

The article talks about the need to ensure energy access beyond rural homes alone, considering the Rajasthan example.

Context:

- The Rajasthan Electricity Regulatory Commission (RERC) has **ordered the State's three power distribution companies, or discoms to solarise unelectrified public schools.**

- This has the potential to electrify about 1,500 government-run schools in the remote parts of the State with roof-top solar panels and generate about 15 megawatts (MW) of power.
- The RERC has also suggested the installation of batteries to ensure storage of power.

Significance of the Ruling:

- Government schools serve as **public spaces in rural areas**. They doubled up as **COVID-19 care centres** during the pandemic.
- They have **housed villagers** protecting them from extreme weather such as storms and floods, apart from turning into **polling centres** during the election season.
- Besides enabling education, the ruling **would benefit several other crucial aspects of rural life**.
- Battery storage of power ensures that they cater to **children's after-school activities**.
- Schools could also extend **power supply to mid-day meal kitchens, toilets, and motorised water pumps**.
- The order directs Rajasthan's cash-strapped discoms to **seek corporate social responsibility (CSR) funds for the solarising drive**. It also allows schools' ownership of the power systems in a phased manner.
- This **removes the burden of infrastructure development** expenses on discoms, while also **ensuring clean energy for the schools**.
- The power that is generated could also be counted towards the **discoms' Renewable Purchase Obligations (RPO)**.
 - RPO is the proportion of power that distribution companies must procure from renewable sources.
 - This ratio is a gradual annual progression to encourage greater use of renewable energy and to provide for a phased manner to reduce dependence on fossil fuels.

Rajasthan's Model:

- In 2019, Rajasthan launched an ambitious target of producing 30 GW of solar energy by 2025.
- It currently has an installed capacity of about 5 GW most of which are from large-scale utility plants, or solar parks with ground-mounted panels.
- The State must install at least 7 GW every year for the next four years to achieve this target.
- Rajasthan is India's largest state in terms of landmass with vast, sparsely populated tracts available to install solar parks. However, bulk infrastructure of this scale is **susceptible to extreme weather events**.

- In such a scenario, a **decentralised model of power generation would prove to be more climate-resilient.**
- **Climate proofing** is another measure that can be taken.
 - Buildings such as primary health centres, panchayat offices, railway stations and bus stops could easily be transitioned to utilising clean energy.
 - With battery storage, the **susceptibility of grid infrastructure to extreme weather events could be mitigated.** This is called climate proofing.

Way Forward:

- As solar installations become inexpensive and with rapidly advancing battery storage technologies, **decentralised solar power generation has become a reality.**
- A State such as Rajasthan, which is most exposed to solar irradiation, could set an example by making its urban and rural centres, power generators, consumers, and suppliers in the same breath.
- Rajasthan government has **a plan to become a power exporter.** While it is an ambitious plan, it should **consider achieving this without destroying the environment.**
- **Convergence between government departments** will also help in achieving the goal.

9. Goods exports touch record \$95 bn in Q1

What's in News?

India registered its highest quarterly merchandise exports of \$95 billion during the first quarter (April-June) of 2021-22.

- India has set a **target of \$400 billion in merchandise exports in the current fiscal (2021-22).**
 - Commerce Ministry has decided that in collaboration with the private sector, EPC, industry associations, MSME, engineering, agriculture, automobile, and steel sector, the country will be aiming to achieve this target.
- The exports rose in June, following strong growth in sectors such as engineering, gems and jewellery and petroleum products.
- However, **India was a net importer in June 2021** with a trade deficit of \$9.4 billion.

Note:

India received the highest ever FDI inflow in 2020-21 of \$81.72 billion, 10% more as compared to 2019-20.

10. New source of gravitational waves detected

Context:

- Scientists have for the first time detected gravitational waves produced by the **collision of a neutron star and a black hole.**

Background:

Neutron star:

- A neutron star is the **collapsed core of a massive supergiant star.** They result from the supernova explosion of a massive star, combined with gravitational collapse.
- Neutron star, are thought to be **composed primarily of neutrons.**
- Apart for black holes, neutron stars are the **smallest and densest currently known class of stellar objects.** Despite their small diameters – about 12.5 miles (20 kilometers) – neutron stars boast nearly 1.5 times the mass of our sun, and are thus incredibly dense.
- Once formed, they no longer actively generate heat, and cool over time; however, they may still evolve further through collision or accretion.

Details:

- The bursts of energy from the collisions were discovered when detectors on Earth spotted the mergers' **gravitational waves, cosmic energetic ripples soaring through space and time** as first theorized by Albert Einstein.
 - The reverberations from the happening was picked up from the **LIGO network of gravitational wave detectors.**
- While astronomers had seen gravitational waves from two black holes colliding with each other and two neutron stars colliding with each other, this is the first time they saw one of each crashing together.

Significance:

- The study of the neutron star-black hole systems would help answer many questions about star formation and calculating the expansion rate of our universe.

11. Can reducing cess levies ease high fuel prices?

Context:

- Ratings agency ICRA recently suggested cut cess levies on retail prices of petrol and diesel to ease price pressure on the fuels.

Background:

Historic high of retail prices of fuels:

- Though the base price of fuels have decreased over the years, **the share of taxes on the retail price has increased at a very high pace.** This has resulted in a scenario of historic high of retail prices of petrol and diesel.
- Experts attribute the current high fuel prices to higher cesses **being imposed by the Centre** and an **increase in Value Added Tax (VAT) rates by more than three-fourths of the State governments.**

Details:

- The ICRA anticipates an increase in the mobility of the population and economic recovery after the easing of curbs. It forecasts the consumption of petrol and diesel to grow in the financial year 2021-22. This it argues will help ensure sufficient revenues for the government pegged at about ₹3.6 lakh crore, about ₹40,000 crore more than in the last financial year.
- The forgo of this additional revenue itself could help cut up to ₹4.50 per litre for petrol and diesel each.

Significance:

Cool inflation level:

- Lower fuel prices will likely help cool inflation levels.
- Retail inflation based on the consumer price index (CPI) has been persistently higher than the RBI's medium-term target of 4%. **For May 2021, the provisional inflation reading was 6.3%**, owing to persistent price pressures in the transport and communication category, which includes the automotive fuels of petrol and diesel.

Allow RBI balance growth and inflation levels in the economy:

- The lower fuel prices will help ease retail inflation and thus allow the RBI to maintain a growth-supportive stance. It will allow the RBI to **retain its accommodative monetary stance** that includes **keeping benchmark borrowing interest rates substantially low**. This would incentivize demand for credit to both consume and invest in new business activity, thus spurring economic growth.

Counter arguments:

- A reduction in fuel cesses could **adversely affect the government's ability to pay interest and principal on oil bonds** issued to public oil marketing companies (OMCs) as compensation for subsidies.

Oil Bonds

- Oil bonds are special types of bonds that were issued to oil marketing companies (OMCs) like Indian Oil, Hindustan Petroleum and Bharat Petroleum. These companies received oil bonds from the government in place of cash subsidies.
 - OMCs were earlier receiving cash subsidies, as earlier these companies were not free to fix their own prices for petrol (before 2010) and diesel (before 2015). This meant that OMCs were often selling fuel far below the international market price, often at significant expenditure to themselves.
- The Oil bonds are interest-bearing, having a fixed coupon rate and paid on a half-yearly basis.

12. Goldilocks Supernova

- Supernovae are usually categorized into two main types: **thermonuclear and iron-core collapse**. A thermonuclear supernova is the explosion of a white dwarf star after it gains matter in a binary star system. An iron core-collapse supernova occurs when a massive star – one more than about ten times the sun's mass – runs out of nuclear fuel, and its iron core collapses, creating a black hole or neutron star.
- Between these two main types of supernovae are **electron-capture supernovae**. When the star is not light enough to avoid collapsing under its own core mass, and not heavy enough to prolong its life and die in some other way later, it forms an electron-capture supernova.

- These stars stop fusion when their cores are made of oxygen, neon and magnesium; they aren't massive enough to create iron.

Context:

- Scientists have discovered the first convincing evidence for **electron-capture supernova- a new type of stellar explosion.**
 - Electron-capture supernovae have been theorized for four decades, but their real-world examples remained elusive.

13. Chinese astronauts complete first spacewalk at new station

Context:

Chinese astronauts successfully performed the country's first tandem spacewalk outside the new Tiangong station in orbit around the Earth.

- The **Shenzhou-12 spaceship** carried the three astronauts to Tianhe.
 - **Tianhe is the main module** of the first permanent space station by China.
- This is a major step in China's plans to have a **fully functioning space station by 2022.**
- China's first space station called Tiangong is set to be functional by the end of 2022 and is the second space station only after the International Space Station.
- The space station China is building is called **Tiangong which means "Heavenly Space"**.

14. IB sounds alert on Bangladeshi nationals

Context:

Eight Bangladeshi nationals **arrested in Andhra Pradesh with fake documents** have admitted that several of their countrymen had entered Indian territory along with them.

Details:

- Investigation officers suspect that **many Bangladeshis are secretly staying in Kolkata, New Delhi, Bengaluru, Chennai, Hyderabad, Goa and other cities.**

Issue:

- **Due to poverty**, many Bangladeshis are entering India illegally by road **in search of work.**
- India has been witnessing immigration since independence. However, illegal migration is the most contentious issue because:
 - There are no authentic official statistics to ascertain the actual number of illegal migrants.
 - Many such Bangladeshis are **lured by terrorists** and are **helping banned organisations in creating unrest in India.**
- Illegal immigration from Bangladesh into Assam has also had serious **socio-political implications.**
- **India's borders with Bangladesh being porous** pose a challenge to its effective management.

Note:

- India **does not** currently **have a national law on refugees.**

Geneva Convention (1951)

- The Convention Relating to the Status of Refugees, also known as the Geneva Convention (1951) is a United Nations multilateral treaty that **defines who a refugee is, and sets out the rights of individuals who are granted asylum and the responsibilities of nations** that grant asylum.
- **India is not a signatory** of the UN Refugee Convention, 1951 and the protocol of 1967.

15. Policy black holes spook space investors

Context:

Concerns of potential foreign investors in India's space sector.

Issue:

- **The Department of Space is both the sectoral regulator and a service provider by way of its role in overseeing the Indian Space Research Organisation (ISRO).**

- The potential foreign investors in India's space sector are unsure if their **licence applications would get fair consideration.**
- They are concerned about a possible **conflict of interest.**

Details:

- In a significant **departure from the 'virtual monopoly' of the state-controlled ISRO and allied entities in the space sector,** reforms were announced in 2020 to open the sector to private investors.
- **Foreign Direct Investment of up to 100%** has been allowed under the **government route in satellite establishment and operation,** subject to the sectoral guidelines of the Department of Space and ISRO.
- **Indian National Space Promotion and Authorisation Centre (IN-SPACe),** the newly created regulatory body, has received at least 26 applications from Indian and foreign firms that include proposals to set up ground stations and make and launch satellites.

Way Forward:

- The Department of Space acts as the regulator, but since it is a major service provider through ISRO, there is **scope for a conflict of interest.**
- The **regulatory structure needs to be refined and there is a need for more clarity** in terms of the processes for authorisation to launch a satellite, the frequency allocation mechanism and even the details of different agencies involved in these clearances.

16. Cities along rivers urged to include conservation plans

Context:

Policy document from the National Mission for Clean Ganga has set out norms for river conservation plans.

Guidelines:

- The policy spells out **provisions in the National Water Policy.**
- It says that the **cities situated on river banks** will have to **incorporate river conservation plans** when they prepare their Master Plans.
- It has been instructed that the **"river-sensitive" plans** must be **practical and consider questions of encroachment and land ownership.**

- A key aspect of conserving and protecting rivers and riverine resources involves **increasing green cover in the vicinity of the river** by creating green buffers, removing concrete structures and employing green infrastructure.
- The Master Plan **should not mandate specific technologies**, but it can **create an environment for facilitating the use of state-of-the-art technologies** for river management.

Technologies being used across the world successfully for river management:

- Satellite-based monitoring of water quality
- Artificial intelligence for riverine biodiversity mapping
- Big data and citizen science for river-health monitoring
- Unmanned aerial vehicles for floodplain mapping.

Note:

- The recommendations are currently for towns that are on the main stem of the Ganga.
- As per the policy document, there are **97 towns encompassing five States** — Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, West Bengal.

17. Unpacking China's game plan

Context:

- Reports of **China upgrading its aviation defence infrastructure in the Tibetan plateau**

Background:

India's superiority in air power:

- India exhibited firmness in their resolve to thwart Chinese attempts to violate the status Quo along the LAC. This firmness was backed by IAF superiority along the LAC.
- India enjoyed certain advantages vis-a-vis airpower as compared to the Chinese.
 - **India has a string of airfields all along the foothills of the Himalayas.** This offers the IAF higher strike potential. On the contrary Chinese airfields in Tibet were few, widely spaced out and hence not mutually supportive. Also this led to **large gaps in their air defence structure** that could have been utilized by the IAF to interdict targets.

- The Indian airfields are situated at lower altitudes. This permits the aircrafts taking off from these airfields to carry a full armament load. On the contrary, most Tibetan airfields are at altitudes above 10,000 ft, severely restricting the payload of PLAAF aircraft.
- The positive asymmetry of IAF proved to be detrimental to China's plans to gain any territorial advantage.

Details:

- The recent high-resolution satellite photos have revealed rapid **upgradation of airfield and air defence infrastructure by China along the LAC.**
 - China has made rapid progress in construction of hardened aircraft shelters and new runways.
 - China has positioned **new air defence radars and missile systems** along the LAC thus providing itself the comfort of a layered air defence setting.

Concerns:

Chinese tactical attempt to buy time:

- The article also suggests the possibility of a link between the Chinese construction activities and the procrastination by China in the talks for reducing tensions in Eastern Ladakh. **The temporary offer of talks seems to be a tactical attempt by the Chinese to buy time to upgrade their air defence infrastructure.**

Strategy of denial:

- By strengthening their air defence architecture, the Chinese are trying to deter India through a **strategy of denial, i.e., to dissuade the IAF to attack China over fears of loss of aircrafts or personnel that could be caused by the missile systems of China.**

Nullify advantages enjoyed by India:

- This move by China could alter the current balance of air power between the Indian Air Force (IAF) and People's Liberation Army Air Force (PLAAF) in the medium to long term. This could nullify the advantage that India enjoys vis-a-vis airpower along the LAC. **India may lose the trump card of positive air power asymmetry** that it now holds which would reduce India's stand in future negotiations.

Way forward:

- India needs to closely **monitor the air defence upgradation drive of China** and make relevant changes to its own strategies.
- India's posture and demands at the talks must reflect its understanding of China's devious attempt to buy time in the name of talks

18. E-waste disposal: L-G seeks means to integrate unorganised sector

Context:

- Delhi Lieutenant-Governor recently chaired a review meeting related to e-waste management in the city.

E-waste management:

- Need to ensure **scientific, efficient and environmentally safe disposal of all types of electronic waste.**
- Setting up of **e-waste processing units** should be prioritized.
- A suitable institutional mechanism should be devised to suitably **integrate the unorganised sector that includes traditional kabaadi walas, ragpickers and NGOs in e-waste collection and processing.**
- Closer coordination with the important stakeholder ministries and stakeholders could provide more effective outcomes.

19. New platform maps Pegasus spread

Context:

Forensic Architecture of Amnesty International and Citizen Lab launched an **online database about the use of the spyware Pegasus** to document attacks against human rights defenders.

Spyware is software with **malicious behaviour** that aims to **gather information about a person or organization** and send it to another entity in a way that **harms the user.**

Details:

- Amnesty stated Pegasus had been used in some of the “**most insidious digital attacks**” on **human rights activists in the world.**

- In 2020, Amnesty and Citizen Lab revealed that the spyware was used on **nine human rights defenders who were accused in the Bhima Koregaon case.**

Pegasus spyware:

- Pegasus is a spyware tool from **Israeli firm NSO Group.**
- In 2020, WhatsApp's report stated that 1,400 of its users were **hacked by Pegasus.**
 - It was used to **spy on journalists and human rights activists** across the globe, including in India.
- Pegasus works by **sending an exploit link**, and if the target user clicks on the link, the malware or the code that allows the surveillance is installed on the user's phone.
 - A presumably newer version of the malware does not even require a target user to click a link.
- Once Pegasus is installed, the **attacker has complete access to the user's phone.** Every call, message, can be intercepted and monitored. It can also access any document stored on the phone.
- Pegasus can also **control the phone's camera and microphone** and has access to the device's location data.
- The Pegasus delivers "a chain of **zero-day exploits** to penetrate security features on the phone and installs Pegasus without the user's knowledge or permission".
 - "zero-day exploit" is a completely unknown feature (vulnerability). There is no fix for it as even the manufacturer is not aware of it.

20. Tracking fugitives everywhere

Context:

- **An increasing number of accused people are absconding** to avoid being convicted.

Concerns:

Lack of efforts to pursue fugitives:

- Though the police department does initiate proceedings for attachment of property and declaration of the accused as proclaimed offenders, the **efforts**

being made to pursue fugitives – domestically or internationally – have been few and far between.

- This goes against the spirit of the law of the land where criminals escape being punished merely by shifting out of the country or place of residence.

Lack of a domestic tracking or database system:

- Unlike the Interpol Notices which has allowed for some form of a system for tracking criminals worldwide, there is **no coordinated system or database for tracking criminals or wanted persons domestically**.
- In the absence of such a system, it is relatively easy for criminals to go undetected.

Lack of a coherent law:

- Indian law on extradition is spread across the Indian Penal Code as well as various laws pertaining to narcotic drugs, Information Technology, hijacking, etc.
- **The lack of a coherent law to deal with fugitives has been a major lacuna in extraditing such offenders.**

Recommendations:

National database:

- There is an urgent need for the **creation of a nationwide database of wanted persons, accessible to multiple stakeholders** like police agencies, passport and immigration authorities and the public.

Fugitive tracking system:

- India should consider implementing a **nation-wide system of 'Wanted Persons Notices'**, to help track fugitives domestically. India could draw valuable inputs from the highly successful U.S.'s inter-State extradition and fugitive tracking system.

Better integration among the various stakeholders:

- Though the **Crime and Criminal Tracking Network and Systems and the National Intelligence Grid** are efforts in the right direction, there is the need for more integration to make them more effective.
- There needs to be enhanced integration between immigration agencies, State police agencies, Interpol-New Delhi, the External Affairs Ministry and the

Home Ministry and central investigation and intelligence agencies to track and trace fugitives both domestically and internationally.

International collaboration and cooperation:

- India should share its 'wanted' database with other nations on a reciprocal basis or through treaties.
- India should consider signing relevant **bilateral and multilateral conventions on criminal matters** which would help it plug legal infirmities in the extradition process.

Consolidate multiple laws:

- All relevant legal processes and requirements should be incorporated into one consolidated law.

Specialized agency:

- A specialized set-up needs to be put in place to deal with all issues pertaining to fugitives, from investigation to extradition.
- This could involve an **Integrated International Cooperation Division (IICD) at the helm with corresponding linkages with fugitive tracking units at the State level.**

21. Cairn says it has got court nod to attach 20 Indian assets in Paris

Context:

Cairn Energy has said that it has secured a French court order allowing it to **freeze at least 20 Indian properties in central Paris.**

Background:

- Cairn Energy **filed a lawsuit in a U.S. court against Air India**, seeking to make the national carrier **liable to pay the damages** awarded to it, but which are not yet honoured by the Indian government.
- Earlier, the **Permanent Court of Arbitration (PCA) at The Hague ruled in favour of Cairn Energy PLC** of the U.K and awarded \$1.2 billion in damages against India in the retrospective taxation case.
 - The Indian government has termed the tribunal's December 2020 decision highly flawed.

- It argues that the **award improperly ratifies Cairn's scheme to achieve Double Non-Taxation**, which was **designed to avoid paying taxes anywhere in the world**, a significant **public policy concern** for governments worldwide.

Details:

- Cairn Energy said that the Paris court has allowed it to freeze 20 assets to secure a part of the dues.
- Also, **it has identified Indian assets worth \$70bn across the world** and could take action in 10 jurisdictions including the U.S., the U.K., Netherlands, Canada, France, Singapore, Japan, the UAE and even the Cayman Islands.
- It has **filed a plea in the US court seeking to make Air India liable to pay**.

Note:

- Recently, some foreign investors in **Devas Multimedia** filed a similar plea in the same court, **seeking to declare Air India as the Indian government's "alter ego"** and **recover a \$160 million compensation** awarded to the firm after an **international arbitration over its scrapped deal with ISRO's commercial arm, Antrix Corporation**.
- In a similar arbitration case, **India lost against Vodafone**, the government had filed an appeal in a Singapore court **to defend the retrospective tax demand** on the telecom firm.
- The officials have stressed that the government's sovereign right to levy taxes cannot be questioned under bilateral pacts.

Way Forward:

- India is entangled in **more than a dozen such cases** against companies over retrospective tax claims and cancellation of contracts.
- The **exchequer could end up paying billions of dollars in damages** if it loses.
- To reduce future arbitration claims, **India has ended such agreements with over 50 countries**.
- India is **working on a new law to protect foreign investors** by offering relief from possible policy changes even as it upholds the right to tax them.

22. In defence of India's noisy democracy

Context

- The article draws a comparison between the political system prevalent in India and China. It analyses the authoritarian Chinese model of efficiency, but supports the democratic ideas and values.

China's Economic Rise

- China's economy has transformed enormously from being a poor country to a Global Powerhouse with no parallel in history.
- It has recorded high rates of economic growth, focused on capital accumulation, powered an export engine to overcome a limited domestic market, welcomed foreign direct investment, plugged into global supply chains and kept its public finances more or less in order.
- This has resulted in hundreds of millions being lifted out of poverty.

India's Development Story

- Despite impressive growth since the 1990s, it continues to be behind China in its global competitiveness.

Issue Area

- Poverty has come down, but employment prospects for the majority remain limited to low-wage informal sector jobs.
- India has fallen behind Bangladesh and Pakistan in a few social development indicators as well.

The drop in social development indicators has allowed many to question the democratic model of development; instead they have supported the Chinese model of development.

Arguments in favour of the China Model

- China is able to take decisions quickly as it is not stopped by the contradictory democratic voices. India's problem is that it is just too democratic.

Arguments against the China Model

East Asian Countries

- China's model comprises a number of key characteristics, State-guided industrial policy and finance; massive infrastructure investments; rural industrialization and openness to foreign trade and technology.
- Similar standards were also met by countries like Japan and South Korea.
 - Democratic regimes have on balance performed better.

Kerala and Tamil Nadu Model

- Kerala and Tamil Nadu have done more to improve the lives of all their citizens across castes and classes than any other State in India.
- These states have also had the longest and most sustained popular democratic movements and intense party competition in the country.

Conflict resolution

- Democracy is, slow and often contentious. But its deliberative and electoral processes help mitigate conflicts, especially in heterogeneous and conflict-ridden societies.
- Even in a more homogeneous country like China, the absence of open public discourse does the opposite, as evidenced by the State's mishandling of ethnic unrest among Tibetans and Uighurs.
- Respect for Minorities and diversity.
- India's democracy may have been quarrelsome, cumbersome and often dominated by elites, but it has preserved individual liberties, group identities and religious and thought freedoms.

Strong civil society

- Without a strong civil society or an independent judiciary to check government power, Chinese leaders have, on many occasions, made errors in judgment.
 - Judicial decisions overturn Government excesses in democratic countries. China lacks such resilience.
- Mao Zedong's Great Leap Forward or the Cultural Revolution is an example, which has resulted in the loss of lives.
 - The human cost of Chinese success is enormous and unacceptable.

Transparency

- The absence of political checks and institutional mechanisms for public scrutiny has encouraged abuse of power and high levels of corruption, contributing to high inequality, arbitrary land grabs, unsafe working conditions, food safety scares, and toxic pollution, among other problems.

- As China's economy becomes more complex, the absence of transparent and accountable governance processes, combined with frequent crackdowns on civil society and efforts to enforce conformity and discipline, may stifle entrepreneurship and innovation.

Negotiation

- Democracy may complicate the process leading to needless debates and discussions, but these deliberations allow for forms of negotiation and compromise that can bridge across interests and even balance otherwise conflicting imperatives for growth, justice, sustainability and social inclusion.
- Examples:
 - National Rural Employment Guarantee Act
 - The Right to Information
 - The right to food

Conclusion

- India's pluralistic democracy has increased political awareness and self-assertion, our independent judiciary, Election Commission and regulatory bodies function with a degree of autonomy.
- Therefore, instead of looking up to China, it is time to defend the noise of Indian democracy.

23. Govt. infra spending dropped sharply in Q1

Context:

- **Projects Today's survey on project investments in India** for the first quarter of the 2021-22 fiscal.

Details:

- The **second wave of COVID-19 pandemic** has had a devastating impact on the Indian economy. The investments have been hard hit by the pandemic.

Public investment:

- There has been a steep decline in new investment projects from government agencies.

- The public infrastructure investments have almost halved compared with the January-March quarter, with critical sectors like irrigation suffering huge declines of about 96%.
- **Overall new investments from the Union and State governments fell 41.6% as compared to Q4 of 2020-21.**

Private investment:

- Private investments have done relatively better with a **mere 1.7% decline in the Q1 of 2021-22.**
- This could be attributed to the strong performance of the manufacturing sector which posted an impressive 45% increase in investments compared to previous quarter.

Foreign investment:

- **Foreign investment projects slipped 95.4% from the previous quarter,** with just 17 such projects.

Concerns:

Affect post pandemic economic revival:

- **Overall fresh investments have decreased by 18% in the first quarter of 2021-22,** compared with the previous quarter. This does **not augur well for government's stated push for capital spending to revive the pandemic ravaged economy.**
- The previous quarter had seen both private and public sector investments rebounding strongly for the first time since the pandemic hit India. The new dip in investments does not augur well for economic revival.

Result in infrastructural deficit:

- Public investments in services, including water and sewage projects have fallen significantly. Investments in sectors like electricity, roadways and railways has also been tepid.
- This will **hamper the infrastructural availability in the Indian economy** and it would have an adverse impact in the longer run and also **affect the quality of life for its citizens.**

Skewed pattern:

- Despite a relatively better performance from the private sector in terms of investment, a large chunk of these private investments are related to just four massive projects.
- There has also been marked skewedness in region wise investments with states like Gujarat and Maharashtra bagging a substantial proportion of all new investments. This **does not augur well for balanced regional or sectoral growth.**

Recommendations:

- The government agencies should try and **front load their capital expenditure plans.**
- The government should ensure **timely execution of projects listed in the National Infrastructure Pipeline.**
- These measures will not only revive the economy but also instil confidence in private companies to expedite their own new investment plans.

24. Sikkim blossoms: State home to 27% of India's flowering plants

Context:

- Publication of the **Flora of Sikkim - A Pictorial Guide by the Botanical Survey of India (BSI).**

Background:

Sikkim's ecology:

- Sikkim is a part of the **Kanchenjunga biosphere landscape.**
- Sikkim is home to **different altitudinal ecosystems**, with the elevation varying from 300 metres to above 8500 metres above mean sea level.

Details:

- The publication lists **532 species of wild orchids (which is more than 40% of all orchid species found in India)**, 36 species of rhododendron and 20 species of oak, and more than 30 species of high-value medicinal plants, among other species.
- Despite being the smallest state in India with less than 1% of India's landmass, **Sikkim is home to 27% of all flowering plants found in India.**

- This presence of a **diverse set of ecosystems varying from the subalpine to the temperate to the tropical** is one of the reasons for high diversity of flora in Sikkim.

Concerns:

- **Developmental activities** such as the widening of roads to Nathu La and the hydel power plants in north Sikkim could have a negative impact on the rich biodiversity of Sikkim.

Additional information:

- The **Sikkim Forest Tree (Amity & Reverence) Rules, 2017** allows any person to associate with trees standing on his or her private land or on any public land by entering into a **Mith/Mit or Mitini relationship**.
- This is an acknowledgement of the unique cultural practice prevalent in Sikkim and is of significance given the global environmental conservational efforts underway.

25. HAL set to deliver first batch of 3 LCH

What's in News?

Hindustan Aeronautics Limited (HAL) is gearing up to deliver the first batch of three **Light Combat Helicopters (LCH) to the Indian Air Force (IAF)**.

- These are part of the **15 Limited Series Production (LSP) helicopters approved for the Army and the IAF**.
- Of the 15 LSP helicopters, 10 are for the IAF and five for the Army.
- The LCH is the **lightest attack helicopter in the world** weighing **5 tonnes**.
- It has been designed and developed by the HAL to meet the specific and unique requirements of the Indian armed forces and can operate at heights of 12,000 feet.

Note:

- The **Army Aviation operates smaller utility helicopters** but does not have attack helicopters in its fleet.
 - However, it has pitched for attack helicopters of its own to operate with its strike corps.

- The **attack helicopter fleet is operated by the Air Force** which provides close air support to the Army.
- The IAF operates the **older Mi-25 and Mi-35 Russian attack helicopters** which are in the process of **being phased out**. It has inducted **22 AH-64E Apache attack helicopters from the U.S.**
- At present, the Army has **90 Advanced Light Helicopters (ALH)** and **75 Rudra, weaponised ALH, helicopters in service** which are indigenously designed and developed by the HAL in addition to the **older Cheetah and Chetak utility helicopters** which are in need of urgent replacement.
- The Army will start receiving the **Apache attack helicopters** from 2023, six of which have been contracted under a deal from the **U.S. in February 2020**.

26. Richard Branson takes off first in space tourism race

What's in News?

Virgin Galactic's crew have successfully completed the flight to space.

- Virgin Galactic space tourism company was founded by Richard Branson.

Details:

- Mr. Branson along with his five crewmates from Virgin Galactic space tourism company **hurtled into space aboard a winged rocket ship**.
- It reached an altitude of about 88 kilometres over the New Mexico desert and then safely landed.
- The crew experienced three to four minutes of weightlessness and saw the curvature of the earth.
- It was intended as a confidence-boosting mission for Virgin Galactic, which plans to start taking paying customers on joyrides.
- Ms. Bandla became the third Indian-origin woman to fly into space after Kalpana Chawla and Sunita Williams.
- **Jeff Bezos' Blue Origin company** intends to send tourists past the so-called **Karman line 100 kilometres above the earth**.
 - **Karman Line** is recognised by international aviation and aerospace federations as the threshold of space.
 - The Karman Line is an attempt to define a boundary between Earth's atmosphere and outer space.
- But NASA, the Air Force, the Federal Aviation Administration and some astrophysicists consider the boundary between the atmosphere and space to begin 80 kilometres up.

27. 68 killed in lightning strikes in 3 States; experts issue warning

Context:

With the monsoon making a slow revival over several parts of India there is a **rise in lightning-linked deaths**.

Details:

- The Home Ministry's statistics consistently cited **lightning as the biggest natural disaster-linked killer in India**.
- Nearly 68 were reportedly struck dead by lightning on a single day in Uttar Pradesh, Rajasthan and Madhya Pradesh.

What is lightning, and how does it strike?

- Lightning is a very **rapid and massive discharge of electricity in the atmosphere**, some of which is directed towards the Earth's surface.
- These **discharges are generated in giant moisture-bearing clouds that are 10-12 km tall**.

How does this current reach the Earth from the cloud?

- While the Earth is a good conductor of electricity, it is electrically neutral. However, **in comparison to the middle layer of the cloud, it becomes positively charged**.
- As a result, about 15%-20% of the current gets directed towards the Earth as well. It is this flow of current that results in **damage to life and property on Earth**.

How common are deaths by lightning?

- Lightning is the **biggest contributor to accidental deaths due to natural causes**.
- In 2019, an analysis by Skymet reported that **five States accounted for half the lightning strikes that year, led by Odisha with 9,37,462 strikes or about 16% of the cloud-to-ground strikes**. There were **20 million lightning strikes in that period with over 72% of them being instances of "in-cloud" lightning**.

Issue:

- Several thousand thunderstorms occur over India every year. Each can involve several – sometimes more than a hundred – lightning strikes.
- **Occurrences of lightning are not tracked in India**.

- **Just one group of scientists**, at the Indian Institute of Tropical Management (IITM) in Pune, **works full-time on thunderstorms and lightning.**
- There is **simply not enough data for scientists to work with.**

28. Inflation remains above 6% in June

Context:

Retail inflation has been recorded at above 6%.

Details:

- According to data released by the **Ministry of Statistics and Program Implementation**, retail inflation had touched a six-month high in May 2021. It has remained at **6.3% in June 2021.**

Issue:

- Inflation has exceeded the **Monetary Policy Committee's target of 4 (+/-2)%**, for the second straight month.
 - At present, the RBI has a target for **retail inflation or CPI of 4%** with a **margin of 2 percent on either side.**
- This has led to questions over whether the panel can continue with its **accommodative stance to help revive growth.**
 - An **accommodative stance** means RBI will cut rates to **inject money into the financial system** whenever needed.
 - A change in the stance to **'neutral'** means RBI **will alter rates in any direction to control the money supply in the system.**
- If the RBI cuts the interest rate, it may further lead to an increase in retail inflation. For **containing inflation, RBI should raise interest rates.** But raising interest rates at this stage would be **catastrophic for India's GDP growth.**
- Economists have stressed that the lack of **fiscal policy action to cool prices could cause a faster unwinding of RBI's growth-supporting approach to interest rates.**

Conclusion:

Growth impulses remain fragile with the second COVID-19 wave hurting the recovery momentum. Economists opine that the tussle between supporting the **nascent, incomplete revival in growth** and **preserving the anchoring of inflationary expectations** will continue.

29. 'Anti-terror law must not be misused to harass people'

- Supreme Court judge Justice D.Y. Chandrachud while delivering a speech on the '**Role of the Supreme Court in protecting the fundamental rights in challenging times**' has stated the need to ensure that anti-terror laws are not misused to quell dissent or harass citizens.
- He reiterated that the judiciary must remain the first line of defence against any move to deprive citizens of their liberty and should not be concerned about its interventions being labelled as "**judicial activism**" or "**judicial overreach**".
- **The Supreme Court should act as "the guardian of the Constitution"** protecting the citizens' fundamental human rights from any infringement through executive or legislative actions.

30. S&P keeps India rating at lowest investment grade

Context:

- S&P Global Ratings forecast of the Indian economy.

Details:

- S&P Global Ratings has kept **India's sovereign rating unchanged at the lowest investment grade of 'BBB-'**. Based on forecasts of an economic recovery following the resolution of the COVID-19 pandemic, S&P has kept the **rating outlook for India at stable**.
- S&P has projected a 9.5% GDP growth in the current fiscal year and a 7.8% GDP growth in the following year.
- S&P Global Ratings has called for additional **economic reforms that spur investment and create jobs** to ensure faster economic recovery from the current economic slowdown.

31. 'High fuel prices threaten recovery'

Context:

- State Bank of India's economics research team's findings on the **rising fuel prices in India**.

Details:

- India has been witnessing **record-high fuel prices**.
- Fuel costs have been ratcheted up to current levels by the combined effects of **rising benchmark Brent prices** and the **increasing government levies on fuels**.
 - Currently, central and state-level taxes contribute to about 55 percent of the retail price of petrol and 51 per cent for diesel.

Concerns:

Inflation concerns:

- The higher petrol and diesel prices will **lead to rising transport costs which will eventually push up inflation rates**.
 - The study predicts that with every 10% increase in petrol pump prices in Mumbai, the Consumer Price Index (CPI) could rise by 0.50%.

Household financial distress:

- The higher expenditure on fuels and also the higher inflation rates have pushed the large middle-class population into financial distress.
- There has been a **significant dip in bank deposits**. The decline in financial savings reflects household distress in India.
 - The household financial savings rate in the third quarter of 2020-21 has come down to 8.2% of GDP from 21% and 10.4% in the previous two quarters.
- **Household debt has increased**.
 - Household debt as a percentage of GDP had increased sharply to 37.3% or Rs. 73.6 lakh crore in 2020-21, from 32.5% of GDP or Rs. 66.1 lakh crore in 2019-20.

Delay economic recovery:

- India's economic recovery could be delayed by rising financial stress on households.
- The higher expenditure on oil has distorted non-discretionary spending and led to **decreased spending on non-discretionary items like grocery and utility services**.
- Also given that the share of non-discretionary spend has jumped to 75% in June, from 62% in March, this has **crowded out customers' discretionary expenses**.
- The report indicated consumers were cutting back spending on other goods to be able to accommodate higher fuel costs. This does not augur well for a **predominantly domestic consumption-based economy like India**.

- The lack of demand in the economy will delay the economic recovery in the post-COVID phase.

Conclusion:

- SBI's economists have called for the fuel taxes to be cut through **tax rationalization** to both cool inflationary pressures and ease the burden on consumers.

32. Rs. 9,800 crore support for livestock development

Context:

- The **Cabinet Committee on Economic Affairs (CCEA)** has approved to spend ₹9,800 crore on livestock development over the next five years.

Details:

- All schemes of the Department of Animal Husbandry and Dairying will be merged into three broad categories – **Indigenous cows and dairy development, Livestock health and Infrastructure development.**

Significance:

- This move by the central government will help attract almost ₹55,000 crore of outside investment into the animal husbandry sector.
- This would involve spending by State governments and cooperatives, financial institutions and external funding agencies.
- The planned expenditure will help **boost growth in the animal husbandry sector which engages around 10 crore farmers.**

33. WPI inflation remains 'high'

Context:

- **Wholesale price inflation has been recorded at 12.07% for June 2021.**
 - This follows another month of high wholesale price inflation of 12.94% in May 2021.

Responsible factors:

- The wholesale price inflation is being attributed to a low base effect along with the **rise in prices of petrol, diesel, naphtha and ATF**, as well as those of **basic metals and food products**.

Concerns:

- The high wholesale prices could **push up the production costs** and **render Indian products uncompetitive in the global markets**.
- The increase in raw material and fuel and power prices would result in a **squeeze on the working capital of the already struggling small businesses**.
- The wholesale price inflation will invariably have a **spillover effect on retail inflation** and this could **cramp any monetary policy intervention** to revive the economy in the post-pandemic scenario.
- The high inflation rates could **hamper the demand in the economy** which in turn will affect the economic revival in the predominantly domestic consumption-based Indian economy.

Recommendations:

- The government could consider **bringing petroleum products into the ambit of GST to rationalise prices**.

34. Simpler drone rules in the offing

Context:

The Ministry of Civil Aviation has released **Draft Drone Rules, 2021, for public consultation**.

Details:

- The rules will replace **the Unmanned Aircraft System Rules, 2021** notified in March 2021.
- The intent is to make the **rules user-friendly** and to **encourage drone research and development**.

Key takeaways from the Draft Drone Rules, 2021:

- The number of **forms to be filled to seek authorisation** before operating a drone has been **reduced from 25 to six**.
- Fee reduced to nominal levels. **No linkage with the size of the drone**.

- Safety features like ‘No permission – no take-off’ (NPNT), real-time tracking beacon, geo-fencing, etc. to be notified in future. A six-month lead time will be provided for compliance.
- **Digital sky platform** would be developed as a business-friendly single-window online system.
- **No pilot licence required for micro drones** (for non-commercial use), **nano drones and for R&D organisations.**
- No restriction on drone operations by foreign-owned companies registered in India.
- Import of drones and drone components to be **regulated by the Directorate General of Foreign Trade.** This is in order to **encourage indigenous manufacturing.**
- No security clearance required before any registration or licence issuance.
- **Coverage of drones** under Drone Rules, 2021 **increased from 300 kg to 500 kg.** This will cover drone taxis also.
- **Directorate General of Civil Aviation** shall prescribe training requirements, oversee drone schools and provide pilot licences online.
- **Maximum penalty** under Drone Rules, 2021 reduced to **INR 1 lakh.**
- **Drone corridors** will be developed for cargo deliveries.
- **Drone promotion council** to be set up to facilitate a business-friendly regulatory regime.
- The Union government may specify certain standards for **obtaining a certificate of airworthiness for drones**, which will promote the use of made-in-India technologies, designs, components and drones; and **India’s regional navigation satellite system named Navigation with Indian Constellation [NavIC].**

35. Growing precarity

In the context of rising inflation, the article talks about the need to cut fuel levies to ease the burden on consumers.

Background:

- According to data released by the Ministry of Statistics and Program Implementation, **retail inflation** had touched a six-month high in May 2021. It has remained at **6.3% in June 2021.**

Details:

- RBI's monthly Bulletin observed, **fuel inflation, which excludes petrol and diesel, surged to a record 12.7%** in June 2021 driven by LPG, kerosene and the rural poor's mainstay, firewood and dung-cake.
- And, disconcertingly, **LPG and kerosene prices have also registered increases so far.**
- Medium and small-scale industrial units, already struggling to cope with the pandemic's impact now face **rising raw material and input costs.**
- Transport costs remain persistently high as both petrol and diesel prices continue to rise.
- With global crude oil trending higher, the persistent rise in domestic transportation costs is bound to reflect in **retail prices of farm produce and products shipped from factories.**

Way Forward:

- **The worry over inflation and growth trade-off persists and the former needs careful handling.**
- The Government must, at the very least, **cut fuel taxes to ease the burden on consumers.**
- Earlier, SBI's economists also had called for the fuel taxes to be cut **through tax rationalization to both cool inflationary pressures and ease the burden on consumers.**

36. Rare Arctic lightning storms strike north of Alaska

Context:

- **Three successive thunderstorms swept across the Arctic region** resulting in unusual lightning bolts.

Details:

- **Lightning are a relatively rare phenomenon in the arctic region.**
 - Given that in the arctic region the water is usually covered with ice, the air over the Arctic Ocean lacks the convective heat needed to generate lightning storms.
- However there are indications of a change in this trend with **episodes of summer lightning within the Arctic Circle having tripled since 2010.**
 - This trend could be **attributed to climate change and increasing loss of sea ice** in the region. As sea ice vanishes, more water is able to evaporate, adding moisture to the warming atmosphere.

- Notably climate change has been warming the Arctic faster than the rest of the world.

Concerns:

- These lightning threaten boreal forests around the Arctic, as they could spark **forest fires** in remote regions already experiencing high temperatures due to global warming.
- On the water, **the lightning is an increasing hazard to mariners** as the vessel traffic has been increasing with retreating sea ice.

37. Independent defence policy in place now, claims Amit Shah

Context:

- Union Home Minister delivering the Rustamji Memorial Lecture at the 18th Investiture Ceremony of the Border Security Force (BSF).

Highlights of the speech:

Border safety:

- **Border safety was at the core of the national security policy.**
- A pilot project of the **Comprehensive Integrated Border Management System** had been implemented for effective surveillance along the border.
- **Development of border areas has been prioritized through infrastructure development work** to provide basic services to the residents. This includes construction of border roads, bridges and important tunnels.

Challenges to internal security:

- The major challenges before the BSF would be **infiltration, drugs/weapons trafficking and drones.**
- There is also the need to develop a long-term strategy for countering the possible use of artificial intelligence and robotic technology from across the border.

38. Curbs on Mastercard

Context:

- The **Reserve Bank of India (RBI)** has banned Mastercard from issuing new **debit and credit cards** to customers in India.

Background:

RBI's data localisation policy:

- In 2018, the Reserve Bank of India had issued a circular ordering card companies such as Visa, Mastercard, and American Express to **store all Indian customer data locally**.
- The underlying reasons for this were stated as follows:
 - Local storage of consumer data is necessary to **protect the privacy of Indian users** and to **address national security concerns**.
 - Regulator could have necessary supervisory access over the card companies.

RBI strict implementation of the guidelines.

- **Earlier, American Express and Diners Club International were banned by the RBI** from issuing new cards after they failed to comply with the 2018 circular.

Details:

- According to the RBI, **Mastercard has failed to comply with the local data storage rules** announced in 2018.

Concerns:

- The move to ban Mastercard would **impact the operation of banks** operating in India that use Mastercard's services to issue cards to their customers.
- Given that Mastercard accounts for almost one third of the card market in India, **new card registrations might take a hit**.
- Some believe the data localisation rules are being used by governments as **tools of economic protectionism**. This sort of economic protectionism could affect the business of foreign card companies. Thus, the card payments sector may end up being restricted to a few domestic companies, which in turn **can**

lead to reduced competition. This could mean **higher costs and lower quality services for customers.**

39. China denies politics behind UNESCO move on Barrier Reef

Context:

The Great Barrier Reef has been **put on a list of World Heritage sites** that could be put on the **in-danger list** after losing half of its corals since 1995.

Details:

- Australia has criticised the move, **blaming global warming for the loss.**
- It also suspected that **China had a role to play** in recommending the Barrier Reef to be listed as endangered.
- However, UNESCO experts argued that **pollution run-off has contributed to the loss.**
- A top Chinese official has said that political tensions between Beijing and Australia were not behind the UNESCO recommendation.

Note:

- The List of World Heritage in Danger is **compiled by UNESCO.**
- The list is intended to **increase international awareness of the threats and to encourage counteractive measures.**
- Two UNESCO world heritage sites in India that were earlier included in the World Heritage in Danger list but now have been delisted include:
 - **Group of Monuments at Hampi**
 - **Manas Wildlife sanctuary, Assam**

40. Pegasus spyware used to 'snoop' on journalists

Context:

It has been reported that some **40 Indian journalists** are a part of the leaked list of **potential targets for surveillance** by an unidentified agency using **Pegasus software.**

Issue:

- **Indian Ministers, government officials and Opposition leaders** also figure in the list of people whose phones may have been compromised by the spyware.
- The **spyware Pegasus** is sold to governments around the world by **NSO Group, an Israeli company**.
- It can be used to **track, extract messages and information from the phones** that run on Android and iOS systems.

41. SC reserves order on telcos' pleas in AGR case

Context:

The Supreme Court has reserved orders on **pleas made by telecom majors** for a chance to place their grievances about arithmetical errors in the **calculation of Adjusted Gross Revenue (AGR)** dues before the Department of Telecom (DoT).

Background:

- The Supreme Court in September 2020 had **granted 10 years to telecom firms for paying the Adjusted Gross Revenue (AGR)-related dues** to the DoT with certain conditions.
- The SC asked telcos to pay **10 per cent of the AGR-related dues by March 31, 2021**.

What is Adjusted Gross Revenue (AGR)?

- Telecom operators are **required to pay licence fees and spectrum charges in the form of 'revenue share' to the Centre**.
- The **revenue amount used to calculate this revenue share** is termed the Adjusted Gross Revenue (AGR).
- According to the DoT, the calculations should incorporate all revenues earned by a telecom company - **including from non-telecom sources such as deposit interests and sale of assets**.
- The **companies, however, have been of the view that AGR should comprise the revenues generated from telecom services only** and non-telecom revenues should be kept out of it. They had argued that AGR must only include license and spectrum fees.

42. Rahul, Prashant Kishor, ex-EC Lavasa on list of spyware targets

Context:

Former Congress president, former Election Commissioner, Union Ministers have appeared on a **leaked list of potential or actual targets for spying by the Pegasus spyware**.

How does Pegasus Spyware Work?

Spyware is software with **malicious behaviour** that aims to **gather information about a person or organization** and send it to another entity in a way that **harms the user**.

Details:

- Amnesty stated Pegasus had been used in some of the “**most insidious digital attacks**” on **human rights activists in the world**.
- In 2020, Amnesty and Citizen Lab revealed that the spyware was used on **nine human rights defenders who were accused in the Bhima Koregaon case**.

Pegasus spyware:

- Pegasus is a spyware tool from **Israeli firm NSO Group**.
- In 2020, WhatsApp’s report stated that 1,400 of its users were **hacked by Pegasus**.
 - It was used to **spy on journalists and human rights activists** across the globe, including in India.
- Pegasus works by **sending an exploit link**, and if the target user clicks on the link, the malware or the code that allows the surveillance is installed on the user’s phone.
 - A presumably newer version of the malware does not even require a target user to click a link.
- Once Pegasus is installed, the **attacker has complete access to the user’s phone**. Every call, message, can be intercepted and monitored. It can also access any document stored on the phone.
- Pegasus can also **control the phone’s camera and microphone** and has access to the device’s location data.
- The Pegasus delivers “a chain of **zero-day exploits** to penetrate security features on the phone and installs Pegasus without the user’s knowledge or permission”.
 - “zero-day exploit” is a completely unknown feature (vulnerability). There is no fix for it as even the manufacturer is not aware of it.

43. Navy seeks bids to build submarines

Project-75I:

- Under Project-75I, the Indian Navy intends to **acquire six diesel-electric submarines**, which will also feature **advanced air-independent propulsion systems** to enable them to stay submerged for a longer duration and substantially increase their operational range.
- The six modern conventional submarines will have the latest equipment, weapons and sensors, including advanced torpedoes, modern missiles and state-of-the-art countermeasure systems.
- All six submarines are expected to be **indigenously constructed in Indian shipyards under the strategic partnership model** of the procurement procedure.
 - Under this system, Strategic Partners (SPs) or Indian applicant companies for the project will have to tie up with any of the Original Equipment Manufacturers (OEM) for the production process.

Context:

- The Defence Ministry has issued the Request For Proposal (RFP) for the construction of six advanced conventional submarines for the Navy under Project-75I.

44. New Initiatives in Building Energy Efficiency

Why in News

“Aiming for Sustainable Habitat: New Initiatives in Building Energy Efficiency 2021” was launched by the **Bureau of Energy Efficiency (BEE)**.

- These initiatives **seek to enhance energy efficiency in the building sector** and were launched as part of 'Azadi Ka Amrut Mahotsav'.

Bureau of Energy Efficiency

- The BEE is a **statutory body** established through the **Energy Conservation Act, 2001 under the Union Ministry of Power**.
- It **assists in developing policies and strategies** with the primary objective of reducing the energy intensity of the Indian economy.

- BEE coordinates with designated consumers, designated agencies, and other organizations to identify and utilize the existing resources and infrastructure, in performing its functions.

Key Points

- **Initiatives Launched:**
 - **Eco Niwas Samhita 2021:**
 - It is an **Energy Conservation Building Code for Residential Buildings (ECBC-R)** to give a further fillip to India's energy conservation efforts.
 - It specifies code compliance approaches and minimum energy performance requirements for building services, and verification framework with **Eco Niwas Samhita 2021**.
 - **Hand Book for Learning:**
 - The web-based platform '**The Handbook of Replicable Designs for Energy Efficient Residential Buildings**' as a learning tool, which can be used to create a pool of ready-to-use resources of replicable designs to construct energy-efficient homes in India.
 - **Online Directory of Building Materials:**
 - Creating an Online Directory of Building Materials that **would envisage the process of establishing standards for energy efficient building materials**.
 - **NEERMAN Awards:**
 - **NEERMAN Awards**, (National Energy Efficiency Roadmap for Movement towards Affordable & Natural Habitat) were announced, with the **goal of encouraging exceptionally efficient building designs** complying with BEE's Energy Conservation Building Codes.
 - **Online Star Rating Tool:**
 - It **provides performance analysis to help professionals** decide the best options to pick for energy-efficiency of their homes.
 - It was launched for **Energy Efficient Homes**, created to improve energy-efficiency and reduce energy consumption in individual homes.
 - **Training:**
 - Training of over 15,000 Architects, Engineers and Government officials on **Energy Conservation Building Code (ECBC) 2017** and **Eco Niwas Samhita 2021**.
- **Significance:**
 - The **building sector is the second largest consumer of electricity** after industry but it is expected to become the **largest energy consuming sector by 2030**.

- These initiatives will **help enhance the energy-efficiency levels in residential buildings across the country**, thereby leading to sustainable habitation.
 - The initiatives will go a long way to **make India more energy-efficient**.

Energy Efficiency in India

- **Energy Efficiency:**
 - Energy efficiency means **using less energy to perform the same task** – that is, **eliminating energy waste**.
 - Energy efficiency **brings a variety of benefits:** reducing **GreenHouse Gas (GHG)** emissions, reducing demand for energy imports, and lowering our costs on a household and economy-wide level.
- **Transition:**
 - India's energy sector is set for a transition with recent developmental ambitions of the government e.g. **175 GW of installed capacity of renewable energy by 2022**, **24X7 Power for all**, **Housing for all by 2022**, **100 smart cities mission**, promotion of e- mobility, electrification of railway sector, 100% electrification of households, Solarization of agricultural pump sets, and promotion of clean cooking.
- **Potential of Energy Efficiency:**
 - Energy Efficiency **has the maximum GHG abatement potential** of around 51% followed by renewables (32%), biofuels (1%), nuclear (8%), carbon capture and storage (8%) as per the **World Energy Outlook (WEO 2010)**.
 - World Energy Outlook (WEO) is the flagship publication of the **International Energy Agency**.
 - India can **avoid building 300 GW of new power generation up to 2040** with implementation of ambitious energy efficiency policies.
- **Positives:**
 - Successful implementation of Energy Efficiency Measures contributed to electricity **savings of 7.14% of total electricity consumption of the country** and **emission reduction of 108.28 million tonnes of CO₂ during 2017-18**.
- **Other initiatives to Promote Energy Conservation and Energy Efficiency:**
 - **PAT Scheme:**
 - **Perform Achieve and Trade Scheme (PAT)** is a market based mechanism to enhance the cost effectiveness in improving the Energy Efficiency in Energy Intensive industries through certification of energy saving which can be traded.

- It is a part of the National Mission for Enhanced Energy Efficiency (NMEEE), which is one of the eight missions under the **National Action Plan on Climate Change (NAPCC)**.
- **Standards and Labeling:**
 - The scheme was **launched in 2006** and is currently invoked for equipments/appliances Room Air Conditioner (Fixed/VariableSpeed), Ceiling Fan, Colour Television, Computer, Direct Cool Refrigerator, Distribution Transformer, Domestic Gas Stove, General Purpose Industrial Motor, LED Lamps, Agricultural Pumpset, etc.
- **Energy Conservation Building Code (ECBC):**
 - It was developed for **new commercial buildings in 2007**.
 - It sets **minimum energy standards for new commercial buildings** having a connected load of 100kW (kilowatt) or contract demand of 120 KVA (kilovolt-ampere) and above.
- **Demand Side Management:**
 - DSM is the **selection, planning, and implementation of measures** intended to have an influence on the demand or customer-side of **the electric meter**.

45. Polluted River Stretches

Why in News

The Central Pollution Control Board (CPCB) in 2018 identified 351 polluted river stretches in India.

- CPCB study reveals that **discharge of untreated wastewater is one of the main causes** of river pollution.
- The assessment of water quality for identification of polluted river stretches found that **31 states and Union territories (UT) had rivers and streams that did not meet the water quality criteria**.

Key Points

- **Findings of CPCB:**
 - **Concentration of Polluted River Stretches:** Almost 60% of polluted river stretches **exist in eight states:** Maharashtra, Assam, Madhya Pradesh, Kerala, Gujarat, Odisha, West Bengal and Karnataka.
 - Maharashtra has the maximum number of polluted river stretches in the country.
 - **Disproportionate Sewage Treatment:** The **National Green Tribunal (NGT)** in 2019 directed that 100% treatment of sewage needed to be ensured before 31st March, 2020.

- However, these states have sewage treatment capacity disproportionate to the sewage generated.
- According to the CPCB report National inventory of sewage treatment plants 2021, about 72,368 million litres per day (MLD) of sewage was generated against which operational treatment capacity was only 26,869 MLD in 2021.
- **Increasing Biological Oxygen Demand:** This huge amount of sewage is left untreated/partially treated and discharged directly into rivers and **pollutes rivers by increasing the biological oxygen demand.**

Biological Oxygen Demand

- Biological Oxygen Demand is the **amount of dissolved oxygen needed by microorganisms to decompose organic matter** (waste or pollutants) under aerobic reaction (in the presence of oxygen).
- The **more organic matter there is** (e.g., in sewage and polluted bodies of water), the **greater is the BOD.**
- **Greater BOD, the lower the amount of dissolved oxygen available for higher animals** such as fishes.
- The BOD is therefore **a reliable gauge of the organic pollution of a water body.**
- **One of the main reasons for treating wastewater prior to its discharge into a water resource is to lower its BOD** i.e. to reduce its need of oxygen and thereby lessen its demand from the streams, lakes, rivers, or estuaries into which it is released.

Dissolved Oxygen

- It is the amount of dissolved oxygen present in the water which is needed for aquatic life to survive. The **quality of water increases with an increase in DO levels.**
- A DO level of 5 mg/l or above is the recommended level for bathing in a river.
- **Other Reasons for Polluted Rivers:**
 - **Urbanization:** Rapid urbanization in India during the recent decades has given rise to a number of environmental problems such as water supply, wastewater generation and its collection, treatment, and disposal.
 - Many towns and cities which came upon the banks of rivers have not given proper thought to the problem of wastewater, sewerage, etc.

- **Industries:** Unrestricted flow of sewage and industrial effluents into the rivers has adversely affected their purity. All these industrial wastes are toxic to life forms that consume this water.
- **Agricultural Runoff and Improper Agricultural Practices:** Traces of fertilizers and pesticides are washed into the nearest water-bodies at the onset of the monsoons or whenever there are heavy rains.
- **Amount of Flow of Rivers:** Impact on river water quality resulting from discharges of treated or untreated wastewater into the river will depend on the dilution offered by the quantum of flows in the river.
- **Religious and Social Practices:** Religious faith and social practices also add to the pollution of the rivers, especially Ganga.
 - Dead bodies are cremated on the river banks. Partially burnt bodies are also flung into the river.
 - Mass bathing in a river during religious festivals is another environmentally harmful practice.
- **Government Initiatives to Tackle Water Pollution:**
 - Recently, the National Green Tribunal (NGT) directed the Ministry of Jal Shakti to devise an appropriate **National River Rejuvenation Mechanism** for effective monitoring of steps to curb pollution and for rejuvenation of all polluted river stretches across the country.
 - **National Water Policy (2012):** It aims to take cognizance of the existing situation, to propose a framework for creation of a system of laws and institutions and for a plan of action with a unified national perspective.
 - Started by the Ministry of Water Resources, it highlights the importance of water for human existence as well as for economic development related activities.
 - It suggests frameworks to conserve water resources through optimal, economical, sustainable and equitable means.
 - **National Water Mission (2010):** It ensures integrated water resource management leading to water conservation, less wastage, equitable distribution forming better policies.
 - **National Mission for Clean Ganga (NMCG):** It envisages a five-tier structure at national, state and district level to take measures for prevention, control, and abatement of environmental pollution in river Ganga.
 - It aims to ensure continuous adequate flow of water so as to rejuvenate the river Ganga.
 - **Namami Gange Project:** It integrates the efforts to clean and protect the Ganga River in a comprehensive manner.

Way Forward

- **Maintaining Minimum Flow of the River:** To maintain and restore the wholesomeness of the river (Aquatic ecosystem), there is a need to maintain the minimum flow.
 - Minimum flow of the river is also important to discharge treated sewage.
- **Comprehensive Waste Management Policy:** There is a need for a comprehensive waste management policy that stresses the need for decentralised garbage disposal practices as this will incentivise private players to participate.
- **Bioremediation:** It is important that **Bioremediation** (i.e. use of microbes to clean up contaminated soil and water) is made compulsory for areas wherever they can be applied.
- **Behavioural Change:** To overhaul the waste management sector and induce the necessary behavioural change, citizen participation and engagement is the key.

46. RBI working towards 'phased introduction' of Digital Rupee

The Reserve Bank of India (RBI) is working toward a “phased implementation strategy” of a Central Bank Digital Currency (CBDC).

Central Bank Digital Currency (CBDC)

- The phrase CBDC has been used to refer to various proposals involving digital currency issued by a central bank.
- They are also called digital fiat currencies or digital base money.
- The present concept of CBDCs was directly inspired by Bitcoin, but a CBDC is different from virtual currency and cryptocurrency.
- Cryptocurrencies are not issued by a state and lack the legal tender status declared by the government.
- CBDC implementations will likely not use any sort of distributed ledger such as a blockchain.

Why India needs a digital rupee?

- **Online transactions:** India is a leader in digital payments, but cash remains dominant for small-value transactions.
- **High currency in circulation:** India has a fairly high currency-to-GDP ratio.
- **Cost of currency management:** An official digital currency would reduce the cost of currency management while enabling real-time payments without any inter-bank settlement.

Features of CBDS

- **High-security instrument:** CBDC is a high-security digital instrument; like paper banknotes, it is a means of payment, a unit of account, and a store of value.
- **Uniquely identifiable:** And like paper currency, each unit is uniquely identifiable to prevent counterfeit.
- **Liability of central bank:** It is a liability of the central bank just as physical currency is.
- **Transferability:** It's a digital bearer instrument that can be stored, transferred, and transmitted by all kinds of digital payment systems and services.

Various benefits offered

- It is efficient than printing notes (cost of printing, transporting, and storing paper currency)
- It reduces the risk of transactions
- It makes tax collection transparent
- Prevents money laundering

47. Species in news: Great Indian Bustards

The Environment Ministry has informed the Parliament that there were no Great Indian Bustards (GIB) left in Kutch Bustard Sanctuary (KBS) in Gujarat's Kutch district.

Great Indian Bustards

- GIBs are the largest among the four bustard species found in India, the other three being MacQueen's bustard, lesser florican and the Bengal florican.
- GIBs' historic range included much of the Indian sub-continent but it has now shrunk to just 10 per cent of it. Among the heaviest birds with flight, GIBs prefer grasslands as their habitats.
- Being terrestrial birds, they spend most of their time on the ground with occasional flights to go from one part of their habitat to the other.
- They feed on insects, lizards, grass seeds etc.
- GIBs are considered the flagship bird species of grassland and hence barometers of the health of grassland ecosystems.

On the brink of extinction

- The GIB population in India had fallen to just 150.

- Pakistan is also believed to host a few GIBs and yet openly supports their hunting.

Protection accorded

- **Birdlife International:** uplisted from Endangered to Critically Endangered (2011)
- **Protection under CITES:** Appendix I
- **IUCN status:** Critically Endangered
- **Protection under Wildlife (Protection) Act:** Schedule I

Threats

- **Overhead power transmission:** lines are the biggest threat to the GIBs.
- **Poor vision:** Due to their poor frontal vision, can't detect powerlines in time and their weight makes in-flight quick manoeuvres difficult.
- **Windmills:** Coincidentally, Kutch and Thar desert are the places that have witnessed the creation of huge renewable energy infrastructure.
- **Noise pollution:** Noise affects the mating and courtship practices of the GIB.
- **Changes in landscape:** Change in the landscape by way of farmers cultivating their land, which otherwise used to remain fallow due to frequent droughts in Kutch.
- **Cultivation changes:** Cultivation of cotton and wheat instead of pulses and fodder are also cited as reasons for falling GIB numbers.

Supreme Court's intervention

- The Supreme Court has ordered that all overhead power transmission lines in core and potential GIB habitats in Rajasthan and Gujarat should be undergrounded.
- The SC also formed a three-member committee to help power companies comply with the order.
- However, nothing has happened on the ground.

Conservation measures

- In 2015, the Central government launched the GIB species recovery programme.
- Under the programme, the WII and Rajasthan Forest departments have jointly set up conservation breeding centres where GIB eggs are harvested from the wild.
- They have been incubated artificially and hatchlings raised in a controlled environment.

48. Subsidy Scheme to Boost Merchant Ships

Why in News

Recently, the Union Cabinet has approved a scheme for providing subsidy support to Indian Shipping companies in global tenders floated by Ministries and Central Public Sector Enterprises (CPSEs) for import of government cargo.

- The scheme provides a subsidy of Rs. 1,624 crore over five years.

Key Points

- **Highlights of the Scheme:**
 - The scheme envisages an **increase in flagging** and would link access to Indian cargo to investment in Indian ships.
 - Flagging in is the **process of adding a vessel to the national registry** and "flagging out" is the process of removing a vessel from a national registry.
 - The subsidy support varies **from 5% to 15%** of the lowest quote offered by the foreign shipping company, depending on whether the ship was flagged after or before 1st February, 2021.
 - However, **ships older than 20 years will not be eligible under the scheme**, according to the Ministry of Ports, Shipping and Waterways.
- **Rationale of the Scheme:**
 - **Small Size of Indian Shipping Industry:** Despite having a 7,500 km long coastline, a significant **national EXIM (Export-Import) trade, a policy of 100% FDI in shipping since 1997**, the Indian shipping industry and India's national fleet is proportionately small when compared with its global counterparts.
 - Currently the Indian fleet comprises a meagre **1.2% of the world fleet in terms of capacity**.
 - The share of Indian ships in the carriage of India's EXIM trade has drastically declined from 40.7% in 1987-88 to about 7.8% in 2018-19.
 - **Offsetting Higher Operational Costs:** Currently, Indian shipping industry bears relatively higher operating costs, owing to factors like higher costs of debt funds, taxation on wages of Indian seafarers, IGST on import of ships, blocked GST tax credits, etc.
 - In this context, these higher operational costs would be offset to a large extent through the subsidy support and it would be more attractive to flag merchant ships in India.

- **Increasing Foreign Exchange Outgo:** Owing to high operational costs, importing a shipping service by an Indian charterer is cheaper than contracting the services of a local shipping company.
 - This has led to an increase in foreign exchange outgo on account of freight bill payments to foreign shipping companies.
- **Significance of the Scheme:**
 - **Generating Employment:** Increase in Indian fleet will provide direct employment to Indian seafarers since Indian ships are required to employ only Indian seafarers.
 - Further, cadets wishing to become seafarers are required to obtain on-board training on ships. Indian ships will therefore provide training slots for young Indian cadet boys and girls.
 - **Strategic Advantages:** A policy to promote the growth of the Indian shipping industry is also necessary because having a bigger national fleet would provide economic, commercial, and strategic advantages to India.
 - **Economic Advantages:** A strong and diverse indigenous shipping fleet will not only lead to foreign exchange savings but would also reduce excessive dependence on foreign ships for transporting India's critical cargoes.
 - Thus, it would help in achieving the objective of Atmanirbhar Bharat and contribute to the Indian GDP.

49. National Security Council

Why in News

Amid the **Pegasus Controversy**, it was reported that the Union Government's expenditure on the **National Security Council secretariat (NSCS) increased ten fold in 2017-18** to Rs 333 crores from Rs 33 cr. in 2016-17.

Key Points

- **About:**
 - NSC of India is a **three-tiered organization** that oversees political, economic, energy and security issues of strategic concern.
 - The **National Security Advisor (NSA)** presides over the NSC, and is also the primary advisor to the prime minister. The current National Security Advisor is Ajit Doval.
- **Formation:**
 - It was formed in 1999, where all aspects of national security are deliberated upon.
- **Three tier Structure:**

- NSC comprises the three tier structure- Strategic Policy Group (SPG), the National Security Advisory Board (NSAB) and the National Security Council Secretariat.
 - The SPG chaired by the Cabinet Secretary is the principal forum for inter-ministerial coordination and integration of the relevant inputs.
 - The NSAB undertakes long-term analysis and provides perspectives on issues of national security.
- **Function:**
 - It operates within the executive office of the prime minister of India, liaising between the government's executive branch and the intelligence services, advising leadership on intelligence and security issues.
- **Members:**
 - The Ministers of Home Affairs, Defence, External Affairs and Finance are its members.

50. Supreme Court Dismisses Plea Against Ban On Firecrackers

Why in News

Recently, the Supreme Court has dismissed appeals challenging the **National Green Tribunal's (NGT) order** which had imposed a complete ban on the sale and use of all firecrackers during the Covid-19 pandemic in NCR and other cities in India.

- The order was given in the context of a poor **Air Quality Index (AQI)**, owing to the burning of crackers.

Key Points

- **Background:**
 - In 2017, the Supreme court had **banned the use and sale of toxic crackers** during the **celebration owing to diwali, Christmas, etc.**, on the basis of a petition filed by two infants.
 - They had said the air pollution caused by various factors, especially firecrackers, had made **Delhi a gas chamber**.
 - They pleaded for their **right to life**.
 - The court **dismissed arguments that bursting crackers was a fundamental right** and an essential practice during religious festivals like Diwali.
 - The court held that the **Right to Freedom of Religion (Article 25) is subject to Right to life (Article 21)**.

- If a particular religious practice is threatening the health and lives of people, such practice is not entitled to protection under Article 25.
- **NGT Order:**
 - The NGT in its December 2020 order said that only **green crackers** (which use less polluting raw materials) would be permitted for Christmas and New Year, in areas where the ambient air quality was in the moderate or below categories.
 - However, owing to **Covid-19 pandemic**, NGT again prohibited the sale and use of firecrackers.
 - The firecrackers companies argued that the ban was an impediment to their livelihoods.
 - In reply to the argument, the Tribunal had reasoned that the “**right to business is not absolute (Article 19 (1) (g)) and there is no right to violate air quality and noise level norms.**”
- **Harmful Effects of Crackers:**
 - Firecrackers contain lots of **heavy metals and toxic chemicals** like cadmium, lead, chromium, aluminium, magnesium, nitrates, carbon monoxide, copper, potassium, sodium, zinc oxide, manganese dioxide etc.
 - These chemicals, if inhaled or ingested, can cause **severe effects in the health of people** like heart diseases, respiratory or nervous system disorders.
 - Further, **noise pollution** causes restlessness, temporary or permanent hearing loss, high blood pressure; sleep disturbance and even poor cognitive development in kids.

51. Moon-forming region seen around exoplanet for the first time

Context:

- Scientists for the first time have **spotted a moon-forming region around an exoplanet.**

Background:

Exoplanet:

- **An exoplanet is any planet beyond our solar system.** More than 4,400 planets have been discovered outside our solar system.
- Most orbit other stars, but free-floating exoplanets, called rogue planets, orbit the galactic center and are untethered to any star.

Details:

- The scientists have observed an **exoplanet surrounded by a disc of gas and dust**.
- The researchers used the **ALMA observatory in Chile's Atacama desert** to detect this disc of swirling material accumulating around one of two newborn planets (PDS 70c) seen orbiting a young star called PDS 70, located 370 light years from Earth.
- No circumplanetary discs had been found until now because all the known exoplanets resided in "mature" – fully developed – solar systems, except the newly identified infant gas planets orbiting PDS 70.

Formation of planets and Moons:

- The dominant mechanism thought to underpin planet formation is called "**core accretion**".
- As per this mechanism, material spinning around a newly formed star coalesces into planets. The small dust grains, coated in ice, gradually grow to larger and larger sizes through successive collisions with other grains. This continues until the grains have grown to a size of a planetary core, at which point the young planet has a strong enough gravitational potential to accrete gas which will form its atmosphere.
- The **circumplanetary discs surrounding some planets similarly yield moons**.
 - The rings of Saturn represent a relic of a primordial moon-forming disc. Saturn has more than 80 moons orbiting it.

52. Cabinet approves Production-linked Incentive (PLI) Scheme for Specialty Steel

Union Cabinet approved the **Production Linked Incentive (PLI) Scheme** for specialty steel.

About the scheme:

- The duration of the scheme **will be five years**, from 2023-24 to 2027-28.
- The scheme is expected to bring in investment of approximately ₹40,000 crores and capacity addition of **25 MT for speciality steel**.
- The scheme will give employment to about 5,25,000 people of which 68,000 will be direct employment.
- There are **3 slabs of PLI incentives**, the lowest being 4 % and highest being 12% which has been **provided for electrical steel (CRGO)**.
- The PLI Scheme will ensure that the basic steel used is 'melted and poured' within the country which means that raw material (finished steel) used for making specialty steel will be made in India only.

- Ensuring that Scheme promotes end to end manufacturing within the country.

The five categories of specialty steel which have been chosen in the PLI Scheme are:

- Coated/Plated Steel Products
- High Strength/Wear resistant Steel
- Specialty Rails
- Alloy Steel Products and Steel wires
- Electrical Steel

Why speciality steel?

- Out of the production of 102 million tonnes steel in India in 2020-21, only **18 million tonnes value added steel/speciality steel was produced** in the country.
- Out of 6.7 million tonnes of imports in the same year, approx. 4 million tonnes import was of specialty steel alone resulting in **FOREX outgo of Approx. Rs. 30,000 crores.**
- By becoming Aatmanirbhar in producing speciality steel, India will move up the steel value chain and come at par with advanced steel making countries like Korea and Japan.

What is Specialty Steel?

- Specialty steel is **value added steel** wherein normal finished steel is worked upon by way of **coating, plating, heat treatment**, etc. to convert it into high value-added steel..
- They are referred to as alloy steel, **contain additional alloyed materials** that deliver special properties to the final product.
- Specialty steels are engineered to provide **superior performance** under **specific conditions.**
- Various stainless-steel alloys are included among **common specialty steels.**
- Typically, standard bearings are fabricated using **chrome steel**, which can be heat-treated and ground to **deliver durability and high load capacity**, allowing the bearings to perform well in broad applications.
- It can be used in **various strategic applications** like Defence, Space, Power, apart from automobile sector, specialized capital goods etc.

Characteristics of Specialty Steels:

- - High corrosion resistance
 - Targeted resistance to high and/or low temperatures

- Easily fabricated
- Dimensional stability and strength
- Non-magnetic
- Sterile and hygienic
- Well suited for special applications
- Lighter weight
- Grease-free use

53. Thane Creek Flamingo Sanctuary proposed as Ramsar Site

The Mumbai Metropolitan Region is likely to get its first Ramsar site at the Thane Creek Flamingo Sanctuary.

Thane Creek Flamingo Sanctuary

- The Maharashtra Government has declared the area along the western bank of Thane Creek as the “Thane Creek Flamingo Sanctuary” since 2015.
- It is Maharashtra’s second marine sanctuary after the Malvan sanctuary.
- It is recognized as an “Important Bird Area” by the Bombay Natural History Society.

About Ramsar Convention

- The Convention on Wetlands of International Importance (better known as the Ramsar Convention) is an international agreement promoting the conservation and wise use of wetlands.
- It is the only global treaty to focus on a single ecosystem.
- The convention was adopted in the Iranian city of Ramsar in 1971 and came into force in 1975.
- Traditionally viewed as a wasteland or breeding ground of disease, wetlands actually provide fresh water and food and serve as nature’s shock absorber.
- Wetlands, critical for biodiversity, are disappearing rapidly, with recent estimates showing that 64% or more of the world’s wetlands have vanished since 1900.
- Major changes in land use for agriculture and grazing, water diversion for dams and canals, and infrastructure development are considered to be some of the main causes of loss and degradation of wetlands.

What does one mean by Ramsar Site?

- A Ramsar Site is a wetland area designated to be of international importance under the Ramsar Convention.

- It provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

54. Tackling the Menace of Black Money

Why in News

Recently, the **Union Minister of State for Finance** has stated in **Lok Sabha** that the **government's black money law** has helped detect several instances where Indians have been found stashing undisclosed income overseas.

Key Points

- **Black Money:**
 - There is **no official definition of black money in economic theory**, with several different terms such as parallel economy, black money, black incomes, unaccounted economy, illegal economy and irregular economy all being used more or less synonymously.
 - The simplest definition of black money could possibly be **money that is hidden from tax authorities**.
 - It can come from two broad categories:
 - **Illegal Activity:**
 - Money that is earned through illegal activity is obviously not reported to the tax authorities, and so is black.
 - **Legal but Unreported Activity:**
 - The second category comprises income from legal activity that is not reported to the tax authorities.
- **Impacts:**
 - **Loss of Revenue:**
 - Black money eats up a part of the tax and, thus, the **government's deficit increases**.
 - The government has to **balance this deficit by increasing taxes, decreasing subsidies and increasing borrowings**.
 - Borrowing leads to a further **increase in the government's debt due to interest burden**. If the government is unable to balance the deficit, it has to decrease spending, which affects development.
 - **Money Circulation:**
 - People generally tend to keep black money in the form of **gold, immovable property and other secret manners**.
 - Such money does not become part of the main economy and, therefore, remains generally out of circulation.
 - The black money keeps circulating among the wealthy and creates more opportunities for them.

- **Higher Inflation:**
 - The infusion of **unaccounted black money** in the economy **leads to higher inflation**, which obviously hits the poor the most.
 - It also increases the disparity between the rich and the poor.
- **Government's Initiatives:**
 - **Legislative Action:**
 - **The Fugitive Economic Offenders Act, 2018**
 - **The Central Goods and Services Tax Act, 2017**
 - **The Benami Transactions (Prohibition) Amendment Act, 2016**
 - **The Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act, 2015**
 - **Prevention of Money Laundering Act, 2002.**
 - **International Cooperation:**
 - **Double Taxation Avoidance Agreements (DTAAs):**
 - India is proactively engaging with foreign governments with a view to facilitate and enhance the exchange of information under Double Taxation Avoidance Agreements (DTAAs)/Tax Information Exchange Agreements (TIEAs)/Multilateral Conventions.
 - **Automatic Exchange of Information:**
 - **India has been a leading force** in the efforts to forge a **multilateral regime** for proactive sharing of **financial information** known as **Automatic Exchange of Information** which will greatly assist the global efforts to combat tax evasion.
 - The Automatic Exchange of Information based on Common Reporting Standard has commenced from 2017 enabling **India to receive financial account information of Indian residents in other countries.**
 - **Foreign Account Tax Compliance Act of USA:**
 - **India has entered into an information sharing agreement** with the USA under the act.

Way Forward

Since, black money menace is still untamed, therefore a lot more needs to be done to tackle it. Some of the strengthening steps that can be taken are:

- **Appropriate legislative framework related to:** Public Procurement, Prevention of Bribery of foreign officials, citizens grievance redressal, **whistleblower** protection, **UID Aadhar.**
- **Setting up and strengthening institutions dealing with illicit money:** Directorate of Criminal Investigation Cell for Exchange of Information,

Income Tax Overseas Units- ITOUs at Mauritius and Singapore have been very useful, Strengthening the Foreign TAX, Tax Research and Investigation Division of the CBDT.

- **Electoral Reforms:** Elections are one of the biggest channels to utilize the black money. Appropriate reforms to reduce money power in elections.
- **Imparting skills to personnel for effective action:** Both domestic and international training pertaining to the concerned area. For instance, the **Financial Intelligence Unit-India** makes proactive efforts to regularly upgrade the skills of its employees by providing them opportunities for training on anti-money laundering, terrorist financing, and related economic issues.

55. Marine Aids to Navigation Bill 2021

In news Parliament has recently passed the Marine Aids to Navigation Bill 2021.

- It aims to replace over 90-year-old Lighthouse Act 1927, to incorporate the global best practices, technological developments and India's International obligations in the field of Marine Aids to Navigation.

What is the Background?

- The administration and management of Lighthouse and Lightships in India is governed by Lighthouse Act 1927 for safe navigation.
- At the time of enactment of Lighthouse Act 1927, there were only 32 Lighthouses in the then British India spread across six regions viz. Aden, Karachi, Bombay, Madras, Calcutta and Rangoon.
- Post-Independence, 17 Lighthouses came under the administrative control of India, which have now increased manifold to meet the growing needs of the shipping industry.
- As the technology evolved, systems were put in place where with the help of Radar and other sensors, vessels were advised from shore about the position and thus Vessel Traffic Services (VTS) came into existence and found wide acceptability.
- These modern, technologically improved aids to marine navigation systems have changed their profile from a 'passive' service to that of 'passive as well as interactive' service.
- Lighthouses have also been globally identified as a major tourist attraction due to scenic location, typical architecture and heritage value.
- The need for enactment of a new Act is necessitated to provide an appropriate statutory framework which reflects the modern role of marine aids to navigation

What are the Benefits of the new Act?

- The new Act will facilitate harmonized and effective functioning of aids to marine navigation and Vessel Traffic Services along the Indian coastline.
- The benefits include:
 - **Improved Legal Framework** for Matters related to Aids to Navigation & Vessel Traffic Services and covers the future developments in the field of Marine Navigation.
 - **Management of 'Vessel Traffic Services'** for enhancing the safety and efficiency of shipping and to protect environment.
 - **Skill development** through Training and Certification for the operators of 'Aids to Navigation' and 'Vessel Traffic Services' at par with International standards.
 - **Auditing and Accreditation of Institutes** to cater to the need of Training and Certification at par with global standards.
 - Marking of "Wreck" in general waters to identify sunken / stranded vessels for safe and efficient navigation.
 - **Development of Lighthouses** for the purpose of education, culture and tourism, which would tap the tourism potential of coastal regions and contribute to their economy.

56. '21.5 mn lost jobs in tourism sector'

- The **tourism industry has been among the hardest hit due to the COVID-19 pandemic.**
 - There has been a significant drop in tourist arrivals (both foreign and domestic) and hence tourism expenditure, during the pandemic.
 - Tourism direct gross value added (TDGVA) has witnessed a high decrease.
 - An estimated 21.5 million people working in the tourism sector lost their jobs during the nine-month period from April 2020-December 2020.

57. What is National Farmers Database?

The Centre's new National Farmers Database will only include land-owning farmers for now as it will be linked to digitized land records.

National Farmers Database

- The Central government had proposed an Agristack initiative to create a digital database that focuses on farmers and the agricultural sector.

- As part of the first step of this initiative, the government has initiated a farmers database that would serve as the core of the Agristack.
- The database would be linked to the digital land record management system and would thus only include farmers who were legal owners of agricultural land.
- The database would facilitate online single sign-on facilities for universal access and usher in proactive and personalized services to farmers such as DBT, soil and plant health advisories, weather advisories
- It would also facilitate seamless credit & insurance, seeds, fertilizers, and pesticide-related information.

Need for such database

- India has 140 million operational farmland holdings.
- The availability of a database would serve an important role in the formulation of evidence-based policies for the agricultural sector.
- Also, the government can make use of the database for targeted service delivery with higher efficiency and in a focused and time-bound manner.
- The database could be used to select beneficiaries of government schemes.
- The availability of data will make it possible to implement digital technologies like AI/Machine Learning, IoT in the agricultural domain, thus opening up the sector to immense opportunities for improvement in productivity.

58. DICGC Bill, 2021

Why in News

Recently, the Union Cabinet has cleared the **Deposit Insurance and Credit Guarantee Corporation (DICGC) Bill, 2021**.

- The failure of banks such as **Punjab and Maharashtra Co-operative (PMC) Bank, Yes Bank** and **Lakshmi Vilas Bank** reignited the debate on the low level of insurance against the deposits held by customers in Indian banks.

Note

- **Deposit Insurance:** It is a protection cover against losses accruing to bank deposits if a bank fails financially and has no money to pay its depositors and has to go in for liquidation.
- **Credit Guarantee:** It is the guarantee that often provides for a specific remedy to the creditor if his debtor does not return his debt.

Key Points

- **Coverage:**
 - The bill will cover **98.3% of depositors and 50.9% of deposit value** in the banking system, **way above the global level of 80% and 20-30%**, respectively.
 - It will **cover all types of banks**, which also include **regional rural banks and co-operative banks**.
 - It will cover **banks already under moratorium** and those that **could come under moratorium**.
 - **Moratorium** is a legally authorized period of delay in the performance of a legal obligation or the payment of a debt.
- **Insurance Cover:**
 - It will **provide funds up to Rs 5 lakh to an account holder within 90 days** in the event of a bank coming under the moratorium imposed by the **Reserve Bank of India (RBI)**.
 - Earlier, account holders had to wait for years till the liquidation or restructuring of a distressed lender to get their deposits that are insured against default.
 - The Rs 5-lakh deposit insurance cover was **raised from Rs 1 lakh in 2020**.
 - **The Damodaran Committee on 'Customer Services in Banks' (2011) had recommended a five-time increase in the cap to Rs. 5 lakh** due to rising income levels and increasing size of individual bank deposits.
 - Within the **first 45 days of the bank being put under moratorium**, the **DICGC would collect all information** relating to deposit accounts. In the **next 45 days, it will review the information and repay depositors** within a maximum of 90 days.
- **Insurance Premium:**
 - It permits raising the deposit insurance premium by **20% immediately, and maximum by 50%**.
 - The premium is **paid by banks to the DICGC**. The Insured banks pay advance insurance premiums to the corporation **semi-annually within two months from the beginning of each financial half year**, based on their deposits as at the end of previous half year.
 - It has been **raised from 10 paise for every Rs 100 deposit, to 12 paise and a limit of 15 paise** has been imposed.
 - This is **only an enabling provision** and the **determination of an increase in the premium payable would involve consultations with the RBI** and require government approval.

Deposit Insurance and Credit Guarantee Corporation

- **About:**
 - It came into existence in 1978 after the merger of **Deposit Insurance Corporation (DIC)** and **Credit Guarantee Corporation of India Ltd. (CGCI)** after passing of the **Deposit Insurance and Credit Guarantee Corporation Act, 1961** by the Parliament.
 - It serves as a **deposit insurance and credit guarantee for banks in India.**
 - It is a **fully owned subsidiary of and is governed by the RBI.**
- **Coverage:**
 - Banks, including regional rural banks, local area banks, foreign banks with branches in India, and cooperative banks, are mandated to take deposit insurance cover with the DICGC.
- **Types of Deposits Covered:**
 - DICGC insures all bank deposits, such as saving, fixed, current, recurring, etc. **except the following** types of deposits:
 - Deposits of **foreign Governments.**
 - Deposits of **Central/State Governments.**
 - **Inter-bank** deposits.
 - Deposits of the **State Land Development Banks** with the State co-operative banks.
 - Any amount due on account of any **deposit received outside India.**
 - Any amount which has been **specifically exempted by the corporation** with the previous approval of the RBI.
- **Funds:**
 - The Corporation maintains the **following funds** :
 - Deposit Insurance Fund
 - Credit Guarantee Fund
 - General Fund
 - The **first two** are funded respectively by the insurance premia and **guarantee fees received and are utilised for settlement** of the respective claims.
 - The **General Fund is utilised for meeting the establishment and administrative expenses** of the Corporation.

59.The epoch of cyberweapons

Context

The controversy over the use of Pegasus spyware for snooping highlights the threats posed by cyber-weapons.

The emergence of cyber weapons epoch

- Cyberattacks on institutions such as banks and on critical infrastructure have proliferated to an alarming extent, signalling the emergence of the cyber weapon epoch.
- **Privacy has been eroded** and the Internet has become a **powerful weapon** in the hands of those seeking to exploit its various facets.
- **Fifth dimension of warfare:** Cyber is often touted as the fifth dimension of warfare – in addition to land, sea, air and space.

The domain of everyday life

- Cyber, as the **domain of military and national security**, also co-exists with **cyber as a domain of everyday life**.
- The war is no longer out there.
- It is now directly inside one's drawing-room, with cyberweapons becoming the weapon of choice.
- Israelis today dominate the cyber domain along with the Chinese, Russians, Koreans and, of course, the Americans.
- The linkage between **sabotage and intrusive surveillance** is but a short step.

Cyberattacks during the past decades

- Beginning with the 2007 devastating cyberattack on Estonia's critical infrastructure, this was followed by the **Stuxnet worm attack** a few years later on **Iran's nuclear facility**.
- The Shamoon virus attack on Saudi Aramco occurred in 2012.
- In 2016, a cyberattack occurred on Ukraine's State power grid; in 2017 there was a Ransomware attack (**NotPetya**) which affected machines in as many as **64 countries**.
- United Kingdom's National Health Service fell prey to **Wannacry** attack the same year/
- The series of attacks happened this year on Ireland's Health Care System and in the United States such as 'SolarWinds', the cyber attack on Colonial Pipeline and JBS, etc.

What are the threats posed by cyberattacks?

- Cyberweapons carry untold capacity to **distort systems and structures** – civilian or military.
- Cyberweapons also interfere with **democratic processes**, aggravate domestic divisions and, above all, unleash forces over which established institutions or even governments have little control.

- As more and more devices are **connected to networks**, the cyber threat is only bound to intensify, both in the short and the medium term.
- What is especially terrifying is that instruments of everyday use can be **infected or infiltrated without any direct involvement of the target**.
- The possibilities for misuse are immense and involve far graver consequences to **an individual, an establishment, or the nation**.
- It is not difficult to envisage that from wholesale espionage, this would become something far more sinister **such as sabotage**.

Way forward

- **Deeper understanding:** Dealing with 'zero day' vulnerabilities require far more thought and introspection than merely creating special firewalls or special phones that are 'detached' from the Internet.
- **Recognising the mindset:** What is needed is a deeper understanding of not only cyber technologies, but also **recognising the mindsets** of those who employ spyware of the Pegasus variety, and those at the helm of companies such as the NSO.
- Short-term remedies are **unlikely to achieve desired results**.
- **No use of AI: Artificial Intelligence (AI)** is often seen as a kind of panacea for many of the current problems and ills, but all advances in technology tend to be a double-edged sword.
- If truth be told, AI could in turn make all information warfare – including cyber related – **almost impossible to detect, deflect or prevent**, at least at the current stage of development of AI tools.

Conclusion

All this suggests that security in the era of ever-expanding cyberweapons could become an ever-receding horizon.

60. Geo-imaging satellite EOS-03

Geo-imaging satellite for earth observation EOS-03, which would enable near real-time monitoring of natural disasters like floods and cyclones, is scheduled for launch in the third quarter of 2021.

EOS-03

- ISRO has realized a geo-imaging satellite, "EOS-03", for Earth Observation from Geostationary Orbit.
- EOS-03 is capable of imaging the whole country four-five times daily and would enable near real-time monitoring of natural disasters like floods and cyclones.

- In addition to natural disasters, EOS-03 would also enable monitoring of water bodies, crops, vegetation condition, forest cover changes.

Other developments: Small Satellite Launch Vehicle (SSLV)

- The first developmental flight of the Small Satellite Launch Vehicle (SSLV) is scheduled for the fourth quarter of 2021 from the Satish Dhawan Space Centre, Sriharikota.
- The SSLV is a cost-effective, three-stage and all-solid launch vehicle with a payload capability of 500 kg to 500 km planar orbit or 300 kg to Sun-Synchronous Polar Orbit.
- It is ideal for the on-demand, quick turn-around launch of small satellites.
- The major technologies developed as part of SSLV are flexible nozzle control with electro-mechanical actuators for all stages, miniaturized avionics, and a velocity trimming module in the upper stage for precise satellite injection.