

www.vishnuias.com



NOVEMBER 2022

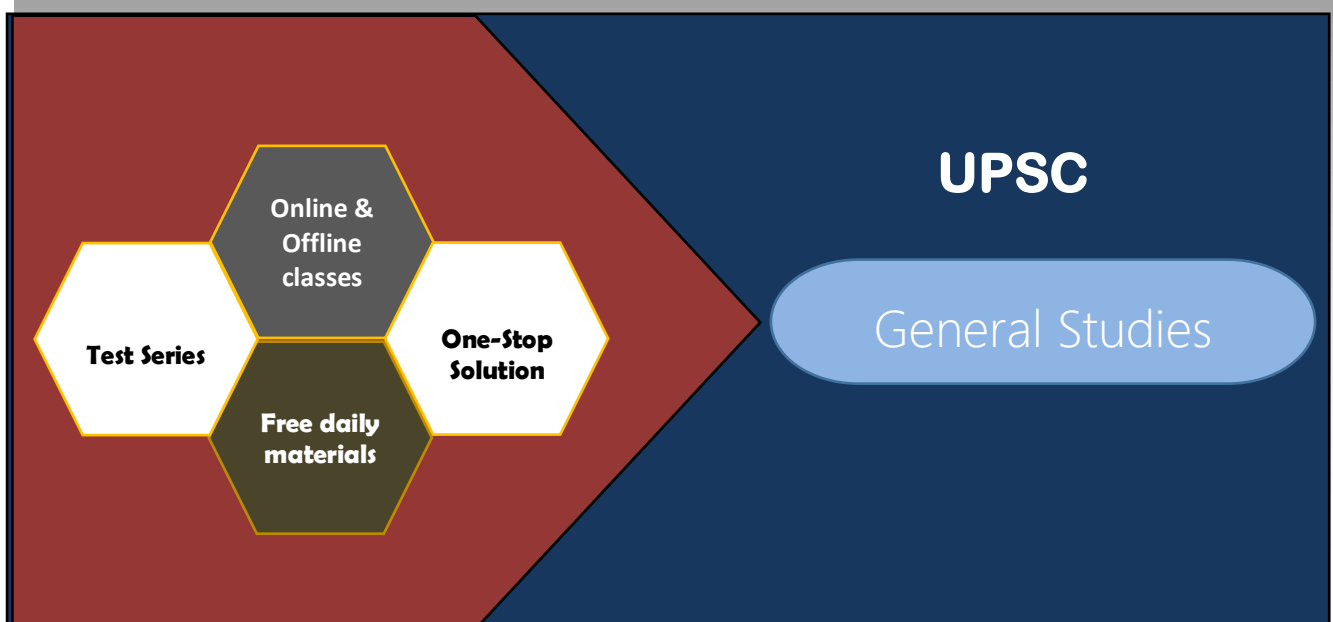
Monthly current affairs magazine

SHIKSHA

A MAGAZINE FOR CIVIL SERVICES PREPARATION

JOIN OUR TELEGRAM: <https://t.me/vishnuiasmentor>

**Articles of the day
THE HINDU & INDIAN EXPRESS**



Contents

GS 1 : Heritage, culture ,Geography of the World and Society

1. Forgotten Heroes: Indian Soldiers in World War-II
2. Nadaprabhu Kempegowda

GS 2 : Polity, Governance, International Relations

1. SC admits plea challenging first amendment to Constitution
2. Citizenship for Indian-origin Tamils
3. Ambiguity of reservations for the poor
4. CAA is an internal matter of India: Bangladesh Minister
5. India Chem 2022
6. Recognizing "ASHA": The real hope
7. Risks in Financing BOT Roads
8. Integrated Circuit Wars
9. Right to Privacy in an era of social media
10. Pahari Ethnic Community added to STs List of J&K
11. Fake News Case against The Wire News Portal
12. Disqualification of Convicted Legislators
13. Assertive China, Implication for world and India
14. Unified District Information System for Education plus (UDISE+) Report
15. Article 142 of the Constitution
16. Black Sea Grain Initiative
17. Snakebites deaths in India
18. Unrecognized Madrasas and Government's role
19. On Postal Ballot for NRIs
20. India's role in Russia-Ukraine war
21. Higher Education in India
22. MHA annual report underlines need to update NPR
23. G20 Presidency: India can be voice for developing world
24. Centre constitutes 22nd Law Commission
25. Counter-terror Diplomacy
26. Kerala govt. moves to divest Governor of Chancellor Role
27. Public Service Broadcasting
28. Consulting the CM Over the Appointment of The Governor
29. The Need for Judicial Reforms
30. Giving More Autonomy to Universities
31. WHO's Global Vaccine Market Report 2022

32. Gender parity? It'll take decades, says UN
33. 19th ASEAN-India Summit
34. The Practice of Sealed Cover Jurisprudence
35. All about Ninth Schedule
36. Vaccine Equity
37. Regulating the election funding system
38. The curious case of Fiscal Federalism in India
39. Transformation Challenges in Population Growth
40. Foundational Literacy and Numeracy in Primary Schools

GS 3 : Economy, Science and Technology, Environment

1. Sequence of Implementation of EWS Quota
2. Amendments to the IT Rules 2021
3. Financing Green Housing
4. One must know India's Economic Growth Story
5. Expansion of World's Biosphere Reserves
6. The US Federal Reserve's Interest Rate Hike
7. A call to ban use of fossil fuels
8. Make-II Route of Defence Procurement
9. Role of Geography and Weather in Delhi's Air Pollution
10. Pollution raises risk of childhood stunting, leading to lifelong impact
11. What is northeast monsoon that is causing heavy rains in Tamil Nadu?
12. CRISPR gene-editing possible in temperature-sensitive organisms, plants & crop varieties
13. Carbon Billionaires - Oxfam Report
14. Imposing Ex-ante Rules on Digital Platforms
15. Content Moderation through Co-regulation
16. Issues over Greenwashing
17. Tackling the Urban Pollution
18. COP27: WMO unveils USD 3.1 billion action plan
19. Stocking up of Gold by Central Banks
20. Vande Bharat: Modern trains need modern infrastructure
21. Interest-free Banking
22. Self-Reliance in India's Defence Sector
23. E-Waste (Management) Rules, 2022
24. India to host "No Money for Terror" Conference
25. Countering Chinese monopoly in Electric vehicle market
26. India to host 'No Money for Terror' Conference
27. LT-LEDS (Long Term-Low Emission Development Strategy)
28. Implications of Private Climate Finance
29. Lessons to be learnt from UK on FTAs

30. India-China Trade Data Mismatch
31. Addressing the Leakages in PDS in the light of PMGKAY
32. National Investment and Infrastructure Fund (NIIF)
33. Impact of Climate Change on Global Health
34. Hwasong-17: North Korea's new 'monster missile'
35. Export Tax on Iron ore
36. 'No Money for Terror'
37. Limiting the Anti-Biotic Pollution and Anti-microbial resistance (AMR)
38. A&N's first application for GI tag for the Nicobari Hodi Craft
39. Role of private sector in India's Space programmes
40. India's abstains in CITES vote on reopening Ivory Trade



GS 1 : Heritage, culture ,Geography of the World and Society

1. Forgotten Heroes: Indian Soldiers in World War-II

- On the eleventh hour of the 11th day of the 11th month of 1918, the guns fell silent over Europe, bringing an end to a brutal first world war that drew in soldiers and contributions from around the world. Indian soldiers and their contribution are not widely recognized in India.

Background of Indian involvement World War II

- **Fight against Fascism:** Two conflicts and a reticence Indian reticence over these two conflicts arises from the uneasy relationship between the Indian contribution to fighting fascism on a global stage and the nationalist movement for freedom at home.
- **Betrayal of nationalistic expectation:** The success of the first is seen to have come at the cost of the second. It began with the betrayal of nationalist expectations of greater autonomy for India in return for support during the Great War.
- **No consultation with Indian leaders:** This was compounded by the bitterness of Viceroy Lord Linlithgow declaring war on Germany on India's behalf in 1939 without consulting Indian leaders, and further roiled by the pitting of Indian against Indian when Netaji Subhas Chandra Bose's Indian National Army sided with the Axis Powers in the hope that this might bring freedom.
- **Fighting for India and for World:** But the failure of Indian independence to follow automatically from India's participation in the wars does not mean that the war efforts extended colonial rule, or were all about protecting Britain: there was fighting on Indian soil to defend India.

What is Indian soldiers role in World War II

- **Support of nationalist leaders:** Almost 1.5 million men volunteered to fight in the Great War. Indians mobilized four days after Britain declared war on Germany, with the support of nationalist leaders, including Mahatma Gandhi.
- **War in Europe, Asia and Africa:** Indians fought with valor and distinction in the trenches of Europe, West Asia and North Africa, earning 11 Victoria Crosses along the way. Of those men, about 74,000 never came home.

- **Largest volunteer for war:** India raised the largest ever volunteer army, of 2.5 million, for the Second World War. More than 87,000 of those men are cremated or buried in war cemeteries around the world and in India.
- **Thirty-one Victoria Crosses:** 15 % of the total Victoria crosses went to soldiers from undivided India. Without Indian soldiers, non-combatant labourers, material and money, the course of both conflicts would have been very different as acknowledged by Field Marshal Auchinleck, Britain's last Commander-in-Chief of the Indian.

The issue of Non-recognition of India's contribution

- **Indian soldiers are honored by Britain:** In Britain, the contribution of the Commonwealth including the Indian subcontinent is memorialized in the Commonwealth Memorial Gates that lead up to Buckingham Palace. The Gates commemorate the campaigns where Commonwealth soldiers served with distinction; there is also a canopy inscribed with the names of the Commonwealth recipients of the George and Victoria Crosses.
- **Indian soldiers fought the Britain's war:** Much of India's recent history is encapsulated in these gates, in a spirit of gratitude and equality. Britain, after all, has much to be grateful for, but Indians seem less keen to acknowledge this. British perfidy, however, does not in any way reduce the sacrifices of those who fought for freedom. Those who went abroad to fight alongside white British soldiers returned with the knowledge that they were equal to their colonial masters. In not recognizing and honoring this, we push those men back into colonial subjugation.
- **Britain betrayed the hopes of freedom:** Some of this ambivalence owes itself to the atrocities of colonial history, which must be acknowledged too. Britain may have handed out 11 Victoria Crosses over the course of the First World War, but it betrayed the hopes of nationalists with the imposition of martial law after the war ended, culminating in the horror of Jallianwala Bagh in April 1919.

Does India fought the war for its own sake?

- **Indian fought the Japanese:** These were not just European wars to defend foreign lands. India was threatened in the Second World War by advancing Japanese forces who got as far as Burma/Myanmar. They were repulsed in the battles of Imphal and Kohima between March and July 1944. These were brutal battles. In Kohima, the two sides were at one point separated by the width of a tennis court. A Commonwealth cemetery on Garrison Hill, Kohima, contains this epitaph (by John Maxwell Edmonds): 'When You Go Home, Tell Them of Us, and Say/For Your Tomorrow, We Gave Our Today'.

- **Ultimate sacrifice for India's freedom:** The memory of the almost 10 million battlefield deaths in the First World War and the 15 million or more who were killed fighting the Second World War is now honored in countries around the world on November 11, with nationwide silences and the laying of wreaths. Not so much in India apart from in Army cantonments and at the British Consulate in Kolkata even though over 1,61,000 men made the ultimate sacrifice for India's freedom.

Conclusion

- Seventy-five years after Independence, it is time to honor India's immense contribution to the world wars and move it from a footnote in another country's history to the main stage, where it belongs. These were India's wars too.

2. Nadaprabhu Kempegowda

PM unveiled a 108-feet tall bronze statue of 'Nadaprabhu' Kempegowda in Bengaluru, credited to be the city's founder.

Nadaprabhu Kempegowda

- Nadaprabhu Kempegowda, a 16th century chieftain of the Vijayanagara empire, is credited as the founder of Bengaluru.
- It is said that he conceived the idea of a new city while hunting with his minister, and later marked its territory by erecting towers in four corners of the proposed city.
- Kempegowda is also known to have developed around 1,000 lakes in the city to cater to drinking and agricultural needs.
- He was from the dominant agricultural Vokkaliga community in south Karnataka.

Political motives behind

- Kempegowda is an iconic figure among Karnataka's second most dominant Vokkaliga community after Lingayats.
- Political parties plan to woo the Vokkaliga community by honoring Kempegowda.
- The statue would be known as the 'Statue of Prosperity'.

GS 2 : Polity, Governance, International Relations

1. SC admits plea challenging first amendment to Constitution

The Supreme Court has agreed to examine a PIL challenging changes made to the right to freedom of speech and expression by the first amendment to the Constitution in 1951.

- The fresh petition argues that the 1st Constitutional Amendment damages the basic structure doctrine.

First amendment

- The Constitution (First Amendment) Act, 1951 made several changes to the Fundamental Rights provisions of the Indian constitution.
- It provided means to:
 1. Restrict freedom of speech and expression,
 2. Validation of zamindari abolition laws, and
 3. Clarified that the right to equality does not bar the enactment of laws which provide “special consideration” for weaker sections of society
- This Amendment set the precedent of amending the Constitution to overcome judicial judgements impeding fulfilment of the government’s perceived responsibilities.

Why in news now?

- In his plea, the petitioner said Section 3(1) of the 1951 Amending Act substituted original Clause (2) of Article 19.
- This clause 19(2) deals with reasonable restrictions on the freedom of speech and expression guaranteed under Article 19(1)(a).

(a) Objectionable insertions

- It which contained two objectionable insertions allowing restrictions also:
 1. In the **interest of public order** and
 2. In relation to **incitement to an offence**

(b) Crucial omissions

- The new Clause (2) also **omitted the expression “tends to overthrow the State”** as appearing in the original Clause (2).
- Section 3 (2) of the amending Act effected validation of certain laws even if they took away or abridged the right to freedom of speech and expression, the petitioner said.

Issues created by Clause (2) of Article 19

Ans. It protects certain arbitrary sections of IPC from constitutionality check

- The petition contended that these two insertions protect certain IPC sections such as from the vice of unconstitutionality –
 1. **Sections 124A:** Sedition
 2. **Section 153A:** Promoting enmity between different groups on grounds of religion, race, place of birth, residence, language, etc. prejudicial to maintenance of harmony
 3. **Section 295A:** Deliberate and malicious acts, intended to outrage religious feelings of any class by insulting its religion or religious beliefs and
 4. **Section 505:** Statements conducing to public mischief
- The questionable expressions inserted unduly abridge the fundamental right under Article 19 (1)(a) { freedom of speech and expression}.

How did the petition invoke basic structure doctrine here?

- The petition argued that undue abridgement does not advance or sub serve any constitutional objectives.
- They appear more to **damages inter alia democracy and republicanism and supremacy of the Constitution.**

2. Citizenship for Indian-origin Tamils

What is the issue?

1. The Supreme Court of India has posted the 232 petitions challenging the Citizenship (Amendment) Act (CAA) to be heard soon.
2. But, there is another issue linked to the subject - the unresolved status of Indian-origin Tamils who repatriated from Sri Lanka.

Plight of Indian-origin Tamils

- Under the British colonial government, Indian-origin Tamils were brought in as **indentured labourers** to work in plantations.
- They remained mostly **legally undocumented and socially isolated** from the native Sri Lankan Tamil and Sinhalese communities due to the policies of the British.
- After 1947, Sri Lanka witnessed rising Sinhalese nationalism, leaving no room for their political and civil participation.
- They were denied citizenship rights and existed as a 'stateless' population, numbering close to 10 lakh by 1960.

What did the governments do?

- Under the bilateral Sirimavo-Shastri Pact (1964) and the Sirimavo-Gandhi Pact (1974), six lakh people along with their natural increase would be granted Indian citizenship upon their repatriation.
- Thus, the process of granting Indian-origin Tamils (who returned to India till around 1982) began.
- However, the Sri Lankan civil war resulted in a spike in Sri Lankan Tamils and Indian-origin Tamils together seeking asylum in India.
- This resulted in a Union Ministry of Home Affairs directive to stop the grant of citizenship to those who arrived in India after July 1983.
- Furthermore, the focus of the Indian and Tamil Nadu governments shifted to refugee welfare and rehabilitation.

Over the next 40 years, the legal destiny of Indian-origin Tamils has been largely intertwined with that of Sri Lankan Tamil refugees, and both cohorts have been relegated to 'refugee' status.

- This is because Indian-origin Tamils who arrived after 1983 came through unauthorised channels or without proper documentation, and came to be classified as 'illegal migrants' as per the CAA 2003.
- This classification has resulted in their statelessness and blocking of potential legal pathways to citizenship.

What did the courts say?

- **In P. Ulaganathan vs Govt of India (2019)**, the Madurai bench of the Madras High Court recognised the distinction between Indian-origin Tamils and Sri Lankan Tamils.
- It held that a continuous period of statelessness of Indian-origin Tamils offends their fundamental right under Article 21 of the Constitution of India.
- It further held that the Union Government has implied powers to grant relaxation in conferring citizenship.

- In **Abirami S. vs The Union of India 2022**, the court held that statelessness is something to be avoided.
- The court held that the principles of the CAA, 2019, which relaxes the conditions for citizenship for Hindus from Afghanistan, Pakistan and Bangladesh, would also apply to Sri Lankan Tamil refugees.
- As such, these judgments have provided categorial judicial guidance to the Union of India on how to utilise an expanded and liberal interpretation of the CAA, 2019 to overcome statelessness.

What is the obligation for India?

- The situation of statelessness of Indian-origin Tamils is 'de jure', created from the failure in implementing the 1964 and 1974 pacts.
- De jure statelessness is recognised in international customary law. So, India has an obligation to remedy the situation.
- In the case of the Chakma refugees, the Supreme Court (2015) held that an undertaking made by the Government of India with respect to grant of citizenship inheres a right in the stateless or refugee population.
- As such, India has made repeated undertakings, through the 1964 and 1974 pacts, which have created a legitimate expectation among the Indian-origin Tamils and would entitle them to be granted citizenship.
- According to a recent report by the UN High Commission for Refugees, "Comprehensive Solutions Strategy for Sri Lankan Refugees", there are around 29,500 Indian-origin Tamils currently living in India.

3. Ambiguity of reservations for the poor

On September 27, 2022, a Constitution Bench led by Chief Justice of India U. U. Lalit heard multiple petitions against reservations based solely on economic criteria introduced by the Constitution (103rd) Amendment Act, 2019.

Introduction:

- After extensive hearings, a five-judge Constitution bench reserved its verdict on a batch of pleas challenging the validity of the 103rd Constitution amendment providing 10 per cent reservation to economically weaker sections (EWS) persons in admissions and government jobs.
- The legal question is whether the EWS quota violated the basic structure of the Constitution.
- Earlier, the Union government in 2019, had also told the Supreme court that the amendment, granting a 10% quota for EWSs, was brought in to promote "social equality" by providing "equal opportunities in higher education and

employment to those who have been excluded by virtue of their economic status”.

Background: 103rd Constitutional Amendment Act

- The 103 Constitutional Amendment Act brought in a 10% reservation for Economically Weaker Sections (EWS) of society other than Backward Classes, Scheduled Castes, and Scheduled Tribes for admission to central government and private educational institutions and recruitment in central government jobs.
 - The Amendment Act modified Article 15 to allow the government to provide for the progress of economically weaker sections.
- The 103 Constitutional Amendment Act also covers private unaided educational institutions, except minority educational institutions.
 - It amended Article 16 to facilitate the reservation of economically weaker sections for up to 10 percent of all posts.
- The amendment leaves the definition of ‘economically weaker sections’ to be determined by the state on the basis of ‘family income’ and other economic indicators.

Issues raised against the 103rd Constitutional Amendment Act:

- The legal challenge to the validity of the 103rd amendment is a ‘basic structure challenge’.
 - As the Amendment violates the principle of equality
 - The Amendment breaches the 50% ceiling on reservations, and
 - The Supreme Court has consistently ruled that for reservations to be reasonable and not to defeat the main right to equality, the total reservations should not be greater than 50 per cent. However, this ‘50 per cent ceiling’ stands effectively breached by the 103rd Constitution amendment.
 - One of the reasons for the quota limit of 50% is explained in Indra Sawhney where the Constitution was seen as enabling “appropriate representation” and not “proportionate representation”.
- Under Article 16(4), reservations for backward classes (SC/STs, OBCs) are dependent on beneficiary groups not being ‘adequately represented’ but that has been omitted in the newly inserted Article 16(6) for EWS.
- The amendment through Article 16(6) ends up making it easier for the state to provide reservations in public employment for EWS than the requirements to provide reservations for ‘backward classes’ under Article 16(4).

Constitutional examination of reservations in India:

- The State of Madras v. Smt. Champakam Dorairajan (1951) case was the first major verdict of the Supreme Court on the issue of Reservation. The case led to the first amendment to the Constitution.
 - The Supreme Court in the case pointed out that while in the case of employment under the State, Article 16(4) provides for reservations in favour of the backward class of citizens, no such provision was made in Article 15.
 - Pursuant to the Supreme Court's order in the case, the Parliament amended Article 15 by inserting Clause (4).
- In the Indra Sawhney Case of 1992, the Supreme Court while upholding the 27 percent quota for backward classes, struck down the government notification reserving 10% government jobs based purely on economic criteria and called it unconstitutional.
 - The Supreme Court in the same case also upheld the principle that the combined reservation beneficiaries should not exceed 50 percent of India's population.
 - The Supreme Court's reasons included the position that income/property holdings cannot be the basis for exclusion from government jobs, and that the Constitution was primarily concerned with addressing social backwardness.
- The Parliament enacted the 77th Constitutional Amendment Act in 1995 which introduced Article 16(4A).
- The Supreme Court in M. Nagaraj v. Union Of India 2006 case while upholding the constitutional validity of Art 16(4A) held that any such reservation policy in order to be constitutionally valid shall satisfy the following three constitutional requirements:
 - The SC and ST communities should be socially and educationally backward.
 - The SC and ST communities are not adequately represented in public employment.
 - Such a reservation policy shall not affect the overall efficiency of the administration.
- The Supreme Court in various cases had also ruled that economic status cannot be the sole criterion for reservation.
 - Many states had tried to implement Economic Reservation, however, they were subsequently quashed by Courts.

Analysis:

- The Constitution of India redresses the historic injustices and corrects the manifest imbalance in matters of higher education and public employment by delineating an "equality code".

- Article 14 guarantees equality before the law and equal protection of the law for everyone. The principle of Equality is an essential feature of the Basic Structure.
- Any alteration of this 'Equality Code' must stand the widely accepted tests of 'Identity' and 'Width' as laid out in the M. Nagaraj case. These tests were developed to ensure that the balance between equality in law and equality in fact is maintained whenever an Amendment is formulated in regard to reservations.
 - Thus, any alteration in the existing structure of the Equality Code would be tantamount to violating the Basic Structure itself.
- In M.G. Badappanavar v. State of Karnataka (2000), the Supreme Court ruled that "equality is the basic feature of the Constitution and any treatment of equals as unequals or any treatment of unequals as equals would violate the basic structure of the Constitution".
 - Therefore, the income limit for determining economic backwardness should be lower and should not be the same as that for determining the 'creamy layer' for Other backward classes.
- Reservation is not the remedy to the problem of poverty but reservation is about compensating for social and institutional barriers to representation. This makes mandating reservations on economic disadvantage arbitrary.
- As per the Supreme Court's observation, the poorer sections among the upper castes could be elevated through different affirmative actions like providing them with scholarships and other financial help.

4. CAA is an internal matter of India: Bangladesh Minister

Bangladesh Information Minister has said that the Citizenship Amendment Act (CAA) framed to grant Indian citizenship to minorities of Bangladesh, Pakistan and Afghanistan was an "internal matter" of India.

Citizenship Amendment Act (CAA), 2019

- The Citizenship (Amendment) Act, 2019 (CAA) is an act that was passed in the Parliament on December 11, 2019.
- The 2019 CAA amended the Citizenship Act of 1955 allowing Indian citizenship for religious minorities who fled from the neighboring Muslim majority countries before December 2014 due to "religious persecution or fear of religious persecution".
- However, the Act excludes Muslims.
- Under CAA, migrants who entered India by December 31, 2014, and had suffered "religious persecution or fear of religious persecution" in their country of origin, were made eligible for citizenship by the new law.

- These type of migrants will be granted fast track Indian citizenship in six years.
- The amendment also relaxed the residence requirement for naturalization of these migrants from eleven years to five.

Key feature: Defining illegal migrants

- Illegal migrants cannot become Indian citizens in accordance with the present laws.
- Under the CAA, an illegal migrant is a foreigner who: (i) enters the country without valid travel documents like a passport and visa, or (ii) enters with valid documents, but stays beyond the permitted time period.
- Illegal migrants may be put in jail or deported under the Foreigners Act, 1946 and The Passport (Entry into India) Act, 1920.

Exceptions

- The Bill provides that illegal migrants who fulfil four conditions will not be treated as illegal migrants under the Act. The conditions are:
 1. They are Hindus, Sikhs, Buddhists, Jains, Parsis or Christians;
 2. They are from Afghanistan, Bangladesh or Pakistan;
 3. They entered India on or before December 31, 2014;
 4. They are not in certain tribal areas of Assam, Meghalaya, Mizoram, or Tripura included in the Sixth Schedule to the Constitution, or areas under the "Inner Line" permit, i.e., Arunachal Pradesh, Mizoram, and Nagaland.

Controversy with the Act

- **Country of Origin:** The Act classifies migrants based on their country of origin to include only Afghanistan, Pakistan and Bangladesh.
- **Other religious minorities ignored:** It is unclear why illegal migrants from only six specified religious minorities have been included in the Act.
- **Defiance of purpose:** India shares a border with Myanmar, which has had a history of persecution of a religious minority, the Rohingya Muslims.
- **Date of Entry:** It is also unclear why there is a differential treatment of migrants based on their date of entry into India, i.e., whether they entered India before or after December 31, 2014.

Why discuss this?

- The CAA became a huge cause of concern between India and Bangladesh when it was passed by the Parliament in December 2019, with Dhaka seeking a written assurance from India.

- Dhaka, then was irked by the remarks about religious persecution of minority Hindus in Bangladesh.

5. India Chem 2022

India Chem 2022 is set to be organized from November 2 to 3 this year.

India Chem

India Chem is the flagship event of the Indian Government's Department of Chemicals & Petrochemicals. It is the largest event focusing on Indian chemicals and petrochemical industry. It is one of the largest composite events of the industry in the Asia-Pacific Region.

About India Chem 2022

The 12th edition of the India Chem 2022 will be jointly organized by the Department of Chemicals and Petrochemicals and the Federation of Indian Chambers of Commerce & Industry (FICCI). It will be organized in Pragati Maidan in New Delhi based on the theme "Vision 2030: Chemicals and Petrochemicals Build India".

An international conference and exhibition will be organized as part of this event. The exhibition will showcase the Indian Government's policies targeting the sustainable growth of the chemicals and petrochemical industry. The event will also provide a platform that enables stakeholders to interact, share knowledge and network. It will showcase investment opportunities in Petroleum, Chemical and Petrochemical Investment Regions (PCPIRs) and highlight the role of "Make in India" initiative in making the country self-reliant in the sector. It will also include bilateral forums involving India and countries from the EU and East Asia as well as the US.

Indian Chemicals and Petrochemicals industry

The Indian Chemicals and Petrochemicals industry, being the backbone of the Indian economy, is at the verge of fast-paced growth. It currently plays a major role in the growth of various sectors in the Indian economy. Sectors such as automotive, construction, electronics, healthcare, textiles and FMCG are hugely reliant on it for their growth. Indian chemical export recorded a 106 per cent growth in 2021-22 when compared with 2013-14. Chemical exports from India reached a record of

29,296 Million in 2021-22. In 2013-14, the chemical exports were worth just 14,210 Million USD.

6. Recognizing “ASHA”: The real hope

- One of the biggest issues facing rural health services is lack of information. ASHA workers are the first respondents even when there is lack of access to medical aid are threatened with violence and abused on the number of occasions while handling the prospected patients in COVID19 pandemic.

Evolution of “ASHA” you may want to know

- The ASHA programme was based on Chhattisgarh’s successful Mitadin programme, in which a Community Worker looks after 50 households.
- The ASHA was to be a local resident, looking after 200 households.
- The programme had a very robust thrust on the stage-wise development of capacity in selected areas of public health.
- Many states tried to incrementally develop the ASHA from a Community Worker to a Community Health Worker, and even to an Auxiliary Nurse Midwife (ANM)/ General Nurse and Midwife (GNM), or a Public Health Nurse.

Qualifications for ASHA Workers

- ASHAs are primarily married, widowed, or divorced women between the ages of 25 and 45 years from within the community.
- They must have good communication and leadership skills; should be literate with formal education up to Class 8, as per the programme guidelines.

What role do the ASHA Workers play?

- **Involved in Awareness programs:** They go door-to-door in their designated areas creating awareness about basic nutrition, hygiene practices, and the health services available. They also counsel women about contraceptives and sexually transmitted infections.
- **Ensures Mother and child health:** They focus primarily on ensuring that pregnant women undergo ante-natal check-up, maintain nutrition during pregnancy, deliver at a healthcare facility, and provide post-birth training on breast-feeding and complementary nutrition of children.
- **Actively involved in Immunization programs:** ASHA workers are also tasked with ensuring and motivating children to get immunized.

- **Providing medicines and therapies:** Other than mother and childcare, ASHA workers also provide medicines daily to TB patients under directly observed treatment of the national programme. They also provide basic medicines and therapies to people under their jurisdiction such as oral rehydration solution, chloroquine for malaria, iron folic acid tablets to prevent anemia etc.
- **Tasked with Screening tests:** They are also tasked with screening for infections like malaria during the season. They also get people tested and get their reports for non-communicable diseases. They were tasked to quarantine the covid 19 infected patients in the pandemic.
- **Informing the birth and death in respective areas:** The health volunteers are also tasked with informing their respective primary health center about any births or deaths in their designated areas.

Challenges that ASHA workers face

- **Lack of communication threatening the job of ASHA Workers:** One of the biggest issues facing rural health services is lack of information.
- **Lack of resources burdening the ASHA works job:** Another area of concern is the lack of resources. Over the years, with the closest hospital being 9 km away and ambulances taking hours to respond, ASHA workers had to take multiple women in labour to the hospital in auto rickshaws.
- **Poor medical health facilities:** Medical facilities are understaffed and lack adequate equipment for various basic procedures like deliveries. Simple tests, like for sickle cell anemia and HIV, cannot be conducted in no of respective areas of ASHA workers.
- **Low wages according to the job they do:** The initial payment used to be paid was Rs 250 a month in 2009. Since ASHA's unionized and agitated for a living wage. Thirteen years on, they earn around Rs 4,000 a month. It is simply not enough to sustain a family of four.
- **Covid 19 disruptions added to the existing problems:** Low wages forcing ASHA's to work two or more jobs. In the pandemic, no of women lost their husband or the means of earnings and had to revert to farming. Weather fluctuations disrupting the farm produce leaving no of ASHA's the sole earner for the family. Those who don't have land are living in miserable conditions.
- **Delayed payments reduce the morale:** Payments are also delayed by months, Desperation for work leaves us unable to focus on the groundwork we do.

What can be done to improve the work conditions of ASHA workers?

- **Improving the communication channels:** Channels of communication between the government and the rural population need to be robust. A deadly pandemic makes the value of these channels obvious but in order to

get people on board, information needs to be sent out much more effectively and in a hands-on manner. ASHA workers play a crucial role in aiding this effort. ASHA's can't do this alone. They need new systems to ensure the dissemination of life-saving information in remote areas.

- **ASHA's should have fixed income:** ASHA's should have a fixed income, giving them the stability in a job where they spend between eight to twelve hours daily.
- **Role needs to be formalized ensuring the dignity:** ASHA's are recognized as "volunteers" currently. Their role needs to be formalized. Recognizing them as workers provides dignity and protection, and helps them to be taken seriously, by the state, the gram panchayat responsible for the disbursement of funds, and patients.
- **Recognizing and awarding their role will empower and motivate ASHA's further:** For people in villages, ASHA's have become lifelines. They have led innumerable immunization drives and are everybody's first call in a medical emergency. They have labored to build trust and serve as a bridge with the state. Examples show recognition gives some leverage to circumvent the system and seek funds for people in my community.

Conclusion

- ASHA's are lifelines of rural primary healthcare, they are playing a critical role on no of fronts ensuring the basic health of India. A better, stronger India is possible if ASHA's are enabled to serve people. Giving them due recognition would serve this end, along with making rural India's needs medical or otherwise a priority.

7. Risks in Financing BOT Roads

The National Highway Authority of India (NHAI) has planned to award at least 8% of the targeted road development for the current fiscal through Build-Operate-Transfer (BOT) route.

Build-Operate-Transfer (BOT) Contract

- A build-operate-transfer (BOT) is a Public Private Partnership (PPP) model used to finance large projects, typically infrastructure projects developed through public-private partnerships.
- BOT projects are normally large-scale, greenfield infrastructure projects that would otherwise be financed, built, and operated solely by the government.

- Under a build-operate-transfer (BOT) contract, an entity (usually a government) grants a concession to a private company to finance, build, and operate a project for certain period.
- After that period, the project is returned to the public entity that originally granted the concession.

Issues of concern

- Recently, credit rating agency ICRA published its study of 120 BOT road projects that have defaulted during the last decade.
- The Enforcement Directorate (ED) attached assets of the promoters of Ranchi Expressway Ltd, on the charges of fraud and money laundering.
- The study by ICRA has revealed that 70% of the sample projects defaulted during the operational phase, largely on account of lower than envisaged traffic and authority-related issues.
- Only one-fourth of the projects could come out of default and nearly 16% of the projects were terminated.

Risks associated with BOT model

- **Risk during execution stage**
 - Ability of the concessionaire/ sponsor to raise the requisite funding
 - Timely availability of right-of-way and various approvals including environmental clearances
 - Changes in design/ scope of work
 - Terrain conditions
 - Local government or judicial interventions
 - Cost-overrun
- **Risks after the operationalization**
 - Revenue shortfall
 - Flawed traffic projections which are made in the absence of any reliable historical data
 - Mortality of a long-term loan
 - Development of alternative routes and modes of transport
 - Local political conditions
 - Natural calamities
 - Changes in laws
 - Poor maintenance

8. Integrated Circuit Wars

1. The US announced sanctions to deny China access to the leading-edge chips that China doesn't have the capability to design and manufacture yet.
2. This marks the beginning of a new phase of the integrated circuit or "silicon chip" war.

What are the new US sanctions?

- The US sanctions prohibit the sale of the newest generations of chips to China.
- It also **forbids any US firm** or those dependent on US technology from selling or licensing software, equipment or technologies that China will need to build its capabilities in chips.
- Beyond that, it **restricts US citizens and even those holding green cards** from working for or with any Chinese entities in a large number of technology areas.
- The sanctions also **apply to US allies and their firms**, given that they are dependent on US technology in one way or the other.
- This makes it difficult for companies like TSMC (Taiwan) or Samsung (South Korea) from selling the latest generation of chips to China or even helping it in this area.

Impact of US sanctions on China

- This is a setback for China that had plans that envisaged it leapfrogging the US in multiple technologies and taking a lead over the West.
- Without access to the latest generation of chips, its ambitions in AI research as well as 5G and Blockchain will suffer a big setback.
- It is not that China did not foresee an event such as this - but it probably thought it had a few more years to prepare and build up its own capabilities and capacities in the area.
- China has been pouring enormous sums of money in directed technology research to make itself less dependent on the West.
- While TSMC is the acknowledged leader in 3-nm processes, Samsung and Intel are building their own capacities. All three firms are also now working on 2nm processes.
- In contrast, Chinese chip fabrication capabilities are several generations behind.

Will this put China permanently behind in chips or can it play catch up?

- Much of China's current tech capabilities were built by people who went to the US, studied in the best engineering colleges and worked with leading Western technology companies before coming back home.
- Many of these entrepreneurs are Chinese by birth but have since then acquired US citizenship. The sanctions will force them to choose sides.
- Also, many engineers in Chinese technology companies are dependent in critical areas on people with US citizenships or green cards.
- Much of China's current capabilities are based on copying Western designs and technologies.
- China has been pushing technology research in its universities and technology institutes for some time now, but it is still behind the US and European research in many areas.
- This does not mean they cannot catch up - just that the current sanctions will make it harder and increase the time required.

What will be the impact of US sanctions on other countries?

- Most European countries and Australia as well as Japan and Korea are largely backing the US, though they are building their own capabilities.
- Many like Japan and various European countries were content depending on Taiwan for fabrication of chips.
- But now, they are rushing to build their own capacities - just to reduce their dependence on the US, South Korea and Taiwan for chip fabrication.

What is the position of India?

- For a major economy, India is taking baby steps in chip manufacturing.
- The plans unveiled so far by the Vedanta-Foxconn partnership are at the low-end of the chip technology spectrum.
- Our journey will start with 28 nm chipsets. Nor have we managed to get any of the top global chip companies to set up shop in the country.
- Indian Prime Minister has made domestic chip capabilities a priority.
- The government has taken a number of concrete steps ranging from the production-linked incentive scheme to helping firms set up plants in India to license 28-nm fabrication technologies from abroad.
- But while those are good steps, they will not be enough for India's ambitions.

What is next for India?

- Next step may be to look at moving up the chip value chain by either buying fully or taking a significant stake in independent chip design and foundry firms around the world that may be available for sale.
- But that will require **active private sector participation**.

- So far, India's biggest businessmen are focused more on building technology capabilities in green energy rather than in chip-making.
- Unless the government persuades them to bet big on the chip arena, it is unlikely that our vulnerability will come down anytime soon.

9. Right to Privacy in an era of social media

- The recent outrage over the unauthorized video of cricketing superstar Virat Kohli's hotel room in Perth including glimpses of his private spaces and objects is best viewed through an understanding of the changed landscape of the "private" and the "public" in our times. It is a topography shaped through our engagements with social media of different kinds.

What does the Constitution say?

- **Fundamental right under Article.21:** Article 21 is also known as the heart of the constitution; this right is granted to citizens of India as well as the non-citizens. This fundamental right not only talks about life and liberty but it also covers wide variety of rights.
- **Interpretation of Maneka Gandhi v. Union of India and Anr (1978):** The interpretation of the term Personal Liberty has been discussed in many cases and finally had a wider interpretation in the case of Maneka Gandhi v. Union of India and Anr (1978) here the Delhi Regional officer ordered the petitioner Maneka Gandhi to surrender her passport within 7 days without giving her proper reason for the same.
- **Supreme court on Personal liberty:** The Supreme Court held that 'Personal Liberty' covered variety of rights and that such right could only be taken away according to the procedure established by law which had to be just, fair and reasonable and not arbitrary in nature. Personal liberty means various rights that provide for personal liberty of a person.
- **Right to privacy:** In Article 21 the term Right to Life includes right to participate in activities, right to tradition, heritage, culture, livelihood and so on. One of the most important right to live also includes Right to Privacy. Each and every human being would want some privacy in their life. No one would want others to intrude in their private space and disturb the happiness and peace.

What is the Fight for right to Privacy?

- **Not in the original constitution:** This right of privacy was not granted to the citizens for a long time and there had been a lot of debate going on about the same, there is no explicit provision in the constitution which emphasizes about the right to privacy.
- **Data is fundamental to the privacy:** Even the data we save in our mobile phones and laptops are also our private data which needs to be protected, if the data is stolen our right to privacy is lost and fundamental right is infringed. Unprotected data causes a disturbance in the right to privacy.

Some of the Important cases related to right to privacy

- **Kharak Singh V. The State of U.P.(1962):** The discussion about the right to privacy first came up in the case of Kharak Singh V. The State of U.P.(1962) Kharak Singh's house was visited by the police at strange hours, frequently waking him up from his sleep, it was held by the court that this infringed his 'right to life' but however court dismissed the petitioner's allegation that the shadowing of chronic criminals infringed on his right to privacy as at that time the right to privacy was not recognised as the Fundamental Right.
- **Rajagopal v. State of Tamil Nadu (1994):** With the case of R. Rajagopal v. State of Tamil Nadu (1994) where this case prepared the way for subsequent decisions on the Right to Privacy, paving the way for it to be included in the Fundamental Rights given under Part III of the Constitution.
- **X v. Hospital Z case (1998):** There are reasonable restrictions for this right about which it was held by the Supreme Court in the case of Mr. X v. Hospital Z (1998) here the appellant Mr. X was tested positive for HIV about which the doctors informed someone else without his consent because of which marriage of Mr. X was called off, the appellant approached the court stating that his right to privacy was violated. The court here held that this fact has to be known to the person whom he marries as this fact would affect her life as well as it being a communicable disease and that there is no violation to the 'Right of Privacy' of Mr. X.

The landmark case of K.S. Puttaswamy v/s Union Of India 2017.

- **Right to privacy is fundamental right:** In the landmark case K.S. Puttaswamy V. Union of India which was passed in the year 2017, Right to Privacy was recognised as Fundamental Right and was then enshrined in Article 21 as a Right to life and personal liberty.
- **Social media endangered the privacy:** Judges held that because there is enormous technical advancement both state and non-state factors may be at risk of loss of privacy, also it was held that an Individual is very concerned

with his / her personal Data, they control their data and what to be posted on social media what to be displayed to the public and what to hide from outsiders, so unauthorized use of such information by anyone else except to whom that information belongs to may lead to violation of individuals privacy.

- **Privacy is integral to fundamental rights:** On 24th August 2017 the nine-judge bench of India passed a unanimous historic Judgement with concurring opinions. Part III of the Indian constitution lays down different articles for the protection of one's Fundamental Rights. The judgement stated privacy to be an integral component of Part III.
- **Overturning the previous judgements:** The bench recognized that the right to privacy should also be a key element of Fundamental Rights and should be included in Article 21 of right to life and personal liberty. In this judgement the decisions given in the case of Kharak Singh V. The State of U.P. (1962) and MP Sharma V. Satish Chandra (1954) were overruled.

Conclusion

- The great deal of hand wringing over the invasion of Virat Kohli's privacy has been accompanied by seemingly endless circulation of the video clip. The line between outrage and enjoyment is as unclear as that between the alternating desire for publicity that ethereal frisson of celebrity-ness and revulsion over too much of it.

10. Pahari Ethnic Community added to STs List of J&K

The National Commission for Scheduled Tribes (NCST) has now cleared the way for the inclusion of the 'Pahari ethnic group' on the Scheduled Tribes list of the Union Territory of Jammu and Kashmir.

Scheduled Tribes

- The term 'Scheduled Tribes' first appeared in the Constitution of India.
- **Article 366 (25)** defined scheduled tribes as "such tribes or tribal communities or parts of or groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purposes of this constitution".
- **Article 342** prescribes procedure to be followed in the matter of specification of scheduled tribes.

- Among the tribal groups, several have adapted to modern life but there are tribal groups who are more vulnerable.
- The **Dhebar Commission (1973)** created a separate category “Primitive Tribal Groups (PTGs)” which was renamed in 2006 as “**Particularly Vulnerable Tribal Groups (PVTGs)**”.

How are STs notified?

- The first specification of Scheduled Tribes in relation to a particular State/ Union Territory is by a notified order of the President, after consultation with the State governments concerned.
- These orders can be modified subsequently only through an Act of Parliament.

Status of STs in India

- The Census 2011 has revealed that there are said to be 705 ethnic groups notified as Scheduled Tribes (STs).
- Over 10 crore Indians are notified as STs, of which 1.04 crore live in urban areas.
- The STs constitute 8.6% of the population and 11.3% of the rural population.

Who are the Paharis referred to in this article?

- The proposal called for the inclusion of the “Paddari tribe”, “Koli” and “Gadda Brahman” communities to be included on the ST list of J&K.
- The suggestion for the inclusion had come from the commission set up for socially and educationally backward classes in the UT.
- The J&K delimitation commission has reserved six of the nine Assembly segments in the Pir Panjal Valley for STs.

11. Fake News Case against The Wire News Portal

The Delhi Police conducted searches at the residences of editors of The Wire for defaming BJP IT cell Chief Amit Malviya through a series of now-retracted stories on Meta, the parent company of Facebook.

What is the issue?

- The Wire has published a series of reports claiming that Malviya (Head of the BJP IT Cell) had certain privileges to take down Instagram posts without getting technical evidence verified by independent experts.

- The privileges has been enjoyed as a purported beneficiary of social media giant Meta's 'XCheck list' or 'Cross Check' programme, which included the right to report any post and have it taken down with no questions asked.
- An FIR has been registered against the news portal on allegations raised by Amit Malviya for cheating, forgery, and publishing fake stories, against Meta, Instagram and Mr. Malviya himself.
- The Wire too filed a complaint against its consultant Devesh Kumar who allegedly supplied the fabricated details for the story.
- The Delhi Police conducted searches at the residences of editors of the news portal in connection with a FIR lodged against the organisation.
- The Wire has voluntarily withdrawn its reportage on Meta and Amit Malviya and issued a public apology.
- It has announced that it is conducting an internal review of them.
- It also said that the cloned copies of seized devices were not provided.

Response of media organisations

- For the police to carry out an immediate and arbitrary search of the media houses's office and its editor's homes, based entirely on a private complaint of defamation is seen to be of mala fide intent.
- Some have criticised that criminal prosecution and harassment by the police have intimidated and prevented journalists from doing their jobs.
- The Press Club of India (PCI) said that the media has a responsibility to report and has to be responsible in reporting at all times but the issue is with the manner in which the Delhi police has acted.
- The Committee to Protect Journalists' Asia program has said that the raids on the homes of The Wire editors is an excessive reaction.
- The International Press Institute condemned the searches and called the extensive seizure of journalists' equipment a serious violation of press freedom.

What does this incident signify?

- A journalist or a media organisation that publishes a false report ought to be held accountable by its peers and civil society.
- Journalistic writing and reporting has to be done with utmost responsibility and accountability.
- Yet, there are ways and means of addressing errors in news reporting.
- Earlier, the news channel, MediaOne, has had its security clearance denied by the Central government that has attracted the attention of the Supreme Court.
- The targeted punishment even after the media entity owned up to an error and retracted a story affects the press freedom.

- The searches and seizure do not augur well for the freedom of the press and for the Fourth Estate performing its role in a democracy.

12. Disqualification of Convicted Legislators

Two Uttar Pradesh legislators were convicted on criminal charges, but only one of them has been disqualified and his seat declared vacant by the State's Legislative Assembly secretariat.

What is the story behind?

- Azam Khan, MLA, was sentenced to a three-year jail term, for making an inflammatory speech in 2019.
- As disqualification upon conviction on a criminal charge, accompanied by a prison sentence of two years and more is immediate, the Assembly secretariat declared his seat vacant.
- However, there has been no such response in regard to Vikram Singh Saini, MLA, after he was sentenced to two years' imprisonment in connection with the Muzaffarnagar riots of 2013.

When does conviction attract disqualification?

- **Section 8** of the Representation of the People Act (RPA), 1951, contains provisions aimed at **decriminalising electoral politics**.
- There are two categories of criminal cases that attract disqualification upon conviction.
- In the first category are offences that entail disqualification for a period of six years upon any conviction.
- If the punishment is a fine, the six-year period will run from the date of conviction.
- But if there is a prison sentence, the disqualification will begin on the date of conviction, and will continue up to the completion of six years after the date of release from jail.
- Major IPC offences are included under this head:
 1. Making speeches that cause enmity between groups (Sec.153A) and doing so in a place of worship (Sec.505),
 2. Bribery and personation during elections and other electoral offences,
 3. Offences relating to rape and cruelty to women by husband and latter's relatives.
- Provisions of laws such as the Customs Act, Protection of Civil Rights Act, Unlawful Activities (Prevention) Act etc are among the offences that entail disqualification regardless of the quantum of punishment.

- Laws for prevention of Sati, corruption, terrorism and insult to national flag and national anthem etc are also part of this group.
- All other criminal provisions form a separate category under which mere conviction will not entail disqualification.
- A sentence of at least 2 years in prison is needed to incur such disqualification.

Is there legal protection for legislators against disqualification?

- Under Section 8(4) of the RPA, legislators could avoid immediate disqualification until 2013.
- The provision said that with respect to a Member of Parliament or a State legislator the disqualification will not take effect for 3 months.
- If within that period, the convicted legislator files an appeal or revision application, it won't take effect until the disposal of the appeal or application.
- In other words, the mere filing of an appeal against conviction will operate as a stay against disqualification.
- In *Lily Thomas vs. Union of India* (2000), the Supreme Court struck down clause (4) of Article 21 as unconstitutional, thus removing the protection enjoyed by lawmakers.

Can the disqualification be removed?

- The Supreme Court has the power to stay not only the sentence, but also the conviction of a person.
- In some rare cases, conviction has been stayed to enable the appellant to contest an election.
- However, the SC has made it clear that such a stay should be very rare and for special reasons.
- The RPA itself provides a remedy through the Election Commission.
- Under Section 11 of the Act, the EC may record reasons and either remove, or reduce the period of, a person's disqualification.

13. Assertive China, Implication for world and India

- China's 20th Party Congress concluded with hardly any surprises, and a predetermined script was implemented without any hitch. Xi Jinping was anointed President for an unprecedented third term, and all six of his acolytes made it to the powerful Politburo Standing Committee.

Why China's 20th Party Congress is important?

- **Extension of tenure of Xi Jinping:** Xi's 'core' status has been further reinforced, and he is now set to eclipse Deng Xiaoping and Jiang Zemin, placing him next only to Mao. Mr. Xi's Thought on 'Socialism with Chinese Characteristics for a New Era' will be the Chinese Communist Party/Communist Party of China (CCP)'s guiding philosophy for the future.
- **Xi's control over party:** It was also evident that Mr. Xi enjoys wide, if not overwhelming, support within the Party elite, enabling him to infuse a renewed sense of purpose alongside tightening of controls over it.
- **High focus on national security:** National security would be the key factor dictating all aspects of governance. A common theme that permeated the proceedings was affirmation of the CCP's historical mission.
- **Emphasized ideological coherence:** There was only a single narrative, crafted in a manner that extolled Mr. Xi's role in revitalization of the CCP, further enhancing his cult status. Unequivocally rejected was an earlier Xi thesis of a 'Community of Common Destiny' which has been replaced by the belief that international public opinion was currently anti-China and also included an incitement to overthrow the existing Communist regime. To counter such disruptive philosophies, it had become necessary for the CCP to emphasize ideological coherence and internal discipline.
- **Avoiding the soviet style collapse:** This would help to avoid the danger of a 'Soviet style collapse' caused by ideological laxity, corruption, divisions within the party and attempts by outsiders to foment unrest.

What are the problematic declarations at 20th party congress?

- **Undermining the USA:** In the realm of geopolitics, the Congress declared that the objective is to effectively reduce the authority and the power of the United States.
- **Rejecting the Indo-pacific:** This was especially true of China's neighborhood, essentially the Indo-Pacific.
- **Achieving the lost glory:** Also, to be eschewed by China were the vague and contradictory goals of the past, made at a time when China sought to make rapid progress in several directions.
- **Theory of victimhood of international conspiracy:** Implicit in the proceedings was the belief that China was being deliberately denied access, and the ability, to import certain vital technological items, and in this regard, of being a victim of major international conspiracies. Earlier pragmatism was replaced by concerns about western pressures to derail China's progress.
- **Possible lifelong tenure to Xi:** The Party Congress is indicative of the fact that Mr. Xi is much more than a mere party 'restorer', and that he adheres to the belief that the CCP's role is central to Chinese society and critical to determining China's role in world affairs.

- **Raising the national strength and international influence:** In terms of China's world view, the Party Congress reiterated that the goal is to make China a modern socialist power by 2035, boost per capita income to middle income levels, and modernise the armed forces. By 2049, the 100th anniversary of the Peoples' Republic of China, China is determined to lead the world in terms of composite national strength and international influence.

What are the implications for the world?

- **Premature takeover of Taiwan:** one can expect that notwithstanding the level of rhetoric and assertions that this is a dangerous phase, China is unlikely to take any premature step to take over Taiwan, and thereby risk a wider conflict with the U.S. and the rest of the world at this point. Mr. Xi is far more likely to devote attention to internal matters within China, since unity within the Communist Party remains ephemeral; while dissent has been stamped out for the present, more consolidation would be necessary.
- **Short term conciliation with world:** Consequently, one might well see China stepping back from its present confrontational posture with the U.S. and several other countries, and adopting a more conciliatory approach in the near future.
- **Conflicts are likely to happen:** There are, of course, certain red lines any attempt at provocation within the 'First Island Chain', or encouraging Taiwan to seek independence or break away from China are certain to lead to a conflict, irrespective of how it would adversely affect China's 2049 plans and objectives.

Implications for India

- **Border incursion will rise:** In India's case, further skirmishes between the two countries along the several thousand kilometres of the undefined land border is to be expected.
- **Conflicts in Indian ocean:** China is unlikely to embark on an open conflict with it anywhere else in the Indian Ocean region. This could alter, if India were to pursue a more aggressive policy in support of the West's 'open seas policy' in waters in China's vicinity.
- **Prime target in west vs China battle:** India is, however, likely to be a principal target of Chinese wrath in the next few years. As India's economic fortunes steadily improve even as China's declines, the perception conflict will become more intense.

- **China's progress at the cost of India:** Moreover, if India is seen as a major recipient of western technology, the kind being denied to China, China would make it a point to use its economic, rather than military muscle, to deter India's progress. For China to achieve greatness by 2049, subduing India economically, and reducing its image in the eyes of the world would be critically important.

Conclusion

- China's middle kingdom complex, unjustified assertion, paranoid claims on borders and seas and wolf warrior diplomacy is against the international rules and order. China has challenged the USA's hegemony and entire international system without any tangible punishment. India has to choose its options carefully without compromising national security and ambitions.

14. Unified District Information System for Education plus (UDISE+) Report

The Union Education Ministry released the detailed report on Unified District Information System for Education Plus (UDISE+) 2021-22 on school education of India.

- Unified District Information System for Education (UDISE) was initiated in 2012-13. It is one of the largest Management Information Systems on School Education.
- It covers more than 15 lakh schools and more than 26.4 crore children. In this system, data was first filled in paper format and then manually entered into the computer. However, this system is prone to errors & misuse.

UDISE+

- UDISE+ is an updated version of UDISE, where the data from the schools is collected online and in real-time.
- It is to overcome the issues present in the UDISE system such as errors in data and delays.
- UDISE+ was developed by the Department of School Education and Literacy in 2018-19. In the UDISE+ system, improvements were made regarding data capture, data mapping, and verification of data.

UDISE+ 2020-21 report data

- In 2020-21, 25.38 crore students enrolled in school education from primary to higher secondary. There is an increase of 28.32 lakh enrolments as compared to 2019-20.
- Gross Enrolment Ratio (GER) has improved in 2020-21 at all levels of school education compared to 2019-20.
- Teachers engaged in school education during 2020-21 stood at 96.96 lakh. There is an increase of 8800 teachers, compared to 2019-20.
- 39.7 lakh students from private and government-aided schools shifted to government schools in 2020-21. This shows the impact of COVID-19 on education.

UDISE+ 2021-22 report data

Enrolments

- The total enrolment in school education from primary to higher secondary in 2021-22 is 25.57 crore. This is a 19.36 lakh increase when compared with the 2020-21 UDISE+ data.
- The total number of enrolment of students belonging to scheduled castes increased from 4.78 Crore in 2020-21 to 4.82 Crore in 2021-22.
- The scheduled tribe enrolment increased from 2.49 crore in 2020-21 to 2.51 crore in 2021-22.
- Enrolment by OBC students also increased from 11.35 crore in 2020-21 to 11.48 crore in 2021-22.
- Gross Enrolment Ratio (GER), which measures the general level of participation has improved at the primary, upper primary and higher secondary levels in 2021-22, when compared with the 2020-21 performance. The performance of GER in higher secondary has significantly improved from 53.8% in 2020-21 to 57.6% in 2021-22.
- The total enrolment of children with special needs (CWSN) in 2021-22 is 22.67 lakh – a 3.45 per cent increase from the 21.91 lakh in 2020-21.

Teachers

- In 2021-22, 95.07 lakh teachers are involved in school education. Of these more than half of them are female teachers.
- The total number of teachers have declined by 1.95 per cent in 2021-22, when compared with the 2020-21 figures. In 2021-22, the percentage of teachers teaching only primary (34.4%) and only upper primary (18.9%) has declined.

- When compared with the previous year, number of teachers during 2021-22 has declined by 0.9% in government schools, 1.45% in government aided schools, 2.94% in private schools and 8.3% in other schools.
- Highest number of enrolment of students in government schools and recruitment of teachers happened in Uttar Pradesh.
- The Pupil Teacher Ratio (PTR) in 2021-22 is 26 for primary, 19 for upper primary, 18 for secondary and 27 for higher secondary. This is a significant progress when compared to the 2018-19 figures.

Girls in schools

- In 2021-22, around 12.29 crore girls enrolled in primary to higher secondary education. This is an increase of 8.19 lakh when compared with the 2020-21 report.
- The Gender Parity Index of GER revealed that the representation of females in school education is on par with the representation of girls in population of corresponding age group. This shows that there is an increased participation of girls in school education.

Schools and amenities

- The total number of schools in 2021-22 decreased from 15.09 lakhs in 2020-21 to 14.89 lakhs. More than 20,000 schools have been shut down in a year. This may be because of closure of private and other management schools and grouping or clustering of schools by various states.
- Only 27% of schools have special toilets for CSWN and more than 49% of these schools have ramps with handrails.
- Only 44.85% schools had computer facilities and nearly 34% have internet connectivity.
- Around 77% schools have playground facilities in 2021-22. This is a 3.4 per cent increase from 2018-19.
- Nearly 27.7% schools had kitchen garden in 2021-22 – a 32 per cent increase from 2018-19.
- 98 lakh schools (33%) have been certified under Fit India Schools.

15. Article 142 of the Constitution

The Supreme Court has upheld the Employees' Pension (Amendment) Scheme, 2014 of the Employees' Provident Fund Organization as "legal and valid" while reading down certain provisions, using its extraordinary powers under Article 142.

What did the Courte rule?

- The court struck down a requirement in the 2014 amendments that employees who go beyond the salary threshold (of ₹15,000 per month) should contribute monthly to the pension scheme at the rate of 1.16% of their salary.

Article 142

Article 142 titled 'Enforcement of decrees and orders of the Supreme Court and orders as to discovery, etc.' has two clauses:

[1] Article 142(1)

- The Supreme Court in the exercise of its jurisdiction may pass such decree or make such order as is necessary for doing complete justice in any cause or matter pending before it.
- Any decree so passed or order so made shall be enforceable throughout the territory of India.
- It may be in such manner as may be prescribed by or under any law made by Parliament and, until provision in that behalf is so made, in such manner as the President may by order prescribe.

[2] Article 142(2)

- The Supreme Court shall have all and every power to make any order for the purpose of securing the attendance of any person, the discovery or production of any documents, or the investigation or punishment of any contempt of itself.

Important instances when Article 142 was invoked

- **Bhopal Gas tragedy case:** The SC awarded a compensation of \$470 million to the victims and held that "prohibitions or limitations or provisions contained in ordinary laws cannot, ipso facto, act as prohibitions or limitations on the constitutional powers under Article 142."
- **Babri Masjid demolition case:** The Supreme Court ordered framing of a scheme by the Centre for formation of trust to construct Ram Mandir at the Masjid demolition site in Ayodhya.
- **Liquor sale ban case:** The Supreme Court banned liquor shops within a distance of 500 metres from National as well as State highways in order to prevent drunken driving.
- **Ex-PM Assassin case:** In the case of Perarivalan, the Supreme Court invoked Article 142(1) under which it was empowered to pass any order necessary to do complete justice in any matter pending before it.

16. Black Sea Grain Initiative

Recently, Russia re-joined the Black Sea Grain deal after Russian President stated that Russia would suspend, but not end, its involvement in the deal.

Black Sea Grain initiative

- It is an agreement between **Russia and Ukraine with Turkey and United Nations (UN)** made during the Russian invasion of Ukraine.
- It is also known as “**Initiative on the Safe Transportation of Grain and Foodstuffs from Ukrainian ports**”.
- **Aim:**
 - To address **rising food prices** brought on by supply chain interruptions as a result of **Russian actions**.
 - To control market **volatility** by assuring a sufficient supply of grains and preventing an increase in food prices.
 - To provide a safe maritime humanitarian corridor for exports from three of **Ukraine's** important ports for food grains:
 - Chornomorsk,
 - Odesa,
 - Yuzhny/Pivdennyi.
- The **initial period** of the agreement was **120 days** with the option to extend or terminate.
- The agreement was to expire in 19 November 2022 unless renewed.

Ukraine is one of the world's top exporters of **Rapeseed, Sunflower oil, Sunflower seeds, and Wheat**.

- With its access to the deep-sea ports in **the Black Sea**, it can directly contact grain importers from The Middle East, North Africa and Russia.
- This channel, which was previously used to carry **75% of the country's agricultural exports**, has now been disrupted by **Russia's involvement** in East Europe.

Features of the Initiative:

- A **Joint Coordination Centre (JCC)** with senior representatives was established as a result of the agreement for **coordination** with Russia, Turkey, Ukraine and UN.
- To ensure proper monitoring, inspection, and safe transit, all commercial ships must register directly with the JCC.
- Ships must transit according to a schedule set by **the JCC** following an inspection in the authorized corridor both inbound and outbound.

- This is done so as to guarantee that there is no unauthorized cargo or individuals onboard.
- After that, they are permitted to use the approved corridor to continue sailing to **Ukrainian ports** for loading.
- All ships are subject to **national authority and responsibility** once they enter **Ukrainian territorial waters**.
- A **minesweeper** from another country would be required to sweep the approaches to the **Ukrainian ports** for the necessary removal of explosives, or tow the vessel using tugboats.
 - It was decided against completely demining **the Ukrainian shoreline** since it was thought that this might increase their susceptibility to **Russian strikes**.
- A **remote monitoring** is required to prevent provocations and undesirable situations.
- No military ships or unmanned aerial aircraft are permitted to approach the corridor any closer than **the JCC-agreed upon predetermined distance**.
 - The parties would also need to be consulted on this, and **the JCC** would need to give its approval.
 - **The JCC** would assist the crew or undertake an inspection against security assurances in the event of non-compliance or suspicious activity, at the request of a party.

Importance of the initiative:

- **The UN Office for Coordination of Humanitarian Affairs** reports that since the initiative started, about **9.8 million tonnes** of grains had been shipped.
- It helped in reducing the global food prices.
 - This can be seen in the reduction of **Food and Agriculture Organization (FAO)'s Food Price Index** which saw a decline for the sixth straight month.
 - Food Price Index measures the monthly change in international prices of a basket of food items.
- The initiative has also been credited for having made a **huge difference** to the **global cost of living crisis**.
- The shipments, which included corn, wheat, rapeseed, and sunflower oil etc. were divided as:
 - **44%** went to **high-income nations** like Spain, the Netherlands, and Italy,
 - **28%** went to **low- and middle-income nations** like Egypt, Iran, Sudan, and Kenya,
 - **27%** went to **upper-middle-income nations** like the United States and Canada (Turkey, China and Bulgaria among others).

What would happen if the deal is suspended?

- There could be **increase in grain prices**, especially that of wheat, with inventory being at historical lows.
- It could particularly impact countries in the **Middle East and Africa** such as Egypt, Turkey, Lebanon, Sudan and Yemen which have benefitted from the resumption (refer to the chart) and are particularly dependent on Russian and Ukrainian exports.

17. Snakebites deaths in India

A study estimated that a vast majority of snakebite deaths globally – up to 64,100 of the 78,600 deaths – occur in India.

Introduction:

- A study by the George Institute for Global Health, India along with researchers from 21 other countries, published in Nature Communications recently estimated that a vast majority of snakebite deaths globally up to 64,100 of the 78,600 deaths occur in India.
- Snakebite (a neglected tropical disease) is a public health problem in India and many other low- and middle-income countries.
- The study also suggests that the global target of halving the number of deaths and injuries from snakebite by 2030 is unlikely to be met.

Snakebite Deaths in India:

- The study used data from verbal autopsy and civil registration details to estimate snakebite deaths from the Global Burden of Disease 2019.
- Previous global estimate of deaths due to snakebite was in 2008.
- Study shows snakebite deaths in India are at almost 80% of the global deaths.
- Within India, Uttar Pradesh has the highest number of deaths, estimated to be up to 16,100, followed by Madhya Pradesh (up to 5,790 deaths), and Rajasthan (up to 5,230 deaths).
- The study estimated that the age-standardised death rate (which accounts for different age-structures in different countries, thus allowing comparison between countries) in India, at 4.0 per 1,00,000, is also among the highest globally compared to the global figure of 0.8 deaths per 1,00,000.
 - Within India, Chhattisgarh, Uttar Pradesh, and Rajasthan have even higher age-standardised death rates, at 6.5, 6.0, and 5.8 per 1,00,000, respectively.

Snakebite as a public health problem:

- Only Somalia has a higher age-standardised death rate than India at 4.5 per 1,00,000 which indicates a failing health system in India leading to high deaths in those who are bitten by venomous snakes.
- India lacks a specific national strategy to address the burden of snakebite in India. This implies that there is no programme by the government to either prevent snakebite or in preventing deaths or disability from snakebites.
- Recognising snakebite as a public health problem, Indian Council of Medical Research recently launched a national survey to estimate the burden.
- There is a massive shortage of medical staff, infrastructure and last mile connectivity in rural areas. g.: Doctor: Population 1:1800 and 78% doctors cater to urban India (population of 30%).
- Snakebite victims approaching a traditional healer for treatment instead of a primary health facility is another factor for increased deaths.
- The antivenom manufactured in India is exclusively against venoms of four major snake species, and is not effective against other species prevalent in different regions.

Way Forward:

- A strategy focusing on snakebite prevention and strengthening of the health system is the need of the hour.
 - As snakebite predominantly affects the rural poor, a national strategy for snakebite brings in an equity focus which will bring benefits for other neglected tropical diseases, which affect the same communities.
- Snakebite at its core is due to snake-human-environment conflict tied to many socio-cultural-religious aspects. Therefore, understanding this conflict and code signing community-based programmes for prevention of snakebites are required.
- There is a need for comprehensive strengthening of primary healthcare systems focusing on both access and quality of care across all health systems blocks, instead of a sole focus on snake antivenom availability.
- A national strategy to address snakebite can bring in the investments for health systems strengthening the community-based programmes.

18. Unrecognized Madrasas and Government's role

- There has been a lot of unhappiness about the UP-government's decision to conduct a survey of unrecognized madrasas in Uttar Pradesh.

Intention of Government behind such survey

- **The government's claim:** The survey being an exercise to help the madrasas and their students has been less than convincing.

- **Questionable intention:** In the past, the government has called into question the patriotism of madrasa students by asking their management to hoist the national flag on Independence Day, record the proceedings, and submit the same to the local magistrate.

Status of unrecognized madrasas

- **Lack of direction:** Most are floundering for lack of direction. Many impart elementary theological instruction through semieducated teachers.
- **Dependence on community funding:** If at all there, secular education is, at best, piecemeal. Madrasas depend almost fully on community funding.
- **Funding cut with covid19:** With the economic downturn first post demonetization and then post COVID19, that funding has reduced to a trickle. Under normal circumstances, an institute pressed for funds cuts down on expansion plans or puts new courses on hold.
- **Existential crisis for madrasa:** It has become an existential crisis for tens of thousands of students. The dwindling community sponsorship has translated into less food to eat and no warm clothes for them. If that makes it seem as though the madrasas' prime purpose is to feed and clothe the needy, the reality is not entirely different.
- **Feeding and imparting the literacy:** Most students are first generation learners. Many of them are sent by parents with the idea that there will be one less mouth to feed at home. For poverty-stricken parents, the madrasas' free boarding and lodging is a blessing. The education is often considered a bonus. The Much-maligned madrasas feed the hungry and impart literacy.

What the case studies reveal about education via unrecognized madrasas?

- **Example of CBSE along with Quran:** Jamiatul Hamd in Gautam Buddha Nagar district is a rare madrasa which encouraged its students to take the Central Board of Secondary Education exams alongside learning to be Hafize Quran (one who has memorized the Quran).
- **Shortage of funds:** The madrasa is so short of funds that the management does not know where the next meal for the students will come from. In the past, Good Samaritans sent packs of rice, lentils, wheat flour and cooking oil.
- **Decline in sponsorship:** Sponsorship has come down drastically, leaving the students with the prospect of going to bed hungry. Also, 40% of the students in this madrasa who went back home during the COVID19 pandemic did not return.
- **Jamia Mahade Noor madrasa in Dadri:** Where 30% of the students dropped out after COVID19. Day scholars face an uncertain future. Some teachers could not be retained due to paucity of funds.

- **Closing down of madrasa:** The cash-strapped Jamia Naseeriya Islamia in Ghaziabad closed down its wing for outstation students. In mosques across Uttar Pradesh, community aid is sought for unrecognized madrasas after daily prayers.
- **Fear about survey:** In almost every madrasa, there are lingering apprehensions about their fate after the survey. Many packed off their outstation students in panic when the survey started. The students may never return.
- **Some student never returned:** Incidentally, these schools had also sent back their outstation students after the nationwide lockdown was imposed in March 2020. Many students did not return as their parents got them employed as either farm labourers or at sundry tea shops or eateries. A student who may have at one time dreamed of becoming a scholar of Islam is now a menial worker.

What government can do?

- **Upholding the Constitutional right:** According to constitution the Right of a citizen not to be denied admission into state maintained and state-aided institution on the ground only of religion, race, caste, or language [Art.29(2)]-" No citizen shall be denied admission into any educational institution maintained by the State or receiving aid out of State funds on grounds only of religion, race, caste, language or any of them"
- **Survey for collecting the data:** Aim of survey should not be harassment but to know the status of madrasa and they're by collecting the data to draft policy for educational and social upliftment of students of madrasa.
- **Recognition of madrasa:** Following the due procedure of law government can seek Registration and recognition of madrasa.
- **Financial assistance to madrasa:** State government can provide the one-time financial assistance for and after the feedback and review state may continue the funding.
- **Education should be the priority:** Government objective should be the modern education of those who are getting poor quality of education. Any constitutional or legal hindrances should not be the excuse to provide the help to needy.

Conclusion

- While government is duty bound to provide aid to registered and recognized madrasa but not mandatory to provide financial aid to unrecognized madrasa. Government can revamp the unrecognized madrasa into modern education imparting institutions. Whatever government decides, state must provide the quality education without any biases.

19. On Postal Ballot for NRIs

In the Supreme Court, the Union government that said it was considering ways to facilitate non-resident Indians (NRIs) to cast their votes remotely.

Earlier, the Chief Election Commissioner of India urged the NRIs to register as overseas electors and talked about a proposal on Electronically Transmitted Postal Ballot System (postal ballot) facility for NRIs.

What do the NRIs miss out on?

- India has the largest diaspora population, with nearly 1.35 crore NRIs spread across the globe.
- Many of them leave the country for short-term work and could miss out on exercising some of their rights such as registering their vote in India's Assembly or parliamentary elections.
- Currently, the Election Commission of India (ECI) allows enrolled overseas citizens to vote in person at the polling station in the constituency where the person is registered as an overseas elector.
- The necessity to vote in person and the costs have, for overseas citizens, acted as a disincentive for their wanting to exercise their mandate.
- This was evident in the numbers of such voters in the 2019 Lok Sabha election - 25,606 among the 99,844 registered electors who voted.

What are some actions taken to remedy this problem?

- In 2014, a committee constituted by the ECI to probe methods to enable overseas voters' mandates concluded that proxy voting was the most viable, though some political parties objected to the idea.
- A Bill was passed in the 16th Lok Sabha (2014-19) to enable this, but lapsed.
- In 2020, the ECI approached the Government to permit NRIs to vote via postal ballots, similar to the system already used by service voters, i.e., the Electronically Transmitted Postal Ballot System (ETPBS).

What will be the impact?

- Allowing postal ballot use does increase the burden on embassy or consular officials.
- But, allowing postal ballot use should be a good move for NRIs.
- This is also a more trustworthy way of registering mandates rather than appointing proxies.

Appointing proxies is currently allowed for service personnel who are a limited number in each constituency unlike NRIs who could constitute a more substantial chunk among the electorate in some States.

- In the 2014 discussion organised by the ECI, some parties raised the question whether NRIs will get a benefit denied to internal migrant workers.
- But the higher costs of travel back to India, as opposed to travelling within, is a valid reason for allowing NRIs the partially ETPB facility.
- Several democratic countries allow for this option to their overseas citizens, but again, none has to deal with anything near the scale India has.

What is the other group to which the ETPB facility can be extended?

- The more important question to be tackled while extending the facility of voting to overseas Indians is whether longer term migrants should also be allowed to register their mandate.
- This is because the idea behind limiting voters to specific constituencies on account of their residency will become infructuous.
- Therefore, if the postal ballot system is indeed instituted, rules must be clearly framed for voters' eligibility on the basis of their time spent away from the country.

20. India's role in Russia-Ukraine war

- As external affairs Minister Subrahmanyam Jaishankar arrives in Russia this week for a bilateral visit, there is growing international interest in the potential Indian diplomatic contribution to ending the tragic war in Ukraine which is now in the ninth month and has shaken the world to its core.

The story of Ukraine's war and India's Strategy so far

- **India's balanced approach:** India has reasons to be satisfied that there is a better appreciation of its position on Ukraine in the Western public discourse. In the last few months, the Western media and think tanks had been relentless in their criticism of the Indian approach to the crisis as lacking moral and strategic clarity in the face of Russia's unprovoked aggression.
- **India didn't criticize Russian nor endorse Russian aggression:** Through the last nine months, Delhi was reluctant to explicitly criticize Russian aggression against Ukraine and insisted on a dialogue between the warring parties. At the same time, India refused to endorse Russian aggression, underlined the importance of respecting the United Nations Charter, emphasized the

inviolability of territorial sovereignty, warned against the use of nuclear weapons, and sought to draw attention to the economic impact of the war on the “Global South”.

- **America showed sensitivity to India’s position:** In the Biden administration there was a measure of understanding of where Delhi was coming from and India’s long-standing equities in the relationship with Russia and the constraints it imposed on India. Official Washington never let the heat of the Ukraine crisis in Europe undermine the longer-term American imperative of engaging India to stabilize the Indo-Pacific. The same can’t be said about Europe, but then the continent was right in the middle of the gravest conflict since the Second World War. The European trauma from a shattered peace is real.
- **India’s role in grain shipment and nuclear power station:** Recent reports in the US media recount the Indian diplomatic contribution at a few critical moments in the nine-month-long war in helping overcome issues over the grain shipment deal from Ukraine and in reducing the growing risks of the war targeting the nuclear power station at Zaporizhzhia in eastern Ukraine.

Efforts to end war by west and Russia

- **Communications between the defence ministers:** The defence ministers of the two countries have frequently talked to each other reminding each other of their redlines in the war. Meanwhile, the onset of winter will increasingly limit the possibilities for military operations in Ukraine and would give a chance to both sides to pause, regroup and rethink their strategy and tactics.
- **Putin’s strategy:** Putin’s current focus on destroying the Ukrainian cities and the occasional threat to use nuclear weapons underline Russia’s weakness in the Ukraine war rather than strength. From a military perspective, there is no easy way for Russia to secure a “victory” in this war.
- **Limitations of Putin:** Putin might have no option but to consider an honorable draw that will save his political face and secure some territorial gains in Ukraine. Can the same be said about the other Vladimir? (The Russians and Ukrainians both claim Vladimir or Volodymyr the Great of the 10th century as the founder of their nations).
- **Ukraine’s strategy:** Ukraine’s president Volodymyr Zelenskyy has led the country’s fight against Russian aggression with impressive determination. Unlike the Russian troops, the Ukrainian forces are trying to save their nation against aggression and have inflicted significant military defeats on the Russians.
- **Limitations of Ukraine:** There is a question, can Zelenskyy succeed in liberating all territories occupied by Russia, including Crimea which Russia took by force in 2014? Zelenskyy might like to fight on until he realizes that

goal, but there are second thoughts in the Western coalition that is backing him.

- **Western effort of sanctions on Russia:** The West had bet that the massive sanctions it imposed after Moscow launched its war against Ukraine would bring the Russian economy to its knees. But Russia is still standing and the costs of the sanctions are beginning to have major effects on Western societies.
- **Rising energy cost and Ineffectiveness of sanctions:** As the economic and energy costs of the war mount, there is growing political support in Europe for a quick resolution of the conflict. In the US, which has emerged as the main supporter of Ukraine, there are both Republicans and Democrats who are questioning the current American “blank cheque” for Ukraine. If the Republicans do well as they are expected to in this week’s midterm elections to the US Congress, the internal polarization could sharpen and cast a shadow over American foreign policy, including the Ukraine strategy.
- **USA is repairing its strategy:** Although these developments need not be fatal to US strategy, Washington is beginning to recalibrate. In important private advice to Kyiv last week, Washington called for greater flexibility in Zelensky’s approach to negotiations with Putin.

Conclusion

- Ending the war in Ukraine is very crucial as global economy especially western, facing energy and inflation crisis. India has a limited impact as mediator in ending the war in Ukraine. West and Russia need to realise their futile pursuit of complete victory is hurting them more. Sooner the war ends better for world.

21. Higher Education in India

Despite having the largest base of 900-plus universities in the world, only 15 higher education institutions from India are in the top 1,000.

Status of Indian higher education system

- India has the largest population in the world in the age bracket of 5-24 years with 580 million people, presenting a huge opportunity in the education sector.

- India is the **world's 2nd largest higher education system**, with around 38 million students in 50,000 academic institutions (including 1,057 universities).
- It has a goal of doubling gross enrolment rates from the current 26.3% to 50% by 2035.
- India is the **2nd largest source of international students** (after China) globally.
- The government has implemented policies like the National Education Policy (NEP) and will have a strong focus on high-quality vocational education.
- It has also embraced the Education 4.0 revolution, which promotes inclusive learning and increased employability.

Issues in Higher Education Institutions (HEIs)

- **Top institutions** - Despite having the largest base of 900-plus universities in the world, only 15 higher education institutions from India are in the top 1,000.
- **Private sector** - 75 % of higher education is in the private sector.
- **Leadership** - In privately-run higher education institutions, the key criteria currently for leadership position is PhD qualification and IIT/IIM faculty.
- While a PhD is not a sufficient indicator of leadership qualities, IITs and IIMs have become brands.
- **Excess interference** - In private HEIs, interference by the sponsors/trustees is rampant and academic freedom is curbed.
- **Entrance exams** - Most of the entrance examinations are a test of rejection that do not assess the learnability quotient, and hence fail to attract the desirable mix of students.
- **Weak governance** - Most HEIs ignore attributes such as participation, responsiveness, transparency and inclusivity.
- **Assessments** - The expert assessors from national accrediting agencies are clueless about good governance attributes.
- **Pseudo-science** - Promotion of pseudo-science in the name of promoting Indian knowledge systems in prominent institutions seems to be harmful.
- **Division of powers** - The Constitution of India allows both the central and the state governments to enact laws related to the higher education sector, leading to confrontation.
- Example - The recent confrontations between the governors and state governments of West Bengal, Tamil Nadu and Kerala related to vice-chancellor appointments.
- **Underfunding** - Indian higher education, at both state and central levels, has been dramatically underfunded for decades.
- **Internationalisation** - India has never had an international academic strategy and has been a largely closed system for a half century.

What lies ahead?

- Academic excellence demands integrative skills across teaching, research and academic administration.
- Constant training and retraining of teachers is needed to avoid burnout syndrome by adding 'on the job' skills.
- Leadership coaching bridges the skill gap.
- Proper implementation of the new National Education Policy (NEP) 2020 that promises major investment in post-secondary education with an emphasis on internationalization is the need of the hour.

22. MHA annual report underlines need to update NPR

The Home Ministry in its latest annual report has underlined the need to update the National Population Register (NPR) database across the country, except Assam.

What did the MHA say?

- The report said the NPR is prepared under various provisions of the Citizenship Rules, 2003, framed under the Citizenship Act, 1955.
- In 2015, a few fields such as name, gender, date and place of birth, place of residence and father's and mother's name were updated and Aadhaar, mobile and ration card numbers were collected.
- To incorporate the changes due to birth, death and migration, the MHA pressed the need to update it again.

National Population Register (NPR)

- The NPR is a **Register of usual residents** of the country.
- It is being prepared at the **local (Village/sub-Town), sub-District, District, State and National level**.
- This is carried under provisions of the **Citizenship Act 1955** and the **Citizenship Rules, 2003** (Registration of Citizens and issue of National Identity Cards).
- It is **mandatory** for every usual resident of India to register in the NPR.
- A usual resident is defined for the purposes of NPR as a person who has resided in a local area for the past 6 months or more or a person who intends to reside in that area for the next 6 months or more.

Why NPR is under fire?

- Though NPR was **first compiled in 2010** and updated in 2015, the new questions were part of a trial exercise involving 30 lakh respondents in September 2019.
- The exercise has **perceived the first step toward the compilation of the National Register of Indian Citizens (NRIC)** according to Citizenship Rules, 2003.

How are NRIC and NPR related?

- Out of the NPR, a set of all usual residents of India, the government proposes to create a **database of “citizens of India”**.
- Thus, the “National Register of Indian Citizens” (NRIC) is a **sub-set of the NPR**.
- The NRIC will be prepared at the local, sub-district, district and State levels after verifying the citizenship status of the residents.
- The rules say the particulars of every family and individual found in the Population Register shall be verified and scrutinized by the Local Registrar.

How NPR is different from Census?

- The census involves a detailed questionnaire — there were **29 items** to be filled up in the 2011 census.
- They are aimed at eliciting the particulars of every person, including age, sex, marital status, children, occupation, birthplace, mother tongue, religion, disability and whether they belonged to any SC or ST.
- On the other hand, the **NPR collects basic demographic data and biometric particulars**.
- While the census is legally backed by the **Census Act, 1948**, the NPR is a mechanism outlined in a set of rules framed under the **Citizenship Act, 1955**.

23. G20 Presidency: India can be voice for developing world

- Government of India launched the logo, website and theme for India’s presidency of the G20, setting the tone for the country’s G20 presidency, beginning December 1. Modi’s clarion call was “One Earth, One Family, One Future”, aptly underscored by the phrase “Vasudhaiva Kutumbakam”.

G-20

- Formed in 1999, the G20 is an international forum of the governments and central bank governors from 20 major economies.

- It brings together 19 of the world's major economies and the European Union.
- Its members account for more than 80% of global GDP, 75% of trade and 60% of population
- To tackle the problems or address issues that plague the world, the heads of governments of the G20 nations periodically participate in summits.
- India has been a member of the G20 since its inception in 1999.

Aims and objective of G20

- The Group was formed with the aim of studying, reviewing, and promoting high-level discussion of policy issues pertaining to the promotion of international financial stability.
- The forum aims to pre-empt the balance of payments problems and turmoil on financial markets by improved coordination of monetary, fiscal, and financial policies.
- It seeks to address issues that go beyond the responsibilities of any one organization.
- Its members account for more than 80% of global GDP, 75% of trade and 60% of population.

Current Global scenario and India's G20 Presidency

- **War between Russia and west:** It must nonetheless countenance a complex geopolitical moment, with tensions between G7 nations and Russia over the war in Ukraine, and growing friction between the US and China.
- **India's efforts to be a mediator:** PM Modi's recent advice to President Putin that "now is not the time for war" is anchored in the ethos of peace and non-violence, the legacy of Buddha and Gandhi.
- **Energy crisis:** The developmental agenda must receive first billing. Differences over energy diversification and the emerging challenges in trade and technology will need reconciliation.
- **Economic crisis:** Stagflation in the US, China and Europe threatens to affect the global economic outlook. Policy coherence in macroeconomics and trade is an important imperative.
- **Supply chain disruptions:** At the "Global Supply Chain Resilience" meeting in October 2021, Modi advocated cooperation on three critical aspects trusted source, transparency and time frame to improve global supply chains. At the SCO Summit this year, he cited the disruption of supply chains due to the Ukraine crisis and spoke of the unprecedented energy and food crises.

What India can show to the world?

- **Growing economy and rising stature:** India's G20 presidency coincides with its growing confidence, matched by its rising stature and high economic growth rate.
- **India's digital infrastructure:** India's commitment to digital transformation will be a key element in forging an accessible and inclusive digital public architecture. The country's exemplary success with the Unified Payments Interface (UPI), Direct Benefits Transfer and Aadhaar authentication in welfare schemes has growing relevance to the developing world.
- **Efforts for TRIPS waiver on vaccine:** The use of the CoWIN platform enhanced vaccine accessibility and equity. India has made a strong pitch for a TRIPS waiver to ensure equitable access to vaccine production.
- **Vaccine assistance to the world:** India's commitment to advancing South-South cooperation is well acknowledged. At the height of the pandemic, India provided 250 million vaccine doses to 101 countries, apart from other medical assistance.
- **SAGAR and Blue Economy:** India's global initiatives in recent years such as SAGAR (Security and Growth for All in The Region), "blue economy", "clean oceans", and disaster-resilient infrastructure have the potential to gain traction in the G20.
- **India as true climate leader:** PM Modi's "Panchamrit" announcements at COP26 – net zero by 2070, non-fossil energy capacity to 500 GW by 2030, 50 per cent of energy requirement through renewables by 2030, reduction of carbon emission by 1 billion tonnes by 2030, and reduction of carbon intensity in the Indian economy to less than 45 per cent by 2030 – established India as a climate leader.

What should be India's Priority as President of G20?

- **Open application programming interface:** As economies everywhere move rapidly towards digitalization, it is important to develop a consensus on an open source, open application programming interface (API) and an interoperable framework for public digital platforms on which the private sector can freely innovate. This would help maximize the impact of the digital transformation for the global public good, including new data, measurement tools, indicators of economic growth and the achievement of Sustainable Development Goals (SDGs).
- **Promotion of LiFE philosophy:** At the COP26 in Glasgow, Modi proposed Mission LiFE, which places individual behavior at the centre of the global climate action narrative. The Mission intends to establish and nurture a global network of individuals known as Pro-Planet People (P3), committed to adopting and promoting environmentally friendly lifestyles. This is based on the idea that responsible individual behavior can undo the damage wrought upon nature.

- **Focus on climate financing:** At COP27 as well as during its G20 presidency, India will have to focus attention on climate finance, especially a new quantified goal beyond the existing annual \$100 billion pledge by Advanced Economies (AEs) to assist developing nations in climate change adaptation and mitigation from 2020 to 2025. The delayed pledge is expected to be fulfilled in 2023 during India's presidency and from there on, the G20 needs to raise the bar.
- **Clean energy partnership:** The G20 presidency will provide India with an opportunity to give impetus to several of its initiatives for clean energy partnerships especially in solar, wind and hydrogen with the EU, Japan and the US. It will provide a platform to give a fillip to the idea of, "One Sun, One World, One Grid", first mooted by Modi at the International Solar Alliance (ISA) in 2018.
- **Achieving the Net Zero target:** India has the scale and capacity to set a shining example of rapid and decarbonized economic growth to help realize the G20's global net zero ambitions. A viable international framework for development and international trade in GH2, together with green ammonia and green shipping, is the key. Reliable supplies of critical minerals and technological collaborations for energy storage, including a global battery coalition, could provide answers.
- **Nuclear energy as an alternative:** Given the nascent support today for civilian nuclear energy in Europe due to energy market volatility, the G20 could work toward an expanded and robust civilian nuclear energy cooperation framework, including for small modular reactors.
- **Reforming the multilateralism:** Multilateral institutions are perceived today as unrepresentative, ineffective, or worse still, both. The call for a new multilateralism and reassessment of the Global Financial Order to ensure adequate credit enhancement and blended finance for sustainable green transitions reflects a popular global sentiment.

Conclusion

- India's presidency should represent the widest and most vulnerable constituencies, especially in South Asia. This can truly advance intra-South Asian economic integration, which is so essential for India's rise.

24. Centre constitutes 22nd Law Commission

The Centre has constituted the Law Commission of India by appointing former Karnataka High Court Chief Justice Ritu Raj Awasthi as its chairperson.

Law Commission of India

- It is an executive body established by an order of the Government of India. First law commission of independent India was established post the Independence in 1955
- Tenure: 3 Years
- Function: Advisory body to the Ministry of Law and Justice for “Legal Reforms in India”
- Recommendations: NOT binding
- First Law Commission was established during the British Raj in 1834 by the Charter Act of 1833
- Chairman: Macaulay; It recommended for the Codifications of the IPC, CrPC etc.

Its' composition

The 22nd Law Commission will be constituted for a period of three years from the date of publication of its Order in the Official Gazette. It will consist of:

1. Full-time Chairperson;
2. Four full-time Members (including Member-Secretary)
3. Secretary, Department of Legal Affairs as ex-officio Member;
4. Secretary, Legislative Department as ex officio Member; and
5. Not more than five part-time Members.

Terms of reference

- The Law Commission shall, **on a reference made to it by the Central Government or suo-motu**, undertake research in law and review of existing laws in India for making reforms therein and enacting new legislations.
- It shall also undertake studies and research for bringing reforms in the justice delivery systems for elimination of delay in procedures, speedy disposal of cases, reduction in cost of litigation etc.

Major reforms undertaken

- The First Law Commission under Macaulay suggested various enactments to the British Government, most of which were passed and enacted and are still in force in India.
- These include the Indian Penal Code (first submitted in 1837 but enacted in 1860 and still in force), Criminal Procedure Code (enacted in 1898, repealed and succeeded by the Criminal Procedure Code of 1973), etc.
- Thereafter three more Law Commissions were established which made a number of other recommendations the Indian Evidence Act (1872) and Indian Contract Act (1872), etc. being some of the significant ones.

Role in legal reforms

The Law Commission has been a key to law reform in India.

- Its role has been both advisory and critical of the government's policies
- In a number of decisions, the Supreme Court has referred to the work done by the commission and followed its recommendations.
- The Commission seeks to simplify procedures to curb delays and improve standards of justice.
- It also strives to promote an accountable and citizen-friendly government that is transparent and ensures the people's right to information.

25. Counter-terror Diplomacy

This article talks about the Counter-terror Diplomacy of India after it hosted the special session of the UN Security Council's Counter-Terrorism Committee (UNSC-CTC) in October 2022 in Delhi and Mumbai.

In December 2022, when India takes over the UNSC Presidency for the last time before its two-year term in the Council ends, India will chair a special briefing on the Global Counter Terrorism Architecture.

What must be the focus?

- The current focus is on the future of the fight against terrorism.
- But, it is important to look at some of the challenges that already exist, especially when the world's attention is consumed by the war in Europe, the aftermath of COVID-19, and global economic recession.

Challenges related to GWOT

- The "Global War On Terrorism" (GWOT) conceived by a post-9/11 United States is over now after the US had negotiated with the Taliban, and then withdrew from Afghanistan. This is the first challenge.
- Moreover, the GWOT itself was **built on an unequal campaign**.
- When India had asked for help to deal with the IC-814 hijacking (1999) less than two years prior to the 9/11 attacks (2001), its pleas fell on deaf ears in the U.S., the UK, the UAE, Pakistan, etc.,
- But, in later years, all of these countries were hit by the same terrorists who the Indian government in 1999 was forced to release.
- The maximum India received in terms of global cooperation was actually from economic strictures that the Financial Action Task Force (FATF)'s grey list placed on Pakistan, which has been cleared now.

- In addition, the weak international reaction to the Taliban's takeover of Afghanistan demonstrates rising fatigue levels in dealing with "another country's problems".

For India, the future of counter-terrorism cooperation is going to be less cooperative, and the counter-terror regimes such as the UNSC Resolutions 1267, 1373, etc. rendered outdated and toothless.

Challenges related to definition

- **Growing global polarisation** over the Russia-Ukraine war is blurring the lines on what constitutes terrorism.
- Away from the battlefield, the polarisation has rendered the UNSC, the body tasked with global peace, paralysed. This is because
 1. The UNSC is unable to pass any meaningful resolutions that aren't vetoed by Russia or western members.
 2. China has been able to block as many as 5 terror designations requested by India and the US.
- The biggest opportunity lost due to the UNSC's other preoccupations has been the need to move forward on India's proposal, of 1996, of the Comprehensive Convention on International Terrorism (CCIT).

Challenge related to technologies

- The next challenge comes from emerging technologies and the weaponisation of different mechanisms for terrorism purposes.
- Drones are already being used to deliver funds, drugs, weapons, ammunition and even improvised explosive devices.
- After the COVID-19 pandemic, worries have grown about the use of biowarfare, and Gain-of-Function (GoF) research to mutate viruses and vectors which could be released into targeted populations.
- In a future that is already here, the use of artificial intelligence (AI) systems and robotic soldiers makes it even easier to perpetrate mass attacks while maintaining anonymity.
- **Terror financing** uses bitcoins and cryptocurrency, and **terror communications** use social media, dark web and gaming centres.

What is next?

- Global inequity, climate change, pandemics, and food and energy shortages are going to be the next big drivers of violence in the world.
- But, at present, the global stakeholders are distracted by territorial disputes and narrow political differences.

- Terrorist acts of the future will grow more lethal, will need fewer people to carry out, and with their sponsors having more and more anonymity.
- India, as host of these counter-terrorism events, the Shanghai Cooperation Organization (SCO) and the next G-20, must
 1. Stop fighting the “last war” on terrorism and
 2. Steer the global narrative towards preparing for the next ones.

26. Kerala govt. moves to divest Governor of Chancellor Role

In the latest escalation of its running battle with Governor, the Kerala government has decided to remove him as Chancellor of State universities, seeking to replace him with “renowned academic experts”.

Who is a Chancellor of a University?

- In India, almost all universities have a chancellor as their titular head whose function is largely ceremonial.
- The governor of the state, appointed as the union’s representative of state by the president, is the honorary chancellor of all State owned universities.
- The de facto head of any government university is the vice-chancellor.
- In private non-profit universities, normally the head of the foundation who has established the university is the chancellor of the university and is the head of the university.

Role of Governors in State Universities

- In most cases, the Governor of the state is the ex-officio chancellor of the universities in that state.
- Its powers and functions as the Chancellor are laid out in the statutes that govern the universities under a particular state government.
- Their role in appointing the Vice-Chancellors has often triggered disputes with the political executive.

What about Central Universities?

- Under the Central Universities Act, 2009, and other statutes, the President of India shall be the Visitor of a central university.
- With their role limited to presiding over convocations, Chancellors in central universities are titular heads, who are appointed by the President in his capacity as Visitor.
- The VCs too are appointed by the Visitor from panels of names picked by search and selection committees formed by the Union government.

- The Act adds that the President, as Visitor, shall have the right to authorize inspections of academic and non-academic aspects of the universities and also to institute inquiries.

What is Kerala attempting to do?

- Education comes under the Concurrent List.
- In an official statement, the Kerala Cabinet noted the M.M. Punchhi Commission had vouched against granting Governors the power of Chancellors.
- In many states, the elected governments have repeatedly accused the Governors of acting at the behest of the Centre on various subjects, including education.

27. Public Service Broadcasting

The guidelines for television channels operating in India have been tweaked to mandate the satellite TV channels to broadcast at least 30 minutes of content daily on themes of national importance and of social relevance.

New guidelines

- The Guidelines for Uplinking and Downlinking of Satellite Television Channels in India, 2022 were approved by the Union Cabinet recently.
- The new guidelines have been amended after a gap of 11 years and a number of steps have been taken for ease of doing business.
- As per the guidelines, the Central Government may, from time to time, issue general advisory to the channels for telecast of content in national interest, and the channel shall comply with the same.
- **Rationale** - As airwaves and frequencies are public property, a company with permission to operate in India, barring foreign channels, will have to air content in the service of the public.

Key features of the new guidelines

- It is obligatory for all TV channels, including private channels to broadcast content on themes of national importance and socially relevant issues for at least 30 minutes every day.
- Eight themes have been identified for this purpose.
 1. Education and spread of literacy
 2. Agriculture and rural development

3. Health and family welfare
 4. Science and technology
 5. Welfare of women
 6. Welfare of the weaker sections of the society
 7. Protection of environment and of cultural heritage
 8. National integration
- **Non-compliance** - If a channel continues to be non-compliant, steps can be taken based on specific advisories that will be issued from time to time and on a case-to-case basis.
 - **Exemptions** - The exemption may apply to wildlife channels and foreign channels, besides live telecasts in the case of sports channels.

What else do the guidelines say?

Currently, Singapore is considered the hub of teleport uplinking.

- The new guidelines allow a news agency to get permission for 5 years instead of the current 1 year.
- The penalty clauses have been rationalised, and separate sets of penalties have been proposed for different types of contraventions against the current method of uniform penalty.
- Broadcast companies will be allowed to uplink foreign channels from Indian teleports, which would create employment opportunities and make India a teleport hub for other countries.

28. Consulting the CM Over the Appointment of The Governor

- With the rise in instances of tension, and even standoffs, between State governments and Governors, there is once again a debate on the role of the Raj Bhavan and conduct of Governors, the relation of Governors with the Centre and State government, and whether Chief Ministers should have a say in the appointment of Governors in their respective States.

Role and responsibilities of governor

1. Executive Powers:

- **Nominal Head of the government:** These powers are exercised by the council of ministers in the name of Governor. Hence Governor is only nominal head and council of ministers is the real executive.
- **Head of the state:** He is the constitutional head of the state who appoints the leader of majority party as chief minister. He can seek any information from

the chief minister. He appoints the advocate general, chairman and members of the respective state public commission.

- **Can recommend the emergency:** He can recommend the imposition of constitutional emergency in a state to the President. During the period of President's rule in a state, the governor enjoys extensive executive powers as an agent of the President.

2. Legislative Powers:

- He is part of state legislative.
- No bill can become a law until the governor signs it.
- He can withhold a bill and send it to the President for consideration.
- He can dissolve the State Assembly before the expiry of its term on the advice of the Chief Minister or as directed by the President.
- He causes the annual Budget to be presented in the Vidhan Sabha.

3. Judicial Powers:

- The governor appoints the district judges.
- He is consulted in the appointment of the judges of the High Court by the President
- He can, pardon, remit and commute the sentence of a person convicted by a state court.

4. Financial Powers:

- He causes the annual budget to be laid before the Vidhan Sabha;
- No money bill can be introduced without his prior approval.

5. Discretionary Powers:

- **Selection of CM:** If no party gets an absolute majority, the Governor can use his discretion in the selection of the Chief Minister;
- **Real executive of state:** During an emergency he can override the advice of the council of ministers. At such times, he acts as an agent of the President and becomes the real ruler of the state;
- **Report to president:** He uses his direction in submitting a report to the President regarding the affairs of the state; and
- **Withhold the assent:** He can withhold his assent to a bill and send it to the President for his approval.

Sarkaria commission's recommendation on the role of governor

- **Chief minister should be involved in appointment:** The powers of the President in the matter of selection and appointment of Governors should not be diluted. However, the Governor of a State should be appointed by the President only after consultation with the Chief Minister of that State. Normally the five-year term should be adhered to and removal or transfer should be by following a similar procedure as for appointment i.e., after consultation with the Chief Minister of the concerned State.
- **Governor should convey assent or dissent in time:** There should be a time-limit say a period of six months within which the Governor should take a decision whether to grant assent or to reserve a Bill for consideration of the President. If the Bill is reserved for consideration of the President, there should be a time-limit, say of three months, within which the President should take a decision whether to accord his assent or to direct the Governor to return it to the State Legislature or to seek the opinion of the Supreme Court regarding the constitutionality of the Act under article 143.

What is the expert's opinion?

- **Vice-president should be involved:** Total composition of the committee is of the ruling party at the Centre. It should be the Vice-President, the Speaker of the Lok Sabha, the Leader of the Opposition, and maybe the Chief Minister of the State.
- **Governor should be above the chief minister:** Getting the Chief Minister involved in the process of selection is not right. The Governor cannot be made to feel that the Chief Minister was one of those responsible for his selection; the Governor has to be above the Chief Minister, be independent, be able to function in a nonpartisan manner, and not be beholden to the ruling party or to the Chief Minister.
- **Minimum qualification to be the governor:** we have no criteria, no minimum qualifications laid out for a Governor. These are often retirement perks or rewards for unstinting loyalty to a particular party. Governors cannot be called before a court of law. These are things which have to be kept in mind.
- **A guide to chief minister:** The Governor is supposed to be a friend, philosopher and guide, helping from the back, sorting out issues and resolving disputes, even between political parties. The Governor has to at times advise the Centre on what is happening and what needs to be done. That brings the Centre and the State together.

Conclusion

- Governors' role is always in contestation when Centre and state have different government. Governor is a political appointee for political purpose.

However, governor should respect the constitutional post he holds and perform his duties and responsibilities without any biases and affiliations.

29. The Need for Judicial Reforms

Empowering itself with the trappings of modern technology, India's Supreme Court has been striving to perform its difficult task.

Need for judicial reforms

- The Supreme Court sits in final judgment over decisions of the high courts and tribunals functioning throughout India.
- As per **Article 141**, the law declared by the Supreme Court and its pronouncements on the constitutional validity of enacted law is binding on all other courts and authorities in the country.
- There is virtually no area of legislative or executive activity which is beyond the highest court's scrutiny.
- Therefore, the judiciary as an institution needs to preserve its independence and must strive to maintain the confidence of the public in the courts.
- The citizens need the reassurance of a system of judicial accountability that will protect the higher judiciary from some of its own members who have gone off track.

What steps have been taken in this aspect?

- The Law Commissions have reported on all aspects of judicial governance.
- In 2005, the Supreme Court had drawn up a fine blueprint on
 - Case-management
 - How to make recent amendments in our procedural laws work on the ground
 - How to get more cases moving along
- In the Salem Advocate Bar Association case, the justices had requested the high courts to implement the detailed blueprint.

What can be done in this regard?

- **Legislation** - So far, there are only guidelines and no law in India to guide our judges.
- In the United States, under the Judicial Councils Act, 1980, this task has been gladly undertaken by the judges.
- The Act confers powers on bodies comprised of judges to take action against a federal judge.

- **Empowering Supreme Courts** - The Supreme Court could not direct the high courts to implement the detailed blueprint on case-management because under our constitutional scheme the high courts are autonomous constitutional bodies not subject to administrative directions of the Supreme Court.
- The Supreme Court can be entrusted with direct responsibility for the functioning of the high court.
- **Public disclosure of annual financial statements** - The judges must make annual financial disclosure statements, not privately to their respective chief justices, but publicly.
- It is done by justices of the Supreme Court in the world's oldest democracy, the US.

30. Giving More Autonomy to Universities

- It is sad but not surprising that none of India's institutions of higher education appears in the list of top 100 universities of the world.

Background: Ranking of the of the Indian Institutes

- **According to the QS World ranking:** The 2023 edition of the Quacquarelli Symonds (QS) world university ranking reckons that three of India's higher educational institutions amongst the top 200 of the World. Another three are counted among the top 300 whereas two more in the top 400.
- **As per the Times Higher Education Ranking:** The Times Higher Education (THE) ranking places only one Indian institution among the top 400 of the worlds.
- **Academic rankings:** Rankings are the same with the Academic Ranking of World Universities (ARWU). Barring one of the most eminent public-funded deemed universities of the country, all the rest are Institutions of National Importance (INIs) the Indian Institutes of Technology (IITs), to be specific.

Why other universities reflect poor performance than IITs and INIs?

- **IITs have more autonomy:** IITs are not only better funded but also generally self-governed, enjoying a greater degree of autonomy as they fall outside the regulatory purview of the University Grants Commission (UGC) and the All-India Council for Technical Education (AICTE).
- **Strict UGC regulations:** Funded through the University Grants Commission (UGC), universities are all subject to a very strict regulatory regime.

- **Micro-management of universities functioning:** Abiding by UGC regulations and AICTE guidelines, encompasses almost all aspects of their functioning be it faculty recruitment, student admission and the award of degrees. In many cases, they are micro-managed by the regulatory authorities.
- **Very less autonomy to UGC affiliated Universities:** Most of the universities have become so comfortable with the practice that they rarely assert their autonomy.
- **Ranking on basis of compliance:** Central universities in the country are also ranked on the basis of their 'obedience' to regulatory compliances. Even in the academic domain, many of them are comfortable in publicly stating that they have adopted the model curricula, pedagogy and syllabi prescribed by the regulatory bodies, even though the same may have been only indicative.

What are the efforts taken to improve the universities performance?

- **National education policy 2020:** A large number of commissions and committees, including the national policies on education (including the National Education Policy 2020), have highlighted the need for higher education autonomy. The new education policy seeks to completely overhaul the higher education system, and to attain this objective, repeatedly emphasizes the need for institutional autonomy.
- **Academic and administrative autonomy:** The NEP regards academic and administrative autonomy essential for making higher education multi-disciplinary, and that teacher and institutional autonomy are a sine qua non in promoting creativity and innovation.
- **Independent board of management:** The policy considers a lack of autonomy as one of the major problems of higher education and promises to ensure faculty and institutional autonomy through a highly independent and empowered board of management which would be vested with academic and administrative autonomy.
- **Light but tight regulation:** It argues for a 'light but tight' regulatory framework and insists that the new regulatory regime would foster a culture of empowerment. Further, it goes on to say that by relying on a robust system of accreditation, all higher education institutions would gradually gain full academic and administrative autonomy.

Conclusion

- Universities in India have been losing their autonomy. In the two years since the approval, announcement, and gradual implementation of the NEP, universities in India today are far less autonomous than earlier. If India wants

to be leader in knowledge and patent economy then its universities must be freed from clutches of unreasonable regulations.

31. WHO's Global Vaccine Market Report 2022

The Global Vaccine Market Report 2022 was released on November 9, 2022 by the World Health Organization (WHO).

Key findings of the report

- Vaccine inequality has been exacerbated by the COVID-19 pandemic.
- Critical vaccines that are in high demand in high-income countries are in short supply in low-income countries.
- Due to the lack of market incentives, development of critical vaccines is facing hurdles.
- Decades-long progress in the development, supply and access to doses is getting reversed because of the unfavourable environment caused by free-market dynamics.
- The burden of cervical cancer is high in low-income countries despite the introduction of human papillomavirus vaccine (HPV) in 41 per cent of these countries. Over 83 per cent of high-income countries have access to HPV vaccines.
- COVID-19 vaccine accounted for most of the 16 billion vaccine doses that were supplied in the global market in 2021. The total value of these vaccines are 141 billion USD.
- This is a major growth in the vaccine market, with the volume raising three-fold when compared with the 2019 (5.8 billion USD) and nearly three-and-a-half times the 2019 market value of 38 billion USD.
- The past 2 years witnessed an increase in vaccine supply. However, there has been a major backslide in the routine immunisation of children during this period. If the current trend persists, it would be impossible to recover from this setback or ensure equitable access to vaccines.
- In 2021, more than 90 manufacturers are supplying vaccines to the WHO member states.
- However, less than 10 managed a bulk of the supply because of "broad portfolios, global reach and a diversity of deployable technology".
- Only 2 manufacturers supply key vaccines like pneumococcal vaccines, measles and rubella-containing vaccines across the globe.
- Policies and supply chains in specific regions influence the accessibility to vaccines. African and east Mediterranean regions are the worst impacted by this. Countries in these regions depend on international manufacturers for 90 per cent of their procured vaccines.

- Price disparities forced the middle-income countries to pay equal to or more than the high-income countries for vaccines.
- The lack of transparency in vaccine manufacturing and supply and insufficient government oversight in the distribution of doses remain key challenges.
- The report recommended several changes that can initiate the paradigm shift in vaccine market. These are:
 1. Clear immunization plans
 2. Aggressive investment and stronger oversight of vaccine development, production and distribution.

32. Gender parity? It'll take decades, says UN

A new UN report titled 'Progress on the Sustainable Development Goals: the gender snapshot 2022' is released.

- It is jointly produced by **UN Women and the UN Statistics Division**.

Highlights of the report

- The world is **not on track to achieve gender equality by 2030**.
- At the current rate of progress, it will take up to **286 years to close gaps in legal protection and remove discriminatory laws**.
 - 140 years for women to be represented **equally in positions of power and leadership and at least 40 years to achieve equal representation in national parliaments**.
- Women are still far from getting **equal space with men in managerial roles** with data showing that close to one in every three managers/supervisors happens to be a woman.
- Women hold only two in every 10 science, engineering and information and communication technology jobs globally.
 - They comprise only **16.5% of inventors associated with a patent**.
- Globally, young women outnumber young men in **tertiary education** they are a minority of students when it comes to **STEM (science, technology, engineering and mathematics) education**.
 - They account for just about **35% and a dismal 3% in information and communication technology studies**.
- **Biased gender norms and stereotypes**, embedded in curricula, textbooks, and teaching and learning practices, derail girls' choices of what to study in school, and ultimately, their **careers and employment opportunities as adults**.

- Access to clean water and sanitation is another big challenge with over **733 million living in high and critical water stress**, where demand for safe, usable water outstrips supply.
 - In India, women and girls devote over 50 minutes per day to collecting water. By comparison, this figure was four minutes per day for men.

Sustainable Development Goal (SDG) 5 data

- COVID-19 and the **backlash against women's sexual and reproductive health and rights** are further diminishing the outlook for gender equality.
 - **Violence against women remains high**
 - Global health, climate, and humanitarian crises have further increased risks of violence, especially for the most vulnerable women and girls.
 - Women feel more unsafe than they did before the pandemic.
- Women's representation in positions of power and decision-making remains below parity.
 - **Only 47 per cent of data required to track progress on SDG 5** are currently available, rendering women and girls effectively invisible.

33. 19th ASEAN-India Summit

Vice President Shri Jagdeep Dhankhar recently led the Indian delegation at the 19th ASEAN-India Summit in Phnom Penh, Cambodia.

Introduction:

- The Vice President, Shri Jagdeep Dhankhar led the Indian delegation, including the External Affairs Minister, Dr S. Jaishankar, at the 19th ASEAN-India Summit in Phnom Penh, Cambodia.
- The Vice President hailed the deep cultural, economic and civilizational ties that have existed between India and South East Asia from time immemorial.
- The Association of Southeast Asian Nations(ASEAN) is central to India's Act East policy. It is at the heart of India's Indo-Pacific outreach.
 - The Indian Prime Minister at Shangri La Dialogue laid out India's Indo-Pacific policy that highlighted that ASEAN will remain at the core of India's policy outreach in the region.

Enhanced collaboration:

- At the summit, ASEAN and India adopted a joint statement announcing the elevation of the existing Strategic Partnership to Comprehensive Strategic Partnership.

- Both sides reaffirmed the importance of maintaining and promoting peace, stability, maritime safety and security, freedom of navigation and overflight in the Indo-Pacific region.
- It also recognised the importance of “unimpeded lawful maritime commerce” and the disputes should be resolved by following “universally recognised principles of international law, including the 1982 United Nations Convention on the Law of the Sea (UNCLOS), and the relevant standards and recommended practices by the International Aviation Organisation (ICAO), and the International Maritime Organisation (IMO).
- Both sides also agreed to intensify maritime cooperation including anti-piracy operations, armed robbery against ships, maritime safety, search and rescue (SAR) operations, humanitarian assistance, and emergency response and relief.
- Both sides announced plans to enhance collaboration against “terrorism and transnational crimes including international economic crimes and money laundering, cybercrime, drugs and human trafficking and arms smuggling.”
- Both sides decided to expand their collaboration in the space industry including “through the establishment of Tracking, Data Reception and Processing Stations in Vietnam and Indonesia”.
- India and ASEAN agreed to expedite the review of the ASEAN-India Trade In Goods Agreement (AITIGA).
- It also agreed to enhance ASEAN-India cooperation on the digital economy through a series of regional capacity-building activities in digital transformation, digital trade, digital skills and innovation, as well as Hackathons.

ASEAN Outlook on the Indo-Pacific:

- This envisages ASEAN Centrality as the underlying principle for promoting cooperation in the Indo-Pacific region, with ASEAN-led mechanisms, such as the East Asia Summit (EAS), as platforms for dialogue and implementation of the Indo-Pacific cooperation, while preserving their formats.
- Its main goals are to defend the regional architecture based on rules, support tighter economic cooperation, and help to establish an atmosphere that is conducive to peace, stability, and prosperity in the region. This builds confidence and trust.
- ASEAN Outlook on the Indo-Pacific involves the further strengthening and optimization of ASEAN-led mechanisms, including the East Asia Summit (EAS), the ASEAN Regional Forum (ARF), the ASEAN Defence Ministers Meeting Plus (ADMM-Plus), the Expanded ASEAN Maritime Forum (EAMF) and others such as the relevant ASEAN Plus One mechanisms.
- Issued at 19th summit, the joint statement noted that both the ASEAN Outlook on the Indo-Pacific (AOIP) and the Indo-Pacific Oceans Initiative

(IPOI) share relevant fundamental principles in promoting peace and cooperation as outlined in the ASEAN-India Joint Statement on Cooperation on the AOIP for Peace, Stability and Prosperity in the Region adopted at the 18th ASEAN-India Summit in 2021.

34. The Practice of Sealed Cover Jurisprudence

A Bench led by Justice D Y Chandrachud has criticised the practice of sealed cover jurisprudence as it makes the adjudication vague and opaque.

Sealed cover jurisprudence

- It is a practice used by the courts (Supreme Court and lower courts), of asking for or accepting information from government agencies in sealed envelopes that can only be accessed by judges.
- There is **no specific law** that defines the doctrine of sealed cover.
- The Supreme Court derives its power to use it from
 - Rule 7 of order XIII of the Supreme Court Rules - No party would be allowed to access the information that the Chief Justice of India (CJI) or court has directed to be kept under sealed cover except if the CJI himself orders to access it.
 - Section 123 of the Indian Evidence Act of 1872

Instances of usage

- **Rule 7 of order XIII of the Supreme Court Rules** - The information can be kept confidential if its publication is not considered to be in the interest of the public.
- **Section 123 of the Indian Evidence Act of 1872** - Official unpublished documents relating to state affairs are protected and cannot be compelled to disclose.
- **Other instances** - When the publication of information affects an ongoing investigation or breaches the privacy of an individual, it may be sought in secrecy or confidence.

When has it been done in the past?

- In the controversial **Rafale fighter jet deal case**, the Supreme Court (SC) had asked the Centre to submit details related to deal's decision making and pricing in a sealed cover.
- In the matters related to **the National Register of Citizens (NRC)** in Assam, the coordinator of the NRC was asked by the apex court to submit period reports in sealed cover.

- In the **2014 BCCI reforms case**, the probe committee of the cricket body had submitted its report to the SC in a sealed envelope.
- In the **Bhima Koregaon case**, in which activists were arrested under the Unlawful Activities Prevention Act, the SC had relied on information submitted by the Maharashtra police in a sealed cover.
- In the **MediaOne case**, the court chose to accept the submission of documents by the government in a sealed cover.

Problem with sealed cover jurisprudence

- **For aggrieved parties** - It prevents parties from having a full overview of the charges against them.
- It denies the aggrieved party their legal right to effectively challenge an order since the adjudication has proceeded on the basis of unshared material provided in a sealed cover.
- It may tilt the balance of power in a litigation in favour of a dominant party which has control over information.
- **For the judiciary** - It perpetuates a culture of opaqueness and secrecy.
- It leaves scope for arbitrariness in judicial decisions.
- It takes away the opportunity to analyse judicial decisions and to appreciate the rationale behind them.
- The sealed cover procedure affects the functioning of the justice delivery system both at an individual case- to case level and at an institutional level.

What about the judgments to curb this practice?

- In **P Gopalakrishnan V. The State of Kerala, 2019**, the Supreme Court had said that disclosure of documents to the accused is constitutionally mandated, even if the investigation is ongoing.
- In the **INX Media case in 2019**, the Supreme Court had criticised the Delhi High Court for basing its decision to deny bail on documents submitted by the Enforcement Directorate (ED) in a sealed cover.
- In 2022, in a case involving the Bihar government, the Bench headed by Justice Ramana made it clear that it wanted all arguments to be presented in open court.
- On hearing an appeal against the Centre's ban in the **MediaOne case**, the SC said that it is not in favour of sealed cover jurisprudence.

35. All about Ninth Schedule

Jharkhand's new bill that seeks to increase the reservation in government posts to 77% needs its inclusion in Ninth Schedule to take effect.

Jharkhand bill about

- The Jharkhand Reservation of Vacancies in Posts and Services (Amendment) Bill, 2022 raised reservation to 77% from the current 60%.
- The Bill came with the notice that the Act shall take effect after it is included in the ninth schedule of the Constitution.
- The 77% reservation breaches the 50% ceiling set by the Supreme Court in the landmark *Indra Sawhney v Union of India* verdict.
- The total reserved seats in jobs and education institutions has crossed 50% in many states including Tamil Nadu where 69% seats are reserved.

What is the Ninth Schedule of the Constitution?

- The Ninth Schedule contains a list of central and state laws which cannot be challenged in courts.
- The Schedule became a part of the Constitution in 1951 by the **First Constitutional (Amendment) Act**. It was created by the new Article 31B, which along with 31A was brought to protect laws related to agrarian reform and for abolishing the Zamindari system.
- Article 31B also has retrospective operation i.e. if laws are inserted in the Ninth Schedule after they are declared unconstitutional, they are considered to have been in the Schedule since their commencement, and thus valid.
- In *I R Coelho v State of Tamil Nadu, 2007*, the Supreme Court ruled that the laws placed under Ninth Schedule can be challenged on the ground of violating the basic structure of the Constitution.

36. Vaccine Equity

The Global Dashboard for Vaccine Equity has put out recent data that justifies the worrying core of the vaccine distribution programme.

Global Dashboard for Vaccine Equity

- The Global Dashboard for Vaccine Equity is a joint effort by the
 - United Nations Development Programme (UNDP)

- World Health Organization (WHO)
- University of Oxford
- It combines the latest data on the global roll-out of COVID-19 vaccines with the most recent socio-economic information.
- It illustrates why accelerating vaccine equity is not only critical to saving lives but also to driving a faster and fairer recovery from the pandemic.
- It provides insights and possibilities for policy makers into the implications of vaccine inequity.
- **Findings** - Only one in four people has been vaccinated with at least one dose in low and middle income countries as of November 9, 2022.
- In high income countries, three in four people have got at least one dose of the vaccine.

Vaccine equity

- Vaccine equity is a situation where everyone in the world has the same access to vaccines.

Reasons for vaccine inequity

- **Increased demand** - In the COVID-19 pandemic, vaccine production was insufficient to meet global demand.
- **Vaccine nationalism** - Many wealthy countries procured vaccine doses through exclusive bilateral deals for their domestic populations.
- Some of the manufacturing countries, such as India, imposed temporary export bans.
- **High expenditure** - The low-income countries would need to increase their health expenditure by a staggering 30-60% to vaccinate 70% of their population under the current pricing.

Impact of global vaccine inequity

- **Vaccine Apartheid** - Widening gaps in global vaccine equity have led to a two-track pandemic with
 - Booster COVID-19 vaccinations proliferating in high-income countries
 - First doses not yet reaching all populations in low-income countries

In 2021, WHO set the target for 70% global vaccination coverage by mid-2022. As of June 2022, only 58 of WHO's 194 Member States had reached the 70% target.

Efforts were taken to reduce vaccine inequity

- **Intellectual Property Waiver** - Affordability alone doesn't determine availability of vaccines.

- Efforts were initiated to waive the intellectual property protection for the COVID-19 range of therapeutics and vaccines.
- **COVAX initiative** - The COVID-19 Vaccine Delivery Partnership (COVAX) was launched to intensify country readiness and delivery support.
- It aimed at accelerating COVID-19 vaccination coverage in 34 low coverage countries, along with their governments.

What lies ahead?

No one is safe until everyone is safe

- World Health Organization (WHO)

- Strong leadership engagement and commitment to detailed and costed vaccination plans will be essential.
- National healthcare system capacity will need to be strengthened.
- COVID-19 vaccination services will need to be integrated with other immunization services and alongside other health interventions.
- Careful risk communication and community engagement plans need to be adapted to enhance demand for vaccination.
- There is also a need to coordinate domestic and international funding.

37. Regulating the election funding system

- Elections are to democracy what financial markets are to the economy. The absence of an omnibus law to regulate elections and political parties in India is a legislative gap waiting to be filled.

Significance of political parties in democracy

- A political party is an organized group of citizens who hold common views on governance and act as a political unit that seeks to obtain control of government with a view to further the agenda and policy they profess.
- Political parties maintain a continuous connection between the people and those who represent them either in government or in the opposition.
- Political parties in India are extra-constitutional, but they are the breathing air of the political system.

Current procedure of recognizing and regulating the political parties In India

- **Registration of political parties:** The Representation of the People Act 1951 was amended in 1988 to add a new section IVA on “Registration of political parties” by which the Election Commission of India (ECI) exercises its mandate for superintendence, direction, and control of elections under Article 324 of the Constitution of India.
- **Recognition as national or state political party:** Association of citizens can apply to the ECI to be registered by submitting its Memorandum of Association and swearing allegiance to the Constitution. It requires fulfilment of performance criteria, including a minimum share of the electoral votes cast in the last election and the number of seats won to become a recognized national or a state party.
- **A regulatory gap in Municipal political parties:** Municipalities became the third level of government, three decades ago in 1992, through the 74th constitutional amendment. But a parallel recognition for political parties operating only at the municipal level is yet to be conceptualized.

Mechanism of Election funding

- **Encouraging private corporates and individual investment:** Indian government does not directly fund election campaigns of parties or independents. However, it has made political parties exempt from income tax, to encourage private corporate and individual investment in building political parties.
- **Limit on election campaign expenditure:** The ECI set upper-end limits (January 2022) for election campaign expenditure in parliamentary seats at INR9.5 million and INR4 million in state legislature seats.

Electoral bonds to end large cash payments in election finance.

- **Scheme of electoral bonds:**
- A publicly owned commercial bank, with the largest network of branches is the only designated vendor.
- Bonds remain valid for 15 days within which they can be encashed through the bank account of the selected political party.
- The purchaser-donor enjoys tax credits on the purchased bonds as in any other donation to charities.
- **Association of democratic records:** The idea was to facilitate large donors, preferring anonymity whilst donating funds for elections, with an alternative to cash payments.

What can be done to ensure the security of the donor?

- **Bond Digitization:** Bonds should be digitized and the privacy of the transfer should be protected through encryption.
- **Authorized access:** Redemption is through banking the audit trail of the donor and the recipient would exist for authorized access.
- **Enhancing transparency with ECI:** Transparency should be enhanced whilst protecting anonymity by authorizing ECI to collect and publish de-personalized information.
- **Personal data should be accessed with the specific orders only:** Access for security and criminal investigation agencies to the personal data should come via a specific order of the ECI allowing such privileged access.

What are the suggestions for better governance of the political parties?

- **Strict Supervision of political parties:** Poor Intra-party governance is concentrated in the Registered Unrecognize Political Parties (RUPP). Most are in breach of their undertaking to fight an election within five years and remain active thereafter.
- **Strengthen the Regulatory compliance:** The benefit of income tax exemption should only be available after registered parties demonstrate a five-year record of compliance with the regulations.
- **Enforce inner-party democracy and avoiding conflict of interest:** Making party members occupying party positions, ineligible for holding executive positions in government. This is necessary to create a complete segregation of functions within the ruling party and the government
- **Empower ECI to regulate political parties:** The misuse of the fiscal privileges afforded to political parties can be minimized through targeted regulatory tweaks, within the existing construct of private financing and the inner functioning of parties improved through targeted regulation.

Conclusion

- “Secrecy is a darkness where corruption gets nurtured”. Funding to the political parties need to be transparent. Transparent funding will pave the way for level playing field for all the political parties.

38. The curious case of Fiscal Federalism in India

- NITI Aayog has not taken any major steps since its constitution to promote cooperative federalism. Contrary to its public statements on promoting cooperative federalism, the Government of India has been accused of doing exactly the opposite. The following instances clearly demonstrate as to how the central government’s policies have undermined the spirit of federalism and eroded the autonomy of the States.

Why the states are angry over hypocrisy of the Centre?

- **Centre raises off budget borrowings states are restricted:** The borrowings by corporations against State guarantees are mostly used for capital investment. The Centre has also been raising off Budget borrowings but mainly for meeting revenue expenditure.
- **CAG report on extra budgetary resources:** The Comptroller and Auditor General of India (C&AG) Report on the Compliance of FRBM Act for 2017-18 and 2018-19 pointed out as many as eight instances of meeting revenue expenditure through Extra Budgetary Resources (EBR).
- **Unjustified limitations on states:** Revenue expenditure met through EBR by the Centre amounted to ₹81,282 crore in 2017-18 and ₹1,58,107 crore in 2018-19. Such borrowings were not reflected in the Budget of the central government. In view of this, treating off Budget borrowings of State corporations as States' borrowings retrospectively is totally unjustified.

Unhappiness about the grants by the finance commission's recommendations?

- **Special grants are not given to states:** The Fifteenth Finance Commission, in its first report, had recommended a special grant to three States amounting to ₹6,764 crore to ensure that the tax devolution in 2020-21 in absolute terms should not be less than the amount of devolution received by these States in 2019-20. This recommendation was not accepted by the Union Government.
- **Nutritional grants are accepted:** the recommendation relating to grants for nutrition amounting to ₹7,735 crore was not accepted.
- **Grants to states are refused by the Centre:** A similar approach has been followed by the Union Government with regard to grants to States recommended by the Finance Commission for the period 2021-26.
- **Sector and state specific grants:** The sector specific grants and State specific grants recommended by the Commission amounting to ₹1,29,987 crore and ₹49,599 crore, respectively, have not been accepted. This clearly demonstrates that the Union Government has undermined the stature of the institution of the Finance Commission and cooperative federalism.

How borrowing of the states is controlled by the Centre?

- **Changes in off budget borrowing norms:** decision to treat off Budget borrowings from 2021-22 onwards serviced from the State budgets as States' borrowings and adjusting them against borrowing limits under Fiscal Responsibility and Budget Management (FRBM) in 2022-23 and following years is against all norms.
- **No recommendations by finance commission:** This is the first time that the Government of India is proposing to treat off Budget borrowings as

government borrowings retrospectively from 2021-22. The Government of India has indicated that such a decision is in accordance with the recommendation of the Finance Commission. In fact, there is no recommendation to this effect by the Fifteenth Finance Commission. The Finance Commission recommended that governments at all tiers may observe strict discipline by resisting any further additions to the stock of off Budget transactions.

- **No amendment to FRBM act:** It observed that in view of the uncertainty that prevails now, the timetable for defining and achieving debt sustainability may be examined by a high-powered intergovernmental group and that the FRBM Act may be amended as per the recommendations of this group to ensure that the legislations of the Union and the States are consistent. No such group has been appointed so far by the Centre.

Cess and Surcharge- A tool to raise revenue for Centre not available to the states

- **Rising share of cess and surcharges:** The government has been resorting to the levy of cesses and surcharges, as these are not shareable with the States under the Constitution. The share of cesses and surcharges in the gross tax revenue of the Centre increased from 13.5% in 2014-15 to 20% in the Budget estimates for 2022-23.
- **States don't get all share in divisible pool:** Though the States' share in the Central taxes is 41%, as recommended by the Fifteenth Finance Commission, they only get a 29.6% share because of higher cesses and surcharges.
- **Undermining the purpose of cess:** The C&AG in its Audit Report on Union Government Accounts for 2018-19 observed that of the ₹2,74,592 crore collected from 35 cesses in 2018-19, only ₹1,64,322 crore had been credited to the dedicated funds and the rest was retained in the Consolidated Fund of India. This is another instance of denying States of their due share as per the constitutional provisions.
- **Increasing centrally sponsor scheme and burden on state:** Committee after committee appointed by the Government of India has emphasised the need to curtail the number of Centrally Sponsored Schemes (CSS) and restrict them to a few areas of national importance. But, what the Government of India has done is to group them under certain broad umbrella heads (currently 28). In addition, in 2015, the Centre increased the States' share in a number of CSS, thereby burdening States. Most of the CSS are operated in the subjects included in the State list. Thus, States have lost their autonomy.
- **NITI Aayoge recommendations are not accepted:** The Sub-Committee of Chief Ministers appointed by NITI Aayog has recommended a reduction in the number of schemes and the introduction of optional schemes. These recommendations have not been acted upon.

Conclusion

- Finance commission is balancing wheel of fiscal federalism. Share of states in central taxes may have increased but cess and surcharges have also increased. Off budget borrowing on states can lifted provided should reduce the unnecessary freebies in the state budget.

39. Transformation Challenges in Population Growth

As predicted by the Revision of World Population Prospects 2022, the human population has touched the 8 billion mark.

World Population Prospects

- The 2022 Revision of World Population Prospects is the 27th edition that has been prepared by the **Population Division of the Department of Economic and Social Affairs of the UN Secretariat**.
- It has been published in a **biennial** cycle since 1951.
- It presents population estimates from 1950 to the present for 237 countries or areas, underpinned by analyses of historical demographic trends.
- For the first time, the estimates and projections are presented in one-year intervals of age and time instead of the five-year intervals used previously.
- According to the report, the global population is expected to grow to around 8.5 billion in 2030, 9.7 billion in 2050 and 10.4 billion in 2100.
- The global population is growing at its slowest rate since 1950, having fallen under 1% in 2020.

What is the picture of India?

- **Population** - India's population stands at 1.412 billion in 2022 and is projected to overtake China as the world's most populous country in 2023.
- According to UNFPA estimates, 68% of India's population is between 15-64 years old in 2022, while people aged 65 and above comprise 7% of the population.
- At 253 million, India is also home to the world's largest adolescent population (10-19 years).
- **Demographic dividend** - India has the prospects to reap the demographic dividend as the median age of an Indian this year was 28.7 years against a global value of 30.3 years.
- According to UNFPA, India will have one of the youngest populations in the world till 2030 and the demographic window of opportunity will last till 2025.

What does this population growth signify?

- **Significance** - The growth of our population is a testament to humanity's achievements, including
 - Reduction in poverty and gender inequality
 - Advancement in health care
 - Expanded access to education
- **Impact** - These have resulted in
 - More women surviving childbirth
 - More children surviving their early years
 - Longer and healthier lifespans

What are the implications of this transformation?

- **Change in international power balance** - The global population share of combined population of India, Pakistan and Bangladesh is now 23%.
- Africa's share in the global population will rise from nearly 6% in 1900 to over 21% in 2050.
- Hence, Asia and Africa will have an important role in determining our shared future.
- **Immigration** - Declining fertility in the West has led to the rapid ageing of the population.
- Immigration remains the only option to reduce the dependency ratio imposed by the rising proportion of the elderly and declining fertility among the native-born population.
- While this gives rise to tremendous ethnic tensions, it also increases the power of minorities in the host countries.
- **Environmental impact** - Population growth has magnified the environmental impacts of economic development.
- It may result in humans consuming far more biological resources, such as forests and land, than the planet can regenerate each year.
- The overconsumption of fossil fuels, for example, leads to more carbon dioxide emissions, responsible for global warming.
- **Internal transformations** - The seat allocation based on the latest population will trigger dispute between north Indian states and southern States.
- The locals-only legislation in Andhra Pradesh and protectionist demands in Tamil Nadu reiterate the growing influx of culturally diverse migrants.

40. Foundational Literacy and Numeracy in Primary Schools

With India's 132nd rank out of 191 countries in the Human Development Index 2021, there is a need to focus on the nation's education, especially the foundational literacy and numeracy in all primary schools.

What efforts were taken over the years?

- **International efforts** - The 1990 World Declaration on Education for All at the Jomtien Conference affirmed the right of all people to education.
- **NEP 2020** - The National Education Policy (NEP), 2020 states that a National Mission on Foundational Literacy and Numeracy will be set up for attaining universal foundational literacy and numeracy in all primary schools.
- It also aims to identify state-wise targets and goals to be achieved by 2025.
- **Role of civil societies**- There are many innovations in the civil society space, such as by Gyan Shala, Saksham, the Central Square Foundation, Room to Read, and Akshara.

What are the challenges?

- Communities view understaffed and ruined schools only as election booths.
- Improvement in school infrastructure, uniforms, toilet access, water and textbook availability, classroom processes remain a challenge.
- Lack of direct funds to schools, teacher vacancies, allocation of non-teaching tasks to teachers, etc. are other issues.
- A systemic way of recruiting good teachers and establishing teacher development institutions is still absent.
- Poor governance affects the effectiveness of face-to-face or digital teacher development initiatives like Nishtha, Pratham's Read India campaign, etc.

What is the need of the hour?

- **Community connects** - To achieve the objective of foundational literacy and numeracy in all primary schools, we need to focus on community connects and parental involvement.
- The Panchayati Raj, Rural and Urban Development Ministries can work on community connect and make learning outcomes a responsibility of local governments.
- **Decentralisation of funds** - Providing decentralised funds to schools with the community overseeing such funds may aid in achieving the NEP objective.
- **Use of technology** - The Sampark Foundation uses audio battery-operated sound boxes and innovative teaching learning materials.
- It has launched a TV, which helps teachers use lesson plans, content and activity videos and worksheets to make classes more interactive.

GS 3 : Economy, Science and Technology, Environment

1. Sequence of Implementation of EWS Quota

This article draws attention to a crucial impending implementation decision about the economically weaker sections (EWS) quota, and shows how the sequence of implementation would result to diverging outcomes.

Different forms of reservation system

- The reservation system in India takes two forms,
 1. Vertical reservation (VR), which until 2019 was defined for stigmatised and marginalised social groups (SCs, STs and OBCs);
 2. Horizontal reservation (HR), applicable to cross-cutting categories such as women, people with disability (PWD), domicile, etc.
- As long as the VR system was social group-based, no individual was eligible for multiple VR categories, since no individual can belong to multiple caste or tribal groups.
- But the 103rd Constitution Amendment Act 2019 had fundamentally altered this original purpose of reservations.

What did the 103rd Constitution Amendment Act do?

- The 103rd Constitution Amendment Act opened the VR to groups that are not defined in terms of hereditary social group identity (caste or tribe), by giving **10% quota for the EWS**.
- **EWS status is transient** (that individuals can fall into or escape out of), but social groups are permanent markers of identity.
- In principle, this meant that an individual could belong to two VR categories (say, SC and EWS).
- But, the 103rd amendment explicitly removed individuals who are already eligible for one VR (SC, ST, or OBC) from the scope of EWS reservations.
- As a result of this exclusion, an individual could still be only eligible for at most one vertical category.
- Exclusion of SCs, STs, OBCs from the scope of EWS reservation was immediately challenged in court on the grounds that it violated individual right to equality (Articles 14-18 of the Indian Constitution).
- The Supreme Court said not to revoke the amendment but to interpret the language of the amendment in a way that does not exclude SCs, STs, OBCs from the scope of EWS reservation.

What is the ambiguity over the overlapping VR categories?

- Allowing for overlapping VR categories generates an ambiguity under the current legal framework, most notably stemming from the ruling of the **Indra Sawhney case (1992)**.

- Under this, any member of a reserved category who is entitled to an open-category (OC) position based on “merit” score should be awarded an OC position, and not be slotted under a VR position.
- Technically, this implies that OC positions must be allocated based on merit in the first step, and VR positions should be allocated to eligible individuals in the second step.
- This procedure is called “**over-and-above**” choice rule in the literature.
- This is to be distinguished from the “**guaranteed minimum**” rule.
- The “guaranteed minimum” rule would guarantee a minimum number of positions to members of beneficiary groups, regardless of whether they enter through reserved or open (“merit”) positions.
- When VR categories are mutually exclusive (no individual can be a member of multiple vertical categories), it is immaterial in what sequence vertical categories are processed in relation to each other.
- But, if individuals can belong to two vertical categories, the relative processing sequence of vertical categories becomes very important.

How will sequencing matter?

- **EWS-first** - Consider the scenario where EWS positions before other VR categories, immediately after the open category seats.
- Under the current income limit for EWS reservation, more than 98% of the population qualifies for EWS reservation.
- If EWS quotas are filled first, the outcome would be the same as treating EWS positions as open positions. This makes the EWS reservation redundant.
- Since the richest applicants are not eligible for EWS, the actual outcome would be slightly different, but not a whole lot as the richest 2% may not apply to public institutions where quotas are applicable.
- **EWS-last** - If EWS positions are allocated after all other VR positions are filled, this issue will not arise.
- Now, while all individuals with incomes lower than the EWS limit are equally eligible for EWS positions, the system awards the EWS positions to eligible individuals who have highest merit scores.
- But since some of the higher score individuals from SCs, STs and OBCs would be admitted under their respective quotas, this sequencing will make EWS positions more accessible to members of forward castes.

What if the current income limit of the EWS category is lowered?

- That would change the calculus somewhat since poorer individuals from all social groups (including non-SC-ST-OBC) would be eligible.
- In this scenario, the richer (above the presumed new income cut-off) SC-ST-OBC individuals will be eligible only for the social group-based VR positions.

- However, changing income limits is likely to open a whole new Pandora's box, especially in the absence of reliable income data.
- Therefore, the court would be well-advised to consider the implications of the implementation routes and to make sure there are no ambiguities, i.e., no loopholes.

2. Amendments to the IT Rules 2021

The Ministry of Electronics and Information Technology (MeitY) has notified amendments to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (IT Rules, 2021).

IT Rules, 2021

- In a bid to keep up with the issues of the social media intermediaries (SMIs), India replaced its decade old regulations on SMIs with the IT Rules, 2021.
- The IT Rules, 2021 were primarily aimed at **placing obligations on SMIs** to ensure an open, safe and trusted internet.
- The set of proposed amendments can be broadly classified into two categories.
 1. The first category involved placing additional obligations on the SMIs to ensure better protection of user interests, and
 2. The second category involved the institution of an appellate mechanism for grievance redressal.

What are the additional obligations placed on the SMIs?

- **Obligation on User compliance** - The original IT Rules, 2021 obligated the SMIs to inform its users of the "rules and regulations, privacy policy and user agreement" that governed its platforms.
- This obligation on the SMIs has now been extended to ensuring that its users are in compliance with the relevant rules of the platform.
- Further, SMIs are required to "make reasonable" efforts to prevent prohibited content being hosted on its platform by the users.
- To a large extent, this enhances the responsibility and concomitantly the power of SMIs to police and moderate content on their platforms.
- While the SMIs are unclear of the extent of measures they are expected to undertake, users are apprehensive that the increased power of the SMIs would trample on freedom of speech and expression.

- **Constitution-based obligation** - There is an obligation on SMIs to respect all the rights accorded to the citizens under the Constitution, including the Articles 14, 19 and 21.
- Given the importance of SMIs in public discourse and the implications of their actions on the fundamental rights of citizens, the horizontal application of fundamental rights is laudable.
- However, the wide interpretation to which this obligation is open to by different courts, could translate to disparate duties on the SMIs.
- **Obligation to remove information** - SMIs are obligated to remove information or a communication link in relation to the six prohibited categories of content as and when a complaint arises.
- They have to remove such information within 72 hours of the complaint being made.
- **Obligation to take measures** - SMIs have been obligated to take all measures to ensure accessibility of its services to users along with reasonable expectation of due diligence, privacy and transparency.
- The obligation is meant to strengthen inclusion in the SMI ecosystem such as allowing for participation by persons with disabilities and diverse linguistic backgrounds.

What are the Grievance Appellate Committees?

- Prior to the IT Rules 2021, platforms followed their own grievance redressal mechanisms and timelines for resolving user complaints.
- The IT Rules uniformed this by mandating that all social media platforms should have a **grievance officer** who would acknowledge the receipt of a complaint within 24 hours and dispose it within 15 days.
- However, the performance of the current grievance redressal mechanism has been sub-optimal.
- To remedy this, the government has instituted Grievance Appellate Committees (GAC).
- The committee is styled as a **three-member council** out of which
 1. One member will be a government officer (ex officio) and
 2. The other two members will be independent representatives.
- GACs will be established to allow users to appeal against the inaction of, or decisions taken by Grievance Officer or intermediaries on user complaints within 30 days.
- But, users will always have the right to approach courts for any remedy.
- Importantly, the GAC is required to adopt an online dispute resolution mechanism which will make it more accessible to the users.
- However, the IT Rules, 2021 do not provide any explicit power to the GAC to enforce its orders.

3. Financing Green Housing

The percentage of greenhouse gases emitted from housing are expected to increase as housing demand accelerates, putting India's green transition targets in trouble.

What steps were taken by the Indian government for green buildings?

- **The Indian Green Building Council (IGBC)** - It was formed by the Confederation of Indian Industry in 2001.
- It is the first rating program exclusively for the residential sector.
- It is the India's premier body for green building certification and related services.
- **Green Rating for Integrated Habitat Assessment (GRIHA)** - It is the National Green Building Rating System.
- It is an assessment tool to measure and rate a building's environmental performance.
- The rating is based on energy consumption, waste generation, renewable energy adoption etc.
- **Bureau of Energy Efficiency (BEE)** - It has launched the Energy Conservation Building Code (ECBC).
- It aims to optimize energy savings & launched a five-star rating scheme.
- **ECO-NIWAS** - Energy Conservation-New Indian Way for Affordable & Sustainable homes (ECO-NIWAS) is an online portal to increase awareness about sustainable building and energy-efficient homes.
- **LEED India** - Leadership in Energy and Environmental Design (LEED) India is another Green Building rating program.
- **TERI** - The Energy and Resources Institute (TERI) plays a very crucial role in developing green building capacities.
- **SUNREF** (Sustainable Use of Natural Resources and Energy Finance) Housing India programme was launched by the French Development Agency (AFD) and the National Housing Bank (NHB).
- The project is co-funded by the European Union (EU).
- It aims at scaling up green affordable housing projects in India.

What structural initiatives can reduce the ill effects of housing?

- **Lowering the GHG footprint** - The GHG footprint can be minimized by
 - Use of low-carbon materials
 - Following sustainable construction processes
 - Recycling building materials
- **Reducing energy usage** - An appropriate blend of active and passive design elements when constructing can reduce energy usage by over 35%.

- Replacing incandescent lights with LEDs reduces energy consumption by about 80%.
- **Reducing the heating and cooling demands** - Retrofitting roofs, windows, and doors that have higher energy performance can reduce heating and cooling demands by up to 40%.

What are the challenges?

- **For builders** - Builders have no economic incentives to implement sustainability, as green homes do not command premium pricing.
- **For buyers** - Buyers have no motivation to pay more if it is rented out.
- **For banks** - Commercial banks are unlikely to provide debt as they wish to avoid an increase in the 'loan-value to house-value' ratio.
- Banks rarely provide capital for retrofitting as the borrowers are reluctant to provide their houses as collateral.

How to overcome the challenges?

- **Credit enhancement** - The government, Multilateral Development Banks (MDBs), and Domestic Development Banks (DDBs) can support green housing sector through a credit enhancement mechanism.
- A subordinate loan can be funded by these institutions to cover the incremental cost of construction and design of energy-efficient houses.
- The savings from these houses over a period can be used to pay the loan back.
- **Credit guarantees** - Partial credit guarantees can be offered on energy-efficient homes that pay the lender if the borrower defaults.
- **Global examples** - In China, green housing mortgage securities are traded at a premium over conventional ones.
- In Singapore, Green Mark rated properties are expected to fetch a higher market premium.

4. One must know India's Economic Growth Story

- As the COVID-19 pandemic fades and hopes to rise for nations and societies to return to some kind of normalcy, there is effort all around to take stock of where we stand and what our prospects look like. A look back over the last few years at how India performed in terms of its economy.

Present situation of India's economic growth

- **Mixed growth story:** One group of experts argues, India's growth story is more mixed. In 2021-22, its GDP growth was 8.7%, which was among the highest in the world. This is good but, against this, we must offset the fact that much of this is the growth of climbing out of the pit into which we had fallen the previous year.
- **IMF reduced the growth forecast:** In 2020-21, India's growth was minus 6.6%, which placed the country in the bottom half of the global growth chart. For 2022-23, the International Monetary Fund has cut India's growth forecast to 6.1%.

Structural assessment of India's growth

- **Rising inequality and high unemployment:** Most of India's growth is occurring at the top end, with a few corporations raking in a disproportionate share of profits, and unemployment is so high, it is likely that large segments of the population are actually witnessing negative growth.
- **Slowdown in previous years:** What makes India's growth story worrying is that the slowdown began much before the COVID19 pandemic. It began in 2016, after which, for four consecutive years, the growth rate each year was lower than in the previous year. Growth in 2016-17 was 8.3%. After that it was, respectively, 6.9%, 6.6%, 4.8%, and minus 6.6%.
- **Status of unemployment:** India's unemployment rate is high. In October, it stood at 7.8%. However, what is really worrying is youth unemployment. According to International Labour Organization (ILO) data, collated and presented by the World Bank, India's youth unemployment, that is, from among people aged 15 to 24 years who are looking for work, the percent that does not find any, stands at 28.3%.

Other perspectives on Indian economy

- **The latest GDP numbers suggest:** For Q1 FY2022-23 suggest that economic growth is on a healthy track. Consumers, after a long lull, have started to step out confidently and spend private consumption spending went up 25.9% in Q1.
- **On the production side:** the contact-intensive services sector also witnessed a strong rebound of 17.7%, thanks to improving consumer confidence.
- **Healthy agriculture sector:** The only sector that consistently performed well throughout the pandemic, remained buoyant.
- **Industrial growth:** Industrial growth boosted from accelerating growth in construction and electricity, gas, water supply and other utility services sectors.
- **Manufacturing is not doing well:** A sector that has not yet taken off sustainably is manufacturing, which witnessed modest growth of 4.5% in Q1.

Higher input costs, supply disruptions, and labor shortages due to reverse migration have weighed on the sector's growth. According to the Reserve Bank of India's (RBI's) data on nonfinancial firms, surging raw material costs have stressed the profitability and margins of companies.

What are the Challenges for the growth of economy?

- **High inflation:** The biggest worry is that of high inflation (which has persisted for way too long) and all the challenges that come along with it. Inflationary environments increase the costs of doing business, impact profitability and margins, and reduce purchasing power. In short, inflation thwarts both supply and demand. Central banks' monetary policy actions, in response to rising inflation, can impede credit growth and economic activity, thereby intensifying the probability of a recession in a few advanced nations.
- **Rising current account deficit:** The other challenge is the rising current-account deficit and currency depreciation against the dollar. While a rebounding domestic economy is resulting in higher imports, moderating global demand is causing exports to slow. The US dollar's unrelenting rise and global inflation are further causing India's import bills to rise.
- **Declining forex:** The RBI had to intervene to contain volatility and ensure an orderly movement of the rupee. The RBI's intervention is leading to a drawdown in foreign exchange reserves. Consequently, the import cover from reserves has reduced to nine months from a high of 19 months at the start of 2021 (although, it remains above the benchmark of three months).

The economy's growth drivers are improving

- **Exports:** Exports, the first growth driver are slowing down and are likely to moderate along with the probable global economic slowdown.
- **Government spending:** Government spending, the second driver, is already at an elevated level, thanks to the pandemic, and the government will likely focus on its prudence in utilizing limited resources. The good news is the share of capital expenses is going up even as the government is reducing revenue expenses. Multiplier effects of this spending will aid in growth in income, assets, and employment for years to come. Strong tax revenues may support further capital spending in the future.
- **Capital expenditure:** According to experts, prospects for capex investments the third growth driver by companies are brighter. Sustained demand growth may be the most-awaited cue for a sustained push for investment.
- **Consumer demand:** Consumer Demand, the fourth, and perhaps the most important, growth driver has improved significantly in recent quarters. However, spending has not grown sustainable despite improving consumer confidence. For instance, retail sales are growing but the pace is patchy, and

auto registrations have remained muted. We expect that receding pandemic fears and the upcoming festive season could give a much-needed boost to the consumer sector.

Conclusion

- Indian economy should not be looked from isolation. It is very much integrated in global economy. Pandemic, Ukraine war, US- China trade war have given a successive shock to global and Indian economy. Despite that Indian has done well than rest of the world. Our focus should be on curbing inequality, not to allow people to descend into extreme poverty and employment generation.

5. Expansion of World's Biosphere Reserves

Expanding biosphere reserves across the world will help millions of people realise a better future in harmony with nature.

Biosphere reserves

- Biosphere Reserve (BR) is an international designation by UNESCO for representative parts of natural and cultural landscapes extending over large area of terrestrial or coastal/marine ecosystems or a combination thereof.
- BRs are living examples of how human beings and nature can co-exist while respecting each others' needs.

Criteria for designation of BR

- The site must contain an effectively protected and minimally disturbed core area of value of nature conservation.
- The core area should be typical of a bio-geographical unit and large enough to sustain viable populations representing all trophic levels in the ecosystem.
- The management authority to ensure the cooperation of local communities while managing and containing the conflicts.
- Areas potential for preservation of traditional tribal or rural modes of living for harmonious use of environment.

World Network of Biosphere Reserves

- The World Network of Biosphere Reserves of the MAB Programme consists of a dynamic and interactive network of sites of excellence.

- It was formed in 1971, as a backbone for biodiversity conservation, ecosystem restoration, and living in harmony with nature.
- There are now 738 properties in 134 countries.
- There are 18 biosphere reserves in India, out of which 12 are recognized internationally under the MAB programme.
- Spain is one of the lead participating WNBR countries globally, with 53 properties.
- The first biosphere reserve in South Asia was the Hurulu Biosphere Reserve, in Sri Lanka.
- Bangladesh, Bhutan, and Nepal do not have biospheres as yet.

What is the significance of World Network of Biosphere Reserves?

- It is a unique tool for cooperation through sharing knowledge, exchanging experiences, building capacity and promoting best practices.
- Support of members is of great importance because the ecological carrying capacity of the planet earth has been exceeded.
- The best concept for 'Living in Harmony with Nature' that exists in the United Nations system, is the WNBR.
- **Concerns** - The long-term threats includes biodiversity loss, climate change, pollution and population dynamics, accelerated by the blind belief in technological solutions for all problems.

6. The US Federal Reserve's Interest Rate Hike

The US Federal Reserve announced its fourth consecutive 75 basis point interest rate hike and signaled a potential change in how it will approach monetary policy to bring down inflation.

Key features of the Fed's move

- The Federal Reserve raised its short-term borrowing rate by 0.75 percentage point to a target range of **3.75%-4%**, the highest level since January 2008.
- The move continued the most aggressive pace of monetary policy tightening since the early 1980s.
- The new statement hinted at that policy change that the Fed will take into account the cumulative tightening of monetary policy in determining future hikes.
- The US central bank has said supply-demand imbalances are causing inflation.

- However, it only has the tools to control the demand side – which it is using to **bring inflation** in line with its mandate of 2%.

What does the higher rate mean for borrowers and savers?

For borrowers

- **Higher mortgage rates** - Along with the central bank's vow to stay tough on inflation, the average interest rate on the 30-year fixed-rate mortgage is hitting higher.
- **Rise in credit card rates** - Anyone who carries a balance on their credit card will have to shell out more to cover the interest charges.
- **Expensive auto loans** - The payments are getting bigger because the price for all cars is rising along with the interest rates on new loans.

For savers

- **Savings account rates** - The interest rates on savings accounts are finally higher after several consecutive rate hikes.

What effect will the Fed hike have on India?

- **Impact on RBI** - The RBI had highlighted that the Fed was the third shock after covid-19 and the war in Ukraine.
- Though RBI considers domestic factors, especially retail inflation, while reviewing the interest rates, Fed is an important part of its policy formulations.
- High imported inflation has added to the retail inflation in India, and RBI has already raised the repo rate by 190 bps over the last 6 months.
- **Impact on Indian markets** - Fed's continuous rate hikes does not augur well for emerging markets including India.
- An increase in US interest rates results in an outflow of funds to US markets, putting their stock markets and currencies under pressure.
- Equity markets are likely to see increased volatility in the next few months.
- The Indian rupee dipped against the US dollar after the Fed's outcome.

7. A call to ban use of fossil fuels

- The President of Vanuatu, a small Pacific Island, wanted the General Assembly to adopt a universal Non-Proliferation Treaty to ban the use of fossil fuels across the world.

Why such extreme call on fossil fuel ban?

- **Unlikely discussion on climate change:** There is a strong belief in some quarters that the next climate conference, just days away in Sharm El Sheikh in Egypt this year (COP27) may not discuss climate change mitigation largely on account of the ongoing energy stress in Europe.
- **Ukraine conflict and rising energy demand:** It is felt that the Russia Ukraine crisis and resulting global energy supply shortages have dented everyone's ability to reduce emissions. This may be a legitimate view but the discussion on coal in the United Nations General Assembly, in September, points to an opposite possibility.

Why this demand is significant?

- **Vanuatu represents the strong voice of island nations:** Usually, such a call by a nation whose contribution to the global energy supplies and emissions is negligible would have gone unnoticed. But Vanuatu represents a strong and vocal group of small islands developing states whose voice is heard with attention and empathy in the UN.
- **Endorsement from various stakeholders:** More so, when it is a matter that will affect the global discourse on climate change. The small island group has gone around seeking endorsements from various quarters governments, the corporate world and civil society.
- **Support from Indian quarters:** Interestingly, the Mayor of Kolkata, capital of one of the largest coal producing States in India, has lent his voice of support.

Similar demand of ban on coal use

- **Demand of coal ban on Glasgow conference:** Vanuatu's plea comes in the wake of a similar call for phaseout of coal which was made last year at the Glasgow climate conference.
- **From phaseout to phasedown:** After strong protest by the Indian interlocutors, the language of the decision at Glasgow was toned down from phaseout to phase down of unabated coal power and inefficient fuel subsidies.
- **Unfair for developing countries:** When India argued that a phaseout was unfair to countries that were heavily dependent on coal power in the medium term, there was consternation among climate enthusiasts. Given this background, the Alliance of Small Island States (AOSIS) may be preparing the ground to make the fossil fuel elimination a part of national climate plans at COP 27.

What will be the implications of fossil fuel ban?

- **No responsibility of polluting countries under UN charter:** a call to end fossil fuels through a mandate in the UN has very different implications than when it is presented under the UN Climate Change Convention. A UN mandate of this nature is divorced from the legal responsibility of the polluting countries to reduce their emissions on the basis of responsibility, capability and national circumstances, as required by the Climate Change Convention.
- **No commitment technological and financial innovations:** It also makes no provisions for technological and financial innovations that are necessary to ensure the transition.
- **Attempt of securitization of climate:** A few months ago, a similar attempt had been made in the UN to treat the matter of climate change as that of global security and request the UN Security Council to resolve it. This was dropped because of the opposition of most of the global south, which saw in this an attempt to address climate change not through international cooperation and consensus but by imposing the wish of a select few on others.

What should be the way forward?

- **Without sacrificing the developing economy:** A plan to drastically reduce coal fired power would in fact do very little to arrest the problem of climate change globally but may create insurmountable difficulties in securing the progress of developing economies towards key sustainable development goals.
- **Just and equitable transition:** If the transition to a world of lower emissions has to be sustainable, it must also be just and equitable.
- **Equal access to alternative energy:** It must ensure equal access to energy and secure energy supplies to all, not just to a few. While the developed economies have full access to alternative sources of energy, because of their strength in terms of technology and resources, the developing nations are handicapped. Therefore, a just transition needs to be built on the promise that green energy and a green future will be available to all.
- **Promoting the philosophy LiFE:** It is in this context that the call for Lifestyle for Environment (LiFE) issued by Prime Minister Narendra Modi and the UN Secretary General, jointly in India recently, assumes importance. Consumers in countries that consume at an unsustainable pace and contribute to rising emissions have a much greater responsibility to clean up the planet and support the growth of green energy.
- **Most vulnerable should be attended first:** The world today is suffering from the adverse effects of climate change which have devastated homes and the

livelihoods of large populations in various parts of the vulnerable world. Addressing these impacts and preparing the world for an uncertain future should be the priority.

Conclusion

- It is high time that building climate resilient infrastructure in the developing and growing countries is given as much importance as phasing down coal and investment in energy innovations and alternative technologies.

8. Make-II Route of Defence Procurement

The Army has approved sanction orders for the development of niche technology by the Indian industry under the Make-II route of defence procurement.

Make-Category Projects

- The provision of 'Make' category of capital acquisition in Defence Procurement Procedure (DPP) is a vital pillar for realising the vision behind the 'Make in India' initiative.
- It aims to foster indigenous capabilities through design & development of required defence equipment/product/systems or upgrades/ sub-systems/components /parts by both public and private sector in a faster time frame.

'Make' Procedure has following two sub-categories:

1. **Make-I (Government Funded):** Projects under 'Make-I' sub-category will involve Government funding of 90%, released in a phased manner and based on the progress of the scheme, as per terms agreed between MoD and the vendor.
2. **Make-II (Industry Funded):** Projects under 'Make-II' category will involve prototype development of equipment/ system/ platform or their upgrades or their sub-systems/ sub-assembly/assemblies/ components. They aim primarily for import substitution/innovative solutions, for which no Government funding will be provided for prototype development purposes.

9. Role of Geography and Weather in Delhi's Air Pollution

As the Air Quality Index (AQI) in Nation Capital Region dipped to the 'severe' category, Stage 4 of the Graded Action Plan (GRAP) has kicked in.

What exactly is the cause for Delhi's air pollution?

- Air pollution in Delhi, and the whole of the Indo Gangetic plains, is a complex phenomenon that is dependent on a variety of factors.
- **Dust** - Road dust along with construction and demolition dust is the most prominent polluter of air.
- **Vehicles** - Vehicles are the second largest polluter, with 20 % of PM 2.5 load and approximately 9 % of PM 10.
- **Thermal plants** - The coal thermal plants in the immediate 300-km periphery of Delhi and industrial point sources also contribute to the pollution.
- **Open burning** - Open burning of waste by neighbourhoods and municipalities, stubble burning, Diwali crackers, etc. adds to this issue.
- **Geography** - The geographical nature of the region makes Delhi a pollution trap with weather and wind speed playing a key role.

Role of weather in Delhi's air pollution

- **Wind direction** - During the southwest monsoon, the prevalent direction of the wind is easterly.
- The winds travel from over the Bay of Bengal, carrying moisture and rainfall to this part of the country.
- Once the monsoon withdraws, however, the predominant direction of the winds changes to north-westerly.
- These winds carry particulate matter (essentially smoke and soot) from crop-burning in Punjab to the area above Delhi, and then onward down the Gangetic basin.
- **Fall in air temperature** - As it gets cooler, the inversion height (the layer beyond which pollutants cannot disperse into the upper atmosphere) comes down.
- When that happens, larger concentrations of pollutants in the air hang closer to the surface, and lead to worsening AQIs.
- In summer, the ventilation is very strong and the land is so hot that pollutants rise high and dissipate.
- But in October-November, the pollutants are like a lid sitting above the entire Indo-Gangetic basin, perhaps at a height of 1 km.

What about the geography of Delhi?

- Geography plays a major role not just in Delhi, but also in the Indo-Gangetic basin that extends from Haryana in the west to the middle of Bihar in the east.
- This area is like a long valley surrounded by higher structures (Malwa and Deccan plateaus, Aravalli Mountains, the Himalayas).

- This topography makes the Indo-Gangetic plain similar to California, which is peculiarly susceptible to pollution.

10. Pollution raises risk of childhood stunting, leading to lifelong impact

Recently, a study paper on impact of air pollution on child growth in India was released.

Key highlights of the study

- Children in **high-pollution** areas of **India** are more likely to be **stunted or severely stunted**, according to a study that examines how dirty air affects child development for the first time.
- When the children were exposed to significantly higher levels of **PM2.5** particles than the national average, they were nearly **5 and 2.4 percentage** points more likely to suffer from stunting or severe stunting, respectively.
- Researchers have discovered a previously unknown socioeconomic burden caused by growth stunting.
 - **Short term problem** of stunting:
 - Weakened immune system,
 - Lower cognitive development,
 - Poorer educational performance,
 - Higher mortality rate.
 - **Long term problem:**
 - Stunted children are more likely to have short stature as adults,
 - Lower cognitive skills and work capacity,
 - A higher risk of obesity and chronic illness,
 - Lower income and wealth,

Suggestions by the researchers:

- Lowering of average pollution levels in India to **WHO recommended** levels is required, i.e., an eightfold reduction from current levels.
 - This would reduce the proportions of **stunted and severely stunted** children by **10.4 and 5.17 percentage points**.
 - This would be equivalent to roughly **14.3 million fewer India's** stunted children.
 - Poor reproductive outcomes.

Indian's exposure to the PM 2.5:

- **Health Effects Institute (HEI)**, a US-based environmental research organization, discovered that **in 2019**, Indians had an average PM2.5 exposure of 82 micrograms per cubic meter of air (ug/m³).
 - However, this figure varies greatly depending on where one lives in India.
- According to same study, people in Delhi were exposed to an average of **118ug/m³ of PM2.5 levels**.

Health risk of PM2.5 exposure:

- **PM2.5 particles** are easily inhaled and absorbed by the lungs into the bloodstream.
 - Leading to a host of ill effects that manifest in cardiovascular illnesses, leading to a higher mortality and disease burden.

What is PM2.5?

- **Particulate Matter (PM)** is a suspended mixture of solid and liquid particles in the air.
 - These are classified as coarse, fine, and ultrafine.
- **Coarse particles** have a diameter of **2.5 to 10 micrometers** (about 25 to 100 times thinner than a human hair), are relatively heavier, and thus settle.
 - Examples include dust, spores, and pollen.
- **PM2.5 particles** have a diameter of less than 2.5 micrometers (more than 100 times thinner than a human hair) and are suspended for a longer period of time.

How it is formed?

- These particles are formed as a result of **fuel combustion and chemical reactions in the atmosphere**.
- Natural processes such as forest fires also contribute to the presence of **PM2.5** in the atmosphere.
 - These particles are also the primary cause of smog formation.

11. What is northeast monsoon that is causing heavy rains in Tamil Nadu?

Chennai and its suburbs received record rainfall as the Northeast monsoon deposits heavy showers in the region.

What is northeast monsoon?

- **India** is situated in a unique geographic arrangement, where on one side it is guarded by **the Himalayas** and on the other, vast oceans.

- This creates a **unique pattern of rain** throughout the country.
- The Indian subcontinent receives most of its rainfall **during the summer** months through the **southwest monsoon** between **June to September**.
 - As **the southwest monsoon retreats**, the coastal region of India receives rain due to the **northeast monsoon** between **October and November**.
- While **the winter monsoon** is less powerful than the summer monsoon, the rains are caused by winds that begin their journey in the air above **Mongolia** and **northwestern China**.
- In 2022, **northeast monsoon** began with the arrival of **northeasterly winds** in the **lower troposphere** over the **Bay of Bengal** and **South Peninsular India**.
 - Since these **winds blow from sea to land**, they are also accompanied by depressions and cyclones and create a low-pressure system.
- The **monsoons in southern India** are weak because **the Himalayas** prevent wind and moisture from reaching **southern states**
 - They also prevent cool air from reaching southern states and even **Sri Lanka**.
 - As a result, the winter monsoons are associated with droughts.

12. CRISPR gene-editing possible in temperature-sensitive organisms, plants & crop varieties

Indian scientists have demonstrated for the first time that the associated Cas9 enzyme can bind to and cut the target DNA at very low temperatures.

Highlights of the research

- It has shown the highly efficient functioning of Cas9 at temperatures as low as 4°C, making it **possible to edit genes in temperature-sensitive** organisms, plants, or crop varieties.
- It provides opportunities to edit genomes of the less explored organisms called cryophiles with an optimal growth temperature of 15°C.
- The results on Cas9-DNA binding and release mechanics will provide valuable insights for **developing temperature-dependent applications** of the CRISPR-Cas9 technology.

CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats)

- It is a new genome-editing tool invented in 2009.
- It is **simpler, faster, cheaper, and more accurate** than older genome editing methods.
- It has opened up various possibilities in plant breeding.

- Using this tool, agricultural scientists can now **edit the genome to insert specific traits in the gene sequence.**
- They are **short DNA sequences found in the genome of prokaryotic organisms** such as bacteria, which are reminders of previous bacteriophage (viruses) attacks that the bacteria successfully defended against.
- **Cas9 enzyme** (part of bacteria's defence mechanism) uses these flags to precisely target and cut any foreign DNA, thus protecting the bacteria from future attacks by similar bacteriophages.
- It is based on a **simplified version of the bacterial CRISPR-Cas9 antiviral defense system.**
- By delivering the Cas9 nuclease complexed with a **synthetic guide RNA (gRNA) into a cell, the cell's genome can be cut at the desired location,** allowing existing genes to be removed and/or new ones added in vivo.

13. **Carbon Billionaires - Oxfam Report**

An Oxfam report titled "Carbon Billionaires: The investment emissions of the world's richest people" was released recently.

What is this report about?

- This report is an analysis of the investments of 125 richest billionaires of the world, and this analysis was conducted by Oxfam International.
- This report is based on the fact that every human on Earth has a carbon footprint, which can be divided into
 1. Personal consumption emissions,
 2. Emissions through government spending and
 3. Emissions linked to investments.

How was the research conducted?

- Oxfam listed the 220 richest people in the world, based on Bloomberg Billionaire List (August 2022).
- It then identified the ownership of these billionaires in corporations and their emissions:
 1. Scope 1 emissions - A direct result of the company's operations.
 2. Scope 2 emissions - They constitute indirect emissions, for example, energy to operate machines.
 3. Scope 3 emissions - These are other indirect emissions such as those resulting from a company's supply chains.
- To focus on investments and sectors where billionaires have a massive influence, their final research database involved 183 corporates, with investments by 125 billionaires worth \$2.4 trillion.

- They utilised the **Greenhouse Gas Protocol**, which “provides the world’s most widely used GHG accounting standards”, to calculate the carbon footprint of these companies.

What does the Oxfam report say?

- This report has said that the world’s richest people emit “unsustainable amounts of carbon,” as compared with an ordinary person.
- On average, billionaires are responsible for emitting “3 million tonnes” of carbon a year, which is more than a million times the average for someone in the bottom 90% of humanity.
- The 125 billionaires taken as a sample fund about 393 million tonnes of CO₂e (carbon dioxide equivalent) per year.
- This is equivalent to the “annual carbon emissions of France”.
- In comparison, it would take
 1. 8 million cows to emit the same levels of CO₂e as each of the 125 billionaires and
 2. Almost four million people to go vegan to offset the emissions of each of the billionaires.

What are billionaires’ ‘personal consumption emissions’?

- In 2018, emissions from the private yachts, planes, helicopters and mansions of 20 billionaires generated, on average, about 8,194 tonnes of carbon dioxide (CO₂e).
- As evident in the billionaire space race, a single space flight can emit as much carbon dioxide as a normal person will in their lifetime.
- In 2021, research conducted by Oxfam and the Stockholm Environment Institute revealed:
 1. The richest 1% (around 63 million people) alone were responsible for 15% of cumulative emissions, and
 2. The richest 1% were emitting 35 times the level of CO₂e compatible with the 1.5°C by 2030 goal of the Paris Agreement.

What can be done to curb their carbon footprint?

- The report says that the corporations are failing to cut emissions and avert climate change.
- But the 2022 report points out the flaws in the 2050 climate change plans of ‘net-zero’ total carbon emissions, they are heavily relying on using land in low-income countries to plant trees.

- In 2021, Oxfam revealed that using land alone to remove the world's carbon emissions to achieve 'net zero' by 2050 would require 1.6 billion hectares of new forests, an area equivalent to 5 times the size of India.
- The 2022 report states that it is the governments' responsibility to create climate policies that work towards green transition, mainly, by regulating the corporate investments in highly polluting industries.
- They should aim to set strong and binding science-based GHG reduction targets and demand greater transparency.
- The Governments should include workers' rights, protection of their livelihoods and that of marginalised communities who are adversely affected by climate change in policy decisions.
- The report suggests that a wealth tax on the richest could
 1. Aid the urgent climate finance needs of developing countries and
 2. Raise hundreds of billions of dollars to help and protect those already suffering the impacts of catastrophic climate change.

14. Imposing Ex-ante Rules on Digital Platforms

Recently, the European Union adopted the Digital Markets Act (DMA), which seeks to impose ex-ante structural limitations on the practices of large technology platforms.

What is ex-ante regulation?

- The Latin word "ex-ante," means "before the event".
- Ex-ante regulations aim at identifying issues in the market beforehand and shape stakeholder behaviour and responses through regulatory intervention.
- Ex ante regimes tell business precisely how to behave, or what to do.
- In Ex ante, the regulator predict such events beforehand and therefore prone to any bias harboured by the regulators.
- Traditionally, ex-ante regulation has been deployed in utility markets, such as electricity distribution.
- Ex-ante obligations in utilities aims for non-discriminatory treatment, interconnection and price regulation.

Ex post actions

- The regulatory action that takes place once a market failure or distortion arises is ex post.

- Ex post actions always take place on information available.
- Conventional tools of anti-trust operates at ex-post level.

Digital Markets Act of EU

- The Digital Markets Act aims to ensure that these platforms behave in a fair way online.
- Together with the Digital Services Act, the Digital Markets Act is one of the centrepieces of the European digital strategy.
- Under the DMA, the European Commission will designate certain providers of core platform services as "gatekeepers" that fulfil a number of criteria.
- After the specific gatekeepers are designated, they will have 6 months to comply with the DMA obligations.

What is the issue with ex ante regulations on digital services?

- A poorly designed and executed ex ante regulation is proven to
 - stifle the innovation outputs in an economy
 - reduce its ability to catch up with its global competitors

Problems with ex ante regulations on digital services

- **Digital services as utility** - Treating the content and application layer of the internet as a utility (as opposed to the infrastructure layer) is an inappropriate comparison.
- **Lack of evidence** - The imposition of ex-ante regulations without any evidence of anti-competitive effects represents a return to a structure-based antitrust approach.
- Solely depending on this form can be counterproductive to innovation and consumer welfare.
- **Effect on regulators** - Ex-ante frameworks tend to confine regulators and reduce their regulatory agility.
- **One-size-fits-all approach** - Operational models for technology platforms vary significantly and the risks associated with such models also differ.
- A one-size-fits-all approach may benefit certain players at the cost of others.

What about the ante regulations in India?

- The Competition Commission of India (CCI) is studying the relevance and feasibility of introducing ex-ante regulations to deal with digital markets in the Indian context.
- Standing Committee on Finance headed by Jayant Sinha has already identified anti-competitive practices by big tech and is likely to recommend an ex-ante framework for digital markets.

What lies ahead?

- There is a need to ensure that the markets serve consumers with the best products and prices and meet evolving demand.
- Focusing instead on protecting competitors can prove counterproductive in the long run, insulating Indian consumers from innovation, competition, and consumer choice.
- Rushing into “plug-and-play” solutions from other jurisdictions could prove detrimental to India’s own ambition of creating an inclusive, efficient and robust digital economy.

15. Content Moderation through Co-regulation

This article talks about good ‘content moderation’ practices, and talks specifically about how content can be moderated through Co-regulation.

Online ecosystem today

- Until the government introduced the Information Technology (IT) Rules 2021, it was voluntary for platforms to establish a grievance redressal mechanism through their terms of service.
- But, the IT Rules 2021 mandate platforms to establish a grievance redressal mechanism to resolve user complaints within fixed timelines.
- Recently, the government amended the IT Rules 2021 and established Grievance Appellate Committees (GACs).
- Comprising government appointees, GACs will now sit in appeals over the platforms’ grievance redressal decisions.
- This signifies the government’s tightening control of online speech, much like Section 69A of the IT Act 2000.
- However, the existing government control on online speech is unsustainable.
- With increased stakes in free speech and with increasing online risks, a modern intermediary law must re-imagine the role of governments.

How should a modern intermediary law be?

- Under such a law, government orders to remove content
 1. Must be necessary and proportionate, and
 2. Must comply with due process.
- The European Union (EU) Digital Services Act (DSA) is a good reference point. It regulates intermediary liability in the EU.
 1. The DSA requires government take-down orders to be proportionate and reasoned.

2. The DSA also gives intermediaries an opportunity to challenge the government's decision to block content.
- An intermediary law must devolve crucial social media **content moderation decisions at the platform level**.
 - Platforms must have the responsibility to regulate content under broad government guidelines.
 - Instituting such a co-regulatory framework will serve three functions.

What functions will the co-regulatory framework serve?

- Co-regulation will give the platforms the flexibility to define the evolving standards of harmful content.
- With co-regulation, platforms will **retain reasonable autonomy** over their terms of service.
- Co-regulation will promote free speech online because government oversight incentivises platforms to engage in private censorship.
- **Co-regulation aligns government and platform interests.**
- Online platforms themselves seek to promote platform speech and security so that their users have a free and safe experience.
- Incentivising platforms to act as Good Samaritans will build healthy online environments.
- Instituting co-regulatory mechanisms **allows the state to outsource content regulation to platforms**, which are better equipped to tackle modern content moderation challenges.
- While maintaining platform autonomy, the co-regulation also makes platforms accountable for their content moderation decisions.
- Whenever platforms remove content, or redress user grievance, their decisions must follow due process and be proportionate.
- But, when the use tools for de-prioritisation of content to reduce the visibility of such content, mostly the users are unaware of it.
- So the users are unable to challenge such actions as they take place through platform algorithms that are often confidential.
- **Platform accountability can be increased through algorithmic transparency.**

16. Issues over Greenwashing

In the first official acknowledgment of greenwashing, UN Secretary General Antonio Guterres warned private corporations to abstain from such practices and mend their ways within a year.

Greenwashing

- Greenwashing refers to a range of activities that companies or even countries indulge in to present misleading or dubious claims about their climate action.
- Also known as "**green sheen**," greenwashing is an attempt to capitalize on the growing demand for environmentally sound products.
- Greenwashing help in boosting the image of the entity and help them garner benefits for things they do nothing against climate change.

How prevalent is greenwashing?

- Greenwashing in the context of net-zero targets is being pursued by many corporations and sub-national governments.
- **Governments** - Developed countries are often accused of greenwashing their normal business investments in developing countries.
- They also greenwash their bilateral aid by highlighting climate co-benefits of the financial flows.
- **Companies** - The Volkswagen scandal, in which the German car company was found to have been cheating in emissions testing of its supposedly green diesel vehicles, was a case of greenwashing.
- Several other multinational corporations, including oil giants like Shell and BP, and Coca Cola have faced accusations of greenwashing.

What are the challenges in preventing greenwashing?

- **Monitoring** - It is practically impossible to monitor and verify all the processes and products that can potentially cut emissions.
- **Regulation** - There is lack of regulation and standardisation in most of these spaces.
- **Methodologies** - The processes, methodologies and institutions to measure, report, create standards, verify claims and grant certifications are still being set up.

What is the issue with carbon trade?

- In addition to greenwashing, the trade in carbon credits has become a major issue.
- **Carbon market** - Countries or firms that reduce emissions beyond their mandate are granted carbon credits, which can then be bought for money by entities that need it to achieve their targets.
- There was a carbon market under the **Kyoto Protocol**, and a new one is being created under the **Paris Agreement** as well.

- Informal carbon markets also exist.
- Any activity that has the potential to reduce or avoid emissions can earn credits and are often certified by unofficial third party companies and sold to others.

Issues with carbon trade

- **Transactions** - The carbon markets have been flagged for lack of integrity and double counting.
- Many developed countries question the integrity of the credits, claiming that they did not accurately represent reductions in emissions.
- **Carbon offsets from forests** - Carbon offsets from forests are one of the most controversial.

What lies ahead?

- An expert group formed by the UN Secretary General in 2021 to suggest remedial actions on greenwashing has recommended that corporations pursuing net zero targets
 - Must not be allowed to make fresh investments in fossil fuels
 - Must be asked to present short-term emission reduction goals on the path to achieving net zero
 - Must bring an end to all activities that lead to deforestation
 - Must not use offset mechanisms at the start of their journey to net-zero status
- It has also recommended the creation of regulatory structures and standards as soon as possible.
- To ensure a level playing field, non-state actors need to move from voluntary initiatives to regulated requirements for net-zero.

17. Tackling the Urban Pollution

- More than 1,10,000 infants are likely to have been killed by air pollution in India in 2019, almost immediately after being born while long-term exposure to outdoor and household air pollution was estimated to be responsible for about 1.67 million annual deaths amongst the adult population in the country.
- Pollution is the introduction of harmful materials into the environment. These harmful materials are called pollutants. Pollutants can be natural, such as volcanic ash. They can also be created by human activity, such as trash or runoff produced by factories. Pollutants damage the quality of air, water, and land.

Menace of air pollution in urban areas

- **Demands for air purifiers:** Demand for air purifiers has boomed. Recently, in Delhi, pollution-related curbs were lifted and schools opened, despite air quality continuing to be in the “very poor” category.
- **Health related problems:** For the majority of urban north Indians who can't afford air purifiers, life continues amidst dust, cough and breathlessness.
- **Children are most affected:** Our children in urban localities are growing up with stunted lungs, amidst poverty.
- **High percentage of respiratory problems:** Eighty per cent of all families in Delhi are noted to be suffering respiratory ailments due to severe pollution.

How we can reduce the air pollution?

- **Expand green cover across urban areas to reduce dust pollution:** Ahmedabad's municipal corporation, for instance, has experimented with urban forests, with the city's 43rd urban forest inaugurated in June 2021 over 20,000 trees have been in 7,625 sq. metres. Chandigarh has about 1,800 parks. Close to 46 per cent of the city was classified as a green area in 2019.
- **Use of Miyawaki technique:** Civil society could also help in Chennai, the NGO Thuvakkam, with a volunteer force of 1,800, has been able to grow 25 Miyawaki forests, raising over 65,000 trees. Such plantations are now being replicated in other cities including Tuticorin, Vellore and Kanchipuram.
- **Push for airshed management:** With a focus on understanding meteorological, seasonal and geographic patterns for air quality across a large region. In the US, the passage of the Air Quality Act (1967) saw the state of California being divided into 35 districts which had similar geographic and meteorological conditions and pollution was regulated at the state level. This approach was successful in reducing emissions by 98 per cent from 2010 to 2019.
- **Heavy penalty on polluting cars:** Inspiration can also be taken from London's air pollution revolution an Ultra-Low Emission zone has been established in Central London, with hefty daily fees on cars that emit more than 75g/km of pollution.

Water pollution in Indian cities

- **Untreated water into freshwater bodies:** 72 per cent of urban sewage is untreated in India's urban freshwater bodies. The Central Pollution Control Board reckons that more than 50 per cent of 351 river stretches (on 323 rivers) are polluted. Over 4,000 septic trucks (with each truck having 5,000 litres of human waste) dispose of their waste in the Ganga every day. In Delhi, about

941 MLPD of raw sewage finds its way to the river, killing off fish and preventing rituals on the banks.

- **Riverine Pollution:** Riverine pollution causes due to raw sewage overflowing from sewage treatment plants, untreated waste from unauthorized colonies, industrial effluents, sewer water from authorized colonies and inter-state pollution.
- **Water scarcity:** More than 40 per cent of Indians are expected to face water scarcity by 2050 and close to 35 million will face annual coastal flooding with sea level rise.
- **Lack of planning:** Apathy prevails as of May 2021, only 16 Indian cities had disclosed their plans to tackle climate change to international institutions, with only eight having actual sustainability-related targets in their urban master plans. Only 43 per cent of all Indian cities surveyed actually sought to address climate change adaptation as a topic in their master plans, while only five had a GHG emission reduction target.

How to fight water pollution?

- **Improving sewage treatment plant capacity:** ensuring linkages with the drainage network. Mangalore's City Corporation (MCC) has wastewater treatment plants with end-user linkages. The MCC offered to supply treated water to such industrial end-users in the city's special economic zone if the latter agreed to fund about 70 per cent of the operations and maintenance cost of the pumps and the sewage treatment plant.
- **Developing a sanitation network:** The problem of untreated waste and sewer water from unauthorized colonies can be solved by investing in a sewerage network. Consider the example of Alandur, a small suburb of Chennai in 2000, it had no underground sewage lines, with most houses dependent on septic tanks. In the late 1990s, the local municipality in partnership with local resident welfare associations conducted collection drives to gain deposits (ranging from Rs 1,000 to Rs 1,500) for developing a sanitation network.
- **Pump house:** The project was launched with a push for creating a pump house, setting up over 5,650 manholes and providing sewerage connections to 23,700 households, a sewage treatment plant with a 12 MLD capacity was also set up. Going forward, many other municipalities in Tamil Nadu have sought to adopt this model.
- **A systems-based approach should be adopted:** along with a push for protecting "blue infra" areas places that act as natural sponges for absorbing surface runoff, allowing groundwater to be recharged. At the household level, we can encourage citizens to take up rainwater harvesting, urban roof terrace greening, urban roof water retention tanks and having a green corridor around residential buildings.

- **Water permeable roads:** Municipalities could be encouraged to make existing roads permeable with a push for green landscaping and rain gardens. At the city level and beyond, policymakers should push for “sponge cities” and incorporate disaster planning. A mindset shift, in citizenry and policymakers, is urgently needed.

Conclusion

- Urban planning and urban pollution are largely neglected in our governance model. Unplanned cities are facing the various problems. We must embrace the technology to fight the pollution in urban India.

18. COP27: WMO unveils USD 3.1 billion action plan

The World Meteorological Organization (WMO) recently released the Executive Action Plan of Early Warnings for All.

What is the action plan all about?

- The Executive Action Plan of Early Warnings for All was released by during a roundtable meeting at the 27th Conference of Parties (COP27) to the United Nations Framework Convention on Climate Change.
- It aims to develop a global early warning system for extreme weather events that have been intensified because of climate change.
- The plan proposes the initial investment of around 3.1 billion USD for delivering early warning systems for all. This investment is equal to around 50 cents (around Rs.40) for each person per annum.
- The initial investment will be diverted to four pillars of early warning system:
 1. Disaster risk knowledge
 2. Observations and forecasting
 3. Preparedness and response
 4. Communication of early warnings
- The disaster risk knowledge involves systematically collecting data and undertaking risk assessment on hazards and vulnerabilities. It requires an investment of 374 million USD.
- Developing hazard monitoring and early warning services require 1.18 billion USD.

- The pillars – observations and forecasting and preparedness and response – require a funding of 1 billion USD to strengthen national and community response capabilities.
- The final pillar of early warning system – dissemination and communication of risk information – needs 550 million USD.
- The initial investment represents only 6 per cent of the 50 billion USD requested for adaptation funding.

Importance of Early Warning Systems

Early warning systems are still not accessible to 33 per cent of the global population, especially in least developed countries and small island developing states. Over 60 per cent of the population in Africa do not have access to these systems.

Early warning systems play a major role in reducing casualty count during disasters and minimising economic damages caused by them. Just 24 hours' notice of an impending disaster event can minimise damage by 30 per cent. Providing investment of 800 million USD to set up these systems in developing countries can cut down losses by 3 billion to 16 billion USD each year.

19. Stocking up of Gold by Central Banks

According to the World Gold Council (WGC), the demand for gold has risen by 28% this year.

Trend about

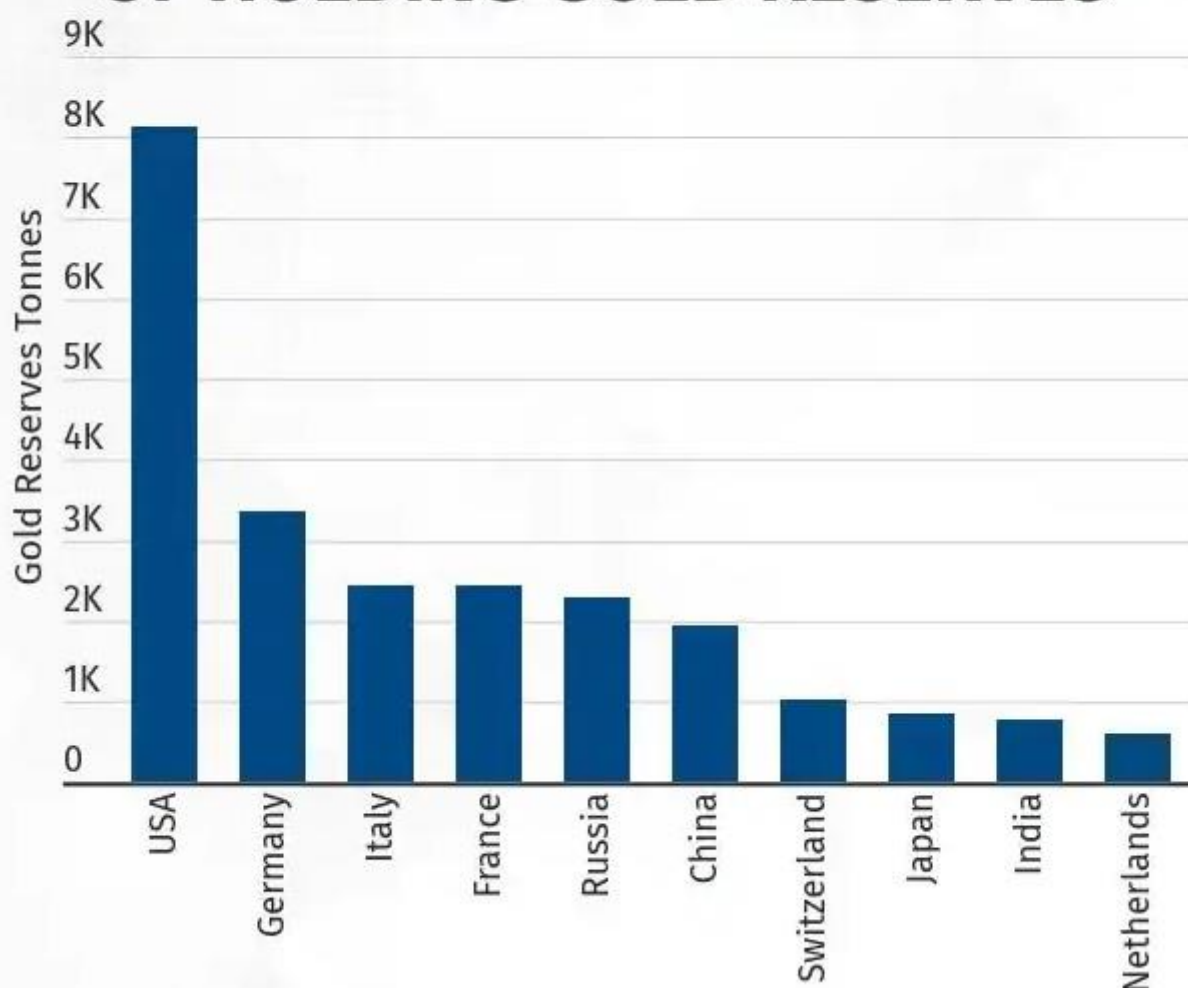
- Gold has always been a critical component of a country's reserves.
- Central banks bought 399.3 tonnes of the yellow metal compared to 90.6 tonnes in the same quarter of 2021.
- The Reserve Bank of India (RBI) was the **third largest** buyers in Q3 of 2022.

Reasons for stocking up of gold by Central Banks

- Economic uncertainty and reserves rebalancing seem to be the prominent reasons.
- **Safety factor** - Historical position was the top reason cited by central banks to buy gold.
- During a crisis, gold acts as a tool to hedge against inflation and has no risk of default.
- Gold's durability, scarcity and finite supply are some features that provide central banks with surety and trust during times of uncertainty.

- **Dollar rebalancing** - Since the dollar has rallied significantly, the weight of it in the overall reserves would have gone up.
- The dollar index has appreciated 16% in October 2022.
- Therefore, central banks might want to add gold to rebalance their reserves to their preferred strategic level.

TOP 10 CENTRAL BANKS IN TERMS OF HOLDING GOLD RESERVES



What is the case with India?

- RBI was the third largest among the known buyers in Q3 of 2022 as it added 17.5 tonnes to the reserves.
- RBI is also the largest buyer since the pandemic.
- The central bank hold gold both domestically and in other countries.
- According to the WGC, gold as a percentage of the RBI's total reserves stood at nearly 8% at September end.

- **Reasons for stockpiling gold**
 - Fluctuation in the rupee-dollar exchange rate
 - Trade deficit concerns
 - Geopolitical uncertainties
 - Diversification of assets

India owns 781 tons of gold, ranking it as the 9th largest gold-holding country in the world.

What are the other findings of the report?

- **Outlook** - Jewellery demand led by India and China also saw a surge in Q3.
- But, the average price of gold was down 3% year on year in Q3.
- **Price down** - Significant outflows from global gold ETFs (Exchange Traded Funds) have weakened the price.

20. Vande Bharat: Modern trains need modern infrastructure

- When the Prime Minister inaugurated the latest edition of the Vande Bharat train recently, India made a huge leap into the future of mass transportation. The new Vande Bharat Express trains or Vande Bharat 2.0 are expected to usher in an era of faster, safer and more comfortable rail travel for passengers.

All you need to know about Vande Bharat

- The Vande Bharat Express is a semi-high-speed, electric multiple unit train previously known as Train 18
- It is designed, built by the Integral Coach Factory (ICF) under the Make in India Initiative
- Vande Bharat running on 5 routes as of November 2022.
- The first Vande Bharat Express train was flagged off on February 15, 2019, on the New Delhi-Kanpur-Allahabad-Varanasi route.
- All the coaches are equipped with automatic doors, GPS-based audio-visual passenger information system, onboard hotspot Wi-Fi for entertainment purposes, and comfortable seats.
- Vande Bharat running on 5 routes as of November 2022.
- Indian Railways hopes to roll out another 25 Vande Bharat train sets by the end of March 2023.
- Railways plans to roll out 75 Vande Bharat trains by Independence Day next year

Vande Bharat 2.0

- The name may be the same, but this train, the third in the Vande Bharat series, is being dubbed 'Vande Bharat 2.0', because of certain upgrades it has received over its predecessors.

What are the notable upgrades and newly added features in 2.0?

- **Faster and lighter than the previous:** This train reaches a top speed of 160 km per hour in 129 seconds, around 16 seconds faster than its predecessor. This is because this train weighs around 392 tonnes, 38 tonnes lighter than the last one, and needs to run almost a km less to attain its top speed.
- **Improved on Riding Index:** It also has a better riding index (lower the better) of 3.26 at 180 km per hour, from the earlier 3.87. At a standard speed of 115 km per, its riding index is 3.26, better than 3.62 attained at the same speed by the earlier. In layman's terms, Riding index is a global benchmark to calculate how comfortable and steady the passenger is while the train is in motion.
- **Fitted with automatic anti-collision system "Kavach":** In terms of safety features, the new train comes fitted with the automatic anti-collision system Kavach, which the previous trains did not have.
- **Improved on safety features:** Coaches have disaster lights and their battery backup increased from the last one's one-hour battery backup. The exterior has eight platform-side cameras, up from four.
- **Passenger communication facility:** There is a passenger-guard communication facility in coaches, which comes with automatic voice recording feature.
- **Making it flood resilient:** The new trainset is higher, making it safe from floods up to 650 mm, up from 400 mm.
- **Better quality streaming of audio-visual information with improved network:** A centralised coach monitoring system, another new addition, through CCTV cameras, and the internal network supports data at 1 gigabyte per second, This means better quality streaming of audio-visual information.
- **Air purification system:** The internal air is filtered through photo catalytic ultra violet air purification system with UV lamp which deactivates 99 per cent of germs, the Railways claims something the earlier trainsets did not have.
- **Onboard infotainment:** It also has a wifi-enabled onboard infotainment system and the LCD display in each coach is now 32 inches, up from the 24-inch screen.

Challenges to the modern railway infrastructure

- **Tracks are not in sync with the modern age trains:** This new-age train slammed head-on into the “old-age” country on at least two occasions in its very first week. The train crashed into a herd of cows, damaging the aircraft-like nose of the driver coach car.
- **Poor fencing along the tracks:** The railways built a new-age train but forgot to construct fencing along the tracks to prevent bovine collisions.
- **Issues with the battery charging units:** Occasional Failure in the battery charging mechanism due to a fault in the charging cable as well as tripping of a circuit breaker needs to be addressed.
- **Technical glitches in the alerting software system:** Failure to alert the technical glitches in the functioning of the system creating problems and adding up to malfunctioning.

Conclusion

- A senior railway official proudly detailed the “superior” features of the Vande Bharat train, which would provide passengers with an “aircraft-like travelling experience” albeit, even quieter than an aircraft, also testified by the Prime Minister. But these superior features need superior and resilient infrastructure to achieve the target.

21. Interest-free Banking

Pakistan has announced that the government would introduce interest-free banking under the Islamic law by 2027.

Interest-free banking

- **Interest-free banking** - Interest free banking, a narrow concept within Islamic banking system, denotes a number of banking operations which **avoid interest**.
- **Islamic banking** - Islamic banking refers to banking activity that conforms to laws and values laid down by Islamic law or Sharia.
- The basis of Islamic finance is
 - Rejection of usury (levying of unreasonable high interest rates) while lending money
 - Non-engagement with immoral businesses (Speculative trading, gambling, or trading in prohibited commodities such as alcohol or pork)
- Under Islamic law, a Muslim is prohibited from paying and accepting interest on a predetermined rate.

How can an interest-free banking system work?

- **Ijarah** - In this system, a bank purchases the asset on behalf of the client and allows its usage for a fixed rental rate.
- After a mutually agreed time, the ownership of the asset is transferred to the client.
- **Murabaha** - It means a sale on mutually agreed profits.
- In this financing technique, an asset is purchased by the bank at a market price and sold to the customer at a mutually-decided marked-up cost.
- The client is allowed to repay in instalments.
- **Musharaka** - It refers to a joint investment by the bank and the client.
- The bank and the client both contribute to the funding of an investment of purchase and agree to share the profit or loss in agreed-upon proportions.

What was the Federal Shariat Court's (FSC) ruling?

- In 2022, the FSC said that Riba in all its forms was prohibited by Islam
- It asked the government to replace the conventional banking system by an interest-free one by December 31, 2027.
- The FSC gave the verdict, after the Supreme Court had referred the case back to religious court for its reconsideration in 2002, after the FSC in 1922 held Riba to be inconsistent with Islam.
- The FSC also stated that all forms of interest (in banking or private transactions) are considered Riba, which is against the teachings of Islam.

Pakistan became the first Muslim country to officially declare modern bank interest as Riba.

What about interest-free banking in India?

- Raghuram Rajan Committee in 2008 suggested the need to have interest-free banking in India, without naming Sharia banking.
- The Reserve Bank of India (RBI) in 2016 had suggested that Islamic banking could be gradually introduced through the opening of an "Islamic window" in conventional banks.
- **Need for interest-free banking** - The Sachar Committee Report, 2006 said that Muslims hold 12.2% of accounts in public sector banks and 11.3% in private sector banks.
- The non-availability of interest-free banking products results in the economically disadvantaged strata of society, not being able to access banking products and services due to reasons of faith.
- This non-availability also denies India access to substantial sources of savings from other countries in the region.

22. Self-Reliance in India's Defence Sector

DefExpo 2022 held in Gandhinagar, Gujarat drew attention on the need for India to acquire the appropriate degree of self-reliance in the defence sector.

Current issues in the Indian defence sector

The Stockholm International Peace Research Institute (SIPRI) yearbook has highlighted India as the top weapons importer during 2017-2021.

- **Russian imports** - The high dependency index on foreign suppliers (on Russia) for major military inventory items is one of the major issues.
- **Compromise on strategic autonomy** - It induces a macro national vulnerability and dilutes India's credible strategic autonomy.
- **Gaps in combat capacity** - The current gaps in combat capacity expose the gaps in the Indian ability to safeguard core national security interests.
 - The Galwan setback against China is an example.
- **Other challenges** - Other challenges faced by the Indian defence manufacturing ecosystem includes
 - The Russian invasion of Ukraine
 - The Covid disrupting the global economy and supply chains
 - Weakening rupee

Impediments in acquiring self-reliance in the defence sector

In 2021-22, defence exports from India reached 1.59 billion dollars and the government has set a target to reach 5 billion dollars in the coming years.

- **Domestic competence** - India does not have the domestic competence to fully design and manufacture any significant combat weapon/platform.
- It depends on the foreign supplier for the critical components.
- **Investment in R&D** - India has not invested enough in the national research and development (R&D) effort.
- As per data collated by the World Bank, India has been able to allocate only 0.66% of GDP (2018) towards R&D, while the world average is 2.63%.
- **Manufacturing capabilities** - Composite combat and manufacturing capabilities have not been reviewed and strengthened appropriately.

- India missed the industrial design and manufacturing bus, a national competence demonstrated by nations like South Korea and China, over the last five decades.
- **Technological advances** - India is yet to acquire a profile in the manufacture of the semiconductor chip which is the new currency of national prosperity and military power.

What lies ahead?

- There are some promising green shoots regarding the 155-mm artillery guns being designed and manufactured in the country.
- For a meaningful indigenisation and credible *aatmanirbharta* (self-reliance), a conducive ecosystem with sustained funding is the need of the hour.
- The techno-strategic landscape of semiconductor industry must be tilted to favour India.

23. E-Waste (Management) Rules, 2022

The Indian Government issued notification on E-Waste (Management) Rules, 2022, which will come to effect from next financial year.

E-Waste (Management) Rules, 2022

- The E-Waste (Management) Rules, 2022 was published by the Ministry of Environment, forest and climate change on November 2, 2022.
- The new rules will come to effect from April 1, 2023.
- They will apply to all businesses and individuals involved in manufacturing, sales, transfer, purchase, refurbishing, dismantling, recycling and processing of e-waste or electrical and electronic equipment.
- Under the new rules, the number of items that have been categorized as e-waste has been increased from 21 to 106.
- It includes all electrical devices and radiotherapy equipment, nuclear medicine equipment and accessories, Magnetic Resonance Imaging (MRI), electric toys, air conditioners, microwaves, tablets, washing machine, refrigerator, iPad and others.
- This includes electronic components, consumables, parts and spares that make the electronic products operational.
- The new rules are not applicable for waste batteries, which are covered under the Battery Waste Management Rules, 2022.
- It is also not applicable for packaging plastics, which are covered under the Plastic Waste Management Rules, 2016.

- It also does not apply for micro enterprises and radio-active wastes, which are covered under the Micro, Small and Medium Enterprises Development Act, 2006 and Atomic Energy Act, 1962 respectively.

Key features of the rules

- The rules restrict the use of hazardous substances for manufacturing electrical and electronic equipment. This comes in response to the deaths caused by exposure to radioactive materials.
- Manufacturers of electronic equipment are mandated to reduce the use of lead, mercury, cadmium and other others that can harm human health and environment.
- These materials can adversely affect brain, heart, liver, kidneys and skeletal system. It also causes harmful effects on neurological and reproductive systems.
- Under the new rules, the Central Pollution Control Board (CPCB) will conduct random sampling of electrical and electronic equipment placed in the market to monitor and verify compliance of reduced use of hazardous substances.
- Manufacturers are required to use technologies and methods that make the end product recyclable. They are also required to ensure the compatibility of components or parts developed by different manufacturers. This will minimise the generation of e-wastes.
- Imports or sales of new electrical and electronic equipment are allowed only if they comply with the government regulations. If the product does not comply with the rules, the manufacturer must withdraw all samples from the market.
- It is the responsibility of the manufacturer to collect e-wastes generated during the manufacturing process and ensure that they are recycled or disposed as per the rules.

24. India to host “No Money for Terror” Conference

The 3rd Ministerial “No Money for Terror” Conference will set to be held on November 18 and 19 this year in New Delhi, India.

NMFT conference

- The Ministerial No Money for Terror (NMFT) Conference aims to create platform for international discussions on countering terror financing.
- The conference includes discussions on technical, legal, regulatory and cooperative aspects of the terrorism financing.

- It aims to set pace for other high-level official and political discussions focusing on terror finance.
- The inaugural edition of this conference was held in Paris, France, in 2018. The second edition of the NMFT took place in Melbourne, Australia, in 2019.
- The third edition was set to take place in India in 2020 but was postponed because of COVID-19 pandemic that caused the global-level restrictions on travel.

3rd Ministerial 'No Money for Terror' Conference

- The third edition will be organized by the Ministry of Home Affairs.
- The event will witness participation from over 75 countries.
- This is the second major conference hosted by India this year.
- It earlier hosted the meeting of the United Nations Security Council's Counter-Terrorism Committee (CTC). This is the first time that the UNSC CTC met in India and only seventh time that it was held outside New York.

What are the focus areas of the 3rd NMFT conference?

- Discussions at the 3rd NMFT conference will focus on global trends of terrorism and terrorist financing, emerging technologies' role in terrorism financing and importance of global cooperation to address related challenges.
- The meeting will seek global cooperation in addressing the challenges in countering terror funding obtained via formal and informal channels.
- It will focus on the role of cryptocurrency in funding terrorist activities. It will deliberate on the concerns related the decentralized nature and the lack of regulation of cryptocurrencies.
- The focus will also be given to dark web's role in promoting transfer or crowdsourcing of funds for terrorism.
- It also aims to strengthen the role of Financial Action Task Force (FATF) in setting global standards that can create an effective mechanism to combat terror funding.

25. Countering Chinese monopoly in Electric vehicle market

- The start of COP27 in Egypt has renewed the world's focus on climate change. Electric vehicles (EVs) are key in the global quest to decarbonizing. In India, which also faces serious air pollution issues, the transition to EVs is critical. However, there is a China-size risk in the supply chain for electric vehicles. The recent saber-rattling across the Taiwan Straits ought to be a warning for the world. Given India's troubled relationship with China, the risk may be even more acute.

What are Electrical vehicles (EV's)?

- Electric vehicles (EV) are a part of the new normal as the global transportation sector undergoes a paradigm shift, with a clear preference towards cleaner and greener vehicles.
- The electric vehicle is a vehicle that runs on electricity alone. Such a vehicle does not contain an internal combustion engine like the other conventional vehicles. Instead, it employs an electric motor to run the wheels.

The global status of EVs production and supply chain.

- **50% of global EV's production comes from China:** EVs themselves, China has a share of around 50 per cent in global production.
- **25% from Europe:** Europe is a distant and stands at second position with 25 per cent.
- **10% from US:** Surprisingly, the US is a small player in the EV supply chain, producing only 10 per cent of vehicles and containing just 7 per cent of battery production capacity.
- **India's position is still not noteworthy:** India does not feature as a player of note.

What makes China a dominant player in EVs supply chain?

- **Every part of EV concentrated in China:** According to a recent report by the International Energy Association, every part of the EV supply chain is highly concentrated, mostly in China.
- **High global mining output of Key minerals, specifically graphite:** The first stage of the supply chain is the key minerals required for batteries, namely lithium, nickel, cobalt and graphite, In graphite, China has an 80 per cent share of global mining output.
- **Chinese control over Politically unstable DRC' Mines of cobalt:** In Cobalt, the politically highly unstable Democratic Republic of Congo mines two-thirds of the global supply and Chinese companies control a big share of that country's mining.
- **China dominates the processing of ore/minerals:** Globally, over 60 per cent of lithium processing, over 70 per cent of cobalt processing, 80 per cent of graphite processing and about 40 per cent of nickel processing takes place in China.
- **China's heavy production of cell components:** Other than Japan and south korea, China produces two-thirds of global anodes and three-fourths of cathodes.
- **Same case with the battery cells:** China has a 70 per cent share in the production of battery cells.

The status of Governmental spending's of energy transition

- **China the biggest spender on energy transition:** According to a report by Bloomberg's New Energy Fund (NEF), in 2021, out of a total global spend of \$750 billion in climate-related investments (90 per cent of which went into renewable energy and electric transport), China alone spent \$266 billion.
- **US stands at second:** The US was a distant second with \$114 billion. The major countries of Europe combined would equal the US. In Europe, about 75-80 per cent of the spending is on EVs, which is why it leads the US in this sector.
- **India holds 7th rank but needs a focused approach:** India was in 7th place not a bad rank to occupy with \$14 billion invested. However, almost 40 per cent of Chinese and US spending was on EVs, while more than 95 per cent of India's spending is on renewable energy. In India, despite intent, EVs have not received sufficient investment.

What Strategy India can follow?

- **Accelerating the mechanism of acquiring overseas mines of critical minerals:** A recently formed government venture, KABIL, which is a JV between three minerals and metals PSUs, is tasked with the job of identifying and acquiring overseas mines
- **Liberalizing the domestic exploration policies:** An alternate option is to liberalize exploration policies domestically, benchmark them with global best practices and invite global investors to find and mine in India.
- **Stitching up the supply alliances:** It is important to stitch up supply alliances with countries ex-China, as has been done with Australia. At higher ends of the value chain, from battery cells onwards, there is a need to invest much more in R&D.
- **Making vibrant start up ecosystem and public private partnership:** A public-private partnership is vital. The vibrant startup ecosystem must be leveraged because it is more likely to be innovative than legacy firms.

Conclusion

- The dragon has showed its evil side during the pandemic. China is weaponizing the trade to counter its adversaries. Excessive reliance on China for critical mineral resources is like falling into China's trap. India and world need to restrain China to have monopoly over Electric Vehicle market.

26. India to host 'No Money for Terror' Conference

The Ministry of Home Affairs will be organising the Third Ministerial 'No Money for Terror' Conference next week where participants from around 75 countries are expected to attend.

'No Money for Terror' Conference

- The conference that was first held In Paris in 2018, followed by Melbourne in 2019.
- It will be held in Delhi after gap of two years due to the travel restrictions imposed due to the COVID-19 pandemic.

Objectives of the event

- **India's efforts:** The event conveys India's determination in its fight against terrorism as well as its support systems for achieving success against it.
- **Global cooperation:** It also intends to include discussions on technical, legal, regulatory and cooperation aspects of all facets of terrorism financing.
- **Compliance mechanism:** The involvement of a compliant State often exacerbates terrorism, especially its financing.

What is Terror Financing?

- Terrorist financing encompasses the means and methods used by terrorist organizations to finance their activities.
- This money can come from legitimate sources, for example from profits from businesses and charitable organizations.
- But terrorist groups can also get their financing from illegal activities such as trafficking in weapons, drugs or people, or kidnapping for ransom.
- Nations like Pakistan has stated policy of supporting cross-border terrorism in India through global fundings.

Why need consensus over terror-finance prevention?

- Globally, countries have been affected by terrorism and militancy for several years and the pattern of violence differs in most theatres.
- It is largely impacted by tumultuous geo-political environment, coupled with prolonged armed sectarian conflicts.
- Such conflicts often lead to poor governance, political instability, economic deprivation and large ungoverned spaces.

What hinders the global consensus?

- **No definition of terrorism:** There is no universal agreement over what constitutes terrorism. This weakens efforts to formulate a concerted global response.
- **Non-enforcement:** Multilateral action suffers from inadequate compliance and enforcement of existing instruments.
- **No global watchdog:** Counter-terrorism regime lacks a central global body dedicated to terrorist prevention and response.

Way forward

- No country is safe if terrorism persists anywhere across the world.
- The world must resolve to make the international financial system entirely hostile to terrorist financing.
- Concerted efforts and a comprehensive approach should be adopted to counter terrorism under the UN auspices on a firm international legal basis.

27. LT-LEDS (Long Term-Low Emission Development Strategy)

India has announced its long-term strategy to transition to a “low emissions” pathway at the United Nations Conference of Parties (COP) ongoing in Sharm el-Sheikh, Egypt.

LT-LED Strategy

- The LT-LEDS are qualitative in nature and are a requirement emanating from the 2015 Paris Agreement.
- Hereby, countries explain how they will transition their economies beyond achieving near-term NDC targets.
- It signifies their path towards the larger climate objective of cutting emissions by 45% by 2030 and achieve net zero around 2050.

Key announcements by India

- **Nuclear energy:** India is set to expand its nuclear power capacity by at least three-fold in the next decade.
- **Green hydrogen:** India aims for becoming an international hub for producing green hydrogen through the National Hydrogen Mission.
- **Ethanol blending:** India aspires to maximise the use of electric vehicles, with ethanol blending to reach 20% by 2025 (it is currently 10%) and a “strong shift” to public transport for passenger and freight traffic.
- **Energy efficiency:** India will also focus on improving energy efficiency by the Perform, Achieve and Trade (PAT) scheme.

- **Carbon sequestration:** India's forest and tree cover are a net carbon sink absorbing 15% of CO₂ emissions in 2016, and it is on track to fulfilling its NDC commitment of 2.5 to 3 billion tonnes of additional carbon sequestration in forest and tree cover **by 2030**.

Hurdles in achieving net-zero

- **Huge cost of transition:** The transition to low carbon pathway will entail several costs amounting to several trillion dollars. It involves the development of new technologies, new infrastructure, and other transaction costs.
- **No climate finance mechanism:** Provision of climate finance by developed countries will play a very significant role and needs to be considerably enhanced.

Considerations made by India

India's approach is based on the following four key considerations that underpin its long-term low-carbon development strategy:

1. **India has contributed little to global warming:** its historical contribution to cumulative global GHG emissions being minuscule despite having a share of ~17% of the world's population.
2. **Huge domestic energy demand:** India has significant energy needs for development.
3. **National circumstances:** India is committed to pursuing low-carbon strategies for development and is actively pursuing them, as per national circumstances
4. **India needs to build climate resilience:** It is the capacity of social, economic and ecosystems to cope with a hazardous event or trend or disturbance.

Conclusion

- India's long-term strategy (LTS) can guide the growth of Indian industry, urban planning, and infrastructure creation.
- Connecting India's net-zero target with near-term climate actions is critical to avoid investments that might be incompatible with a low-emissions and climate-resilient future.

28. Implications of Private Climate Finance

Developing countries have been consistently insisting that a significant portion of climate finance should come from public funds as private finance will not address their needs and priorities.

Climate finance commitment

Private sector capital for climate finance includes the funding provided by private financial institutions, investors, and companies in climate-friendly projects and financial assets.

- The **Global Environment Facility (GEF)** has served as an operating entity of the financial mechanism since the United Nations Framework Convention on Climate Change's (UNFCCC), 1994.
- Two special fund are set up and are managed by the GEF
 - The Special Climate Change Fund (SCCF)
 - The Least Developed Countries Fund (LDCF)
- In 2009, at the **COP15 Summit in Copenhagen**, developed countries committed to jointly mobilize 100 billion dollars annually in climate finance by 2020.
- At b, in 2010, Parties established the **Green Climate Fund (GCF)** and later designated it as an operating entity of the financial mechanism.
- The **Adaptation Fund (AF)** was established under the Kyoto Protocol in 2001.
- **The Paris Agreement** reaffirmed the obligations of developed countries, while encouraging voluntary contributions by other Parties.

What is the issue with the climate finance by developed countries?

- **SCF report** - The UNFCCC Standing Committee on Finance (SCF) reports that the 100 billion dollar goal has not been achieved in 2020.
- The SCF report relied mainly on the Organisation for Economic Co-operation and Development (OECD) and Oxfam reports for aggregate climate finance trends.
- **OECD report**- Developed countries have mobilised 83.3 billion dollars in climate finance in 2020.
- **Oxfam report** - The actual value of the OECD-claimed climate assistance is only around 21–24.5 billion dollars.
- Following the dismal failure to meet the 100 billion dollar goal, developed countries pushed the target year for achieving it to 2025 from 2020.

- At COP26 (Glasgow), developed countries came up with a **Climate Finance Delivery Plan (CFDP)** claiming that the goal would be met in 2023.

Challenges in private climate finance

- **Skewed climate finance** - Climate finance remains skewed towards mitigation and flows towards bankable projects with clear revenue plan.
- **Profitability** - Adaptation does not seem to offer commercially profitable opportunities for private financiers.
- **Accessibility** - Vulnerable, debt-ridden and low-income countries with poor credit ratings, find it challenging to access private finance.
- **Result delivery** - The private climate finance efforts have not yielded results at the scale required to tap into the significant potential for investments.
- **Mobilisation potential** - Many activities needing financing may have little or no direct mobilisation potential.

What lies ahead?

- The SCF report has concluded that the mobilisation of private finance should not compromise in addressing the needs of developing countries.
- Grant-based and concessional international public climate finance will continue to play the key role in addressing the needs and the priorities of developing countries.

29. Lessons to be learnt from UK on FTAs

To achieve the export target of 2 trillion dollars by 2030, India is seriously negotiating on Free Trade Agreements (FTAs), but most FTAs happen behind closed doors with very little information available.

FTAs

The Ministry of Commerce is the nodal body dealing with FTAs in India.

- FTAs are arrangements between two or more countries or trading blocs that primarily agree to reduce or eliminate customs tariff and non-tariff barriers on substantial trade between them.
- FTAs, normally cover trade in goods or trade in services.
- FTAs also cover other areas such as intellectual property rights (IPRs), investment, government procurement and competition policy, etc.
- India is negotiating FTAs with countries such as the European Union, Canada, the U.K., and Israel.
- **Types of FTA**

- PTA (Preferential Trade Agreement)
- CECA (Comprehensive Economic Cooperation Agreement)
- CEPA (Comprehensive Economic Partnership Agreement)
- Customs Union
- Common Market and Economic Union

What is the significance of FTAs?

- **Market access** - By eliminating tariffs and some non-tariff barriers, FTA partners get easier market access into one another's markets.
- **Preferential treatment** - Exporters prefer FTAs to multilateral trade liberalization because they get preferential treatment over non-FTA competitors.
- **Protection of local exporters** - FTAs protect local exporters from losing out to foreign companies that might receive preferential treatment under other FTAs.
- **Increased foreign investment** - There is also possibility of increased foreign investment from outside the FTA.

What lessons should India learn from UK regarding FTAs?

In India, entering into treaties and negotiations, signing and ratification are within the constitutional competence of Parliament.

- **Outlining the objective** - The executive should make a clear case outlining of its strategic objectives publicly for entering into negotiations for a FTA treaty.
- **Stakeholder consultation** - The executive should be under an obligation to consult all stakeholders, respond to their concerns and make this information publicly available.
- **Committee for scrutiny** - The Indian Parliament should constitute a committee on the lines of the UK's International Agreements Committee (IAC) for effective scrutiny.
- **Parliamentary debate** - The executive should place the FTA on the floor of Parliament for debate before ratification.

30. India-China Trade Data Mismatch

The trade data mismatch of India and China which is attributed to 'under-invoicing' by Indian importers for the imports originating from China, has attracted wide media coverage.

How about the picture of bilateral trade between India and China?

- **Trade ties** - Trade ties began to boom since the early 2000s driven largely by India's imports of Chinese machinery and other equipment.
- In 2008, China became India's largest trading partner.
- **Total bilateral trade** - The total bilateral trade registered a 14.6% increase compared to 2021, amidst the military standoff in eastern Ladakh.
- India and China bilateral trade continued to boom, crossing 100 billion dollars for the second year in 2022.
- **Major imports** - India's biggest imports in 2021 were electrical and mechanical machinery, chemicals used in industrial production, active pharmaceutical ingredients and auto components.
- India also imported medical supplies during the pandemic.
- **Trade deficit** - China's exports increased while India witnessed a decreased in exports leading to a trade deficit of over 75 billion dollars.

What about the trade data mismatch?

- China reported its exports to India over 103 billion dollars while India claims the Chinese imports at 92 billion dollars, hence a mismatch of 12 billion dollars.
- This reflects significant asymmetries in international trade statistics.
- **Impact** - The discrepancies in international trade statistics can result in ill-informed policy decisions.
- Under-invoicing is one of the reasons for trade data anomalies.

What reasons have been attributed for trade data mismatch?

- **Diversion of goods** - Re-routing or re-exporting of goods imported from China generally do not reflect in India but Chinese Trade Statistics record these as exports to India.
- This leads to trade data asymmetries.
- Some of the trading models that re-routes or re-exports goods to another country includes
 - Merchanting trade transactions
 - Bill to-ship to model
 - Switch-bill of lading
 - High Sea Sale (HSS) transactions
- **Free Trade & Warehousing Zones** - Some Indian trading firms buy bulk goods from China and maintain inventory at FTWZ locations and sell them in small quantities at higher profit margins.

- Chinese Statistics will record it as exports, but for India it is not imports as the goods are kept at a FTWZ, a foreign territory, as defined under the SEZ Act, 2005.
- **Record maintenance** - The mismatch in trade statistics also happens due to maintenance of records of export statistics and that of import statistics records.
- **Inconsistent attribution of trade partners** - A country may record statistics on goods destined to claimed territories as 'others' instead of reporting it as an exports to an actual country.
- **National differences** - There can be national differences on reporting of underlying records i.e. statistical norms and standards used to compile trade statistics.

31. Addressing the Leakages in PDS in the light of PMGKAY

- The government of India extended Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY), a scheme to distribute free food grains to the poor, for another three months. However, issues of food grain leakages remains unaddressed.

Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY)

- **PM-GKAY:** Launched during COVID-19 crisis to provided food security to the poor, needy and the vulnerable households/beneficiaries so that they do not suffer on account of non-availability of adequate foodgrains. Under PMGKAY, effectively it has doubled the quantity of monthly foodgrains entitlements being normally delivered to beneficiaries.
- **Benefits:** Under PMGKAY welfare scheme, 5 kg of food grain per person per month is provided free of cost for all the beneficiaries covered under the National Food Security Act (NFSA) including those covered under Direct Benefit Transfer (DBT).
- **Financial Expenditure:** Financial implication for the Government of India has been about 3.45 Lakh Crore for Phase-VI of PMGKAY. With the additional expenditure of about Rs. 44,762 Crore for Phase-VII of this scheme, the overall expenditure of PMGKAY will be about Rs. 3.91 lakh crore for all the phases.
- **Grain Allotment:** The total outgo in terms of food grains for PMGKAY Phase VII is likely to be about 122 LMT. Food grain for phases I- VII is about 1121 LMT.
- **Implementation:** PM Garib Kalyan Ann Yojana (PMGKAY) has been implemented in the following phases -

1. Phase I and II (8 months): April'20 to Nov.'20
2. Phase-III to V (11 months): May'21 to March'22
3. Phase-VI (6 months): April'22 to Sept.'22

Impact of the PMGKY scheme

- **Ensuring food security and public health:** Policymakers and experts concede that the scheme made a difference to food security and public health during the pandemic.
- **IMF commended the scheme:** Be it the Parliamentary Standing Committee on Food and Public Distribution or the authors of an IMF-published working paper, "Pandemic, Poverty, and Inequality: Evidence from India" (April 2022), the scheme has received commendation.
- **Absorbing the shock in the pandemic:** The working paper concluded that "the social safety net provided by the expansion of India's food subsidy program absorbed a major part of the pandemic shock."

Why the experts are suggesting the study of PMGKY?

- **Rationalizing the budget:** To keep the budgetary allocation under control, rules on quota for rice or wheat can be changed suitably.
- **Checking the diversion of Funds:** While it is all right to provide foodgrains free during the pandemic, the central and State authorities need to ponder over the scheme's continuance, given the chronic problem of diversion from the Public Distribution System (PDS).
- **Combing the Centre and state subsidy:** In many States, including West Bengal, Kerala and Karnataka, the 50 kg is free. In Tamil Nadu, for over 10 years, rice-drawing card holders have been getting rice free.

How the transparent study of PMGKY will help in leakage detection?

- **Updating the database of beneficiary:** Study should be the basis for updating the database of foodgrain-drawing card holders, scrutinising the data critically and zeroing in on the needy.
- **Automation of PDS:** The task should not be onerous, given the widespread application of technological tools in the PDS such as Aadhaar, automation of fair price shops and capturing of the biometric data of beneficiaries.
- **Estimation of PHH:** Using this database, the Centre and States can decide whether the size of the Priority Households (PHH) nearly 71 crores, can be pruned or not.

- **Reasonable price to avoid freebies culture:** In addition, if they feel the need to go beyond the mandate of the NFSA, as is being done under the PMGKAY, they can supply the foodgrains at a reasonable price. The culture of providing essential commodities free of cost at the drop of a hat has to go.

Conclusion

- PMGKY has helped the needy in people in the dark period of pandemic. However, with good intention of government food grain leakages of PDS couldn't be stopped. Transparent study of will certainly help in leakage detection and more targeted delivery.

32. National Investment and Infrastructure Fund (NIIF)

Finance Minister has urged the National Investment and Infrastructure Fund (NIIF) to expand its operations and explore ways to crowd in private capital for projects under the National Infrastructure Pipeline, PM Gati Shakti and National Infrastructure Corridor.

NIIF

- National Investment and Infrastructure Fund (NIIF) is India's first infrastructure specific investment fund or a sovereign wealth fund that was **set up in February 2015**.
- The objective behind creating this fund was to maximize economic impact mainly through infrastructure investment in commercially viable projects, **both Greenfield and Brownfield**.
- It was proposed to be established as an **Alternative Investment Fund** to provide long tenor capital for infrastructure projects with an inflow of ₹20,000 crore from the GoI.
- It was registered with SEBI as **Category II** Alternative Investment Fund.

Types of funds in NIIF

- NIIF manages three funds: Master Fund, Fund of Funds and Strategic Fund.
 - The funds were set up to make investments in India by raising capital from domestic and international institutional investors.
1. **Master Fund:** It is an infrastructure fund with the objective of primarily investing in operating assets in the core infrastructure sectors such as roads, ports, airports, power etc.
 2. **Fund of Funds:** The Fund of Funds anchor and/or invest in funds managed by fund managers who have good track records in infrastructure and

associated sectors in India. Some of the sectors of focus include Green Infrastructure, Mid-Income & Affordable Housing, Infrastructure services and allied sectors.

3. **Strategic Opportunities Fund:** It is registered as an Alternative Investment Fund II under SEBI in India. Its objective is to invest largely in equity and equity-linked instruments. It has been established to provide long-term capital to strategic and growth oriented sectors in the country with the aim to build domestic leaders.

Functions of NIIF

The functions of NIIF are as follows:

1. Fund raising through suitable instruments including off-shore credit enhanced bonds, and attracting anchor investors to participate as partners in NIIF;
2. Servicing of the investors of NIIF.
3. Considering and approving candidate companies/institutions/ projects (including state entities) for investments and periodic monitoring of investments.
4. Investing in the corpus created by Asset Management Companies (AMCs) for investing in private equity.
5. Preparing a shelf of infrastructure projects and providing advisory service

33. Impact of Climate Change on Global Health

A recent report by Lancet, has traced the intimate link between changing weather events and their impact on the health of people.

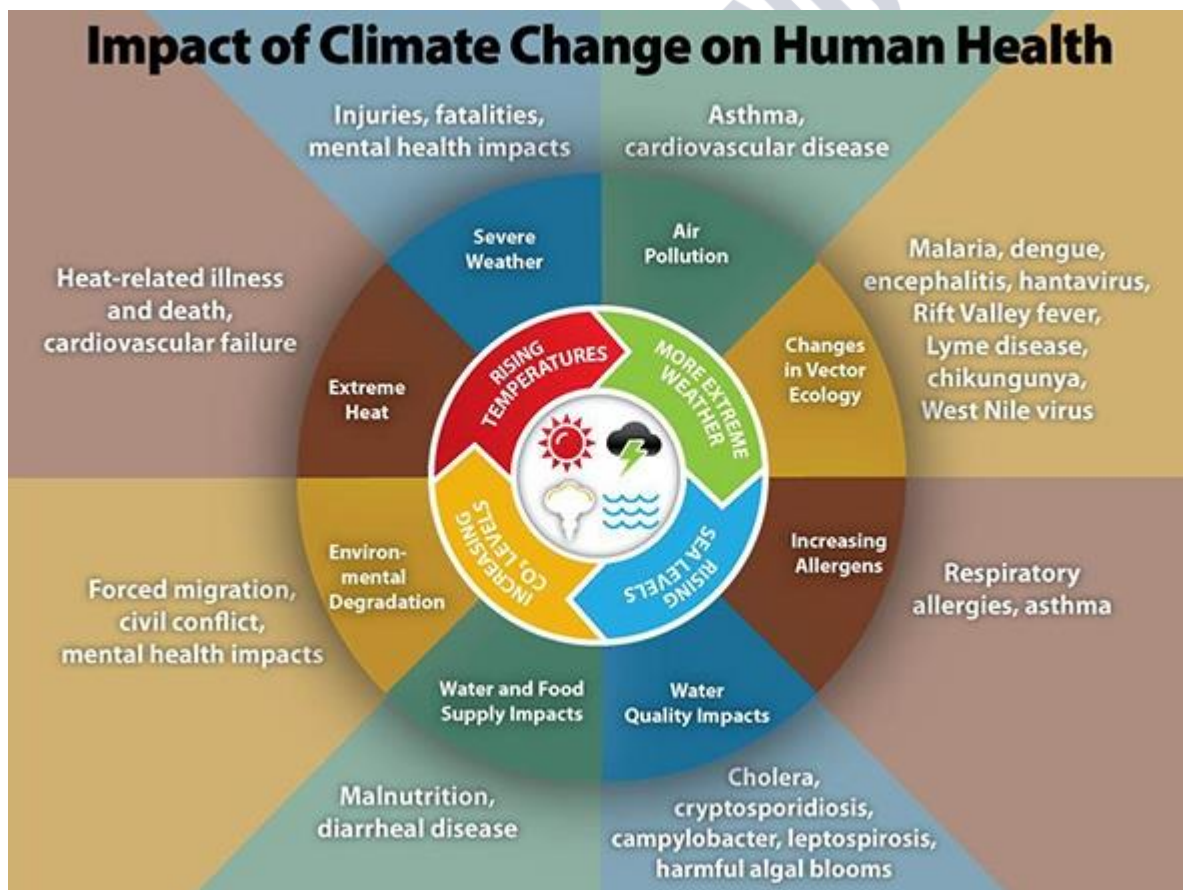
Lancet report outline

According to the World Health Organization (WHO), climate change affects the social and environmental determinants of health – clean air, safe drinking water, sufficient food and secure shelter.

- The 2022 Lancet report points out that the world's reliance on fossil fuels increases the risk of disease, food insecurity and other illnesses related to heat.
- It indicates that rapidly increasing temperatures exposed people, especially the adults above 65 years old and children younger than one to 3.7 billion more heatwave days in 2021 than annually in 1986–2005.

Major findings of the report

- **Global health** - The changing climate is affecting the spread of infectious disease, raising the risk of emerging diseases and co-epidemics.
- It records that coastal waters are becoming more suited for the transmission of Vibrio pathogens.
- It also says that the number of months suitable for malaria transmission has increased in the highland areas of the Americas and Africa.
- **Food security** - Higher temperatures threaten crop yields directly, with the growth season shortening for many cereal crops.
- Extreme weather events disrupt supply chains, thereby undermining food security.
- The prevalence of undernourishment increased during the COVID-19 pandemic and it is now worsened by Russia's invasion of Ukraine.
- **Fossil fuels** - The report argues that the renewed outcry for coal could reverse whatever gains have been made in air quality improvement and push the world towards a future of accelerated climate change.



What are the possible solutions for this issue?

- **Health-centred response** - A health-centred response to the coexisting climate, energy, and cost-of-living crises provides an opportunity to deliver a healthy, low-carbon future.

- A health-centred response would reduce the likelihood of the catastrophic climate change impacts, while improving energy security and creating an opportunity for economic recovery.
- **Air quality** - Improvements in air quality will help prevent deaths resulting from exposure to PM2.5 pollution.
- **Physical and mental wellbeing** - Low-carbon travel and increase in urban spaces would result in promoting physical activity which would have an impact on physical and mental health.
- **Dietary pattern shift** - The report calls for an accelerated transition to balanced and more plant-based diets, as it would
 - Help reduce emissions from red meat and milk production
 - Prevent diet-related deaths
 - Reduce the risk of zoonotic diseases
 - Reduce the burden of communicable and non-communicable diseases

34. Hwasong-17: North Korea's new 'monster missile'

North Korea said it test-fired its massive new Hwasong-17 intercontinental ballistic missile (ICBM).

Hwasong-17

- The Hwasong-17 is nuclear-armed North Korea's biggest missile yet, and is the largest road-mobile, liquid-fuelled ICBM in the world.
- Its diameter is estimated to be between 2.4 and 2.5 metres, and its total mass, when fully fuelled, is likely somewhere between 80,000 and 110,000 kg.
- Unlike North Korea's earlier ICBMs, the Hwasong-17 is launched directly from a transporter, erector, and launcher (TEL) vehicle with 11 axles, photos by state media showed.

How far can it fly?

- The missile launched on Friday flew nearly 1,000 km (621 miles) for about 69 minutes and reached a maximum altitude of 6,041 km.
- The weapon could travel as far as 15,000 km (9,320 miles), enough to reach the continental United States.

What is North Korea trying to demonstrate with the missile launches?

- North Korea is wary of joint drills between the US and South Korea and believes them to be a rehearsal for invasion and proof of hostile policies.

- Notably, Pyongyang's record launches this year began even before military exercises between the allies, one also involving Japan.
- While it says it is responding to the "provocative" drills, some analysts believe that Kim Jong-un must be setting the stage for something bigger – the resumption of nuclear testing after five years.
- Pyongyang may also be showcasing its pre-emptive abilities in response to South Korea's own pre-emptive "kill chain" strategy.

Failure of diplomacy

- North Korea pulled out of the Nuclear Non-proliferation Treaty (NPT) in January 2003 and has conducted six nuclear tests so far since 2006.
- Diplomatic talks have been starting and halting over the past two decades.
- The Six-Party Talks involving South and North Korea, China, Japan, Russia, and the United States, started in 2003, have since stalled with changing geopolitical dynamics.
- Former U.S. President Donald Trump met with Kim Jong-un thrice between 2018 and 2019 but talks broke down and resulted in more sanctions from the West and increased testing by Pyongyang.
- The Joe Biden administration did make attempts to restart talks, and North Korea has not seemed keen either.

35. Export Tax on Iron ore

India recently scrapped export tax on iron ore, steel.

Key Details:

- The Union government of India scrapped export taxes on low-grade iron ore and on some intermediate steel products.
- The Union finance ministry in May 2022 hiked the export duty on pig iron and steel products to 15 percent from 'nil'.
- The tax on export of iron ores and concentrates was hiked to 50 percent from 30 percent, while on iron pellets a 45 per cent duty was imposed.
- The additional tax was imposed to boost domestic supply of iron ore, a raw ingredient for making steel, and thereby hold down inflation.
- Iron & steel are freely importable and freely exportable.

Impact on Exports:

- Indian producers of low-grade ore depend largely on foreign markets as most major domestic steel producers use high-grade iron ore.
- Iron ore and steel saw a big drop in exports in October bringing down overall exports by over 16%.

- India's iron ore exports had dropped to "nearly zero" in October due to higher export taxes and were further expected to go down due to lower demand from China.
- Major miners and steel makers have urged the government to scrap the additional export taxation to fight weakening global demand.
- The high export tax on intermediate steel products also significantly hurt shipments.
- It has a multiplicative effect on the economy stemming from both direct and associated effects on the supply chain and consumption industries.

Significance of the steel sector:

- The iron and Steel industry is one of the most important industries in India. India ranks second-most for the production of Iron and Steel.
- The Government's vision to achieve a \$5 trillion economy by 2024 entails investments worth INR 100 lakh crore in infrastructure sectors, including several steel-intensive sectors like Housing for All, 100% electrification, piped water for all, etc.
- Due to its role in fostering economic development and job creation, the steel industry is also crucial for a country. Many important industries, including the automotive, manufacturing, capital goods, and defence industries, employ steel.

36. 'No Money for Terror'

Recently, third 'No Money for Terror' (NMFT) Ministerial Conference on Counter-Terrorism Financing was held in New Delhi, India.

No Money for Terror Conference:

- The "No Money for Terror" conference was started in 2018, as an initiative of France.
- France, which was subjected to one of the deadliest Islamic State/ISIS attacks in 2015 held the first NMFT conference in April 2018.
- The idea behind the NMFT ministerial conference is to share expertise and good practice in combating terror financing that can be implemented internationally.
- In 2019, the conference was held in Australia and assessed terror financing risks, especially in the context of the Indo-Pacific.
- It was to be held in India in 2020 but was postponed due to the Covid-19 pandemic.

2022 Conference:

- It was attended by about 450 delegates from across the world, including Ministers, Heads of Multilateral organisations and Financial Action Task Force (FATF) Heads of Delegations.
- During the Conference, deliberations were held in four sessions with focus on:
 - Global Trends in Terrorism and Terrorist Financing.
 - Use of Formal and Informal Channels of Funds for Terrorism.
 - Emerging Technologies and Terrorist Financing.
 - International Co-operation to Address Challenges in Combating Terrorist Financing.

India's stand in 2022 Conference:

- PM Modi in his address to the conference warned against nations that use terrorism as a tool of foreign policy.
- India has proposed a permanent secretariat for 'No Money for Terror' (NMFT) ministerial conference, in order to sustain the global focus on countering the financing of terrorism.
- India urged the international community to take cognisance of threats emerging from regime change in Afghanistan, as the last one had led to 9/11 attacks.
- India called for the strong cooperation between the United Nations Security Council, Financial Action Task Force, Financial Intelligence Units, and the Egmont Group in the prevention, detection and prosecution of illegal fund flow.
- India alerted that terrorists should not be allowed to misuse differences in legal principles, procedures and processes in different countries. This can be prevented through deeper coordination and understanding between governments with Joint operations, intelligence coordination and extradition.
- India also stressed the need for a uniform understanding of new finance technologies due to the changing dynamics of terrorism in light of advancing technology.
 - New kinds of technology are being used for terror financing and recruitment. Challenges from the dark net, private currencies and more are emerging.

37. Limiting the Anti-Biotic Pollution and Anti-microbial resistance (AMR)

- Almost half, or 43 per cent, of the world's rivers are contaminated with active pharmaceutical ingredients in concentrations that can have disastrous ramifications on health. The industry must prioritize wastewater management and process controls to limit antibiotic pollution and Anti-

microbial resistance (AMR). 18-22 November is observed as World Antimicrobial awareness week.

Anti-microbial resistance (AMR)

- Antimicrobial resistance (AMR or AR) is the ability of a microbe to resist the effects of medication that once could successfully treat the microbe
- Antibiotic resistance occurs naturally, but misuse of antibiotics in humans and animals is accelerating the process.
- A growing number of infections – such as pneumonia, tuberculosis, gonorrhoea, and salmonellosis – are becoming harder to treat as the antibiotics used to treat them become less effective.
- It leads to higher medical costs, prolonged hospital stays, and increased mortality.

Importance of Pharma Industry

- **Important sector of economy:** The recently adopted Glasgow Climate Pact has called upon countries to facilitate the adoption of greener technologies to phase out the use of fossil fuels. The development and deployment of such technologies is also critical for the pharmaceutical sector that has formed the backbone of the growth of many economies including India.
- **Improving the health outcomes:** The Pharma sector plays a fundamental role in improving health outcomes through the invention of life-saving products.
- **20% of global supply of medication:** Pivoting to sustainable waste management and process-control practices assumes acute significance in the Indian context. India already accounts for 20 per cent of the global supply of medication, making it the largest supplier of generic medicines worldwide.

Anti-biotic Pollution and Anti-microbial resistance (AMR)

- **Pharmaceutical pollution in the country:** Recently, widescale pharmaceutical pollution has been reported across the country, particularly in pharmaceutical hubs like Himachal Pradesh, Andhra Pradesh, and Telangana.
- **Untreated waste release into rivers:** The release of untreated effluents into the soil and water bodies add to the pollution of the environment during the manufacturing of various pharmaceuticals, including antibiotics. Further, untreated antibiotic residues also accelerate the build-up of antimicrobial resistance (AMR).
- **High emission intensity:** Pharma sectors emission intensity is 55 per cent more than the automotive sector.
- **AMR is public health threat:** AMR is often dubbed as one of the top 10 public health threats facing humanity. It occurs when disease-causing

pathogens develop a resistance against the pharmaceuticals that could have neutralized them. In 2019, AMR accounted for more than half a million deaths in the European region and about five million globally.

- **Accumulation of AMR in ecosystem:** The build-up of AMR can happen due to several factors across the human, animal, and environmental ecosystems.

Government policies to prevent Anti-biotic pollution in India

- **National Action Plan on AMR (NAP-AMR):** India's production capacity is all set to expand further with the government's recent impetus on the domestic production of pharmaceuticals. Against this background, the country's National Action Plan on AMR (NAP-AMR) called for limiting pharmaceutical pollution.
- **Surveillance of residues discharged:** Strategic Pillars 2 and 3 under the NAP-AMR focused on developing frameworks for the surveillance of residues discharged in the environment and developing a plan to reduce the environmental impact on AMR, respectively. However, this policy impetus is yet to translate into on-ground implementation.
- **Benefits to manufacturers with greener practices:** The government can take a cue from countries like the United Kingdom, Norway, Sweden and Germany, among others, which have policies in place that provide benefits to manufacturers with greener practices.

How pharmaceutical industry can improve its waste management?

- **Use of innovative technologies:** Adopting innovative technology and self-regulation can help the industry reduce its carbon footprint and minimize its environmental impact.
- **State-of-art API technology:** Centrient Pharmaceuticals Netherlands BV's plant at Toansa, Punjab, where the adoption of state-of-art API technology led to a 60-62 per cent reduction in the plant's carbon footprint.
- **Regulating the discharge:** The AMR Industry Alliance (AMRIA) has developed the Predicted No-Effect Concentrations (PNEC) criteria further to facilitate the industry in regulating its discharge of effluents.
- **Strict compliance of guidelines:** The compliance to PNEC value for Centrist's oral API product line and supply chain has helped the company reduce the environmental impact of manufacturing.

Conclusion

- The containment of AMR in India is crucial for realizing several policy goals, including the United Nations Sustainable Development Goals. While collective action is needed from various stakeholders, the domestic

pharmaceutical industry should also take the lead, especially in limiting antibiotic pollution.

38. A&N's first application for GI tag for the Nicobari Hodi Craft

The Geographical Indications Registry at Chennai, has received an application from the Tribal Development Council, Andaman & Nicobar Islands, seeking the GI tag for the Nicobari hodi craft.

- This is the first application from the Union Territory seeking a Geographical Indication (GI) tag for one its products.

About Nicobari Hodi Craft

- The hodi is the Nicobari tribe's traditional craft.
- It is an outrigger canoe, very commonly operated in the Nicobar group of islands.
- The hodi is built using either locally available trees or from nearby islands, and its design varies slightly from island to island.
- Hodis are used for transporting people and goods from one island to another, for sending coconuts, for fishing and racing purposes.
- The tuhet, a group of families under a headman, consider the hodi an asset.
- Hodi races are held between islands and villages.
- The technical skills for building a hodi are based on indigenous knowledge inherited by the Nicobarese from their forefathers.

How many GI tags have been accorded so far?

- The Geographical Indications Registry, established in Chennai in September 2003, has received over 1,000 applications.
- An application seeking GI tag for the Banaras' thandai (a beverage made with milk, dry fruits and spices) was the 1,000th application.
- Data shows that, as on date, around 1,015 applications have been filed at the Chennai office and of them, GI tags have been given to 422 products.

39. Role of private sector in India's Space programmes

- The launch of the Vikram S (Mission Prarambh) rocket last week has been rightly hailed as an important milestone in India's outer space journey. It is the first privately built Indian rocket to make it to space.

Private players in space sector

- **Lack of Enabling policy:** The country's private sector has the talent and experience to shorten that distance if Delhi creates the enabling policy environment.
- **Monopoly of Government:** When space emerged as an important endeavour in the second half of the 20th century, governments were in the lead. The cost, complexity and research-intensity of the space effort meant the space programmes everywhere became a government monopoly.
- **Government can no longer ignore private players:** But in the 21st century, the role of the private sector has dramatically expanded. Satellites were once owned only by governments but today private companies lead the satellite business.

Major private players and their space endeavor

- **Starlink satellite system:** Elon Musk's Starlink satellite system is now a major player with more than 2,300 satellites in low earth orbit they deliver a variety of space services including useful military information to the armed forces of Ukraine in their fight against Russian forces.
- **Amazon's Project Kuiper:** Plans to launch more than 3,000 satellites in the coming years to offer a range of services, including broadband internet. This will involve making at least three satellites a day.
- **One-web cooperation:** Airtel in India is a partner in the One-Web corporation that offers connectivity through its system of nearly 500 satellites.
- **Breaking the monopoly of Government:** The business of launch vehicles the most demanding of space activities remained a state monopoly until recently. Elon Musk's SpaceX has broken through that launch monopoly and Amazon's Blue Origin rocket will soon be in the market too.

History of India's space programme

- **Space for national development only:** Delhi's main objective was to leverage outer space to accelerate national development. Eventually, military and commercial dimensions began to envelop the Indian space programme.
- **Cooperation with Soviet Union:** India's space programme began with intensive cooperation with the Western countries and later with the Soviet Union. Delhi also offered space cooperation to other developing countries within the rubric of engagement with friendly governments.
- **Sanctions halted India's progress:** The non-proliferation sanctions on India after its first nuclear test in 1974 severely constricted the space for the country in international space cooperation. It was only after the historic civil nuclear initiative that the sanctions regime began to ease.

What should be India's future approach in space domain?

- **Commercially leveraging the space using MTCR:** India is now part of the Missile Technology Control Regime that regulates commerce in space related commodities and technologies.
- **Dual use technology under Wassenaar Arrangement:** India is also part of the Wassenaar Arrangement that controls trade in dual use technologies that can be used for both civilian and military purposes.
- **The growing range of new space possibilities:** From using satellites for delivering broadband internet to the mining of the Moon and from space manufacturing to deep space exploration. Put simply, the scale of the global economy is rapidly growing its value is expected to more than double from about \$450 billion in 2022 to nearly one trillion dollars within a decade.
- **It must be about business and economy:** For India, outer space can no longer be about narrowly framed ideas of "development" and "national prestige". It must be about business and economy. The current Indian share of the global space economy is barely 2 per cent. PM Modi has been demanding that India rapidly increase its share to 8 per cent in the coming years.
- **The private sector companies for larger role:** Raising the Indian share of the global space economy can only be done by drawing in the private sector companies to play a larger role. Consider, for example, The Artemis 1 rocket was launched last week and the programme involves a number of leading aerospace companies like Boeing, Lockheed, Northrop Grumman, Airbus and Space X.
- **International cooperation in national space programmes:** If Apollo was a purely national project of the United States, the Artemis programme is a multinational endeavor between the US and its partners, including France, Canada, and Japan. Meanwhile Russia and China are coming together to collaborate not only on their space programmes, but also on building a joint base on the Moon that will establish long term human presence there.
- **Capital support for space programme:** India has just about embarked on a programme to enhance the contribution of its private sector in outer space. India is also drawing on foreign capital to support its start-ups. Singapore's sovereign wealth fund GIC, for example, is a major investor in Skyroot Aerospace that launched the Vikram S rocket.

Conclusion

- Many Western aerospace companies will be eager to invest in India's space programme as it begins to open up. India is also coming to terms with the fact

that international cooperation is not just an “add-on” to the national space programme, but must be an integral part of India’s space strategy.

40. India’s abstains in CITES vote on reopening Ivory Trade

India’s decision not to vote against a proposal to re-open the international trade in ivory at the ongoing conference of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

CITES

- CITES stands for the Convention on International Trade in Endangered Species of Wild Fauna and Flora.
- It is as an international agreement aimed at ensuring “that international trade in specimens of wild animals and plants does not threaten their survival”.
- It was drafted after a resolution was adopted at a meeting of the members of the International Union for Conservation of Nature (IUCN) in 1963.
- It entered into force on July 1, 1975, and now has 183 parties.
- The Convention is **legally binding** on the Parties in the sense that they are committed to implementing it; however, it does not take the place of national laws.
- **India is a signatory** to and has also ratified CITES convention in 1976.

CITES Appendices

- CITES works by subjecting international trade in specimens of selected species to certain controls.
- All import, export, re-exports and introduction from the sea of species covered by the convention has to be authorized through a licensing system.

It has three appendices:

- **Appendix I** includes species threatened with extinction. Trade-in specimens of these species are permitted only in exceptional circumstances.
- **Appendix II** provides a lower level of protection.
- **Appendix III** contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling trade.

Why such move by India?

- Elephant remains one of India’s most powerful cultural and religious symbols.

- A pioneer in banning even the domestic trade in ivory in 1986, India has always been at the forefront of global elephant conservation initiatives.

What is the tussle over Ivory?

- The international ivory trade was globally banned in 1989 when all African elephant populations were put in CITES Appendix I.
- However, the populations of Namibia, Botswana, and Zimbabwe were transferred to Appendix II in 1997, and South Africa's in 2000 to allow two "one-off sales".
- This is because ivory **stockpiled from natural elephant deaths and seizures** from poachers.
- Subsequently, Namibia's proposal for allowing a regular form of controlled trade in ivory by delisting the elephant populations of the four countries from Appendix II was rejected at CoP17 (2016) and CoP18 (2019).
- At the ongoing CoP19, the proposal was moved by Zimbabwe but met the same fate.
- These are low income countries often battling to generate some revenue from Ivory trade.

India and ivory trade

- The endangered Asian elephant was included in CITES Appendix I in 1975, which banned the export of ivory from the Asian range countries.
- In 1986, India amended The Wild Life (Protection) Act, 1972 to ban even domestic sales of ivory.
- After the ivory trade was globally banned, India again amended the law to ban the import of African ivory in 1991.
- In 1981 when New Delhi hosted COP3, India designed the iconic CITES logo in the form of an elephant.
- Over the years, India's stand has been unequivocal on the ivory issue.

What has changed now?

- After protracted negotiation, India signed an agreement in July with Namibia to fly in cheetahs.
- India has agreed to promote "sustainable utilisation and management of biodiversity" by supporting advances in this area of bilateral cooperation "at international forums including meetings of" CITES.
- While the word "ivory" was not mentioned, Namibia sought India's support under this agreement.