

May (Week 1)

INDEX

Contents

| | |
|--|----|
| Prelims | 2 |
| NATIONAL | 2 |
| e-Shram | 2 |
| Jute Industry in West Bengal | 2 |
| Anchor Investors | 4 |
| The loan scheme for inmates in Maharashtra's prisons | 4 |
| India's position on the World Press Freedom Index..... | 5 |
| Highest sex ratio at birth in Ladakh | 6 |
| Mumbai's sewage disposal project | 7 |
| Submarine tech that India wants | 8 |
| INTERNATIONAL | 10 |
| A portable device that turns seawater into drinking water, without using filters | 10 |
| The history of the transatlantic slave trade | 10 |
| Transnistria | 12 |
| Mains | 14 |
| GS II | 14 |
| Turkey's foreign policy reset..... | 14 |
| Bill assent, a delay and the Governor's options..... | 16 |
| Quasi-federalism | 18 |
| The Delhi dual governance conundrum | 19 |
| Invigorating the Ayush industry | 21 |
| The debate on the national language..... | 22 |
| A new track for capital punishment jurisprudence | 24 |
| GS III | 26 |
| Funding woes haunt Indian science | 26 |
| Intense heat | 27 |
| A new perspective on fertility and income levels | 29 |
| Joblessness on the rise in India | 30 |
| Inflation control needs another model | 32 |
| The status of GST compensation dues..... | 33 |
| The status of the Naga peace talks | 35 |
| Current Affairs Quiz | 37 |

Prelims

NATIONAL

e-Shram

(Source: [The Hindu](#))

Context: Top functionaries of the Union Labour and Employment Ministry that the Ministry was working on a mechanism to process accident insurance claims by unorganised workers registered on the e-Shram portal, which has seen over 27 crore registrations so far.

Details:

- The portal was launched six months ago with the aim of creating a national database of unorganised workers and to facilitate social security schemes for them.
- Among the promises made then was that the workers would be eligible for ₹2 lakh as accident insurance.
- A senior official of the Ministry said discussions were on to link the e-Shram portal with the Pradhan Mantri Suraksha Bima Yojana, the Centre's existing accident insurance scheme.
- The scheme would allow the workers to get the direct benefit transfer (DBT) through the e-Shram unique ID number.
- The official added that the unique IDs on the e-Shram portal carried the same series from the Employees Provident Fund Organisation's universal account number (UAN).
- **Aim:** To register 38 crore unorganised workers such as construction labourers, migrant workforce, street vendors, and domestic workers, among others.
 - The workers will be issued an e-Shram card containing a 12 digit unique number.
 - If a worker is registered on the eSHRAM portal and meets with an accident, he will be eligible for Rs 2.0 Lakh on death or permanent disability and Rs 1.0 lakh on partial disability.
- **Implementation:** Government in States/UTs will conduct registration of unorganised workers across the country.

Jute Industry in West Bengal

(Source: [The Hindu](#))

Context: Member of Parliament (MP) from Barrackpore constituency in West Bengal, Arjun Singh, met Textile Minister Piyush Goyal on Saturday to apprise him about issues concerning jute farmers, workers and the overall jute industry. Mr. Singh later said in a tweet that the meeting was very positive and expressed hope that the issues would be resolved soon. The Barrackpore MP had earlier written to West Bengal Chief Minister Mamata Banerjee, seeking her intervention into the "arbitrary decision" of capping the price for procuring raw jute from the mills. He was referring to the Office of the Jute Commissioner (JCO)'s September 30 notification mandating that no entity would be allowed to purchase or sell raw jute at a price exceeding ₹6,500 per quintal.

What is the problem?

- In simple words, mills are procuring raw jute at prices higher than what they are selling them at after processing.



- Let's understand the mechanism first. Mills do not acquire their raw material directly from the farmers, but instead through intermediaries.
- As a standard practice, the middlemen charge mills for their services, which involves procuring jute from farmers, grading, bailing and then bringing the bales to the mills.
- The government has a fixed Minimum Support Price (MSP) for raw jute procurement from farmers, which is ₹4,750 per quintal for the 2022-23 season.
- However, as the executive stated, this reached his mill at ₹7,200 per quintal, that is, ₹700 more than the ₹6,500 per quintal cap for the final product.
- Though the Union government has come up with several schemes to prevent de-hoarding, the executive believes the mechanism requires a certain "systematic regulation".

What happened to supply?

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

Where is jute used?

- Bulk of the final jute produced is used for packaging purposes.
- The provisions of the Jute Packaging Material (Compulsory use in Packing Commodities) Act, 1987 or the JPM Act mandate that 100% production of foodgrains and 20% sugar production must be packaged in jute bags.
- The share of jute used for sacks, therefore, increased from 67.9% for the TE (TE: Triennium Ending or three years ending) 2010-11 to 78.3% in TE 2020-21.
- On the other hand, jute used for manufacturing other products (such as furnishing materials, fashion accessories, floor coverings or varied applications in paper and textile industries) has declined from 15.5% to 9.7% during the same period.
- As per the Food and Agriculture Organisation (FAO), India is the largest producer of jute followed by Bangladesh and China. However, in terms of acreage and trade, Bangladesh takes the lead accounting for three-fourth of the global jute exports in comparison to India's 7%.
- This can be attributed to the fact that India lags behind Bangladesh in producing superior quality jute fibre due to infrastructural constraints related to retting, farm mechanisation, lack of availability of certified seeds and varieties suitable for the country's agro-climate.
- What also does not bode well for India is that jute acreage competes with crops as paddy, maize, groundnut, and sesame. The increased availability of synthetic substitutes is further bothering the demand for jute domestically.
- Further, as the CACP report stated, Bangladesh provides cash subsidies for varied semi-finished and finished jute products.
- Hence, the competitiveness emerges as a challenge for India to explore export options in order to compensate for the domestic scenario.

What is at stake?

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

Anchor Investors

(Source: [Indian Express](#))

Context: Domestic mutual funds invested Rs 4,002.27 crore, accounting for 71.12 per cent of the total anchor book portion of the initial public offering (IPO) of Life Insurance Corporation (LIC). SBI Mutual Fund invested Rs 1,006.89 crore, becoming the largest investor in the anchor book quota.

Anchor investors

- An anchor investor in an IPO is a qualified institutional buyer (QIB) like a foreign portfolio investor or mutual fund or insurance company which invests before the IPO is made available to the public as per Sebi regulations.
- As initial investors, they make the IPO process more attractive for investors, and instil confidence in them. Anchor investors also aid in price discovery of the IPO.
- Anchor investors who get guaranteed allotment a day before the IPO opens to the public are normally allocated 60 per cent of the QIB quota.
- Companies with a profitable track record can allocate 50 per cent of the IPO to QIBs. The demand in the anchor category is an indication of the success of the IPO, according to analysts.

The loan scheme for inmates in Maharashtra's prisons

(Source: [Indian Express](#))

Context: The Maharashtra Department of Prisons has launched a loan scheme for inmates serving sentences in jails across the state. The credit scheme titled Jivhala is being offered by the Maharashtra State Cooperative Bank. The pilot was introduced for prisoners at Yerawada Central Jail in Pune, and will gradually be extended to nearly 60 prisons across the state. According to bank and prison officials, this is likely the first kind of credit scheme for prisoners in India. Existing loans initiatives for inmates are for rehabilitation after completion of their prison terms.

What is Maharashtra's loan scheme for prisoners, and who is eligible?

- The credit scheme, called Jivhala meaning 'affection' in Marathi, has been launched primarily for convicted inmates who are undergoing a prison sentence of more than three years.
- Officials said majority of the inmates are sole breadwinners, and their incarceration has left their families without a source of income.
- Therefore, while the loan will be disbursed in the name of the inmate, it will be issued to designated family members.
- In the initial phase, a loan of Rs 50,000 will be given at a 7 per cent interest rate. Of the interest the bank earns, one per cent will be given back to the system as a contribution to the Prisoners' Welfare Fund.
- The loan will be provided without any requirement of mortgage or guarantor.
- Inmates will be able to use the loans for education of their children, medical treatment of family members, legal fees, or any other expenses.
- Bank officials said they found that over 75 per cent of the applications were for agricultural purposes.

How will the inmates repay the loans?

- On entering the prison system, an inmate is categorised as skilled, semi-skilled or un-skilled and assigned work in various industrial and manufacturing units inside the prison. For this work, they are paid anywhere between Rs 50 to 70 as daily wages.



- The money, deposited in their accounts, can be used to buy essentials from the jail canteen and/or can be sent home. The inmates get their earnings from the jail upon their release.
- Bank officials said once an inmate takes a loan, the Equated Monthly Installment calculated will be directly deducted from their prison accounts.

India's position on the World Press Freedom Index

(Source: [The Hindu](#))

Context: India's ranking in the 2022 World Press Freedom Index has fallen to 150 out of 180 countries, according to the latest report released by the global media watchdog, Reporters Without Borders (RSF). In last year's report, India was ranked 142. The top three positions for countries with the highest press freedom were taken by the Nordic trio of Norway (a score of 92.65), Denmark (90.27) and Sweden (88.84).

What is RSF and what's the objective of this Index?

- RSF is an international NGO whose self-proclaimed aim is to defend and promote media freedom. Headquartered in Paris, it has consultative status with the United Nations.
- The objective of the World Press Freedom Index, which it releases every year, "is to compare the level of press freedom enjoyed by journalists and media in 180 countries and territories" in the previous calendar year.
- The RSF defines press freedom as "the ability of journalists as individuals and collectives to select, produce, and disseminate news in the public interest independent of political, economic, legal, and social interference and in the absence of threats to their physical and mental safety."

What is the methodology used by RSF to assess and rank countries?

- Countries are ranked after being assigned a score ranging from 0 to 100, with 100 representing the highest possible level of press freedom and 0 the worst.
- The scoring has two components: a quantitative one, that tallies abuses against journalists and media outlets, and a qualitative analysis based on the responses of press freedom specialists (journalists, researchers, human rights defenders) to an RSF questionnaire.
- Countries are evaluated on five contextual indicators: political context, legal framework, economic context, socio-cultural context, and safety.
- For instance, the political context indicator considers, among other things, "the degree of support for the media in their role of holding politicians and government to account in the public interest".
- A 'subsidiary score' ranging from 0 to 100 is calculated for each indicator, and all the subsidiary scores together contribute to the 'global score'.
- India, which had a global score of 53.44 in the 2021 Index, could muster only 41 this time.

What are the findings with regard to world press freedom?

- In terms of global trends, the report flags a "two-fold increase in polarisation amplified by information chaos — that is, media polarisation fuelling divisions within countries, as well as polarisation between countries at the international level."
- It notes that "within democratic societies, divisions are growing" due to the spread of "opinion media" modelled on Fox News, and the rise of "disinformation circuits" amplified by how social media functions.



- While singling out Moldova (40th) and Bulgaria (91st) for drastic improvements in press freedom “thanks to a government change”, it has classified the situation in 28 countries including Russia (155) and Belarus (153), as “very bad”.
- The world’s 10 worst countries for press freedom include Myanmar (176th), China (175), Turkmenistan (177th), Iran (178th), Eritrea (179th) and North Korea (180th).

What does the Index say about India?

- The report states that in India, “the violence against journalists, the politically partisan media and the concentration of media ownership all demonstrate that press freedom is in crisis”.
- Describing India as “one of the world’s most dangerous countries for the media”, the report notes that “journalists are exposed to all kinds of physical violence including police violence, ambushes by political activists, and deadly reprisals by criminal groups or corrupt local officials.”
- It highlights that “supporters of Hindutva, the ideology that spawned the Hindu far-right, wage all-out online attacks on any views that conflict with their thinking.”

What are the report’s observations on India under various indicators?

- Under ‘political context’, it states: “Originally a product of the anti-colonial movement, the Indian press used to be seen as fairly progressive but things changed radically in the mid-2010s, when Narendra Modi became prime minister and engineered a spectacular rapprochement between his party, the BJP, and the big families dominating the media.”
- It highlights that “very early on, Modi took a critical stance vis-à-vis journalists, seeing them as ‘intermediaries’ polluting the direct relationship between himself and his supporters.”
- With regard to ‘legal framework’, the report notes that “Indian law is protective in theory but charges of defamation, sedition, contempt of court and endangering national security are increasingly used against journalists critical of the government”.
- Under ‘economic context’, the report, describing Indian media as a “colossus with a feet of clay”, points out that “media outlets largely depend on advertising contracts with local and regional governments” and “at the national level, the central government has seen that it can exploit this to impose its own narrative, and is now spending more than ₹130 billion (5 billion euros) a year on ads in the print and online media alone.
- “Finally, on the socio-cultural indicators of press freedom, the report, noting that “the enormous diversity of Indian society is barely reflected in the mainstream media,” states that “for the most part, only Hindu men from upper castes hold senior positions in journalism or are media executives — a bias that is reflected in media content.”

Highest sex ratio at birth in Ladakh

(Source: [The Hindu](#))

Context: *Ladakh recorded the highest sex ratio at birth in the country in 2020, followed by Arunachal Pradesh, Andaman and Nicobar Islands, Tripura and Kerala, according to the annual report on Vital Statistics based on 2020 Civil Registration System report.*

Details:

- Highest Sex Ratio at Birth (SRB) based on registered events has been reported by Ladakh (1,104) followed by Arunachal Pradesh (1,011), A&N Islands (984), Tripura (974), and Kerala (969). Sex ratio at birth is the number of females per thousand males.
- The lowest sex ratio was reported by Manipur (880), followed by Dadra and Nagar Haveli and Daman and Diu (898), Gujarat (909), Haryana (916) and Madhya Pradesh (921).

2019 data

- In 2019, the highest sex ratio at birth was reported by Arunachal Pradesh (1,024), followed by Nagaland (1,001), Mizoram (975) and A&N Islands (965), and the lowest sex ratio was reported by Gujarat (901), Assam (903), Madhya Pradesh (905) and Jammu & Kashmir (909).
- The report said that the requisite information from Maharashtra, Sikkim, Uttar Pradesh and Delhi on sex ratio was “not available.” They had not provided the said data in 2019 as well.
- “The sex ratio at birth of registered events is an important indicator to map the sex differential of the population at the beginning of their life. The sex ratio at birth has been calculated after deducting the delayed registration of more than one year for the year 2020,” the report said. None of the States or UTs have recorded sex ratio at birth below 880.
- The report noted that 1,43,379 infant deaths were registered in 2020 and the share of rural areas was only 23.4%, while that of urban areas was 76.6% in total registered infant deaths. “Non-registration of infant deaths in rural areas was a cause of concern,” it stated.

Mumbai's sewage disposal project

(Source: [Indian Express](#))

Context: *The Brihanmumbai Municipal Corporation (BMC) has finalised seven contractors to execute work on its ambitious Mumbai Sewage Disposal Project-II (MSDP-II). The long-pending project will be undertaken at a cost of nearly Rs 30,000 crore.*

Sewage generation in Mumbai

- With a population of 12.5 million, Mumbai generates around 2,400 million litres of sewage every day. The city currently has a sewer line network of 2,025 km.
- However, the existing lines do not cover the entire city, and the BMC is in the process of laying new lines.
- The sewage generated across the city is collected at seven Sewage Treatment Plants (STP) sewage zones — Colaba, Worli, Bandra, Versova, Malad, Ghatkopar and Bhandup.
- Except for Colaba, the other STPs can only do primary treatment of sewage before discharging it into the Arabian Sea. This contributes to high-level pollution in the sea and impacts coastal biodiversity.
- A study had previously found that coastal water around Juhu, Girgaum Chowpatty and Haji Ali was the dirtiest.
- The 17.6 km Mithi river that flows into Mahim Creek and the Arabian Sea was also found to have very high levels of pollution due to the discharge of sewage as well as industrial waste.
- Besides this, in the absence of a 100 per cent sewerage network, about 25 per cent of the city's sewage enters water bodies without any treatment, thus polluting the coast.

What is the sewage disposal project?

- Initially, the BMC had planned to upgrade the existing primary STPs at the seven locations. However, in an updated plan, the civic body proposed to construct new STPs to treat the sewage as per the latest norms set by Central Pollution Control Board.
- Of the seven STPs, work at the Colaba STP was completed in 2020.
- The BMC now wants to complete construction at the remaining locations, as well as build a new plant in Dharavi. The cost for these seven plants is estimated to be Rs 29,653 crore.

Submarine tech that India wants

(Source: [Indian Express](#))

Context: *On April 30, France's Naval Group, one of five shortlisted Original Equipment Manufacturers (OEM) for the Navy's P-75 India (P-75I) project to build six conventional submarines within the country, announced it would not bid for the project. The reason, Naval Group said, was that the Request for Proposal (RFP) "requires that the fuel cell AIP be sea proven, which is not the case for us yet since the French Navy does not use such a propulsion system."*

AIP refers to Air-Independent Propulsion, a technology for conventional — that is, non-nuclear — submarines.

What is the P-75I project?

- In June 1999, the Cabinet Committee on Security approved a 30-year plan for the Navy to indigenously build and induct 24 submarines by 2030.
- In the first phase, two lines of production were to be established — the first, P-75; the second, P-75I. Each line was to produce six submarines.
- The contract for P-75 was signed in 2005 with the Naval Group, then known as DCNS, in partnership with Mazagon Dock Shipbuilders Ltd (MDL).
- The first Kalvari Class (Scorpene Class) submarine under the project was commissioned in December 2017. Another five submarines have been built since; the final one, Vagsheer, was launched last month, and will be commissioned by late 2023.
- While P-75 deliveries were delayed, P-75I has seen long delays even before it has kicked off. The first Request for Information was issued in 2008, then again in 2010, but the RFP was issued only in July 2021.
- This will be India's first project under the Strategic Partnership Model — the government will give the contract to an Indian Strategic Partner (SP), which will partner with a foreign OEM to build AIP-powered submarines in the country.
- MDL and Larsen and Toubro are the two selected SP; the five selected OEMs are Naval Group (France), ThyssenKrupp Marine Systems (Germany), ROE (Russia), Daewoo Shipbuilding and Marine Engineering (South Korea), and Navantia (Spain).

Why does the Navy want AIP subs?

- Issuing the RFP last year, the government said it "envisages indigenous construction of six modern conventional submarines (including associated shore support, Engineering Support Package, training and spares package) with contemporary equipment, weapons & sensors including Fuel-Cell based AIP (Air Independent Propulsion Plant), advanced torpedoes, modern missiles and state of the art countermeasure systems."
- AIP, it said, "has a force multiplier effect on lethality of a diesel electric submarine as it enhances the submerged endurance of the boat several folds. Fuel cell-based AIP has merits in performance compared to other technologies."
- Simply put, AIP technology allows a conventional submarine to remain submerged for much longer than ordinary diesel-electric submarines. All conventional submarines have to surface to run their generators that recharge the batteries that allow the boat to function under water.
- However, the more frequently a submarine surfaces, the higher the chances of it being detected. AIP allows a submarine to remain submerged for more than a fortnight, compared to two to three days for diesel-electric boats.
- While the six P-75 submarines are diesel-electric, they can be fitted with AIP technology later in their lives. By the time P-75I is completed under the 30-year project, India is projected to have six diesel-electric, six AIP-powered, and six nuclear attack submarines (yet to be built).



- India has been working to develop AIP technology indigenously as well. A tableaux of the Defence Research and Development Organisation (DRDO) at this year's Republic Day parade showcased AIP.
- In March 2021, the Defence Ministry had said DRDO had achieved an "important milestone in the development of Air Independent Propulsion (AIP) System by proving the land-based prototype".
- However, experts have certain doubts about DRDO's AIP prototype, and many fear it may not be ready even by the time the first Kalvari Class submarine comes for refitting starting 2024.
- Around 10 countries have developed or are close to building AIP technology, and almost 20 nations have AIP submarines.

What submarines does India have now?

- India has 16 conventional diesel-electric submarines, which are classified as SSKs.
- After the last two Kalvari Class subs are commissioned under P-75, this number will go up to 18. India also has two nuclear ballistic submarines, classified SSBN.
- Of the 16 SSKs, four are of Shishumar Class, which were bought and then built in India in collaboration with the Germans starting 1980s; eight are Kilo Class or Sindhughosh Class submarines bought from Russia (including erstwhile USSR) between 1984 and 2000; and four are Kalvari Class built in India at MDL.

AIP let's conventional subs stay submerged for longer

- **DIESEL-ELECTRIC SUBMARINES** must come to the surface or close to it to run their generators to recharge the batteries that propel them underwater.
 - AIP is a mechanism that allows the batteries to be charged even while the boat is submerged. However, even with AIP, the submarine needs to surface every three weeks or so.
 - According to a 2015 article on the website of the independent strategic and defence think tank Australian Strategic Policy Institute, AIP "offers the possibility of increasing underwater endurance by a factor of up to 3 or 4, which reduces the indiscretion ratio significantly".
- **THERE ARE DIFFERENT TYPES** of AIP mechanisms available; what India is looking for under the P-75I project is AIP based on fuel cells.
 - These cells convert chemical energy into electrical energy, recharging the batteries of the submarine.
- **THERE ARE DOWNSIDES TO AIP.** The Australian paper says "installing AIP increases the length and weight of the boats, requires pressurised liquid oxygen (LOX) storage on-board and supply for all three technologies".
 - Also, "MESMA and the Stirling engine have some acoustic noise from moving parts; and the...submarine's unit cost [increases] by around 10%."



INTERNATIONAL

A portable device that turns seawater into drinking water, without using filters

(Source: [Indian Express](#))

Context: *Massachusetts Institute of Technology (MIT) researchers have developed a portable desalination unit, weighing less than 10 kg, that can remove particles and salts to generate drinking water.*

WHAT IT DOES:

- The suitcase-sized device requires less power to operate than a cell phone charger. It can also be driven by a small, portable solar panel, which can be purchased online for around \$50 (about Rs 3,800 at current exchange rates), MIT said in a news release.
- It said the device automatically generates drinking water that exceeds World Health Organization (WHO) quality standards. The device runs with the push of one button.
- While other portable desalination units that require water to pass through filters, this device utilises electrical power to remove particles from drinking water.
- Eliminating the need for replacement filters greatly reduces the long-term maintenance requirements.
- This, the release said, could enable the unit to be deployed in remote and severely resource-limited areas.
- It could also be used to aid refugees fleeing natural disasters or by soldiers carrying out long-term military operations, it said.
- The researchers have described the device in the American Chemical Society journal *Environmental Science & Technology*.

HOW IT WORKS:

- The unit relies on a technique called ion concentration polarisation, which was pioneered by Han's group more than 10 years ago, the release said.
- Rather than filtering water, the process applies an electrical field that causes positively or negatively charged particles — including salt molecules, bacteria, viruses — to be repelled as they flow past.
- The charged particles are funnelled into a second stream of water that is eventually discharged. The process removes solids, allowing clean water to pass through the channel.

The history of the transatlantic slave trade

(Source: [Indian Express](#))

Context: *Researchers were due to begin a 10-day evaluation of the submerged wreck of the Clotilda, believed to be the most complete remains of a slave ship ever discovered. The Clotilda, the last known slave ship to arrive in the United States from Africa, was scuttled in the Gulf of Mexico close to the mouth of the Mobile river in Alabama after it had offloaded its cargo of 110 captive men, women, and children in July 1860, 53 years after Congress had outlawed international slave trade.*

The slave trade

- Between the 16th and 19th centuries, as many as 10-12 million Africans were transported to the Americas as part of the transatlantic slave trade.
- Hundreds of slaves were packed like animals into the hulls of the ships for brutal journeys that could last from weeks to even months.

- Usually, pairs of slaves were chained together at the ankle and placed in columns with ropes around their necks.
- Unhygienic conditions often led to the outbreak of diseases. Historians suggest that 10-15 per cent of slaves died during the journey.

The Clotilda

- The slave ship was bankrolled by Timothy Meaher, a wealthy businessman and landowner from Mobile, Alabama, and captained by one William Foster.
- In early March 1860, Foster sailed for Whydah, a port in the kingdom of Dahomey (now Benin). After purchasing his cargo of slaves, Foster embarked on the return journey to the US in May.

The scuttling

- Upon reaching the coast of Alabama, the crew and slaves were illegally removed, the ship was set on fire, and deliberately sunk.
- This was done because a federal law of 1807, backed by President Thomas Jefferson, had prohibited the import of new slaves into the US.
- This law, however, did not seek to curtail the country's internal trade in slaves.
- An AP report quoted historian Natalie S Robertson as saying Meaher commissioned the *Clotilda's* journey so he could win a 1,000-dollar wager that he could continue importing slaves despite the 1807 law.



The slaves

- Since they had been brought illegally, the *Clotilda's* cargo could not be classified as slaves. But they continued to be enslaved, and were distributed amongst the financial backers of the voyage.
- Meaher kept 32 of the slaves on his estate near Mobile; the others were sold to various slave owners across Alabama.
- In the decades before the American Civil War of 1861-65, the country had witnessed a cotton boom. The cultivation of cotton relied heavily on slave labour, and the demand for slaves continued to grow.
- With imports banned, prices of domestic slaves skyrocketed, and plantation owners demanded the resumption of the global slave trade, and provided incentive for men like Meaher.

Africatown

- In January 1865, when Abraham Lincoln was President, Congress passed the 13th Amendment abolishing slavery.
- The former West African slaves purchased some land from Meaher, on which they established Africatown outside Mobile.
- They were joined by other emancipated slaves from nearby areas, and together they established an autonomous community where they retained many of their indigenous customs and spoke in their own language.

Transnistria

(Source: [The Hindu](#))

Context: As the Russia-Ukraine War completes over two months, Transnistria, the tiny breakaway region of Moldova, risks being dragged into the conflict.

Where is Transnistria?

- The de facto state lies between Moldova to its west and Ukraine towards its east. Often described as a “remnant of the Soviet Union”, Transnistria declared independence like Moldova did soon after the break-up of the Soviet Union.
- When Moldovan troops attempted to take over the territory in 1990-1992, Transnistria was able to resist them because of Russian soldiers based in Transnistria.
- Since then, it has remained free of Moldovan control. However, most countries continue to see Transnistria as part of Moldova.

What is the political make-up of Transnistria?

- Transnistria is not recognised as independent even by Russia and its economy is dependent on Russia for subsidies and free gas. Most Transnistrians have dual citizenship of Russia and Transnistria or triple citizenship of Moldova, Transnistria, and Russia. Unlike the rest of Moldova, which speaks Romanian, the majority of people in Transnistria speak Russian and use the Cyrillic script like Russians.
- It has its own government (which is pro-Russian), Parliament, armed force, constitution, flag, anthem, etc. In a referendum held in 2006, over 97% of Transnistrians voted for future integration with Russia and after the annexation of Crimea, the government asked if it could to be absorbed into Russia.
- Russia, however, was not keen on this. But Transnistria is host to over 1,500 Russian “peacekeepers” and is home to a large Russian ammunition depot at Cobasna.

THE HINDU
e-Paper

Tensions in Transnistria

The small region wedged between Moldova to its west and Ukraine to its east risks being dragged into the ongoing conflict

TRANSNISTRIA FACTFILE

- Split from Moldova in 1991-92 war, amid collapse of the Soviet Union. Becomes a self-declared independent state not recognised internationally
- Referendum in 2006 saw 97.2% vote in favour of joining Russia
- Its a separatist region that permanently hosts estimated 1,500 Russian “peacekeeping” troops
- Population: **4,70,000**
- Area: **4,000 sq km**

RECENT DEVELOPMENTS

Apr 25-27, 2022: Transnistria officials claim series of incidents:

- Explosions hit state security HQ in Tiraspol. Separatist authorities blame Ukrainian “infiltrators”
- Blasts at Mayak radio centre damage Soviet-era masts used to broadcast Russian news
- Attack on military unit in village of Parcani, just outside Tiraspol
- Shots fired from Ukraine towards Kolbasna village, location of large Russian arms depot

Sources: AFP, BBC



■ Russia could use flare-up of tensions as pretext for invasion. If Russia reinforces Transnistria, it might then move on to Ukraine's key port city of Odesa

© GRAPHIC NEWS

Why is it in the news now?

- Transnistria risks being drawn into the Russia-Ukraine war because of reports of a series of explosions in its territory.
- First, there was an attack by men using rocket propelled grenades on its security headquarters, followed by an attack on a radio centre which broadcasts Russian news. There were also reports that a village which is host to one of the largest ammunition depots in Europe was hit by shots.
- No one has taken responsibility for these attacks in which there were no deaths. However, Ukrainian officials termed them as a deliberate provocation by Russia to intervene in Transnistria and Moldova while Russian officials blamed Ukraine for the attacks.
- After the explosions, Transnistria's President Vadim Krasnoselsky called for a 15-day red alert, with anti-terrorist security measures put in place.
- Men of fighting age have been banned from leaving its territory. This is being read as a sign that Transnistria will be drawn into the Russia-Ukraine conflict.
- There are fears in the West and in Ukraine that Transnistria could be used as a staging ground in the conflict between Russia and Ukraine and that Russia might use Transnistria to cut off the southwestern corner of Ukraine, leading to direct Russian intervention inside Moldova.
- These fears were compounded by a Russian General, Rustam Minnekayev, asserting that Russian speaking people in Transnistria and Moldova are being oppressed, reminding observers ominously of Russia justifying its invasion of Ukraine by claiming to be acting on behalf of Russian speakers in the Donbass region oppressed by Ukraine.
- Added to this was his statement that Moscow intends to take over southern Ukraine, including the port city of Odesa, which would allow it access to Transnistria. This would create a land-bridge for Russia from southern Ukraine all the way to Transnistria.
- Clearly, Transnistria's strategic location is important to the next phase of Russia's war on Ukraine. The region is not too distant from the Black Sea port of Odesa and also shares a relatively long border with Ukraine.
- If Transnistria comes under Russian control, it will enable Russia to create a Russian-controlled corridor along Ukraine's Black Sea coast.
- If Russia succeeds in linking Odesa with Transnistria, the rest of Ukraine would become completely landlocked and the country would naturally be weakened. Moldova, on its part, fears that Russia will use Transnistria to launch an attack on it as Russia has long wanted Moldova to be in its sphere of influence.

What lies ahead?

- There is little Moldova, Europe's poorest country, can do in this situation. It is constitutionally neutral and has a very small military force.
- It is not a member of NATO. So, there is little chance of NATO coming to its rescue, particularly since NATO cannot give membership to countries which have border disputes with other countries.
- Similarly, it is not a member of the European Union though it is pro-Europe. In March this year, Moldova had signed an official request to join the EU. However, this will take time and the country right now cannot comply with the EU's conditions for membership.
- Meanwhile, all eyes will be on what Russia intends to do next in Transnistria as part of its war with Ukraine, which has already dragged on longer than expected.

Mains

GS II

Turkey's foreign policy reset

(Source: [The Hindu](#))

Context: *The war in Ukraine has encouraged Turkey's president, Recep Tayyip Erdogan, to quickly reset relations with his West Asian neighbours so that he is better placed to cope with the serious geopolitical challenges emerging from the conflict.*

Details

- This process of course-correction began when Israeli president Isaac Herzog visited Turkey on March 9 this year, ending a decade of strained ties, largely on account of Turkey's support for Palestinian interests.
- The bonhomie created by the visit has continued, with regular telephonic conversations between the leaders of the two countries and indications that Mr. Erdogan might visit Israel shortly.
- The more dramatic Turkish outreach has been to Saudi Arabia, with Mr. Erdogan's visit on April 28-29. The visit was preceded by the special prosecutor in Turkey transferring the criminal case against 26 Saudi nationals for the murder of Jamal Khashoggi to the kingdom itself, thus closing this sensitive and divisive matter.
- Saudi Arabia reciprocated by removing the ban on the import of Turkish goods, which had reduced Turkish exports from \$3.2 billion in 2019 to \$200 million last year.
- Before his departure, Mr. Erdogan spoke of a "joint will to start a new period of cooperation", and specifically mentioned energy, health, food security, finance and defence industry as areas to be pursued.
- During the visit, he had cordial meetings with King Salman and Crown Prince Mohammed bin Salman, and referred to the kingdom as Turkey's "friend and brother".
- Besides boosting bilateral economic ties, regional commentators have referred to prospects for cooperation in promoting regional stability, particularly in matters relating to Syria, Iraq, Egypt and the east Mediterranean.

Turkey's strategic autonomy

- A NATO member since 1952, Turkey, under President Erdogan aspires, as Graham Fuller has said, "to a broad regional leadership, un beholden to any single country or power".
- Convinced that the U.S. had some hand in the attempted coup against him in July 2016, Mr. Erdogan moved closer to Russia and, contrary to NATO rules, even purchased the Russian S-400 missile defence system.
- Its expulsion from the NATO project to develop the F-35 fighter aircraft has encouraged even greater affinity with Russia.
- Russia today provides 52% of Turkey's gas imports, 65% of its grain requirements, and sends seven million tourists annually who make a significant contribution to the Turkish GDP. Russia is also constructing a nuclear power station that in 2030 will meet 30% of Turkey's energy needs. Bilateral trade last year was \$30 billion.
- The two countries are also bonded by the 930-km TurkStream gas pipeline that bypasses Ukraine and links the two countries through the Black Sea.
- Turkey has also built close ties with Ukraine. The latter provides nearly 15% of Turkey's grain imports and also sends annually a million tourists to the country. In early February 2022, the two countries



entered into a free trade agreement and a defence cooperation agreement. The latter provides for the supply and joint production of Turkey's lethal Bayraktar TB2 unmanned drones which have boosted Ukraine's fighting capabilities in the ongoing conflict with Russia.

- On March 29, Turkey hosted the second round of Russia-Ukraine peace talks in Istanbul, amidst some hints of progress at that time. Peace talks have halted since then; recent reports indicate that the western allies are not keen on a quick end to the conflict. At the same time, western nations are pursuing efforts to pull Turkey more deeply into their alliance.
- So far, Turkey has remained committed to strategic autonomy. It has described the Ukraine conflict as a "war" and, in terms of the Montreux Convention of 1936, the Bosphorus and Dardanelles Straits have been closed for naval shipping. Mr. Erdogan has described the war as "unacceptable", while Turkey's official media has criticised the Russian attack. Turkey also co-sponsored the UN General Assembly resolution that "deplored" the Russian invasion.
- However, Turkey has refused to join its western allies in imposing economic sanctions on Russia, nor has it closed its airspace to Russian traffic. It has also not sent any fresh arms shipments to Ukraine.

Regional geopolitics

- The sinking of the Russian Black Sea fleet flagship, Moskva, on 14 April, possibly through missile attacks from Ukraine, has highlighted the strategic significance of the Black Sea.
- Through its Black Sea fleet, Russia is anxious to project power in the Mediterranean — hence the expansion and modernisation of its bases in the Crimea, Tartous and Hmeimim in Syria, and the consolidation of its military presence in Libya.
- These Russian concerns and ambitions impinge on Turkey's interests. Hence, not surprisingly, they have been on opposite sides over the Nagorno-Karabakh dispute, when in 2020 Turkey backed Azerbaijan against Armenia, a Russian ally.
- Turkey has also opposed Russia's occupation of Crimea in 2014 on the ground that Russian control over Crimea and the upgradation of Russian naval capabilities will tilt the maritime balance of power in favour of the latter.
- In response, Turkey has enhanced its naval prowess in these waters — in April this year, the "Blue Homeland" naval exercises took place in the Black, Aegean and Mediterranean Seas, involving 122 ships, 41 aircraft and 12,000 personnel. During these war games, Mr. Erdogan pledged to make Turkey "the most powerful naval force in the region".
- Russia's plan in the Ukraine war to take full control of the Donbas region in east Ukraine and the Ukrainian coast on the Black Sea, and then take over the Transnistria region on the Ukraine-Moldova border — taken together, this would significantly expand Russian influence and revive the traditional Russian-Ottoman rivalry in the region, when the Ottomans had been backed by western allies, Britain and France.
- Turkey's NATO allies hope that, faced with the challenge of an expansionist Russia, Turkey would return as a compliant member of the trans-Atlantic alliance.
- But this seems unlikely. Turkey remains uncomfortable with periodic western criticisms of Mr. Erdogan's authoritarian ways.
- Turkish public opinion is also largely anti-West. In a survey in January 2022, 39.4% of those polled favoured closer ties with China and Russia, while 37.5% favoured closer relations with the U.S. and the EU; a year earlier, the two figures were, respectively, 27.6% and 40.9%.
- Again, in geopolitical terms, Turkey sees the need to work closely with Russia to manage its crucial interests in Central and West Asia, the Caucasus and Afghanistan.
- As the war continues and there are increasing domestic and regional pressures on Mr. Erdogan, the Turkish leader will need to depend on his substantial capacity as a crisis manager to take his country through these stormy times.



Bill assent, a delay and the Governor's options

(Source: [The Hindu](#))

Context: *The State of Tamil Nadu has been witnessing a confrontation between the elected government and the State Governor on the question of giving assent to the National Eligibility cum Entrance Test (NEET) Bill (linked to an all India pre-medical entrance test) passed by the State Assembly. Giving assent to a Bill passed by the legislature is a normal constitutional act performed by the Governor. But of late, even such normal acts have become a source of confrontation between State governments and the Governors. The conduct of Governors in certain States follows a definite pattern which causes a great deal of disquiet to elected governments as well as to those who have faith in the constitutional order.*

On the advice of Ministers

- The position of a Governor in the constitutional setup in India needs to be clearly understood in order to grasp the significance of the actions as well as responses of Governors in the politico-administrative contexts emerging from time to time in States.
- The Governor is an appointee of the President, which means the Union government. Although Article 154(1) of the Constitution vests in the Governor the executive power of the State, he is required to exercise that power in accordance with the Constitution.
- In other words, the Governor can act only on the aid and advice of the Council of Ministers. Though there is not much deviation from the language used in the Government of India Act of 1935 in the context of the powers of the British-era Governors, it is a settled constitutional position that the Governor is only a constitutional head and the executive power of the State is exercised by the Council of Ministers.
- In *Shamsher Singh vs State of Punjab* (1974), the Supreme Court had clearly affirmed this position in the following words: “We declare the law of this branch of our Constitution to be that the President and Governor, custodians of all executives and other powers under various Articles, shall, by virtue of these provisions, exercise their formal constitutional powers only upon and in accordance with the advice of their Ministers save in a few well known exceptional situations”.
- Dr. Ambedkar explained the position of the Governor in the Constituent Assembly as follows: “The Governor under the Constitution has no functions which he can discharge by himself: no functions at all.”
- The Sarkaria Commission restates this position in its report, “it is a well-recognized principle that so long as the council of ministers enjoys [the] confidence of the Assembly its advice in these matters, unless patently unconstitutional, must be deemed as binding on the governor”.
- In 2016, a five-judge constitution Bench of the Supreme Court (the *Nabam Rebia* case) reaffirmed the above position on the governors’ powers in our constitutional setup.

The pathways available

- It may be stated here that this analysis of the Governor’s powers is meant to enable readers to have a perspective on the issue of the Governor of Tamil Nadu not deciding on the request for assent to the NEET Bill passed by the Assembly even after the passage of more than two months.
- What exactly are the options before the Governor in the matter of giving assent to a Bill passed by the Assembly?
- Article 200 of the Constitution provides for four alternative courses of action for a Governor when a Bill after being passed by the legislature is presented to him for his assent. Assent of the Governor or the President is necessary for a Bill to become law.
- The Governor can give his assent straightaway or withhold his assent. He may also reserve it for the consideration of the President, in which case the assent is given or withheld by the President.
- The fourth option is to return the Bill to the legislature with the request that it may reconsider the Bill or any particular provision of the Bill. The Governor can also suggest any new amendment to the Bill.



When such a message is received from the Governor, the legislature is required to reconsider his recommendations quickly.

- However, if the legislature again passes the Bill without accepting any of the amendments suggested by the Governor he is constitutionally bound to give assent to the Bill.
- The Governor of Tamil Nadu returned the NEET Bill to the Assembly for reconsideration of the Bill. Accordingly, the Assembly held a special session in the first week of February and passed it again and presented it to the Governor for his assent. He has not assented to the Bill so far.

A wrong view

- In the meantime, some sources in the Raj Bhavan have reportedly said that the Constitution has not fixed any time line within which to act.
- This, then, is the crux of the issue. The point that is made by these sources is that since the Constitution has not fixed any time frame, the Governor can postpone a decision indefinitely. Needless to say, it is a very wrong view.
- While it is true that Article 200 does not lay down any time frame for the Governor to take action under this Article, it is imperative on the part of the Governor to exercise one of the options contained therein.
- A constitutional authority cannot circumvent a provision of the Constitution by taking advantage of an omission. The option mentioned in Article 200 is meant to be exercised by the Governor without delay.
- The context of Article 200 needs to be understood to be able to take the correct decision. After a Bill is passed by the legislature, it is sent to the Governor immediately. Although Article 200 does not say by what time the Governor should take the next step, it clearly and unambiguously states the options for him to exercise.
- It is obvious that if the Governor does not exercise any of those options he will not be acting in conformity with the Constitution because non-action is not an option contained in Article 200.
- But sitting on the Bill after the Assembly has passed it again and sent it to him is impermissible under the Constitution. Article 200 (proviso) clearly says that when the Assembly reconsiders the Bill on the recommendations of the Governor and presents it to him, he shall not withhold assent.
- The Constitution makers could never have intended that the Governor could sit on a Bill passed by the legislature for as long as he wants and take advantage of the absence of any specific time frame.
- In fact, the words used in Article 200 "... it shall be presented to the governor and the governor shall declare..." indicates that the Constitution requires the Governor to act without delay upon the presentation of the Bill.
- The reason is obvious. The legislature passes a Bill because there is an urgency about it. But if the Governor does not act, the will of the legislature is frustrated. It is not the constitutional policy to frustrate the legislative will as expressed through the Bill. Therefore, in view of the mandatory provision in the proviso to Article 200, it is clear that the Constitution does not permit the Governor to sit on a Bill after the Assembly re-submits it to him after reconsideration.

An undemocratic option

- Giving assent to a Bill passed by the legislature is a part of the legislative process and not of the executive power. But the Constitution has by providing for definite options made it obligatory for the Governor to exercise any of those options without delay.
- Withholding of assent, though an option, is not normally exercised by Governors because it will be an extremely unpopular step. Besides, withholding assent to a Bill by the Governor, an appointee of the President, neutralises the entire legislative exercise by an elected legislature enjoying the support of the people.
- In the opinion of this writer, this option is undemocratic and essentially against federalism. In the United Kingdom it is unconstitutional for the monarch to refuse to assent to a Bill passed by Parliament.
- Similarly, in Australia, refusal of assent to a Bill by the crown is considered repugnant to the federal system.



- In our constitutional system, the Governor or the President is not personally responsible for their acts. It is the elected government that is responsible. Under Article 361, the President or a Governor is not answerable to any court for anything done in the exercise and performance of their powers and duties.
- But when a Governor does not take any decision on a Bill which is put up for his assent, he is not acting in exercise and performance of the duties cast upon him.

Quasi-federalism

(Source: [The Hindu](#))

Context: *The contemporary discourse on federalism in India is moving on a discursive note across multiple dimensions, be it economic, political and cultural, to the extent that one is compelled to regard India to be at an inflection point vis-a-vis Centre-State relations owing to increasing asymmetry. Professor Shawn Rosenberg has argued that without an active and committed citizenry a democracy can devour itself and, in this context, it is worth engaging with India's federal ethos and the associated asymmetries.*

Federal, quasi federal or hybrid?

- India consciously adopted a version of federalism that made the Union government and State governments interdependent on each other (latter more vis-a-vis the former) thereby violating the primal characteristic of a federal constitution i.e., autonomous spheres of authority for Union and State governments.
- Similar other constitutional features include the size and composition of the Rajya Sabha akin to that of the Lok Sabha thereby favouring larger States; Article 3 of the Indian Constitution which allows the Union to alter the boundaries of a State without the latter's consent, emergency powers, and concurrent list subjects of the Seventh Schedule wherein the Union possesses more authority than the State barring a few exceptions.
- India's centralised federal structure was not marked by the process of 'coming together' but was an outcome of 'holding together' and 'putting together'.
- Ambedkar called India's federation a Union as it was indestructible which is why the Constitution does not contain words related to federalism. He also said that India's Constitution holds requisite flexibility to be federal and unitary on a need basis.
- While the Supreme Court of India held that federalism was a part of the basic structure of the Indian Constitution in the S.R. Bommai vs Union of India case(1994), the Court also held that the Indian variant of federalism upholds a strong centre in the Kuldeep Nayar vs Union of India case (2006).
- Professor Louise Tillin argues that a conscious effort on the part of the framers of the Constitution to ensure flexibility and accommodate diversity renders India's federalism an original form which is neither conventional nor reductive.

The reasons for a centralised federal structure

- It is worth noting that the Indian National Congress (INC) vehemently opposed the discretionary powers of the provincial governors in the run-up to the 1937 elections and advocated in favour of autonomy.
- However, following the governance experience, in 1939, Nehru argued otherwise. Therefore, contextualising the choice of the framers of the Constitution provides a much needed insight on the past, thereby helping one understand the present and imagine the future of India's federal ethos.
- Tillin presents at least four reasons that informed India's choice of a centralised federal structure.
 - First was the partition of India and the concomitant concerns. Anticipating the Muslim League's participation in the Constituent Assembly debates following the Cabinet Mission plan in 1946, the Objectives Resolution introduced by Jawaharlal Nehru in the Assembly were inclined towards a decentralised federal structure wherein States would wield residuary powers. Further,



in his presidential address at the 44th session of the INC, J.B. Kripalani too spoke in favour of maximum autonomy to the States and regarded centralisation to be at odds with liberty. However, after the Partition a revised stand was unanimously taken by the Union Powers Committee of the Constituent Assembly, in favour of a strong Union with residuary powers and weaker States, to safeguard the integrity of the nation.

- The second reason pivoted around the reconstitution of social relations in a highly hierarchical and discriminatory society towards forging a national civic identity as argued by Professor Katharine Adeney instead of immediate caste and linguistic identities. Dr. Madhav Khosla shows that Nehru and Ambedkar believed that a centralised federal structure would unsettle prevalent trends of social dominance, help fight poverty better and therefore yield liberating outcomes.
- The third reason concerns the objective of building a welfare state. Drawing from existing literature, Tillin shows that in a decentralised federal setup, redistributive policies could be structurally thwarted by organised (small and dominant) groups. Instead, a centralised federal set-up can prevent such issues and further a universal rights-based system.
- The final reason involved the alleviation of inter-regional economic inequality. The cotton mill industry in Bombay, and the jute mill industry in the Bengal region were subject to a 'race to the bottom' or rampant cost cutting practices. The Bengal region saw workers' rights and safety nets being thwarted by Anglo-Scottish mill owners. The Bombay region had an empowered working class — thanks to the trade unionists — thereby affecting the business interests of mill owners owing to race to the bottom practices in the adjacent cotton belt region mills.
- Provincial interventions seemed to exacerbate inequalities. India's membership in the International Labour Organization, the Nehru Report (1928), and the Bombay Plan (1944) pushed for a centralised system to foster socio-economic rights and safeguards for the working and entrepreneurial classes.

The present and the future

- While the aforementioned reasons make a case for a centralised federal set-up, the structure's effectiveness is solely dependent on the intent and objectives a government aims to achieve.
- For instance, Tillin observed that linguistic reorganisation would not have been possible if India followed a rigid or conventional federal system.
- In other words, the current form of federalism in the Indian context is largely a function of the intent of the government of the day and the objectives it seeks to achieve. The majoritarian tendencies prevalent today are subverting the unique and indigenised set-up into an asymmetrical one.
- Inter alia, delayed disbursement of resources and tax proceeds, bias towards electorally unfavourable States, evasion of accountability, blurring spheres of authority, weakening institutions, proliferation of fissiparous political ideologies all signal towards the diminishing of India's plurality or regionalisation of the nation — a process that is highly antithetical to the forging of a supra-local and secular national identity that preserves and promotes pluralism.
- While it would be safe to argue that our federal set-up is a conscious choice, its furthering or undoing, will depend on the collective will of the citizenry and the representatives they vote to power.

The Delhi dual governance conundrum

(Source: [The Hindu](#))

Context: *Delhi has been the flashpoint of innumerable power struggles but 2015 was a momentous year in the history of the metropolis. The country's two main political parties failed miserably in an election to see who controls the National Capital Territory. The Aam Aadmi Party swept the election, winning 67 of the 70 seats. However, in the absence of statehood for Delhi, there has been a prolonged confrontation on the relative powers of the territorial administration and the Union government.*



Dilemmas of dual governance

- The status of Delhi being a Union Territory under Schedule 1 of the Constitution but christened the 'National Capital Territory' under Article 239 AA, engrafted by the Constitution (Sixty-ninth Amendment) Act, 2014, put the dynamics of the relationship between the elected Council of Ministers in Delhi and the Central Government under severe strain.
- The Administrator of Delhi, renamed as the Lieutenant Governor (L-G) under the aforementioned amendment, crossed swords with the elected government on multiple issues, including control over agencies, namely the Anti-Corruption Bureau, the Civil Services and the Electricity Board.
- The issues pertaining to the power to appoint the Public Prosecutor in Delhi and to appoint a Commission of Enquiry under the Commissions of Enquiry Act, etc. were vexed legal questions necessitating interpretation of the Constitution.
- Though the Delhi High Court decided in favour of the Central Government relying on the status of Delhi as a Union Territory, on appeal by the NCT, the Supreme Court referred the matter to a Constitution Bench to decide on the substantial questions of law pertaining to the powers of the elected government of Delhi vis-a-vis the L-G.
- The five-judge Bench opened a new jurisprudential chapter in the Administration of NCT by invoking the rule of purposive construction to say that the objectives behind the Constitution (Sixty-ninth Amendment) Act shall guide the interpretation of Article 239AA and breathed the principles of federalism and democracy into Article 239AA, thereby finding a parliamentary intent to accord a sui generis status in distinction from other Union Territories.
- The Court declared that the L-G is bound by the "aid and advice" of the Council of Ministers, noting that the Delhi Assembly also has the power to make laws over all subjects that figure in the Concurrent List, and all, except three excluded subjects, in the State List. The L-G ought to act on the "aid and advice" of the Council of Ministers, except when he refers a matter to the President for a final decision.
- Regarding the L-G's power to refer to the President any matter on which there is a difference of opinion between L-G and the Council of Ministers, the Supreme Court ruled that "any matter" cannot be construed to mean "every matter", and such a reference shall arise only in exceptional circumstances. L-G shall act as a facilitator rather than anointing himself as an adversary to the elected Council of Ministers.
- At the same time, the Court ruled that the National Capital Territory of Delhi cannot be granted the status of a State under the constitutional scheme.

Split verdict on services

- After the Constitution Bench laid down the law on the broad issues involved, the contested questions were listed before a two-judge Bench. The Court unanimously held that while the Anti-corruption Bureau belongs to the province of the Centre, the Electricity Board under Government of NCT is the Appropriate Authority under the Electricity Act of 2003.
- While it held that only Central Government has the power to constitute enquiry Commission under the 1952 Act, the power to appoint Public Prosecutor is vested with Government of NCT.
- While one Judge found that services were totally outside the purview of the Government of NCT, the other held that officers below the rank of joint secretary are under the control of the Government of NCT.

Back to the Constitution Bench?

- This split has resulted in the present hearing before a three-Judge Bench presided over by the Chief Justice, in the course of which the Solicitor General sought reference to a Constitution Bench.
- This has been opposed by the Government of the NCT of Delhi, whose counsel argued that forming another Constitution Bench to decide the matter would amount to a "review" of the earlier Constitution Bench ruling. The 3-Judge Bench has reserved its orders on the question.



- It is germane to remember the observation of Justice Ashok Bhushan penned as part of the Constitution Bench decision on NCT (2018) that, “From persons holding high office, it is expected that they shall conduct themselves in faithful discharge of their duties so as to ensure smooth running of administration so that rights of all can be protected.”
- Unless the stakeholders recognise this axiomatic precept, Delhi would continue to be under administrative and political distress.
- The 2021 amendment to the Government of National Capital Territory of Delhi Act, 1991, is a pointer to the possibility that the tug-of-war will not end. The aforementioned amendment is also under challenge before the Supreme Court.

Invigorating the Ayush industry

(Source: [The Hindu](#))

Context: *The global market for herbal medicine was valued at \$657.5 billion in 2020. It is expected to grow to \$746.9 billion in 2022. In China, the traditional medicine industry had total revenue of \$37.41 billion in 2018, according to an IBISWorld report. In fact, the Healthy China 2030 plan forecasts that the value of traditional Chinese medicine (TCM) market may reach \$737.9 billion within China and globally by 2030. The growth of the TCM industry in China is attributed to the immense attention the sector has received in the country. In 1982, the Constitution of China gave full recognition to TCM. Since 2009, there has been continuous support for TCM in health policies. China has focused upon developing quality infrastructure for TCM to co-exist with modern medicine under the same roof.*

The NAM scheme

- In India, the National Ayush Mission (NAM) was launched in 2014 by the Department of Ayush, Ministry of Health and Family Welfare, to promote Ayush systems and address the needs of the sector in a comprehensive way.
- Providing cost-effective services, strengthening educational systems, quality control of drugs and sustainable availability of raw materials are the main objectives of NAM. The industry is projected to reach \$23.3 billion in 2022, according to a Research and Information System for Developing Countries (RIS), 2021, report. The Indian herbal medicine market is worth \$18.1 billion.
- The Indian Ayush sector has grown by 17% between 2014 and 2020. Related segments such as plant derivatives grew by 21%, plant extracts by 14.7%, and herbal plants by 14.3% during the same period.
- Under the ‘Medicinal Plants’ component of the NAM scheme (2015–16 to 2020–21), the cultivation of prioritised medicinal plants in identified clusters/zones is being supported. Cultivation of plants on farmer’s land, establishment of nurseries with backward linkages, post-harvest management with forward linkages, and primary processing, marketing, etc., are all covered under the scheme.
- For the cultivation of plants, subsidies at 30%, 50% and 75% of the cultivation cost for 140 medicinal plants are being provided. So far, approximately 56,396 hectares are under the cultivation of medicinal plants, as per the Ministry of Ayush.
- Further, last year Union Ayush Minister Sarbananda Sonowal announced that medicinal plants will be cultivated on 75,000 hectares of land. The Ministry of Finance has also announced a ₹4000-crore package under the Aatmanirbhar Bharat Abhiyaan for the promotion of herbal cultivation.
- There is no doubt about the potential of the sector and the above measures will surely help. However, the Ayush sector requires a multi-dimensional thrust, ranging from initiatives at the institutional level, massive awareness and promotion of cultivation of medicinal plants by farmers, to trade-related interventions and quality focus measures.

SMPBs to be strengthened

- The National Medicinal Plant Board (NMPB) implements the medicinal plant component of Ayush through state bodies—State Medicinal Plant Boards (SMPBs).
- The organisational structure of SMPBs needs to be strengthened. They should have experts for conservation, cultivation, R&D, herbal garden and nurseries, IEC and marketing and trade of medicinal plants.
- On the trade front, developing comprehensive databases on Ayush trade, products and raw materials is needed. To date, most ISM (Indian System of Medicine) products, herbal products and medicinal plants products are not identified under specific HS (Harmonised system) codes.
- Expansion of HS national lines to accommodate various features of traditional medicine and medicinal plant products based on existing requirements is required to provide more comprehensive trade data on Ayurvedic products.
- Prime Minister Narendra Modi laid the foundation of the WHO-Global Centre for Traditional Medicine in Jamnagar on April 19, 2022. This will be the first and only global outpost centre for traditional medicine across the world.
- NITI Aayog has already constituted a committee and four working groups on integrative medicine, with more than 50 experts across the country, to provide deeper insights and recommendations in the areas of education, research, clinical practice and public health and administration. Considerable progress has been made by the committee for the finalisation of the report. Integration of Ayush systems into mainstream systems will certainly give wider acceptance for traditional systems of the country.
- The Ayush industry in India can provide cost-effective healthcare to people across States. It has all the ingredients of success, to co-exist with the modern health systems, as a choice-based system of traditional medicine.

The debate on the national language

(Source: [The Hindu](#))

Context: Remarks by a Hindi actor to the effect that Hindi is the national language of India sparked a controversy recently over the status of the language under the Constitution. Many were quick to point out that there is no national language for India, and that Hindi is the official language of the Union. The official language issue was hotly debated in the Constituent Assembly, and the provisions relating to it were formulated only after a compromise that English shall continue to be used for 15 years.

What is the status of Hindi?

- Under Article 343 of the Constitution, the official language of the Union shall be Hindi in Devanagari script. The international form of Indian numerals will be used for official purposes.
- The Constituent Assembly was bitterly divided on the question, with members from States that did not speak Hindi initially opposing the declaration of Hindi as a national language.
- Proponents of Hindi were insistent that English was the language of enslavement and that it should be eliminated as early as possible. Opponents were against English being done away with, fearing that it may lead to Hindi domination in regions that did not speak the language.
- There were demands to make Sanskrit the official language, while some argued in favour of 'Hindustani'.
- There were differences of opinion over the script too. When opinion veered towards accepting Hindi, proponents of the language wanted the 'Devanagari' script to be adopted both for words and numerals.
- Some advocated that the Roman script be adopted, as it would facilitate faster learning of Hindi. The predominant opinion was in favour of adopting 'international numerals' (the Arabic form used and understood throughout the world) instead of Hindi numerals.

- Ultimately, it was decided that the Constitution will only speak of an ‘official language’. And that English would continue to be used for a period of 15 years. The Constitution said that after 15 years, Parliament may by law decide on the use of English and the use of the Devanagari form of numbers for specified purposes.

What is the Eighth Schedule?

- The Eighth Schedule contains a list of languages in the country. Initially, there were 14 languages in the schedule, but now there are 22 languages.
- There is no description of the sort of languages that are included or will be included in the Eighth Schedule. There are only two references to these languages in the text of the Constitution.
- One is in Article 344(1), which provides for the formation of a Commission by the President, which should have a Chairman and members representing these scheduled languages. The purpose of the Commission is to make recommendations for the progressive use of Hindi for official purposes of the Union and for restricting the use of English.
- The second reference, found in Article 351, says it is the Union government’s duty to promote the spread of Hindi so that it becomes “a medium of expression for all elements of the composite culture of India” and also to assimilate elements of forms and expressions from Hindustani and languages listed in the Eighth Schedule.

What were the 1965 protests about?

- The Official Languages Act, 1963 was passed in anticipation of the expiry of the 15-year period during which the Constitution originally allowed the use of English for official purposes.
- Its operative section provided for the continuing use of English, notwithstanding the expiry of the 15-year period. This came into force from Jan 26, 1965, a date which marked the completion of 15 years since the Constitution was adopted.
- Jawaharlal Nehru had given an assurance in 1959 that English would remain in official use and as the language of communication between the Centre and the States. The Official Languages Act, 1963, did not explicitly incorporate this assurance, causing apprehensions in some States as the January 1965 deadline neared. At that time, Prime Minister Lal Bahadur Shastri reiterated the government’s commitment to move towards making Hindi the official language for all purposes.
- In Tamil Nadu, then known as Madras, the prospect of the use of Hindi as the medium of examination for recruitment to the Union public services created an apprehension that Hindi would be imposed in such a way that the future employment prospects of those who do not speak Hindi will be bleak.
- With the Congress government in the State taking the view that the people had nothing to fear about, protests broke out in January 1965. It took a violent turn after more and more student activists joined the protest, and continued even after key Dravida Munnetra Kazhagam (DMK) leaders were arrested.
- More than 60 people died in police firing and other incidents as the protests went on for days. The agitation died down later, but by then the Congress at the Centre realised the sensitivity of the language issue among Tamil-speaking people.
- When the Official Language Rules were framed in 1976, it was made clear that the Rules apply to the whole of India, except Tamil Nadu.

What is the three-language formula?

- Since the 1960s, the Centre’s education policy documents speak of teaching three languages — Hindi, English and one regional language in Hindi-speaking States, and Hindi, English and the official regional language in other States. In practice, however, only some States teach both their predominant language and Hindi, besides English.
- In States where Hindi is the official language, a third language is rarely taught as a compulsory subject. Tamil Nadu has been steadfastly opposing the three-language formula and sticks to teaching Tamil and English. It argues that those who need to know Hindi can learn on their own.

A new track for capital punishment jurisprudence

(Source: The Hindu)

Context: *A recent trend in the evolution of jurisprudence around the death penalty in India may reset judicial thinking around sentencing and have long-term ramifications in the awarding of capital punishment. Over the last six months or so, while dealing with appeals against confirmation of the death sentence, the Supreme Court of India has examined sentencing methodology from the perspective of mitigating circumstances more closely. The Court has also initiated a suo motu writ petition (criminal) to delve deep into these issues on key aspects surrounding our understanding of death penalty sentencing. As such, it is clear that the present trajectory of judicial thinking will not only reaffirm the fundamentals of the rarest of rare principle but also lead a new wave of thinking in the jurisprudence around capital punishment.*

Sentencing lapses

- Capital punishment once delivered by the court of sessions (“sentencing court”) is required under law, specifically Chapter 28 of the Code of Criminal Procedure, to be confirmed by the jurisdictional High Court (“confirming court”).
- The development of case laws on the point of sentencing has emphasised that sentencing cannot be a formality and that the sentencing court must make a genuine effort to hear the accused on the question of sentence. *Bachan Singh vs State of Punjab* (1980), the leading case on this point, calls for mitigating and aggravating circumstances to be balanced against each other and laid down the principle that the death penalty ought not to be awarded unless the alternative of life imprisonment is “unquestionably foreclosed”.
- Subsequent cases have developed this position to that of the state (which is the prosecuting agency) having the onus to lead evidence to establish that there is no possibility of reformation of the accused for the sentencing court to impose capital punishment.
- It is also an equally well-established legal principle that in a sentencing hearing, the accused must necessarily be provided with sufficient opportunity to produce any material that may have bearing on the sentencing exercise.
- When read in conjunction with the ratio decidendi of the *Bachan Singh* case, it is incumbent upon the sentencing court and the confirming court to ensure that the question of reform and rehabilitation of a convicted person has been examined in detail for these courts to come to a definitive conclusion that all such options are unquestionably foreclosed.
- In spite of such judicial guidance developed over four decades, studies have shown that when a group of former judges was asked what it considered as a rarest of rare case, the judges gave personalised, subjective and divergent explanations.
- A report by the National Law University Delhi’s Project 39A (earlier known as the “Centre on the Death Penalty”) titled ‘Matters of Judgment’ found that there is no judicial uniformity or consistency when it comes to awarding the death sentence.
- In the report titled ‘Death Penalty Sentencing in Trial Courts’ (also authored by Project 39A), findings reported from a study of cases involving death sentencing between 2000 and 2015 in Delhi, Maharashtra and Madhya Pradesh have showed that courts have been lax in assessing the aspect of reformation while undertaking the sentencing exercise.

Mitigation investigation

- On the back of such studies, the Supreme Court has begun to inquire into sentencing methodology with great interest. In *Rajendra Pralhadrao Wasnik vs The State of Maharashtra* (2018), the Court was open to bringing on record material pertaining to the convict “about his conduct in jail, his conduct outside jail if

he has been on bail for some time, medical evidence about his mental make-up, contact with his family and so on”.

- Building on this, the Court, in Mofil Khan vs State of Jharkhand (2021), held that the “the State is under a duty to procure evidence to establish that there is no possibility of reformation and rehabilitation of the accused” and that “the Court will have to highlight clear evidence as to why the convict is not fit for any kind of reformatory and rehabilitation scheme.”
- Undoubtedly, the onus has been placed on the State to lead evidence to show that no reformation is possible and for the sentencing courts to be satisfied that a thorough mitigation analysis was done before the death sentence is awarded.
- For a complete mitigation investigation, professionals trained in psychology, sociology and criminology are required in addition to legal professionals.
- Taking cognisance of the value of a holistic approach to mitigation investigation, the Court in Manoj & Ors vs State of Madhya Pradesh (2022) issued directions to the State to place before the court all “report(s) of all the probation officer(s)” relating to the accused and reports “about their conduct and nature of the work done by them” while in prison.
- More importantly, the order also directs that a trained psychiatrist and a local professor of psychology conduct a psychiatric and psychological evaluation of the convict.

Suo motu writ petition

- On March 29, 2022, a Bench of the Supreme Court led by Justice U.U. Lalit (along with Justices S. Ravindra Bhat and P.S. Narasimha) was hearing an interlocutory application filed on behalf of a death sentence convict seeking permission for a mitigation investigator from Project 39A be provided permission to conduct interviews and access material pertaining to the prisoner.
- While doing so, the Court recorded a set of observations around the questions of what may constitute mitigating circumstances, the role of a probation officer in assisting the Court and the potential value addition of a mitigation investigator to the sentencing exercise.
- These observations now form the basis of a suo motu writ petition (criminal) which will be heard separately and comprehensively on these aspects.
- The views of the Attorney General representing the Union of India as well as those of the National Legal Services Authority have been sought in this matter; and this is now listed for hearing on May 10, 2022 for consideration of arguments.
- At this hearing, or soon thereafter, it is hoped that guidelines around best practices in death penalty sentencing will be framed.

Onus on courts

- Nevertheless, it is undeniable that there is a new wave of thinking in this hitherto underexplored domain of sentencing, which forms a key pillar of judicial work.
- The intervention of the Supreme Court of India in, hopefully, framing guidelines around incorporation of a mitigation analysis and consideration of psycho-social reports of the prisoner at the time of sentencing is timely and necessary.
- As a result, the responsibility of the sentencing and confirming courts will now be greater in ensuring that no death sentence is manually awarded or routinely confirmed.
- The entire judicial exercise that has culminated in the institution of the suo motu writ petition will only go to strengthening the doctrine of the rarest of rare, as laid down in the Bachan Singh case and, thereby, reinstating fairness in the death penalty sentencing exercise.

GS III

Funding woes haunt Indian science

(Source: [The Hindu](#))

Context: Far back in time, science, like monasticism, attracted people who were singularly driven by a passion for seeking the truth. Largely ignored by the rulers and the state machinery of those days, science was either supported by the enlightened and munificent elites or by the investigators themselves from their personal funds. The times have changed since, and we have never had so many people supported by the state, whose purported purpose of work is to understand the world better. Thus, knowledge generation of the natural world has become a highly competitive endeavour among the nations and science funding has often been touted as a marker of social advancement.

India's R&D expenditure

- With very little participation from the private sector in the country that includes some of the richest by global standards, curiosity-driven basic research in India is primarily sustained by direct funding from the government.
- Still, it remains static in India and hovers between a paltry 0.6 to 0.8% of GDP over a decade, way below the United States, China, Japan, the European Union countries and South Korea.
- While India's global R&D expenditure remains static at 1-3% of the global total, the U.S. and China accounted for 25% and 23%, respectively.
- This trend of under-funding is also reflected in the low proportion of qualified researchers available in India, considering its huge population.
- The World Bank statistics indicate that India had 255 researchers per million people in 2017 — a minuscule fraction for its size and population, in contrast to 8,342 per million in Israel, 7,597 in Sweden and 7,498 in South Korea. Compared to 111 in the U.S. and 423 in China, India has only 15 researchers per 1,00,000 population.
- The budgetary allocations over the last several years show a consistent downward trend. Much of the total of the funding available goes to DRDO, Department of Space and Atomic Energy, leaving only 30 to 40% for agencies such as Indian Council of Agricultural Research (ICAR), Council of Scientific and Industrial Research (CSIR), Department of Science and Technology (DST), Department of Biotechnology (DBT), Ministry of Earth Sciences (MoES) and Indian Council of Medical Research (ICMR); it is from this last-mentioned allocation that the extra-mural research from the individual investigators are supported.
- The current financial year (2022-23) is no exemption, borne out by the budgetary allocations for scientific research. The Union Ministry of Science and Technology has earmarked ₹14,217 crore in the 2022-2023 Union Budget — a drop of 3.9% from last year; the DST and DBT are supposed to receive ₹5,240 crore and ₹2,961 crore, respectively.
- While the funding trend remained frozen between 2011 and 2018, the number of universities jumped from 752 to 1,016, and doctoral degrees escalated from 10,111 to 24,474, which means that the available number of people required to do scientific work as a career option enlarged exponentially.
- Probably realising this demand from the new generation of researchers from the universities, the 2021-22 budget offered ₹10,000 crore (\$1.37 billion) every year starting from 2021, over the next five years, for a new funding agency called the National Research Foundation (NRF).
- This agency is expected to boost university science research, as well as the work in social sciences. The journal Nature in its editorial dated February 9, 2021, in a somewhat euphoric tone, called it “a ground-



breaking change”, giving the fullest credit to the then Principal Scientific Adviser K. Vijay Raghavan for seeding this idea to the point of fruition.

- This newly proposed idea is also in tune with what is being stated in the National Education Policy 2020: "The NRF will provide a reliable base of merit-based but equitable peer-reviewed research funding, helping to develop a culture of research in the country through suitable incentives for and recognition of outstanding research, and by undertaking major initiatives to seed and grow research at state universities and other public institutions where research capability is currently limited”.

The NRF's importance

- Despite the announcement of the NRF and a huge fund infusion in the science budget, the 2021 budget speech had also expressed the intention of investing about ₹4,000 crore over five years for deep-ocean research and biodiversity conservation; and promised to four centres for virological research and a commitment to developing hydrogen energy.
- Planned to be an autonomous body and therefore less bureaucratic, the NRF was expected to bring thousands of colleges and universities under its ambit. As most of the country's scientific research is being conducted by government laboratories and a few premier institutes, this new forum was thought to be a game-changer by its intent of democratisation of the knowledge base.
- But it is anybody's guess why the current-year budget was eloquently silent on this initiative of the last financial year, which is yet to be approved by the Cabinet. Such a lack of continuity in government policy towards science funding is a huge deterrent to achieving the fullest potential in scientific research in India.
- Gallup poll of sorts among the researchers would surely nail the biggest hindrance in Indian science — the financial bureaucracy, again a legacy of British colonial governance. To unleash the fullest potential of Indian science, a vibrant and responsive financial system is required.
- Such a system should be autonomous and more participatory, and less bureaucratic — a problem also compounded by the fact that the finance person is made more accountable to the ministry rather than the secretary of the department. It is widely felt that it is often less difficult to have a project approved than to have funds periodically released.
- A corollary question is how to regain the autonomy of scientific institutions in financial management that has undergone considerable erosion. India must choose to break the bureaucratic barriers that exist in the government departments and develop innovative ways to help basic research flourish.
- India cannot aspire to be a global leader in scientific research if enough funds are not injected into basic research by committing to raise the R&D spending to at least 1% of the GDP. It is also important for the private sector to chip in. But for that to happen, the government should incentivise the private players by giving them tax breaks, etc.
- The promise to set up NRF, independent of political interference, and the related financial commitment needs to be realised. Another option is to upgrade the SERB (Science Engineering Research Board) to play the role assigned to the NRF.
- There are a lot of cues to be obtained from China on how it managed to become a world leader in scientific research. For all this to achieve, a foremost requirement is a dynamic R&D ecosystem, which India lacks today.

Intense heat

(Source: [The Hindu](#))

Context: India is in the throes of an unusually long series of heatwaves that began in the end of March and scorched north India for most of April. The India Meteorological Department (IMD) said April was the hottest in northwest India in 122 years. It has also been an unusually hot April — with temperatures touching above 40°C — in large parts of Bihar, Jharkhand and West Bengal.



How widespread is the heatwave?

- Records from IMD suggest that the average maximum temperature till April 27 was 35.7°C, the highest in five years for this month.
- In Madhya Pradesh, Rajasthan, Punjab, and Gujarat, the average maximum temperature in April 2022 so far has been the highest since 1951; while it has been the second highest in Delhi, Uttar Pradesh, and Haryana.
- In most of these States, the temperature has been consistently above 42°C and around 5-6 degrees above normal for this time of the year.
- Latest IMD forecasts say heat wave conditions prevail in many parts of Punjab, northwest Rajasthan and Vidarbha, Maharashtra. It's also unusually hot in parts of Himachal Pradesh, west Madhya Pradesh, Jharkhand, Bihar, Gangetic West Bengal and Odisha.
- Maximum temperatures were 43-46 degree Celsius over most parts of Rajasthan, Vidarbha, Madhya Pradesh and east Uttar Pradesh, in many parts of Gujarat and interior Odisha; in some parts of central Maharashtra and in isolated pockets of Bihar, Jharkhand and interior Gangetic West Bengal. Temperatures were over 40-43 degree Celsius in most parts of Haryana-Delhi, Punjab and in isolated pockets of west Uttar Pradesh, Chhattisgarh, Marathwada, Telangana and Rayalaseema.
- These scorching conditions are expected to continue until the middle of next week until, the agency says, a western disturbance from West Asia brings rain to parts of north and north-western India.
- While it is not unusual for the latter half of April to be dry and hot in most of north, west and central India, this year is unusual in that this follows the warmest March in 121 years with the maximum temperature across the country nearly 1.86°C above normal.

How are heatwaves defined?

- A heatwave is declared when the maximum temperature is over 40°C and at least 4.5 notches above normal. A severe heatwave is declared if the departure from normal temperature is more than 6.4 degrees, according to the IMD.
- Based on absolute recorded temperatures, a heatwave is declared when an area logs a maximum temperature of 45°C. A severe heatwave is declared if the maximum temperature crosses 47 degrees.

Is climate change responsible?

- The heat-trapping consequences of global warming imply that climate extremes such as heatwaves are expected to rise in frequency. Instances of extreme rainfall, as well as longer rainless spells are expected, according to assessments by the Intergovernmental Panel on Climate Change.
- The main reason for the scorching heat in the northern parts of the country is lack of rainfall. Usually, periods of high temperature are punctuated by periodic episodes of rain but this was largely absent during March and April.
- Ironically, April also saw maximum instances of extreme rainfall since 2018 though it was concentrated in the south and north-eastern India.
- The rain-bearing western disturbances originate because of temperature gradients between the northernmost parts of the globe and the latitudes passing through West Asia. Weaker gradients mean weaker rains. This March and April, cooler than normal conditions in the Pacific Ocean failed to aid rainfall in north India.

What impact do heatwaves have over India?

- Research through the years shows that the number of heatwave days in India is increasing every decade. From 413 in 1981-90 to 575 in 2001-10 and 600 in 2011-20, the number of days that see extremely hot days is persistently increasing at 103 weather stations.
- Some parts along eastern India, such as Andhra Pradesh, Telangana and Odisha, also register higher humidity along with high temperatures, leading to the rise in a condition called 'wet bulb' temperature, that at its mildest can cause extreme discomfort and at its worst cause dehydration and death.

- Heatwaves have killed more than 17,000 people in 50 years in India, according to a research study by IMD scientists. However, the intensity and length of heatwaves don't have a direct connection to India's monsoon that sets in over Kerala in June.

What is being done to buffer against high temperatures?

- Over the years, forecast systems have improved that allow heatwave warnings to be disseminated via electronic channels and phones instantaneously.
- Many State governments across the country have declared school holidays; some have highlighted the dangers of working outdoors during the day.
- Many State governments award monetary compensation for deaths linked to heatwaves.

A new perspective on fertility and income levels

(Source: [The Hindu](#))

Context: *Researchers argue that empirical observations that have guided economists till now no longer hold true, saying the inverse relationship between income levels and fertility has either flattened or reversed*

Details:

- Economists who study the subject of human fertility have traditionally tried to explain two empirical observations in the real world.
- One of these empirical observations is the fact that in many countries, there is an inverse relationship between fertility and income levels.
 - That is, as income levels have risen across the world, fertility levels have dropped significantly. In fact, in many countries in the western world, fertility is at below replacement levels at the moment and governments are trying to incentivize people to have more children.
- The second important empirical observation has been the inverse relationship between women's participation in the labour force and their fertility levels.
 - That is, as women's participation in the labour force has risen over the years there has been a fall in fertility levels.
- Economists have generally explained the inverse relationship between income and fertility as due to the decision among modern households to invest in the quality of children that they raise over the quantity of children that they make.
- In fact, some economists have argued that the decision of households to invest in child quality over child quantity was what helped many countries to build modern economies marked by high productivity.
- So, according to this view, when many households decided to have fewer kids and also sent these kids to schools to gain various skills over a number of years, for instance, this helped boost the productivity of the economy.
- On the other hand, the inverse relationship between women's labour force participation rate and fertility has been explained in terms of the costs involved for women who are employed when it comes to having and raising children.
- As more women have entered the labour force over the decades, the opportunity cost of bearing and raising children has risen and led many to have fewer children.
- For example, a working woman has to forego earnings over a considerable period of time when she spends time out of the workforce to have and then raise children.



Women's labour and fertility levels

- In “The Economics of Fertility: A New Era”, researchers Matthias Doepke, Anne Hannusch, Fabian Kindermann, and Michele Tertilt argue that the two empirical observations discussed above that have guided economists till date no longer hold true in large parts of today's world. They argue that the inverse relationship between income levels and fertility has either flattened or reversed in many high-income countries.
- Even more surprisingly, there is now a positive rather than a negative or inverse relationship between women's labour force participation rate and fertility levels across many countries.
- That is, even as the participation of women in the labour force has risen there has also been a rise in fertility levels. The researchers argue that there may be various reasons for the drastic change in these empirical observations that have guided mainstream economists for many decades now.
- Women today, for instance, get more support from their family, the state, and others when it comes to raising their children. Employment conditions may also be better suited to the needs of working mothers, thus encouraging more working women to have more children.
- Changes in social norms and support for working mothers may have also helped in the rise in fertility levels at a time when women's participation in the labour force has risen, the researchers say.
- All these factors together may have helped lower what is known as the “motherhood penalty” that women incur when they choose to work.

What this means for old theories?

- What does this all mean for the old theories that economists used to explain empirical regularities observed in the past? It would be hard to completely dismiss them because the opportunity cost of making and raising children will always have an effect on the decisions made by households.
- Whether it is the 19th century or the 21st century, a woman who is thinking about having children will still factor in the opportunity cost of having a child in terms of lost potential earnings.
- Similarly, households' decisions on whether to invest in the quality of children they raise or rather increase or decrease the number of children they have will also have an effect on fertility regardless of the times that we live in.
- In other words, these are truths that always hold true even though empirical observations may lead us to believe that they don't matter anymore. It may just be that the effect of income levels and labor force participation may be blunted now by other factors such as social norms, family and state support, etc.
- Also, the influence that societal views on the idea of having children may have on households' decision to have children may be a topic of interest worth exploring by social scientists. After all, it can have a significant effect on the cost that households are generally willing to bear to have and raise children.

Joblessness on the rise in India

(Source: [The Hindu](#))

Context: *As compared to the 8% per annum GDP growth in the period 2004-14, and 7.5 million new non-farm jobs created each year over 2005 to 2012 (NSO's employment-unemployment survey), the number of new nonfarm jobs generated between 2013-2019 was only 2.9 million, when at least 5 million were joining the labour force annually (NSO's Periodic Labour Force Survey (PLFS)). The NSO itself states clearly that the two surveys provide comparable data; the claim that those two surveys are not comparable is not correct.*

Unpaid family labour

- A claim is made that between 2017-18 and 2019-20, the worker participation rate (WPR) and labour force participation rate (LFPR) was rising, showing improvement in the labour market.



- The next question is: how come these rates were rising, exactly when the economy was slowing down sharply from 2017 to 2020?
- The reality is that this rise in WPR and LFPR is misleading. It was caused mostly by increasing unpaid family labour, mostly by women.
- The claim that manufacturing employment increased between 2017-18 and 2019-20 by 1.8 million is correct (based on PLFS). What this ignores is that between 2011-12 and 2017-18, manufacturing employment fell in absolute terms by 3 million, so a recovery is hardly any consolation. Manufacturing as a share of GDP fell from 17% in 2016 to 15%, then 13% in 2020, despite 'Make in India'.
- Meanwhile, another argument offered is that GDP in FY22 "could not have returned to pre-COVID FY20 level without workers returning to work and MSMEs recovering too".
- Clearly, this fails to recognise that organised economic activity could recover without a corresponding increase in unorganised activities, thus cancelling each other out, and still leave the jobless without work, or even less work.
- Second, a fall in urban unemployment after July 2020 to January-March 2021 has now been reversed, with urban unemployment rate rising in April-June 2021 back to mid-2020 level, and labour force participation falling again. This is a K-shaped recovery.
- In any case, the authors provide no evidence that MSMEs, that provide most of the non-farm employment, have recovered to pre-COVID levels. Meanwhile, here is the evidence. The Consortium of Indian Association (CIA) conducted a survey of over 81,000 micro businesses across Indian in June 2021, two months after the second wave was over.
- Of them 59% reduced their staff compared to pre-COVID levels; 88% respondents had not availed of any government stimulus packages; 28% reported they were unable to get payment dues from their customers from private or government; 64% reported banks were not giving loans.

Farm employment

- In any case, the recovery of urban employment till March 2021 clearly ignores that urban employment barely captures a third of total employment. Besides, agriculture output may have performed well during COVID, and free rations may have alleviated acute distress.
- This completely ignores that between 2019 and 2020, the absolute number of workers in agriculture increased from 200 million to 232 million, depressing rural wages — a reversal of the absolute fall in farm employment of 37 million between 2005-2012, when non-farm jobs were growing 7.5 million annually, real wages were rising, and number of poor falling. Rising farm employment is a reversal of the structural change underway until 2014.
- Finally, another dubious argument is offered to supplement the claim that organised formal employment is rising, because new registration in employment provident fund rose in the last two years. One limitation of EPFO-based payroll data is the absence of data on unique existing contributors. Employees join, leave and then rejoin leading to continuous revisions in EPFO enrolment.
- There has been a massive increase in joblessness of at least 10 million due to COVID-19, on top of the 30 million already unemployed in 2019.
- This happened while the CMIE is reporting the employment rate has fallen from nearly 43% in 2016 to 37% in just four years. Poverty had already increased during pre-COVID times, and increased further post-COVID by all estimates.

Inflation control needs another model

(Source: [The Hindu](#))

Context: *Inflation is back as a talking point in the public arena, some would say belatedly, for wholesale price inflation has been in the double digits for over 12 months. India's official measure of inflation, the rate of change of the consumer price index, has now breached the Reserve Bank of India (RBI)'s upper target of 6% for three months continuously. At the conclusion of the April meeting, the Monetary Policy Committee had already warned that the focus will henceforth be on inflation. Yesterday it raised the repo rate somewhat sooner than was expected by the market. It may appear contradictory to ask whether the RBI's stated policy of 'inflation targeting', implemented through changes in the interest rate, can control inflation, but we show here why that would be justified.*

Discourse on inflation

- The discourse on inflation engaged in by Western central banks, which has been adopted in toto by their Indian counterpart, is so abstruse that it is not understood even by many economists. So, we begin with an explainer.
- The starting point of this discourse is that inflation reflects an excess of output over its 'natural' level. Inflation targeting refers to the policy of controlling inflation by raising the interest rate over which the central bank has control, i.e. the rate at which it lends to commercial banks, the so-called 'repo rate'.
- This, it is argued, will induce firms to stay their investment plans and reduce inventories, lowering production. As economy-wide output declines, becoming equal to the natural level of output, inflation will cease. This story does not just legitimise a policy of output contraction for inflation but sees it as optimal.
- The natural level of output itself is the productive counterpart of the natural level of employment, the level that obtains in a freely functioning labour market. So, at the natural level of output, the economy is deemed to be at full employment.
- It is left unstated, but salient in the context, that the natural level of output is unobservable. Hence inflation as a reflection of an "overheating" economy is something that must be taken on trust.
- Surely it is disturbing that India's official model of inflation control is based on so unscientific a foundation. At least, the view of inflation that had ruled the central banks of the west before they adopted inflation targeting was based on something tangible, namely, the growth of the money supply.
- Not surprisingly for a theory based on an unobservable variable, the proposition that inflation is due to an overheating economy fares poorly when put to a statistical test for India.
- We are not aware of a single demonstration of the empirical validity of the model of inflation presented in the RBI report of 2014, which recommended a move to inflation targeting.
- On the other hand, in our published research, we explain inflation in India in terms of the movement of the prices of agricultural goods and, to a lesser extent, imported oil.
- The implication of this finding is damaging for the claim that monetary policy can control inflation, for neither the price of agricultural goods nor that of imported oil is under the central bank's control. The only route by which monetary policy can, in principle, control inflation is by curbing the growth of non-agricultural output, which would in turn lower the growth of demand for agricultural goods.
- As the demand for agricultural goods slows, so will inflation, but this comes at the cost of output and employment. At least, this is the theory. Whether this takes place in practice depends upon the extent to which changes in the repo rate are transmitted to commercial bank lending rates.

Agricultural goods prices

- The implication for the policymaker that inflation is driven by agricultural goods prices, as is the case in India presently, is that the focus should be on increasing the supply of these goods. This could be a win-win solution, for as agricultural production grows faster, the economy expands without inflation.



- Ideally, food prices should decline, for the consequent rise in demand for other goods will propel the economy forward.
- But the product mix of agriculture becomes relevant here. Growing per capita income in India has shifted the average consumption basket towards foods rich in minerals, such as fruits and vegetables, and protein, such as milk and meat.
- But the expansion of the supply of these foods has been lower than the growth in demand for them. So a concerted drive to increase the supply of food other than rice and wheat holds the key.
- There was a time when the leadership of the RBI understood this, but now its leadership appears unwilling to acknowledge native wisdom.
- Increasing agricultural supply at steady if not declining prices is not going to be easy for political reasons. The States have not shown themselves to be particularly sensitive to the charge that they do little to ensure a supply of cheap food for the rest of the country, or even themselves in some cases.
- When they do produce surpluses, their only concern is that these be procured by the central government at the highest price. The stances of the leaders of wheat-producing northern States and rice-producing southern ones reflect this. Under these circumstances, a nation-wide project for producing food cheaply remains a distant dream.
- Now that the farm laws have been repealed, it is the time to initiate a discussion on how such a project can be taken forward.
- Costly food threatens the health of the population, as people economise on their food intake, and holds back the economy, as only a small part of a household's budget can be spent on non-agricultural goods.
- Monetary policy manouvres, typified by the RBI's raising of the repo rate yesterday, is not an efficient solution for an agricultural price-driven inflation.
- Any lasting inflation control would require placing agricultural production on a steady footing, with continuously rising productivity. This would require a re-orientation of farm policy. Since the time of the Green Revolution, the focus has been on raising output, that too of the superior cereals.
- The inflation caused by continuously raising procurement prices for these crops and slow growth elsewhere in the food-producing sector has been swept under the carpet. The time has come to end this folly. Until then, inflation targeting by a committee accountable to no one will remain a charade.

The status of GST compensation dues

(Source: [The Hindu](#))

Context: *At a meeting with Chief Ministers last week, Prime Minister Narendra Modi said that several non-BJP ruled States had failed to cut taxes on fuel products whose prices have surged sharply since March and urged them to do so in the interest of giving relief to the people facing high inflation. Most of the States he referred to — West Bengal, Tamil Nadu, Maharashtra, Kerala, Telangana, Jharkhand and Andhra Pradesh — countered the PM's pitch bluntly. West Bengal and Tamil Nadu said they had already reduced their VAT levies once. Maharashtra and Kerala pointed to States' resource constraints and pending dues from the Centre. The Mamata Banerjee administration said slashing State levies on petrol and diesel will be possible only if the Centre clears its outstanding dues of over ₹97,000 crore, which includes compensation for implementing the Goods and Services Tax (GST).*

What is the status of the outstanding GST compensation due to the States?

- The GST regime entailed doing away with multiple State and Central levies to create a simplified tax system for businesses. As this meant that States had to give up several taxation powers in the process, they were assured that revenue losses will be compensated for five years.



- The compensation was to be calculated by assuming a 14% year-on-year growth over revenues in 2015-16 from the State taxes subsumed in GST, and remitted from a compensation cess fund backed by cess levies on sin and luxury goods like pan masala, tobacco, coal and cars.
- Hours after the meeting, to counter these States' arguments about pending dues, the Finance Ministry said that outstanding GST compensation dues to States for 2021-22 stood at ₹78,704 crore, equivalent to four months of such accruals.
- This means that dues have been remitted to States for the eight-month period of April 2021 till November 2021.
- The ministry, which had last released GST compensation of ₹18,252 crore to States and Union Territories during March, indicated its inability to pay the dues immediately owing to 'inadequate balance' in the compensation cess collections fund.
- "Normally, compensation for 10 months from April-January of any financial year is released during that year and the compensation for February-March is released only in the next financial year. The pending amount will also be released as and when amount from cess accrues in the compensation fund," the Ministry assured.
- On top of the ₹78,704 crore due to States, ostensibly for the period of December 2021 to March 2022, compensation for the April to June period — the last quarter for which such dues will accrue — also need to be arranged.
- Chief economist of rating agency ICRA Aditi Nayar has estimated that this could be another ₹60,000 crore, taking total dues that remain to be paid to States close to ₹1.4 lakh crore.

How much GST compensation has been paid so far to States and when will this cess levy end?

- From July 2017 when the GST regime kicked off till now, about ₹7.35 lakh crore has been released as GST compensation to States. It had nearly doubled from ₹83,000 crore in 2018-19 to ₹1.65 lakh crore in 2019-20, before the pandemic hit the economy and revenue collections across the board.
- The Finance Ministry said that ₹2.78 lakh crore of compensation has been released to States for the year 2020-21 itself. Because GST as well as compensation cess inflows had dried up due to the COVID-19 lockdowns, as much as ₹1.1 lakh crore was financed through special borrowings from the market. In effect, the Centre borrowed these funds and lent them onwards to States as 'back-to-back' loans staggered through the year.
- Similarly, ₹1.59 lakh crore was raised in 2021-22 to pay States' compensation dues as per estimated shortfalls in the cess fund collections, and these funds were disbursed entirely by October by resorting to front-loading of the borrowings during the financial year.
- At the time, the Finance Ministry had expected the overall compensation payouts for the year to be ₹2.59 lakh crore, which it said would exceed the amount of compensation accruing to States in 2021-22, indicating it included pending compensation shortfalls for 2020-21.
- The levy of the compensation cess, which was to cease on June 30 this year, has been extended till March 2025-26 with a view to use the receipts to repay the principal and interest on these special loans.
- Several States, worried about income sources falling off a cliff once the assured compensation ceases to accrue from July 1, have urged the Centre to extend the GST compensation period beyond the five-year promise.
- But these demands have been stymied so far, citing the legal provisions enabling GST, and are unlikely to gain traction.

Will the record GST collections in recent months help?

- To the extent that States get a larger share of higher GST collections, of course. With April and May both clocking fresh highs in GST revenues of ₹1.42 lakh crore and over ₹1.67 lakh crore, the Centre and States' share, after making adjustments, was a robust ₹1.32 lakh crore and ₹1.36 lakh crore, respectively, over the two-month period. However, GST compensation cess collections are still not growing as rapidly as the overall kitty.



- Giving States some clarity on when outstanding GST compensation dues will be released, will help them plan their borrowings for the year, which will be particularly tricky from July.
- While the expected step-down in GST compensation flows from July 2023 may enlarge State borrowings this year, the timing of the release of the pending funds would impact their plans significantly, Ms. Nayar noted.
- Moreover, with States expected to aggressively push capital spending this year, which is critical to spur growth, an early release of funds, be it the devolution of other tax collections, or GST compensation, would help them plan and execute public infrastructure projects quicker.

The status of the Naga peace talks

(Source: The Hindu)

Context: *The annual report of the Ministry of Home Affairs (MHA) released recently said that the Isak-Muivah faction of the National Socialist Council of Nagaland (NSCN-IM) was involved in 44% of insurgency-related incidents in Nagaland in 2020. The Union government had, in 2015, signed a framework agreement with the NSCN-IM to find a solution to the Naga political issue. The negotiations are yet to be concluded.*

Why did the Naga insurgency begin?

- The term Naga was created by the British for administrative convenience to refer to a group of tribes with similar origins but distinct cultures, dialects, and customs. The Naga tribes are accumulated in Nagaland, Arunachal Pradesh, Manipur, and Myanmar.
- Residing in the Naga hills of Assam during the advent of the British and the annexation of Assam in 1820, the Nagas did not consider themselves a part of British India.
- The British adopted a way of governance over the Nagas that involved keeping in place their traditional ways of life, customs, and laws while putting British administrators at the top.
- At the time of the withdrawal of the British, insecurity grew among the Naga tribes about the future of their cultural autonomy after India's independence, which was accompanied by the fear of the entry of "plains people" or "outsiders" into their territory.
- These gave rise to the formation of the Naga Hills District Tribal Council in 1945, which was renamed the Naga National Council (NNC) in 1946. Amid uncertainties over the post-independence future of the Nagas, a section of the NNC, led by Naga leader A.Z. Phizo declared the independence of the Nagas on August 14, 1947, a day before India's declaration.
- The underground insurgency began in the early 1950s when Mr. Phizo founded the Naga Federal Government (NFG) and its armed wing, the Naga Federal Army (NFA). The Central Government sent the armed forces into Naga areas to curb the insurgency and imposed the contentious Armed Forces Special Powers Act (AFSPA), which is still in place in parts of Nagaland.
- The Nagas, led by Mr. Phizo, demanding an independent state outside of India, boycotted the 1952 and 1957 general elections and armed clashes grew. Unlike other groups in the north east which were accepting some form of autonomy under the Constitution, Nagas rejected this in favour of sovereignty.
- Some leaders among the NNC formed their own group to hold discussions with the government, leading to the formation of the State of Nagaland in 1963.

- This, however, did not satisfy many in the NNC and NFG, who, following years of negotiations with the government, eventually signed the Shillong Accord of 1975, agreeing to surrender arms and accept the Constitution.

When did the NSCN come into the picture?

- This signing of the Shillong Accord was not agreeable with many top leaders of the NNC and those operating from Myanmar as the agreement did not address the issue of Naga sovereignty and coerced them to accept the Constitution.
- Three NNC leaders — Thuingaleng Muivah of the Tangkhul Naga tribe of Manipur's Ukhrul district, Isak Chishi Swu of the Sema tribe, and S. S. Khaplang from Myanmar's Hemis tribe, formed the National Socialist Council Of Nagaland (NSCN) to continue the armed movement. The motto of the NSCN was to create a People's Republic of Nagaland free of Indian rule.
- In 1988, after years of infighting and violent clashes along tribal lines and over the main cause of the movement, the NSCN split into two factions. One, led by Mr. Muivah and Swu called the NSCN-IM and the other, led by Mr. Khaplang called the NSCN-K.
- The NSCN-IM demanded and continues to demand 'Greater Nagaland' or Nagalim — it wants to extend Nagaland's borders by including Naga-dominated areas in the neighbouring States of Assam, Manipur and Arunachal Pradesh.
- The NSCN-IM has now grown to become the most powerful insurgent group, also playing a role in the creation of smaller groups in other States. Its armed operations intensified along with illegal activities like tax extortion, smuggling of weapons and so on.

Where do the peace talks stand now?

- In 1997, the Government of India got the NSCN-IM to sign a ceasefire agreement to begin the holding of talks with the aim of signing a Naga Peace Accord.
- After this ceasefire, there have been over a hundred rounds of talks spanning over 24 years between the Centre and the insurgent group, while a solution is still awaited.
- New Delhi has been holding peace parleys simultaneously with the NSCN-IM, and the Naga National Political Groups (NNPGs) comprising at least seven other extremist groups, including the NSCN (K).
- In 2015, it signed a Framework Agreement with the NSCN (IM), the first step towards an actual Peace Accord. The then Joint Intelligence Chief R.N. Ravi was appointed the interlocutor for Naga peace talks and signed the agreement on behalf of the Centre. He was later appointed as Nagaland's Governor in 2019 to further the negotiations.
- The negotiations hit an impasse in 2020, with the NSCN-IM demanding the removal of Mr. Ravi as interlocutor, accusing him of "high handedness" and tweaking the agreement to mislead other Naga groups.
- The NSCN-IM continued to demand a separate flag and constitution for the Nagas and the creation of Nagalim, which it claimed was agreed upon in the Agreement.
- Mr. Ravi, however, denied this claim. After Mr. Ravi's removal as the interlocutor last year, Intelligence Bureau officer A.K. Mishra was first appointed as the Centre's adviser and then the interlocutor for the peace talks.
- On April 19 this year, Mr. Mishra visited the NSCN-IM's camp in Dimapur to hold closed-door talks but issues over the Naga flag and constitution remain to be ironed out.

Current Affairs Quiz

1) Consider the following statements:

1. Crimeware-as-a-Service Model refers to the practice of providing cyber hacking products and services to other cybercriminals.
2. It allows even a non-hacker to attack any system without having the cyber know-how to do so.

Select the correct answer:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

2) Consider the following statements regarding:

1. Sustainable Aviation Fuel is produced from sustainable feedstocks and is similar in its chemistry to the traditional jet fuel.
2. Sustainable feedstocks include cooking oil, non-palm waste oils from animals or plants, and solid waste from homes.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

3) Consider the following statements with respect to the Enforcement Case Information Report:

1. It is prepared by the Enforcement Directorate and it sets out the basis on which the accused is being investigated.
2. In the Vijay Madanlal vs Union of India case, the SC ruled that, the ED must provide the accused with the copy of the ECR.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

In Youth Bar Association Vs Union of India, the Supreme Court mandated that an accused person was entitled to having a copy of the FIR.

4) Consider the following statements with respect to rights:

1. Accepting foreign donations is an absolute and a vested right of an individual and an organisation in India.
2. Rights guaranteed under Part III and Article 19 of the Indian Constitution are not absolute rights.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2

d. Neither 1 nor 2

Answer : b

- Accepting foreign donations cannot be an absolute or even a vested right and the restrictions placed on Non- Government Organisations' (NGOs) ability to raise and use foreign donations through the said amendments are constitutional.

5) Consider the following statements about steroids:

1. Cortico steroids are lab-made molecules that mimic the action of the hormone called cortisol that controls the body's stress response, metabolism, and inflammation.
2. Anabolic steroids are lab-made versions of the male hormone testosterone and have a similar effect of increasing muscle mass as the natural hormone does.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c



6) Consider the following statements:

1. Stratospheric Observatory for Infrared Astronomy is a flying observatory which flies in the stratosphere above 99 percent of Earth's infrared blocking atmosphere.
2. The aim of was to understand how infrared waves pass through dense regions of gas and dust in space without getting scattered.
3. It is an joint initiative of NASA and German Space Agency and was the first to discover water on the sun-facing side of the Moon.

Which of the above statements is/are correct?

- a. 1 and 2 only
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Answer : b

SOFIA is designed to observe the infrared universe and understand Star birth and death, ?Formation of new solar systems, Identification of complex molecules in space, Planets, comets and asteroids in our solar system, Nebulas and galaxies, Celestial magnetic fields, and Black holes at the center of galaxies.

7) Consider the following statements:

1. When an electric current flows through a conductor in a magnetic field, the magnetic field exerts a transverse force on the moving charge carriers.
2. It is due to the hall effect that the sensor in the mobile phone switches off when the screen cover is closed.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

8) Consider the following statements with respect to different types of investors:

1. An anchor investor is a qualified institutional buyer who invests before the IPO is made available to the public.
2. Foreign Portfolio Investors are not allowed to invest in IPOs owned by the public sector in India.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

9) Consider the following statements:

- 1. Advanced Towed Artillery Gun System has the capability to program and fire Long Range Guided Munitions to achieve precision and deep strike.
- 2. It is developed under the public-private partnership by the Armament Research and Development Establishment under DRDO.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

10) Consider the following statements:

- 1. Sedition law was invoked from the government of India act, 1935 and is defined under Article 334 of the Indian Constituion.
- 2. Sedition is defined as 'an act by whoever, in words, either spoken or written, attempts to excite disaffection towards the Government established by law in India'.
- 3. It is a non-bailable offence, punishable with imprisonment from three years up to life, along with a fine.

Which of the above statements is/are correct?

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : b

The Sedition charge, which was included in Section 124 A of the Indian penal code in 1870, was imposed by the British Colonial government to primarily suppress the writings and speeches of prominent Indian freedom fighters.

11) Consider the following statements:

- 1. World Press Freedom Index is released by the global media watchdog, Reporters Without Borders.
- 2. The indices are political context, legal framework, economic context, soci-cultural context, and safety.

Which of the above statement(s) is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

12) Consider the following statements with respect to basis point:

- 1. A basis point is a standard measure for interest rates and other percentages in finance, representing one hundredth of one percent.



2. The basis point is used for calculating changes in interest rates, equity indices, and fixed-income security yields.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

13) Consider the following:

- 1. Ladakh
- 2. Manipur
- 3. Arunachal Pradesh
- 4. Gujarat
- 5. Andaman and Nicobar Islands

Arrange the above States/Union Territories from highest to lowest level of sex ratio:

- a. 2-4-1-3-5
- b. 1-3-5-4-2
- c. 3-4-5-2-1
- d. 5-2-1-4-3

Answer : b

14) Consider the following statements:

- 1. The Governor prima facie had no authority to transfer the mercy plea to the President.
- 2. The Governor is bound by the State Council's advice and the President has no role under Article 161.

Which of the above statements is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Answer : c

15) Consider the following statements about shigella, sometimes seen in the news:

- 1. Shigella is a type of virus that is responsible for food poisoning in humans and affects the digestive tract.
- 2. There is no possibility of person to person transmission of Shigella virus and spreads through contaminated food.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : d

Shigella is a bacterium that causes a diarrheal illness called shigellosis.

Shigella is found in the stool (feces) of infected people, in food or water contaminated by an infected person, and on surfaces that have been touched by infected people.

16) Consider the following statements regarding:

- 1. Black Widow Binary System refers to a system where a rapidly spinning neutron star is being consumed by the brighter companion star.
- 2. Black widow binaries are powered by pulsars that emit flashes of high-energy gamma and X-rays.

Select the correct answer code:



- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : b

It is a unique system that consists of a pulsar (rapidly spinning neutron star) that is circling and slowly consuming a smaller companion star, just like the female black widow spider does to its mate, hence the name.

17) Consider the following statements with respect to fundamental rights:

- 1. Fundamental rights given under the Indian constitution in case of violation can only be enforced against the public authorities and not against private individuals.
- 2. In *Shamdasani vs Central Bank of India*, the SC laid down that, violation of rights by the private individuals gives the aggrieved person a right to seek remedy under general laws only.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

18) Consider the following statements:

- 1. The original structure of the Lepakshi Temple was built by Agastya and was rebuilt by the Chalukyas.
- 2. It is an example of the Vijayanagara Architecture.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. None

Answer : b

The entire temple complex was believed to be re-built by Virupanna, and his brother Veeranna under the rule of Vijayanagara king Achyuta Devaraya.

The original structure is said to have been built by Sage Agastya and finds itself mentioned in the Skanda Purana as one of the 108 Saivaite pilgrimage centers of ancient India.

19) Consider the following:

It is commonly found in tropical scrub and deciduous forests. It is a nocturnal primate and is arboreal in nature. They are very social at dusk and dawn with two mating seasons in a year. It has been listed as Endangered by the IUCN.

The above is likely the description of:

- a. Slender Loris
- b. Amur Leopard
- c. Koala
- d. Monitor Lizard

Answer : a

20) Consider the following statements:

- 1. It is a waterfall on the Sharavati river in the Western Ghats.
- 2. It is the second-highest plunge waterfall in India.
- 3. The falls are fed by the water released from the Linganamkki Dam.

The above description is of:

- a. Dudhsagar Falls
- b. Old Courtallam Falls
- c. Jog Falls
- d. Kempty Falls

Answer : c

