

# News Juice Monthly AUGUST 2024 EDITION

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For Prelims and Mains

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#### **Polity & Governance**

1. How many examinations are under the charge of the National Testing Agency? Is it equipped to handle the large number of students and centres? What are the challenges? What are the loopholes in the system that can be manipulated by unscrupulous players?

#### Why in News?

The National Testing Agency (NTA) has come under intense fire over the past few weeks, with widespread allegations of cheating, paper leaks and other irregularities impacting flagship examinations such as the NEET (National Eligibility cum Entrance Test) for undergraduate medical college admissions and the UGC-NET for Ph.D and assistant professor appointments. The agency's director general, Subodh Kumar Singh, has been removed, the CBI is probing irregularities, and a high-level panel has been set up to create a roadmap for a systemic overhaul.

#### What is the NTA?



The NTA was set up in 2017 as a specialist, self-sustaining and autonomous organisation under the aegis of the Union Education Ministry. Its director general and governing body are appointed by the Union government. However, it is registered as a society and is a separate legal entity, which raises questions about the government's legal liability for the NTA's actions.

Its main mandate is to conduct efficient, transparent and international standard tests to assess the competency of candidates for admission, and recruitment purposes. Soon after it was established, the NTA took over the conduct of major all-India examinations, such as the JEE for engineering college admissions, NEET-UG, and UGC-NET (both of which had previously been conducted by the Central Board for Secondary Education or CBSE), as well as the entrance tests for Jawaharlal Nehru University and Delhi University.

The National Education Policy of 2020 envisaged a broader role, recommending that the NTA conduct an entrance or aptitude test for all universities across the country. In all, the NTA now has charge for more than 20 examinations.

#### Why have there been so many problems?

One of the main problems is that the NTA was originally intended to conduct computer-based tests only. Thus, when the NTA took over conduct of the UGC-NET examination from the CBSE six years ago, it was converted from a pen-and-paper examination to a computer-adaptive test. This year, however, for reasons that are unclear, UGC-NET shifted back to the pen-and-paper mode. The day after it was conducted for over 11 lakh aspirants, the government cancelled the examination, citing inputs from the cyber crime unit.

"Pen-and-paper is a heaven for scamsters," said one former official, noting that the printing process is particularly vulnerable to leaks. It is interesting that when the government announced fresh dates for UGC-NET 2024 to be held again, it also stipulated that it would be a computer-adaptive test this time.

However, when the conduct of NEET-UG was taken over by the NTA, the Health Ministry flatly refused to allow it to shift to a computer-based exam, citing concerns about students in rural areas who would not be prepared for an online exam. Hence, the NTA has been forced to run a major examination in a mode that it was never intended to implement by design.

Officials and educationists note that the agency is severely understaffed for the role it is currently being asked to undertake. According to a senior official, the agency was set up with only about 25 permanent staff positions. A number of its functions have also been outsourced to technical partners from the very beginning. Given that NEET-UG alone had more than 23 lakh candidates writing the examination in almost 5,000 centres across the country and abroad, this has left the agency stretched thin, according to some officials. However, some educationists have complained that engaging third-party players takes accountability out of the government's hands and leaves loopholes in the system which can be exploited by unscrupulous players.

Officials say the NTA has also failed to develop robust mechanisms needed to handle a large-scale pen-and-paper examination, including the setting of the question paper and its encryption, selection of external printing presses and exam centres, transportation to printing presses, storage and distribution to examinees at examination centres and then the collection and transportation of answer sheets to evaluation centres. Each of these is a stage where malpractice can occur without robust security mechanisms.

#### What is the way ahead?

The high-level panel headed by former ISRO chief K. Radhakrishnan has been given two months to recommend reforms in the examination process, improve data security protocols, and overhaul the NTA's functioning.

Educationists, however, propose starkly different pathways for the future. One option is to add manpower and infrastructure to the NTA to equip it to take on large-scale pen-and-paper examinations in an improvement to the CBSE system that preceded it. Those recommending this return to the past point out that pen-and-paper examinations are more equitable, especially for students in rural and remote areas with little access to technology.

Another option is to dismantle the centralisation process that seeks to move all testing in the country under the NTA. Some State governments, and professors from individual universities, notably JNU, have called for entrance tests for their institutions to be removed from the NTA and handed back to the institutions themselves, arguing that more decentralised structures are needed to meet the vastly differing needs of institutions.

However, others seek a more radical reform of the assessment system. They suggest systemic changes to remove the single, high-stakes entrance examination which results in extreme pressure on students, encourages an inequitable coaching industry, and incentivises malpractice. Instead, periodic assessments of knowledge, concept-based understanding, and aptitude can be conducted in the final years of school education as the precursor to the admission process, using online testing, and Al-based proctoring which can be overseen by the NTA.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

#### 2. New crimes under the Bharatiya Nyay Sanhita, and some grey areas

#### Why in News?

Three new criminal laws have come into effect from 1st July, 2024. The Bharatiya Nyaya Sanhita (BNS), the Bharatiya Nagrik Suraksha Sanhita (BNSS), and the Bharatiya Sakshya Adhiniyam (BSA), passed in Parliament last December, have replaced the Indian Penal Code (IPC), 1860, the Criminal Procedure Code (CrPC), 1973, and the Indian Evidence Act, 1872 respectively.



Since Independence, the colonial-era IPC (which provides the substance of criminal law), CrPC (which provides the procedure for law's enforcement), and Evidence Act have seen several revisions.

But as Union Home Minister Amit Shah said during the new laws' passage in Parliament, the sanhitas

represented laws that had been framed by Indians, for Indians.

There has been an overwhelming consensus that India's criminal laws needed updating. At the same time, the consultation process during the pandemic for drafting the laws, and their hasty passage through Parliament, has caused much disquiet. Some legal experts opine that although the new laws make significant changes, they do not 'overhaul' the existing laws.

#### **New crimes in BNS**

1. The BNS introduces a handful of new crimes. Notable among them is Clause 69, which penalises sexual intercourse through the employment of "deceitful means".

The provision reads: "Whoever, by deceitful means or by making promise to marry to a woman without any intention of fulfilling the same, has sexual intercourse with her... shall be punished with imprisonment" of upto 10 years, and also be liable for a fine. "Deceitful means" includes the false promise of employment or promotion, inducement, or marrying after suppressing identity. Critics say that this might, in some cases, end up criminalising consensual relationships and provide a fillip to the "love jihad" narrative.

- 2. The BNS, under Clause 103, for the first time also recognises murder on the ground of race, caste, or community as a separate offence. The SC had, in 2018, directed the Centre to consider a separate law for lynching. The new provision could now ensure such crimes, which have been on the rise in recent years, get legal recognition.
- 3. Another big-ticket addition to the BNS is the inclusion of offences such as organised crime and terror, previously in the ambit of specific stringent laws like Unlawful Activities Prevention Act for terrorism, and state-specific laws such as the Maharashtra Control of Organised Crime Act for organised crime. On terrorism, the BNS borrows heavily from the UAPA.

Organised crime, in Clause 111(1), encompasses "any continuing unlawful activity including kidnapping, robbery, vehicle theft, extortion, land grabbing, contract killing, economic offences, cyber-crimes having severe consequences, trafficking in people, drugs, illicit goods or services and weapons, human trafficking racket for prostitution or ransom..." But vague descriptions such as "cyber-crimes having severe consequences" will have to be addressed. Snatching, defined in Clause 304(1), is also a 'new' crime, distinct from theft. The definition reads: "in order to commit theft, the offender suddenly or quickly or forcibly seizes or secures or grabs or takes away from any person or from his possession any moveable property". Both theft and snatching prescribe a punishment of upto three-years in jail.

The rearrangement of provisions in the BNS signals legislative intent. Like the IPC, it starts with chapters dealing with general exceptions, punishments, abetment, and the Right of Private Defense. Offences against the state comes before offences against women and offences against body. But in the BNS crimes against women, comes before in Chapter V before offences against the state (like sedition).

#### New timelines, processes

A big change in the BNSS is the expansion of detention in police custody from the 15-day limit in the CrPC to up to 90 days.

According to Section 167(2) of the CrPC, an accused had to be sent to judicial custody (prison) after a maximum of 15 days in police custody. This was intended to incentivise the police to complete investigations in a time-bound manner, and curtail the likelihood of custodial torture and forced confessions. Clause 187(3)of the BNSS has deleted the words "otherwise than in police custody," essentially, allowing the police to keep custody of an accused for upto 90 days for all offences listed in the BNS.

The BNSS also states that in cases where the punishment is seven years or more, the victim shall be given an opportunity of being heard before withdrawal of the case by the government.

Trials in absentia — where a person accused of a crime can be tried and convicted in his absence, as if he was present in court and has waived his right to a fair trial for all offences — are another new introduction in the BNSS. While such a provision already exists under the UAPA, the burden of proof is reversed in the terror law, i.e. the onus is on the accused to prove

himself not guilty, rather than the state to prove his guilt. Critics argue that the introduction of trials in absentia under normal criminal law allows the state to forgo its duty to properly locate the accused before the trial begins.

The BNSS also removes the provision for statutory bail if an accused has more than one offence against his name. Under the CrPC, an accused could be granted statutory bail if he has served at least half of the maximum sentence prescribed for the offence. This was to ensure that trials do not take forever, and when they do, the accused does not suffer continued incarceration for no fault of his.

#### The upside

Among key positive changes in the new laws is the introduction of community service as an alternate form of punishment for some offences. These include small theft, defamation, and attempt to die by suicide with an intention to keep a public official from discharging her duty.

While it is unclear how offences deserving no jail time were chosen, with three-fourths of India's prison population being undertrials, community service as punishment keeps first-time convicts and those convicted for minor offences out of prison. The BNS, however, does not define what constitutes community service, leaving it to the discretion of judges.

Also, sexual intercourse with a minor wife has been brought under the ambit of rape. The IPC had carved out only one exception for marital rape — intercourse with wife who is less than the age of 15 years. In 2017, the SC had held that this 15 year limit was at odds with child rape laws under the POCSO Act. The new law addresses the grey area that 15-18 year old married girls fell in, under the IPC.

The inclusion of offences for mob-lynching is crucial, and signals a legislative acknowledgement of such hate crimes. The emphasis on video-conferencing of trials, and prescription of timelines for speedy trials should improve justice delivery but their success will depend on implementation on the ground.

#### Remaining grey areas

Among the big announcements made by the government on the three laws was "doing away with sedition." This was crucial since it came over a year after the SC in May 2022 virtually stalled the operation of sedition law deeming it "prima facie unconstitutional."

Despite the government's claims, the BNS has in fact introduced the offence with a wider definition, while incorporating the SC guidelines in the 1962 Kedarnath Singh case, which upheld the constitutional validity for the crime of sedition. In Hindi, the law carries out a simple name change — from rajdroh (rebellion against the king) to deshdroh (rebellion against the nation).

The other big concern, as the criminal laws are rolled out, is the issue of penalising rape in cases where the victims are male. The BNS, with a seemingly progressive outlook, entirely leaves out the contentious Section 377 of the IPC which criminalises "carnal intercourse against

the order of nature". In 2018, this provision had been read down by the apex court in its landmark Navtej Singh Johar v Union of India ruling to the extent that it criminalised consensual sex among adults, including those of the same sex.

But Section 377 is still invoked to penalise non-consensual sex, and is often the only recourse in cases of rape of men (specific rape laws are applied in cases of women victims). With the exclusion of this provision in the BNS, and with rape laws still not made gender-neutral, there is little criminal recourse for male victims of sexual assault.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

#### 3. New criminal laws in effect; amendments soon



#### Why in News?

As three new criminal laws come into effect across the country despite objections from States ruled by non-BJP parties, Union government officials said here on Sunday that the States were free to bring in their own amendments to some provisions of the Bharatiya Nagrik Suraksha Sanhita (BNSS) that replaces the Code of Criminal Procedure (Cr.PC.). The BNSS prescribes the procedure and conditions for arrest, bail, and custody, among other things.

The Bharatiya Nyaya Sanhita (BNS), which replaces the Indian Penal Code, 1860, may also be amended soon to incorporate a section on sexual crimes against men and transgender persons. A senior government official said that police officers were being asked to invoke other allied sections under the BNS, such as wrongful confinement and physical hurt, if they get such complaints, until an amendment is brought to correct this anomaly.

The Bharatiya Sakshya (BS), which replaces the Indian Evidence Act, 1872, is the third law which will come into force.

The IPC and Cr.PC will run concurrently along with the new laws as several cases are still pending in courts and some crimes that took place before July 1 that are reported later will have to be registered under the IPC.

#### **First information reports**

First information reports (FIRs) are filed through the Crime and Criminal Tracking Network Systems (CCTNS), a programme that functions under the National Crime Records Bureau. A significant upgrade to the CCTNS will help people file an e-FIR, without visiting a police station, and a zero FIR, which can be filed irrespective of the jurisdiction of the crime location.

The official said that changes have also been made to the CCTNS software to register FIRs in languages other than English and Hindi.

#### **Electronic evidence**

The BNSS mandates compulsory audio-video recording of search and seizure in each criminal case and mandatory forensic examination in all cases where an offence attracts punishment of seven years or more.

The recordings will have to be submitted before the court electronically "without delay." Under Section 105 of the BNSS, the scope of audiovisual recording during search and seizure includes the process of preparing a list of seized items and the signature of witnesses.

While the Home Ministry is testing eSakshya (e-evidence), a mobile based application to help police record scene of crime, search and seizure in a criminal case and upload the file on the cloud-based platform, several States depending on their capacities have devised their own systems.

For instance, the Delhi Police have developed an e-pramaan application which will help investigating officials record a scene of crime and generate a hash value along with a certificate under Section 62 of Bharatiya Sakshya. Officials pointed out that the security of the cloud-based system where the data will be stored will be of prime concern.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

# 4. New sections in criminal laws: Cheating is not Section 420 but 318, punishment for murder is Section 103

#### Why in News?

The three new criminal laws came into effect on July 1. The Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS) will replace the Criminal Procedure Code (CrPC); the Bharatiya Nyaya Sanhita (BNS) will replace the Indian Penal Code; and the Bharatiya Sakshya Adhiniyam will replace the Indian Evidence Act.

Passed in parliament last year, the government billed it as an effort to remove colonial influences on India's legal system. Home Minister Amit Shah said last year that the "purpose of older laws" brought in by the British "was to strengthen the British rule". "Its purpose was to punish, not to dispense justice."

"After nearly 150 years, the three new criminal laws are being brought with entirely new perspectives and provisions with a purpose to eliminate the delays in the criminal justice system... we will not see any colonial influence, and they will resonate with the essence of Indian soil, at the core of these (Bills) is the protection of the constitutional rights, human rights, and the self-defence of Indian citizens," Shah said.

#### **Important Sections of BNS**

The BNS has 358 sections, compared to the 511 in the IPC. Therefore, the longstanding numbering of many criminal charges listed in the IPC has changed. For instance, Section 420, which defined cheating, led to the number '420' becoming a catchall and commonly used term for such crimes. It is now listed as Section 318 in the BNS.

Here is a list of some major criminal charges and how they are numbered in the BNS.

#### 1. Punishment for murder

Previously Section 302 in the Indian Penal Code, the offence is now covered under Section 103 of the Bharatiya Nyaya Sanhita.

#### 2. Attempt to murder

Previously Section 307 in the Indian Penal Code, the offence is now covered under Section 109 of the Bharatiya Nyaya Sanhita.

#### 3. Rape

Previously Section 375 in the Indian Penal Code, the offence is now covered under Section 63 of the Bharatiya Nyaya Sanhita.

#### 4. Gang rape

Previously Section 376D in the Indian Penal Code, the offence is now covered under Section 70 (1) of the Bharatiya Nyaya Sanhita.

#### 5. Cruelty against a married woman

Previously Section 498A in the Indian Penal Code, the offence is now covered under Section 85 of the Bharatiya Nyaya Sanhita.

#### 6. Dowry death

Previously Section 304B in the Indian Penal Code, the offence is now covered under Section 80 of the Bharatiya Nyaya Sanhita.

#### 7. Sexual harassment

Previously Section 354A in the Indian Penal Code, the offence is now covered under Section 75 of the Bharatiya Nyaya Sanhita.

#### 8. Outraging the modesty of a woman

Previously Section 354 in the Indian Penal Code, the offence is now covered under Section 74 of the Bharatiya Nyaya Sanhita.

#### 9. Criminal intimidation

Previously Section 503 in the Indian Penal Code, the offence is now covered under Section 351 of the Bharatiya Nyaya Sanhita.

#### 10. Defamation

Previously Section 499 in the Indian Penal Code, the offence is now covered under Section 356 of the Bharatiya Nyaya Sanhita.

#### 11. Cheating

Previously Section 420 in the Indian Penal Code, the offence is now covered under Section 318 of the Bharatiya Nyaya Sanhita.

#### 12. Criminal Conspiracy

Previously Section 120A in the Indian Penal Code, the offence is now covered under Section 61 of the Bharatiya Nyaya Sanhita.

#### 13. Sedition

Previously Section 124A in the Indian Penal Code, the offence is now covered under Section 152 of the Bharatiya Nyaya Sanhita.

#### 14. Promoting enmity between different groups

Previously Section 153A in the Indian Penal Code, the offence is now covered under Section 196 of the Bharatiya Nyaya Sanhita.

#### 15. Imputations, assertions prejudicial to national integration

Previously Section 153B in the Indian Penal Code, the offence is now covered under Section 197 of the Bharatiya Nyaya Sanhita.

#### 16. Statements conducing to public mischief

Previously Section 505 in the Indian Penal Code, the offence is now covered under Section 353 of the Bharatiya Nyaya Sanhita.

#### 17. Public nuisance

Previously Section 268 in the Indian Penal Code, the offence is now covered under Section 270 of the Bharatiya Nyaya Sanhita.

Relevance: GS Prelims & Mains Paper II; Governance

#### Source: Indian Express

#### 5. Champai quits, Hemant Soren set to return as Jharkhand CM

#### Why in News?



Hemant Soren back as Jharkhand CM for third term after 5 months in jail

Jharkhand Mukti Morcha (JMM) leader Hemant Soren took oath as Jharkhand Chief Minister for the third term on Thursday. The state governor C.P. Radhakrishnan administered the oath ceremony at the Raj Bhavan in Ranchi.

Jharkhand Chief Minister Champai Soren resigned on Wednesday, paving the way for his predecessor Hemant Soren to stake his claim to form the government and return to the State's top post after being unanimously elected leader of the ruling alliance's legislators at a marathon meeting in Ranchi.

#### Why Hemant Soren resigned earlier?

Mr. Hemant Soren, son of Jharkhand Mukti Morcha (JMM) supremo Shibu Soren, had resigned as Chief Minister in January shortly before he was taken into custody by the Enforcement Directorate in a money laundering case linked to an alleged land scam. He was released on bail on June 28.

#### **Intervening Chief Minister Resigned**

Ending his five-month term, Mr. Champai Soren met Governor C.P. Radhakrishnan at the Raj Bhavan and tendered his resignation in the presence of Mr. Hemant Soren, who staked his claim soon afterwards.

As per the sources, the outgoing CM is said to be "upset" over the development, though he has denied this, and is likely to be given a new responsibility as the chairperson of INDIA bloc coordination committee in the State or as executive president of the JMM.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

#### 6. The lack of leadership at TISS

#### Why in News?

Over a 100 staff members of the Tata Institute of Social Sciences (TISS) were in for a shock, after they received termination letters on June 28, and were asked to not report to work come July. Within two days of this development, they were told that the termination letters had been withdrawn and that they could continue working as the Tata Education Trust (TET), which funds their salaries, had now assured to make funds available to support their salaries.

#### What happened?

A month before the termination letters, up to 55 teachers and 60 non-teaching staff had an inkling that their jobs could be in trouble, because even as the academic year of 2023-24 was

winding up in April, there was no clarity from TET on the renewal of funding of their contractual positions. "Some of these staff has been working with TISS for up to fifteen years. TISS is largely funded by the University Grants Commission, but staff salaries, certain courses and funds for maintenance are funded by the TET.



#### TISS withdraws 'mass termination' notice: 'Tata trust to release funds'

The Tata Institute of Social Sciences (TISS) has retracted its notice to terminate contracts of over 55 teaching and 60 non-teaching staff after facing strong criticism from faculty and student body.

#### What has been happening at TISS?

From 2004 onwards, TISS had widened its scope of work, and from close to 15 programmes including Masters' and Diplomas, it expanded its offering to over 55 programmes including dual degrees and foreign university collaborations.

Under the directorship of late Prof. S. Parsuraman, TISS was flourishing, with students undertaking enormous field work under the research guidance of teachers.

Mr. Parsuraman was the longest serving director of TISS from 2004 to 2018. However, trouble started brewing in TISS from 2016 onwards, when it decided to stop student aid to those belonging to marginalised

communities in all of its four campuses in Mumbai, Tuljapur, Hyderabad and Guwahati.

After Mr. Parsuraman's tenure, Prof. Shalini Bharath, a public health researcher who has extensively worked on HIV access issues served as a director for five years.

In 2023, the UGC regulations were changed, which brought appointments in TISS under the central government's purview, as over 50% of its funding is from the Centre.

After Prof. Bharath retired, the director of Indian Institute of Management (Mumbai) Manoj Tiwari, took up the additional charge of an acting director as well as Vice Chancellor, until a full time director is appointed. He was supposed to have interim charge for six months, but his term was extended by another six months after delays were faced in appointing a Director.

#### How has a lack of leadership affected the institute?

After the tweak of the UGC regulations, administrative bodies of TISS were also supposed to undergo an overhaul. Sources at TISS say that in a classic case of 'mismanagement,' these bodies have not yet been made fully operational.

After the central government took over the TISS administration, the erstwhile 'Governing Board,' the highest decision making body of the institute, earlier headed by a nominee of the

Tata Group, S. Ramadorai who was also CEO of Tata Consultancy Services, and included two to three faculty members as well as an equal number of external members, stood dissolved.

The government decided that this would be replaced by an 'Executive Council,' headed by the VC. "It has been over nine months, but the new council is yet to come into full operation.

#### How has this affected students?

After the executive council, the academic council is the second-most important body in TISS. The academic council is vital to all semester activities in the institute. What is disheartening is that the academic council is yet to convene to approve results for major programmes including Masters, PhD, Diplomas and Certificate courses, thus leaving the students in a lurch.

While the students were supposed to receive their results in May, this has now been delayed by three months, and their convocation has been pushed to August. The delay has affected the future of over thousand students who graduate out of TISS every year, and it affects their future plans of studying abroad or pursuing careers as they have not been awarded their degrees.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

#### 7. The Telecommunications Act 2023: Ushering in a New Era of Connectivity

#### **About the Painting**

The Union Government on July 04, 2024, issued Gazetted Notification for enforcing section 6-8, 48 and 59(b) of the Telecommunications Act. 2023 w.e.f. today, i.e., July 05, 2024.

The Telecommunication Act 2023 aims to amend and consolidate the law relating to development, expansion and operation of telecommunication services and telecommunication networks; assignment of spectrum; and for matters connected therewith. The Telecommunication Act 2023 also seeks to repeals existing legislative framework like Indian Telegraph Act 1885 and Indian Wireless Telegraph Act 1933 owing to huge technical advancements in the telecom sector and technologies.

Guided by the principles of Samavesh (Inclusion), Suraksha (Security), Vriddhi (Growth), and Tvarit (Responsiveness), the Act aims to achieve the vision of Viksit Bharat (Developed India).

The Telecommunications Act, 2023, was passed by the Parliament in December 2023, received the assent of President of India on December 24, 2023 and was published in the official Gazette on the same day. Some sections of the Act have already been brought into force w.e.f. 26thJune, 2024 vide Notification No.2408(E) dated 21st June, 2024 in the Gazette of India.

The salient features of the sections that have been brought into force with effect from July 05, 2024 (Today) are:

- 1. **Optimal utilization of spectrum:** The Act provides legal framework for efficient utilization of scarce spectrum through processes such as secondary assignment, sharing, trading, leasing and surrender of spectrum. It also enables the utilisation of spectrum in a flexible, liberalised and technologically neutral manner. It also empowers the Central Government to establish an enforcement and monitoring mechanism for the purpose.
- 2. **Prohibition of use of equipment which block telecommunications:** The Acts prescribes, with immediate effect, the use of any equipment which blocks telecommunication, unless permitted by the Central Government.
- 3. **Criteria for appointment as Chairperson and Members of TRAI:** Section 59(b) of the Act will amend section 4 of the TRAI Act 1997 and prescribes criteria for appointment of Chairperson and Members of TRAI.

One major aspect that is being covered in the latest notification is the Focus of the Central Government on increasing efficiency in spectrum utilization and various modes of achieving the same like secondary assignment, sharing/trading etc.

Relevance: GS Prelims & Mains paper II; Governance

Source: PIB

## 8. How compensation for Agniveers differs from that for regular soldiers in matter of death

#### Why in News?

Earlier this week, Leader of Opposition in Lok Sabha Rahul Gandhi alleged that the family of Agniveer Ajay Kumar, who was killed in a landmine blast in January, did not receive financial assistance from the government.

After Defence Minister Rajnath Singh told Parliament that an Agniveer who is killed in the line of duty receives a compensation of Rs 1 crore, Rahul posted on social media accusing him of lying to the House.

Late on July 3, the Army issued a statement saying the family of the Agniveer would receive a compensation of Rs 1.65 crore, and that "emoluments due to a fallen hero are paid expeditiously" to their next of kin, including of Agniveers.

Government sources said the Rs 1.65 crore include Rs 48 lakh and Rs 50 lakh as insurance from the central government and from financial institutions under an MoU respectively; an additional sum of Rs 39,000; Rs 44 lakh as ex gratia; Rs 8 lakh from the Army welfare fund; Rs 13 lakh as balance of pay until completion of tenure; and Rs 2.3 lakh as Seva Nidhi, the contributory scheme that Agniveers are entitled to.

#### **Compensation to Agniveers vis a vis a Regular soldiers**

**INSURANCE:** All regular soldiers contribute Rs 5,000 per month towards the Army Group Insurance Fund which insures them for Rs 50 lakh. Agniveers are insured for Rs 48 lakh, but they make no contribution from their salary towards the premium for this insurance. The sum insured is paid to all soldiers and Agniveers irrespective of the cause of death.

The services have signed Memorandums of Understanding (MoUs) with the banks where the salaries of all defence personnel, including Agniveers, are credited under the defence salary package. These personnel are insured by the banks for various amounts as per the banks' policies.

**EX GRATIA:** A sum of Rs 44 lakh has been earmarked as ex gratia for Agniveers whose deaths are attributable and aggravated by military service, or occur during operations.

The ex gratia for a regular soldier can be Rs 25 lakh, Rs 35 lakh or Rs 45 lakh, depending on the nature of the casualty.

Deaths, either of Agniveers or of regular soldiers, which are neither attributable to nor aggravated by military service are not eligible for any ex gratia.

The ex gratia from state governments varies from zero to Rs 1 crore, depending on the state. This is applicable to both Agniveers and regular soldiers who either die or suffer disabilities on duty.

**IN ADDITION:** Agniveers and regular soldiers are given Rs 8 lakh in case of death in operations and Rs 2.5 lakh in case of death due to any other reason.

#### **Seva Nidhi for Agniveers**

Seva Nidhi is a contributory scheme applicable only to Agniveers. For those whose deaths are neither attributable to nor aggravated by military service, get the amount accumulated till the date of death, along with the government's contribution and interest.

Agniveers who die while on duty or in operations get the full pay for the unserved period up to four years, including the Seva Nidhi component.

#### Only for regular soldiers

Some benefits are exclusive to regular soldiers. Gratuity and monthly family pension, which is a substantial amount, are available only to regular soldiers.

**Death Gratuity:** Death gratuity of 15 days' pay for every completed year of service or part thereof, subject to a maximum of Rs 25 lakh.

**Family Pension:** Families of soldiers who die due to reasons neither attributable to, nor aggravated by military service get ordinary family pension, which is 50% of the last pay drawn for up to 10 years, and 30% thereafter.

In case of deaths that are attributable to military service, a special family pension, which is 60% of the soldier's last pay, applies. For soldiers killed in operations, a liberalised family pension, which 100% of the last pay, is given to the family. Liberalised family pensions are tax-free.

These pensions are revised as per the system of One Rank One Pay (OROP) and Pay Commission recommendations. The DA component is also added to the pensions.

**Education provision:** Children of soldiers who die due to operational reasons are eligible for a children's education allowance which is equal to the cost of school/ college fees and books till graduation. Transportation, hostel charges, and uniform costs are also included.

For other than battle casualties, an educational scholarship varying from Rs 10,000 per annum for Class 1 to Rs 50,000 per annum for professional courses is given. Wives of such soldiers are also entitled to Rs 20,000-50,000 per annum for graduation and professional courses.

**Ex-Servicemen Contributory Health Scheme:** The families of regular soldiers are entitled to benefits of the Ex-Servicemen Contributory Health Scheme (ECHS), a centrally-funded scheme along the lines of CGHS to provide medical care to armed forces pensioners and their families.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian express

#### 9. What does Karnataka Bill promise gig workers?

#### Why in News?

On June 29, the Karnataka government published the draft of the Karnataka Platform-based Gig Workers (Social Security and Welfare) Bill, making it the second Indian State to initiate such a move, the first being Rajasthan.

The Bill seeks to regulate the social security and welfare of platform-based gig workers in the State and is expected to be placed in the monsoon session of the Assembly.

#### What is a Gig Worker?

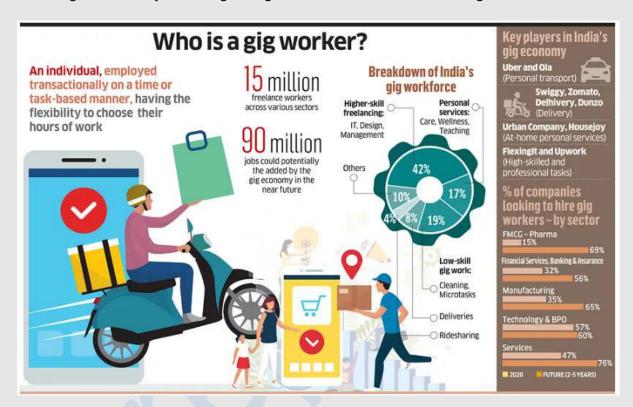
A gig worker is someone who takes on short-term or project-based jobs, rather than being employed by a company. Many freelancers find gigs through online platforms.

Unlike traditional employees, gig economy workers lack the security, perks, and employee benefits that come with being a full-time employee. For example, they usually have to provide for their own health insurance, retirement plans, and other benefits that a traditional employee might get as part of their compensation package.

However, gig workers tend to enjoy more flexibility. They're considered independent workers who can pursue other jobs or side hustles based on their schedules and interests. Plus, many gig roles offer the luxury of working from any location.

Think of the ridesharing apps Uber and Ola, the food delivery app Swiggy, or Instacart for grocery delivery. For work that can be done remotely, such as graphic design or virtual assistant, businesses might look to a platform like Upwork, such as contracting a graphic designer to create a pamphlet or logo.

Many industries, including tech, education, and finance, now rely on gig work to fill labor gaps, reflecting its versatility and the growing demand for flexible work arrangements.



#### Gig workforce in India

A 2022 NITI Aayog report estimates that India will have 23.5 million gig workers by 2029-30. Around two lakh gig workers work with platforms such as Swiggy, Zomato, Uber, Ola, Urban Company, Porter, Dunzo, Amazon, Flipkart and so on in Bengaluru alone reportedly. The last two decades have seen the rise of several such platforms shaping the gig economy in India and impacting the labour market in a big way.

Veering away from traditional employer-employee relationships, the aggregators do not onboard gig workers as their employees, but as 'partners' (or other similar terminologies). This essentially makes the workers independent contractors and leaves them outside the security net of labour protection laws. Although initially thought of as a great opportunity to make money while enjoying autonomy and flexibility, over the years workers started seeing reduced payments, arbitrary dismissals and other instances of exploitation in the absence of regulatory laws.

#### What are some of the highlights of the Bill?

Introduced as a 'rights-based bill', the Karnataka draft Bill seeks to protect the rights of platform-based gig workers and places obligations on aggregators in relation to social security, occupational health and safety of workers. The new draft aims to introduce safeguards against unfair dismissals, bring in a two-level grievance redressal mechanism for workers, and more transparency with regards to the automated monitoring and decision-making systems deployed by platforms.

According to the draft Bill, the contract between the aggregator and the worker should contain an exhaustive list of grounds on which the contract would be terminated by the aggregator. It also stipulates that the aggregator shall not terminate a worker without giving valid reasons in writing and prior notice of 14 days.

#### Why is this important?

Arbitrary terminations have been a major complaint raised by gig workers for many years now. Instances of blacklisting workers or terminating them from work without hearing out their side have been aplenty. Often, platforms enact these through automated monitoring and decision-making systems which track the work and earnings of the gig worker, record customer feedback, and make decisions accordingly. Workers point out that this system is heavily skewed in favour of the customer and makes it a game of chasing ratings and pleasing the customer at any cost. The absence of human intervention leaves no room for grievance redressal for the latter.

#### What are the other features of the draft?

Given that arbitrary deductions from payments have been another point raised by workers, the draft mandates aggregators to make payments at least every week and to inform the worker about the reasons for payment deductions if any. As per the new draft, a worker will have the right to refuse a specified number of gigs per week with 'reasonable cause' without any adverse consequences.

Taking a leaf out of the Rajasthan Bill, the new draft also seeks to establish a welfare board and a social security and welfare fund for gig workers. A welfare fee would be levied either on every transaction between the worker and the aggregator or on the overall turnover of the company. The welfare fee as well as contributions from Union and State governments would go to the fund. All gig workers must be registered and the aggregators should furnish to the government the database of gig workers. Contracts must be written in a simple language and any change should be notified to the worker at least 14 days before the proposed change. The gig worker will have the option to terminate the contract accordingly without any adverse consequences for their existing entitlements. The aggregator must also provide reasonable and safe working conditions for workers, although the draft does not delve into what constitutes as 'reasonable.'

#### **Have there been initiatives in other States?**

Around a year back, Rajasthan introduced the Rajasthan Platform Based Gig Workers (Registration and Welfare) Bill, making it the first-ever State to do so. The Bill that was

introduced by the Congress government became an Act in September. In November, the BJP came to power in the State and the Act has gone into cold storage. The Haryana government is set to establish a State-level board dedicated to the social and economic security of gig workers. The Telangana government is also currently in the process of drafting a similar bill as per sources.

As far as Union government initiatives are concerned, in 2020, the Code on Social Security was introduced. It recognised those who freelance or work under short terms, and mandated employers to provide them benefits similar to those of regular employees.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

#### 10. Why Karnataka is cracking down on vendors of pani puri and gobi manchurian

#### Why in News?

Karnataka's food safety department has cracked down on sellers of many street food staples, such as gobi manchurian and pani puri.

The statewide crackdown is against the use of artificial food colouring, and other cancercausing agents by food business operators (FBOs). In the past five months, 4,000 food samples have been collected for testing by the food safety department following reports of FBOs' unhygienic practices leading to health disorders.



#### **Action after complaints**

Srinivas K, Commissioner of Karnataka's Food Safety and Standards Commisssionerate, said they had received multiple complaints of vomiting, diarrhoea, and other health complications after consuming certain food items.

As a result, the department decided to take action against the use of artificial colouring agents. Since March, it has issued three orders banning the use of such agents in food items such as gobi manchurian, cotton candy, and chicken kababs.

The latest ban came earlier in July after the department found carcinogenic agents (they can potentially cause cancer) and bacteria harmful to human health in the samples of pani puri and shawarma.

#### Harmful colouring agents

The samples tested by the food safety department revealed that the food items contained artificial colouring agents such as Tartrazine, Sunset Yellow, Rhodamine B, and Brilliant Blue. These agents can cause cancer or lead to diabetes, kidney failure, and other complications, according to food safety department officials. In fact, Rhodamine B — used to give a red colour — is generally used as a synthetic dye to add colour to a wide range of materials such as textiles. Exposure to the dye may damage the eye and irritate the respiratory tract.

#### **Legal action against FBOs**

To take legal action against an FBO selling unsafe food items, the food safety department has to collect two kinds of samples — a survey sample and a legal sample. It first collects and tests a survey sample from an FBO. If this sample is found to be unsafe, four more samples (known as legal samples) are collected from the FBO concerned, and then sent to Central Food Technological Research Institute (CFTRI) for further testing. If the CFTRI report also deems the sample unfit for human consumption, the FBO is booked under the Food Safety Act.

The FBO is tried at a court of Judicial Magistrate of First Class (JMFC). If the FBO is found guilty, a fine of up to Rs 10 lakh and imprisonment for seven years can be awarded. So far, 284 FOBs in Karnataka for selling unsafe food items under the Food Safety Act.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

# 11. What is Digital Bharat Nidhi, govt's fresh attempt at improving rural telecom connectivity?

#### Why in News?

The Department of Telecommunications (DoT) recently released draft rules to operationalise the Digital Bharat Nidhi, in a fresh attempt by the central government at increasing telecom connectivity in rural areas.

Digital Bharat Nidhi would replace the erstwhile Universal Service Obligation Fund (USOF), which is a pool of funds generated by a 5 per cent Universal Service Levy charged upon all the telecom fund operators on their Adjusted Gross Revenue (AGR).

The idea is that this money would be used to fund the expansion of telecom networks in remote and rural areas, where private companies may otherwise resist offering their services



due to them not being revenue-generating markets.

With the Centre notifying parts of the Telecom Act last month, it has also proposed additional rules for the final makeover of the USOF as the Digital Bharat Nidhi (DBN) – which would have a relatively wider scope than the USOF.

#### **Digital Bharat Nidhi**

As per the Telecom Act, contributions made by telecom companies towards the Digital Bharat Nidhi will first be credited to the Consolidated Fund of India (CFI). All revenues that the government receives, including loans raised and all money received in repayment of loans, are credited to the CFI. The government also incurs its expenditures from this fund. The Centre will deposit the collected funds to the DBN from time to time.

Funds collected under the DBN will be used to support universal service through promoting access to and delivery of telecommunication services in underserved rural, remote and urban areas; fund research and development of telecommunication services, technologies, and products; support pilot projects, consultancy assistance and advisory support for improving connectivity; and for the introduction of telecommunication services, technologies, and products.

#### **Operation of Digital Bharat Nidhi**

As per the draft rules issued by the DoT on how the DBN will be operationalised, the Centre will appoint an "administrator" who will select "DBN implementers" through "bidding" or invitation of applications from eligible persons.

This so-called administrator will determine the modalities of providing funding to DBN implementers on a case-by-case basis, including but not limited to full funding, partial funding, co-funding, market risk mitigation, and risk capital.

The DBN shall fund schemes and projects for providing targeted access to telecommunication services for underserved groups of society such as women, persons with disabilities and economically and socially weaker sections, as per the draft rules.

#### **Underutilisation of USOF**

Since its establishment in 2003, a common criticism of the USOF has been its relative underutilisation.

According to information shared in Parliament by former Minister of State for Communications Devusinh Chauhan in December 2022, between 2017 and 2022, the government had collected

Rs 41,740 crore as part of contributions made by telcos towards the USOF, of which it had utilised Rs 30,213 crore – about 72 per cent.

Most notably, in 2019-20, the collection was Rs 7,962 crore, of which the utilised amount was just Rs 2,926 crore. In the period specified by the former minister, the government did not achieve complete utilisation even once.

A key reason for the weak spending from the USOF can be attributed to the underspending of funds allocated for the BharatNet project for fibre connectivity to villages.

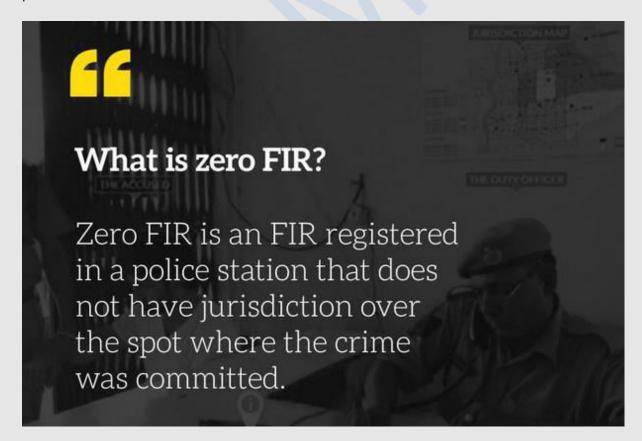
Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

12. What are new provisions for police officers relating to FIRs, videography, arrest and timelines?

#### Why in News?

The new criminal laws have become effective from July 1. SOPs have been issued by the Bureau of Police Research and Development (BPRD) to guide police officers in implementing the new provisions.



What are rules for registering FIRs?

The officer in-charge of a police station cannot refuse to register an FIR on the basis of lack of jurisdiction or disputed jurisdiction. He is legally bound to register (popularly known as a zero FIR) and transfer such a case to the respective police station. Though this practice was followed earlier too, the Bharatiya Nagarik Suraksha Sanhita (BNSS) now has a direct provision under Section 173; non-registration of FIRs may attract penal action under various sections.

Additionally, while information can be given orally or in writing as before, it may also be given by electronic means which is to be taken on record by the officer in-charge if it is signed within three days by the person giving it. While no one can stop a police officer from enquiring into the information immediately if it is of a sensitive nature, the electronic mode by which information may be given must be decided by the agencies, such as the Crime and Criminal Tracking Network and Systems (CCTNS) portal, the police website or officially published email IDs.

#### What about videography?

The BNSS mandates videography during a search conducted by the police under Section 185; of the scene of crime (Section 176); and of the process of conducting a search of a place or taking possession of any property (Section 105). Since these are mandatory provisions, any negligence on the part of the police may benefit the accused persons. Therefore, investigating officers (IOs) must be provided electronic devices and proper training to discharge such functions.

A cloud-based mobile app, 'eSakshya' has been designed by the National Informatics Centre for enforcement agencies, which allows capturing multiple photos and videos. The photographs of witnesses and selfies of IOs may be captured using this app. Each item is geotagged and time-stamped to ensure the integrity of data. Since eSakshya is an initiative under the Inter-operable Criminal Justice System (ICJS), this data will be available to other agencies such as the judiciary, prosecution and cyber forensic experts.

#### What about provisions of arrest?

Information about arrested persons is to be mandatorily displayed in police stations. Section 37 of the BNSS requires a police officer in every police station, not below the rank of Assistant Sub-Inspector, to be responsible for maintaining and prominently displaying information about the arrested persons. Therefore, boards (including in digital mode) containing names, addresses and the nature of the offence must be put up outside police stations and district control rooms.

Some restriction has been imposed on the arrest of frail or sick and elderly persons. Section 35(7) states that the permission of an officer not below the rank of DySP is mandatory for arresting a person charged with an offence punishable for imprisonment of less than three years if such person is infirm or is above 60 years of age. Similarly, though the law now provides for the use of handcuffs in certain cases, the IOs must use them cautiously. The Supreme Court has laid down that handcuffing may be done only when there is a possibility of escaping from custody or causing harm to himself or others.

#### What about timelines?

In case of medical examination of a victim of rape, the registered medical practitioner is mandated under Section 184 (6) of the BNSS to forward the medical report to the IO within seven days, who shall forward it to the magistrate concerned. Therefore, doctors must be sensitised about the new law. The investigation of POCSO cases is required to be completed within two months of recording the information of the offence. Earlier, this time limit was only for rape cases under the Indian Penal Code.

A new provision under Section 193(3)(h) requires the IO to maintain the sequence of custody of an electronic device. Though maintaining a chain of custody is important for every seizure, emphasis is laid on electronic devices because they are sensitive pieces of evidence and more vulnerable to tampering. While every police officer is required to upgrade his skills about maintaining integrity of electronic records, the task of the (cyber) expert is likely to increase with many of the mandatory provisions coming into effect.

This sub-section also imposes a duty to inform the progress of the investigation within 90 days to the informant or victim.

Section 113 introduced in the Bharatiya Nyaya Sanhita (BNS) defines what is a 'terrorist act' and imposes the duty on an officer, not below the rank of Superintendent of Police (SP), to decide whether to register a case under this Section or the UAPA. Since, no guidelines are given to exercise this discretion, the SP may inter-alia consider factors such as whether the terrorist organisation is notified under the UAPA, approximate time needed to complete investigation, the rank of the IO and the level of scrutiny required, and how dangerous the accused person is.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

#### 13. What is a divorced Muslim woman's right to maintenance under the CrPC?

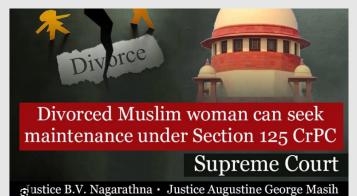
#### Why in News?

Petitioner Mohd Adbul Samad challenged a 2017 family court order directing him to pay maintenance of Rs 20,000 per month to his former wife. The Telangana High Court, on appeal, refused to set aside the order of the family court.

The Supreme Court dismissed an appeal by a Muslim man against a Telangana High Court order allowing his ex-wife to seek maintenance under the Code of Criminal Procedure, 1973 (CrPC).

The Supreme Court bench reiterated that a Muslim woman is entitled to seek maintenance from her husband under Section 125 of the CrPC — a secular legislation — even if they were divorced under religious personal law.

While the ruling follows a 22-year-old landmark precedent, it sparked a discussion on the chequered legal and political history of the right to maintenance of Muslim women.



#### The present case

Petitioner Mohd Adbul Samad challenged a 2017 family court order directing him to pay maintenance of Rs 20,000 per month to his former wife. The Telangana High Court, on appeal, refused to set aside the order of the family court.

Section 125 CrPC places an obligation

on "any person having sufficient means" to maintain "his wife" or "his legitimate or illegitimate minor child" if they are unable to maintain themselves — typically through monetary support at regular intervals. The explanation in the section clarifies that the word "wife" also includes a divorced woman who has not re-married.

This position was first taken in the landmark 2001 ruling in Danial Latifi & Anr v. Union of India.

#### **Shah Bano decision**

In 1978, a woman named Shah Bano Begum filed a petition seeking maintenance from her husband under Section 125 for herself and her five children. Divorcing Shah Bano via 'irrevocable talaq' later that same year, her former husband, Mohammed Ahmad Khan, argued that he is only required to provide maintenance during the iddat period following divorce — three months under ordinary circumstances during which she cannot marry another man — according to Muslim personal law.

After Shah Bano's plea was granted by Madhya Pradesh High Court in 1980, the matter reached the Supreme Court. The All Indian Muslim Personal Law Board argued that the court was bound to apply Muslim personal law as per The Muslim Personal Law (Shariat) Application Act, 1937.

A five-judge Constitution Bench upheld the High Court's decision. Then Chief Justice of India Y V Chandrachud held that provisions such as Section 125 CrPC "cut across the barriers of religion", and "whether the spouses are Hindus or Muslims, Christians or Parsis, pagans or heathens, is wholly irrelevant". The court also held that the divorced wife was entitled to maintenance under Section 125 even after the iddat period "if she is unable to maintain herself".

#### The Muslim Women (protection of rights on divorce) act, 1986

The government of Prime Minister Rajiv Gandhi then enacted the MWPRD Act, which effectively overturned the Shah Bano verdict. Under the Act, the obligation to pay maintenance after the iddat period was placed on the relatives or children of the divorced wife and, in their absence, on the State Wakf Board.

#### **Challenge to 1986 Act**

Soon after the MWPRD Act was enacted, Shah Bano's lawyer, Danial Latifi Nafess Ahmad Siddigui, challenged its constitutionality before the Supreme Court.

He argued that Section 125 is meant to protect women of all religions from "destitution or vagrancy", and that the MWPRD Act discriminates against Muslim women, violating their right to equality (Article 14) and right to life with dignity (Article 21).

The Centre argued that personal law is a legitimate basis for discrimination and does not violate the right to equality.

The All India Muslim Personal Law Board argued that the Act takes care of Muslim women and prevents "vagrancy" while being in tune with Muslim personal law, which only places an obligation for maintenance on the husband during the iddat period.

#### **SC** view on MWPRD Act

In an endeavour to uphold the constitutionality of the law while securing maintenance for a divorced Muslim woman beyond the iddat period, the five-judge Constitution Bench in its judgment creatively interpreted Section 3(a) of the MWPRD Act, which requires the former husband to provide "a reasonable and fair provision and maintenance to be made and paid to her within the iddat period".

The court interpreted this to mean that the husband "is required to contemplate the future needs (of the divorced wife) and make preparatory arrangements in advance for meeting those needs" within the iddat period. In contrast, the actual payment would not be limited to this period and could "extend to the whole life of the divorced wife unless she gets married for a second time".

As a result, the court held, a Muslim husband is responsible for paying maintenance even beyond the iddat period, and upheld the constitutionality of the MWPRD Act.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

#### 14. In Kejriwal bail, lens on ED's power to arrest

Why in News?



The Supreme Court recently granted interim bail to Arvind Kejriwal in the case brought by the Enforcement Directorate (ED) in the alleged Delhi excise policy scam. The Chief Minister of Delhi, who was arrested on March 21 this year, had challenged the legality of his arrest.

The order has ramifications beyond Kejriwal and the Aam Aadmi Party (AAP).

In its 66-page ruling, the SC raised some crucial concerns over the ED's power to arrest under the Prevention of Money Laundering Act, 2002 (PMLA), and the way the agency uses that power.

#### What does the interim bail in the ED case mean for Arvind Kejriwal?

It is a shot in the arm for Kejriwal and AAP. A trial court had granted regular bail to Kejriwal in the same case but the Delhi High Court had stayed the order. However, Kejriwal will remain in jail for now, since he is also under arrest in the Central Bureau of Investigations's (CBI's) case in the same alleged scam.

A special CBI court is likely to hear that case on July 17. What happens then will dictate when he can be released from custody. The bar for bail in a CBI case is lower compared to an ED case.

#### On what grounds has the SC granted Kejriwal interim bail now?

The SC did not really make a finding on whether Kejriwal's arrest was legal or not — but it did find sufficient grounds to question how the ED uses its power to arrest. This issue required "indepth consideration" by a larger Bench, the court said.

Therefore, until the larger Bench decides this question, Kejriwal who "has suffered incarceration of over 90 days", must be released on bail, the court said.

In 2022, a three-judge Bench upheld the PMLA and virtually all of the ED's powers, including its power to arrest. However, the ruling did not specifically address the principles on the necessity to arrest. A Bench of five judges will now have to hear the issue.

#### What is the Enforcement Directorate's power to arrest under the PMLA?

The SC's ruling is essentially on the ambit of Section 19 of the PMLA, the provision in the law from which the ED draws its power to arrest.

Section 19(1) reads: "If [the authorised officer]...has on the basis of material in his possession, reason to believe (that reason for such belief to be recorded in writing) that any person has been guilty of an offence punishable under this Act, he may arrest such person and shall, as soon as may be, inform him of the grounds for such arrest."

The benchmark for arrest that can be distilled from this provision is that the ED officer must, from the "material in his possession", have "reason to believe" that the accused is "guilty" of the offence — and then record his reasons and share them with the accused at the time of arrest.

These words are crucial since the PMLA is a departure from ordinary criminal law. While the threshold in ordinary law is far lower, getting bail is also not as difficult. Under Section 41 the Code of Criminal Procedure (CrPC), police can arrest a person without a warrant when a "reasonable suspicion exists" that the person has committed a cognizable (serious) offence.

The bar for bail under PMLA, which imposes a reverse burden of proof — which means that instead of the prosecution having to prove their accusation, it is the accused who must prove their innocence — too, is different from ordinary criminal law.

Under PMLA, the test for bail is prima facie finding by the court that the accused is not guilty.

#### So what was Kejriwal's case?

Kejriwal's case was essentially that the ED had "no necessity to arrest him" on March 21. His lawyers argued that the ED's "reasons to believe" selectively refer to the implicating material, and ignore the exculpatory material.

Kejriwal's lawyers argued that the ECIR (Enforcement Case Investigation Report, akin to an FIR) was registered in August 2022, and the material that the ED relied on for the arrest was available to it by July 2023 — but the arrest finally happened in March 2024. The ED's "material" was basically the statements of approvers, and Kejriwal argued that the agency relied upon only those statements in which he was named.

The legality of arrest is not just a technical aspect. Since stringent laws such as the PMLA and the Unlawful Activities Prevention Act (UAPA) impose a high bar for bail, the procedural safeguards become the test against arbitrary arrest. Since getting bail is so difficult, due process requires the agency to scrupulously follow the rigours of the law in arresting an individual.

#### And what did the court find?

The court has a primary finding on how it interprets the words "reasons to believe". Since Section 19 states the "reasons to believe" must be to establish a finding of "guilt" and nothing less, the SC held that the ED must have a higher bar for what it considers reason to believe. Essentially, the reason must virtually be "evidence admissible in court", because that is what is needed to establish guilt — and not just a subjective finding of the ED.

#### What is the upshot of the ruling?

Although the issue has to be debated before a larger Bench, recent ruling essentially restricts the ED's scope for arrest. The criticism that the ED has over the years used its powers arbitrarily, and that jail under PMLA means bail is virtually impossible, will now face fresh judicial scrutiny.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

#### 15. The SC ruling on portrayal of disability in films

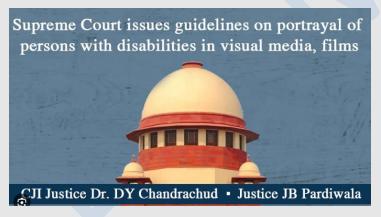
#### Why in News?

On July 8, while hearing a plea to ban the film Aaankh Micholi for derogatory portrayal of people with disabilities, the Supreme Court in a landmark ruling laid down comprehensive guidelines to prevent stereotyping and discrimination of persons with disabilities (PwDs) in visual media, including films and documentaries.

#### What is the framework?

The Supreme Court's framework focuses on the prevention of stigmatisation and discrimination, recognising their profound impact on the dignity and identity of persons with disabilities. Among the guidelines is a call to avoid words that cultivate institutional discrimination, such as "cripple" and "spastic," as they contribute to negative self-image and perpetuate discriminatory attitudes.

A Bench headed by the Chief Justice of India D.Y. Chandrachud said stereotyping differently abled persons in visual media and films must end, asking creators to provide an accurate representation of disabilities rather than mocking them.



# What are laws which grant disability rights?

The law which comprehensively deals with disability rights is the Rights of Persons with Disabilities (RPwD) Act which came into force from April 19, 2017. It replaced the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995. The National Trust Act (1999),

Rehabilitation Council of India Act (1992), Mental Health Care Act (2017) are the other laws that govern disability rights.

According to expert, there are broadly two models under which disability rights are looked at, namely medical and social models. The human rights model, which is a recent one, is an evolution of the social model which says that people with disability are a part of society and have the same rights as everyone else.

The Supreme Court's emphasis on the human rights model is significant as it makes the government and private parties obliged to facilitate full and effective participation of persons with disabilities in society.

#### What about creative freedom?

Cinematic expression doesn't have absolute power when it operates in the context of marginalised communities. It has to be looked at from the overall context of the expression and intent behind the expression. The Supreme Court said "the creative freedom of the filmmaker cannot include the freedom to lampoon, stereotype, misrepresent or disparage those already marginalised". In determining these aspects, the "intention" and "overall message" of the film have to be considered.

#### What is the way forward?

The court emphasised on collaboration with disability advocacy groups to gain invaluable insights and guidance on respectful and accurate portrayals, ensuring the content aligns with the lived experiences of persons with disabilities. It has also said that implementing training programmes for writers, directors, producers, and actors to emphasise the impact of portrayals on public perceptions and the lived experiences of persons with disabilities is a necessity.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

#### 16. On the jurisdiction of the CBI

#### Why in News?

The Supreme Court on July 10 upheld the maintainability of the West Bengal government's suit accusing the Union government of "constitutional overreach" by employing the Central Bureau of Investigation (CBI) to register and investigate cases in the State despite its withdrawal of general consent on November 16, 2018.

'Establishment, extension of jurisdiction, superintendence of DSPE vests with GOI'; West Bengal's suit alleging misuse of CBI by Union maintainable

SUPREME COURT

Justice B.R. Gavai · Justice Sandeep Mehta

The Supreme Court Bench rejected the Centre's preliminary objections that it was wrongly made a defendant in the suit as it did not control the CBI, which was an "independent agency." Perusing various provisions of the Delhi Special Police Establishment (DSPE) Act, 1946, under which the CBI functions, the Bench concluded "the very establishment, exercise of powers, extension of jurisdiction, the superintendence of the DSPE [Act], all vest with the Government of India." Accordingly, the Court ruled that the suit discloses a valid cause of action and must be heard on merits. It posted the next hearing on August 13.

#### What is general consent?

Under Section 6 of the DSPE Act, the CBI is required to obtain consent from the concerned State government before initiating an investigation within its jurisdiction.

This permission is crucial since "police" and "public order" are subjects that fall within the State List under the seventh schedule of the Constitution. However, no such prior consent is necessary in Union territories or railway areas. General consent is given by States to facilitate the agency's seamless investigation into corruption charges against Central government employees in their territories.

However, since 2015, several States such as Chhattisgarh, Jharkhand, Kerala, Mizoram, Punjab, Rajasthan, Telangana, Meghalaya and West Bengal have revoked their general consent alleging that the Centre is misusing the federal agency to unfairly target the Opposition. In the absence of such an omnibus consent, the CBI is unable to register any fresh cases in these States without the explicit permission of the respective State governments.

#### What does the case filed by the West Bengal government allege?

In August 2021, the West Bengal government filed an original suit under Article 131 of the Constitution arguing that the actions of the Union government and the involvement of the CBI in the State infringed upon its sovereignty. The suit highlighted that despite the withdrawal of general consent for CBI investigations by the Trinamool Congress government on November 16, 2018, the agency proceeded to register 12 new cases. Deeming this to be a "constitutional overreach," the State sought the annulment of these 12 cases and a restraint on the agency from lodging any further cases.

#### What was the Union government's argument?

Solicitor-General Tushar Mehta, appearing for the Union government, pressed the Court to dismiss West Bengal's suit by raising preliminary objections to its maintainability. He pointed out that original suits under Article 131 of the Constitution exclusively involve the Union and States as parties. "It is the CBI which has registered the cases in question. But the CBI is not a defendant in this suit, and it cannot be made one, as the CBI is not a 'State' under Article 131," Mr. Mehta contended.

He further argued that the CBI was an "independent agency" since it did not function under the direct control of the Union government. "The Union does not supervise the registration of offences or investigation or closure or filing of chargesheet or conviction or acquittal of cases by the CBI," he reasoned. However, later in the proceedings, Mr. Mehta finally conceded that

the agency cannot initiate any investigation without the express authorisation of the Union government under Section 5 of the DSPE Act.

On the contrary, senior advocate Kapil Sibal highlighted that the case extended beyond the Centre's control over the CBI to the fundamental question of whether the agency could disregard a specific notification issued by the West Bengal government in 2018, withdrawing its consent. Mr. Sibal asserted that once a State grants and then withdraws its consent, the CBI lacks jurisdiction to exercise its powers within that State.

#### What did the verdict state?

The Court observed that a bare perusal of the provisions of the DSPE Act reveals that right from the constitution of the CBI, the classes of offences which are to be investigated by it, to its administration and powers, it is the "Central government that it is vitally concerned with." Under Section 4 of the DSPE Act, except the offences under the Prevention of Corruption Act, in which the superintendence will be with the Central Vigilance Commission, the superintendence of the DSPE in all other matters would vest with the Central government. The judge also reminded the Centre that Section 6 of the DSPE Act mandates the prior consent of the State government to a CBI probe within its jurisdiction.

While the Court recognised that the CBI would always be entitled to investigate offences independently, it underscored that this autonomy "would not water down" its administrative control and superintendence that vests with the Centre. It thus proceeded to conclude that the Solicitor General's argument that the CBI is an "independent agency" holds no water.

The verdict, however, clarified that these observations were only made to meet the preliminary objections raised by the Union government and would not have any bearing on the merits of the suit.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

#### 17. SC to look into use of Money Bills to pass laws

#### Why in News?

Chief Justice of India D.Y. Chandrachud on Monday agreed to list petitions challenging the Money Bill route taken by the Centre to pass contentious amendments in the Parliament.

#### The provisions

A Money Bill is deemed to contain only provisions dealing with all or any of the matters under clauses (a) to (g) of Article 110(1), largely including the appropriation of money from the Consolidated Fund of India and taxation. In other words, a Money Bill is restricted only to the specified financial matters.

The reference includes legal questions concerning amendments made from 2015 onwards in the Prevention of Money Laundering Act (PMLA) through Money Bills, giving the Enforcement Directorate almost blanket powers of arrest, raids, etc. Though the court had upheld the legality of the PMLA amendments, it left the question whether the amendments could have been passed as Money Bills to the seven-judge Bench.

Similarly, the case also raises questions about the passage of the Finance Act of 2017 as a Money Bill to alter the appointments to 19 key judicial tribunals.

# The contentious route

Some of the legislations passed as Money Bills in the Parliament include:

- Amendments to the Prevention of Money Laundering Act
- The Finance Act of 2017
- Aadhaar Act, 2016



A Money Bill is a financial legislation that contains provisions exclusively related to revenue, taxation, government expenditures, and borrowing

Mr. Ramesh, a petitioner in this case, had argued that the 2017 Act was deliberately categorised as a Money Bill to "extend executive control over these institutions (tribunals) by altering the composition of the selection committees and vastly downgrading the qualifications and experience required to staff these bodies".

The question of passage of laws after dressing them up as Money Bills had come up in the Aadhaar case too. However, the top court had, in a majority verdict in 2021, refused to review its 2018 judgment (K. Puttaswamy case) upholding the validity of the Aadhaar Act and its certification as a Money Bill.

Justice Chandrachud (as he was then) had delivered a dissenting opinion on the Review Bench in 2021. The two questions before the Review Bench had been whether the Lok Sabha Speaker's decision to declare the proposed Aadhaar law as a Money Bill was "final". The second, whether the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and

Services) Act, 2016 was correctly certified as a 'Money Bill' under Article 110(1) of the Constitution.

Justice Chandrachud, in his dissent, had said the Review Bench ought to wait till the seven-judge Bench decided the larger questions on the Money Bill in the Rojer Mathew reference. But the majority had disagreed with him.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

#### 18. Key issue will be back in SC: What constitutes a Money Bill?

#### Why in News?

The Supreme Court has agreed to "take the call" on hearing petitions challenging the "Money Bill route" taken by the government to push through contentious legislation in Parliament.



#### Why Money bill route was taken?

Money Bills offer a fast-track route to enact legislation because they do not require passage in Rajya Sabha. Several important laws including amendments to the Prevention of Money Laundering Act, 2002, (PMLA) and the Foreign Contributions Regulations Act, 2010, (FCRA) as well as the Aadhaar Act, 2016, have been passed by this route in recent years, circumventing the Upper House, where the NDA may have had to struggle for numbers at the time.

The question of which Bills can be designated as Money Bills was referred to a seven-judge Bench in November 2019 by a five-judge Bench led by then CJI Ranjan Gogoi in Rojer Mathew vs South Indian Bank Ltd. In October 2023, CJI Chandrachud had said the seven-judge Bench would be set up soon.

#### **Money Bill in Constitution**

In the usual process of lawmaking, a Bill must be passed by majorities in both Lok Sabha and Rajya Sabha. The exception are a category of Bills known as Money Bills.

Under Article 109, a Money Bill shall be introduced only in Lok Sabha and, upon passage, transmitted to Rajya Sabha for its "recommendations". Rajya Sabha must revert within 14 days, but it is up to Lok Sabha to accept or reject any or all of its recommendations. If the Bill is not returned by Rajya Sabha within the stipulated period, it is considered passed anyway.

#### **Meaning of Money Bill**

To ensure this process is not abused, Article 110 provides a strict definition of a Money Bill. In order for a Bill to be designated as a Money Bill, it must contain "only provisions dealing with all or any" of a specific list of subjects. These subjects include taxation, financial obligations of the Government of India, the Consolidated Fund (revenue received by the government through taxes and expenses incurred in the form of borrowings and loans) or Contingency Fund (money to meet unforeseen expenditure) of India, or "any matter incidental" to the matters listed in the Article.

Under Article 110(3), "If any question arises whether a Bill is a Money Bill or not, the decision of the Speaker of the House of the People thereon shall be final."

#### The important cases in SC

**CHALLENGE TO AADHAAR ACT:** In September 2018, the court ruled in favour of the government, upholding the constitutionality of the Aadhaar law by a 4-1 majority. The petitioners argued that the Act were passed as a Money Bill, even though it contained provisions that were unrelated to the subjects listed under Article 110.

Justice Ashok Bhushan, who concurred with the majority, wrote that the main aim of the Act was to provide subsidies and benefits, which involves expenditure from the Consolidated Fund, and qualified the Act to be passed as a Money Bill.

Justice D Y Chandrachud (he was not CJI at the time), was the sole dissenting voice. He observed that the use of the Money Bill route in this case was an "abuse of the constitutional process", and that passing an ordinary Bill as a money Bill limits the role of Rajya Sabha in lawmaking.

**FINANCE ACT, 2017:** The Finance Act, 2017 included amendments to a number of Acts which, among other things, empowered the government to notify rules regarding the service conditions of members of Tribunals. Shortly afterward, the Centre notified the Appellate Tribunal and Other Authorities (Qualifications, Experience and Other Conditions of Service of Members) Rules of 2017 (Tribunal Rules).

A host of petitioners, including the Madras Bar Association, the All India Lawyers' Union, and Congress MP Jairam Ramesh argued that the Finance Act, 2017, must be struck down in its entirety as it contained provisions that had no connection with the subjects listed in Article 110.

In November 2019, a five-judge Bench struck down the Tribunal Rules as unconstitutional for interfering with judicial independence, but referred the Money Bill aspect to a larger seven-judge Bench. The court observed that the five-judge Bench in the Aadhaar case did not elaborate upon what makes a valid Money Bill.

**SINCE 2019:** In the years since the 2019 judgment, the court has stopped short of addressing the Money Bill question in several cases, given the pending seven-judge Bench case. These include the challenge to the wide powers of the Enforcement Directorate under the PMLA, where the restrictive bail conditions under Section 45 were introduced through a Money Bill (the Finance Act, 2018), and the challenge to the Centre's Electoral Bond scheme which was facilitated through amendments to key laws through the Money Bill route.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

19. What is PM SHRI, the 'showcase' schools scheme? Why some States are not ready to implement this scheme? How is Centre pressurizing the States to implement the same?

### Why in News?

The Centre has stopped funding for the umbrella program for school education in three opposition-ruled states that have refused to implement its PM SHRI scheme. The Samagra Shiksha Scheme, for which funding has been stopped in West Bengal, Punjab, and Delhi, supports implementation of the Right of Children to Free and Compulsory Education (RTE) Act, 2009.



Samagra Shiksha funds for the third and fourth quarters of 2023-24 and the first quarter of 2024-25, amounting to Rs 330 crore, Rs 515 crore, and Rs 1,000 crore for Delhi, Punjab and West Bengal respectively, have not been released.

While the Education Ministry has given no official explanation, a senior official told that states cannot receive Samagra Shiksha funds without

implementing PM SHRI (PM Schools for Rising India), which is part of the program.

### **PM SHRI scheme**

The scheme, approved in 2022, seeks to develop 14,500 schools to "showcase" the National Education Policy (NEP), 2020, and be "exemplars" for other schools in their region. The scheme is for existing elementary, secondary, and senior secondary schools run by the central government and state and local governments around the country.

The PM SHRI dashboard online currently lists 10,077 schools, of which 839 are Kendriya Vidyalayas and 599 Navodaya Vidyalayas, both run by the Centre. The remaining 8,639 schools are run by state or local governments.

The Centre had declared a total project cost of Rs 27,360 crore for five years until 2026-27, of which the Centre would bear Rs 18,128 crore. At the end of the five-year period, states and Union Territories (UTs) would be required to "continue to maintain the benchmarks achieved by these schools".

### **Selection of schools**

UP has the most PM SHRI schools (1,865) followed by Maharashtra (910) and Andhra Pradesh (900). No state or local government-run schools in the non-BJP states of Punjab, Delhi, Tamil Nadu, Kerala, West Bengal, and Bihar, as well as Odisha, which got a BJP government only last month, have been included in the scheme.

PM SHRI schools are selected through the "challenge mode" — schools that meet certain minimum benchmarks (including a pucca building in good condition, barrier-free access ramps, at least one toilet each for boys and girls) can apply online.

They are evaluated on a set of parameters that include infrastructure, teaching staff, and learning outcomes. Schools in urban areas must score at least 70%; those in rural areas 60% to be selected. States are supposed to send a list of recommended schools to the Ministry, and an expert committee headed by the School Education and Literacy Secretary draws up the final list. Up to two schools — an elementary school and a secondary/ senior secondary school can be selected per block/ urban local body.

The state, UT, or Kendriya Vidyalaya Sangathan/ Navodaya Vidyalaya Samiti is required to sign a Memorandum of Understanding (MoU) with the Ministry of Education committing to implement the provisions of the NEP "in entirety within the entire State/ UT", and to prefix PM SHRI to the name of the selected school.

States/ UTs have to work to ensure zero dropout rates in all grades within two years of implementation, comply with norms for pupil-teacher ratio, and implement "innovative pedagogy" such as activity-based, sports-based, art-based, and toy-based learning.

### Samagra Shiksha

The PM SHRI scheme is to be implemented at the state/ UT level through the existing administrative structure available for Samagra Shiksha, which the government describes as "an overarching program for the school education sector...from pre-school to Class 12..., prepared with the broader goal of improving school effectiveness measured in terms of equal opportunities for schooling and equitable learning outcomes".

Samagra Shiksha, which was proposed by the Union Budget of 2018-19, subsumed the erstwhile Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA), and Teacher Education (TE) schemes.

The scheme is funded in a 60:40 ratio by the Centre and states, barring the 11 Northeastern and Himalayan states, which have to bear only 10% of the cost.

### Three outlier states

Delhi and Punjab have declined to participate in PM SHRI because the Aam Aadmi Party governments in these states are already implementing similar schemes for exemplar schools called "Schools of Specialised Excellence" and "Schools of Eminence" respectively. West Bengal has objected to the requirement of prefixing PM SHRI to the names of the schools, especially since the state bears 40% of the cost.

The states that have not signed the PM SHRI MoU have not received funds from the Centre under the Samagra Shiksha scheme. After holding out initially, Kerala, Bihar, Tamil Nadu, and Odisha agreed to participate in the scheme in March this year.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

20. How do Assam's Foreigners Tribunals function? How do these tribunals decide whether a person is Indian or not? Does the Border police play a role?

### **How did the FTs come about?**

The FTs are quasi-judicial bodies formed through the Foreigners (Tribunals) Order of 1964 under Section 3 of the Foreigners' Act of 1946, to let local authorities in a State refer a person suspected to be a foreigner to tribunals. The FTs are currently exclusive to Assam as cases of "illegal immigrants" are dealt with according to the Foreigners' Act in other States.

Each FT is headed by a member drawn from judges, advocates, and civil servants with judicial experience. The Ministry of Home Affairs told Parliament in 2021 that there are 300 FTs in Assam but the website of the State's Home and Political Department says that only 100 FTs are currently functioning.

### What is the role of the Border police?

The Assam Police Border Organisation was established as a part of the State police's Special Branch in 1962 under the Prevention of Infiltration of Pakistani (PIP) scheme. The organisation was made an independent wing in 1974 and is now headed by the Special Director General of Police (Border). After the liberation war of Bangladesh, the PIP scheme was renamed Prevention of Infiltration of Foreigners or PIF scheme. The members of this wing are tasked with detecting and deporting illegal foreigners, patrolling the India-Bangladesh border with the Border Security Force, maintaining a second line of defence to check the entry of illegal foreigners, and monitoring people "settled in riverine and char (sandbar) areas". This is apart from referring people of suspicious citizenship to the FTs to decide whether they are Indian or not based on documents.



### How does an FT function?

According to the 1964 order, an FT has the powers of a civil court in certain matters such as summoning and enforcing the attendance of any person and examining him or her on oath and requiring the production of any document. A tribunal is required to serve a notice in English or the official language of the State to a person alleged to be a foreigner within 10 days of receiving the reference from the authority concerned. Such a person has 10 days to reply to the notice and another 10 days to produce evidence in support of his or her case. An FT has to dispose of a case within 60 days of reference. If the person fails to provide any proof of citizenship, the FT can send him or her to a detention centre, now called transit camp, for deportation later.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

### 21. Bombay HC quashes exemption from RTE quota for private schools: what did the rule say?

### Why in News?

The Bombay High Court recently quashed the Maharashtra government's recent notification which had exempted private schools — located within one kilometre radius of a government or government-aided school — from providing a 25% quota for students belonging to "weaker section and disadvantaged group in the neighbourhood".

The quota comes under Section 12(1)(C) of The Right Of Children To Free And Compulsory Education Act, 2009. Students admitted under this quota are given fee concessions, with the state government meant to reimburse private schools for the same.

Section 12(1)(c) of the RTE Act provides students from disadvantaged communities with the opportunity to access resources from private schools that may not have been available to them otherwise. The 25% quota is a move towards inclusive and quality education for all.

What did the rule say?

The notification, which came out on February 9, said: the "local authority shall not identify the private unaided school, for the purposes of 25% admission of disadvantaged group and weaker section under the Maharashtra Right of Children to Free and Compulsory Education Rules, 2013, where government schools and aided schools are situated within one-kilometre radius of that school."

This meant that private schools within a one km radius of a government or government-aided school (which receives money from the government) would not have to set aside 25% of seats for students from socio-economically backward sections. Instead, students in these neighbourhoods would have been considered for admission into said government or

government-aided schools first.

The exemption also applied to private schools established in the future, as long as they were built within a one km radius of a government or government-aided school. In case there were no government or government-aided schools in the vicinity, private schools would be identified for RTE admissions, according to the notification.

### Similar Provision in Other States

With the notification, Maharashtra joined Karnataka and Kerala as states that have imposed this new regime to exempt private schools from providing RTE admissions.

Karnataka introduced the rule in December 2018, and specifically referenced the Kerala rules which were introduced in 2011. In Kerala, the fee concession for students is only made available to RTE quota students if there are no government or aided schools "within walking distance", which is one km for students joining Class 1.

### Why have states introduced such exemptions?

In Karnataka, when the rule was introduced in 2018, the state's Law Minister Krishna Byregowda said: "The primary intention of RTE is to provide education to all classes of students... Till date, Karnataka has allowed parents to admit children to private schools despite having government schools in the same neighbourhood. This has resulted in the enrollment ratio [in government schools] dropping drastically."

Private schools and teachers' organisations have also highlighted that state governments have often failed to reimburse the fees for students admitted through this quota. According to Section 12(2) of the RTE Act, state governments are bound to reimburse expenses incurred by the school per child, or the fee amount, whichever is less.

In Maharashtra, the Maharashtra English School Trustees Association (MESTA) threatened to boycott RTE admissions last December citing pending payments of Rs 1,800 crore in reimbursements.

### Why was the notification criticised?

Shantha Sinha, a member of the sub-committee of the Central Advisory Board of Education which played a crucial role in drafting the RTE Act, said "Section 12(1)(C) of the RTE Act that mandates 25% reservation of seats to children from disadvantaged backgrounds is in the direction of contesting the education apartheid in the country, and bringing parity and equality of opportunity for all children. Maharashtra government's amendment is unjustified".

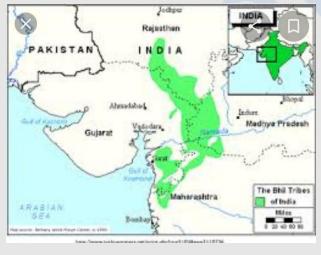
Similarly, Matin Mujawar, a Pune-based RTE activist, said that "one of the intentions of this law (the quota) was to enable students from marginalised backgrounds to get education in good schools". He said that the notification had "effectively closed" the small window through which some of the disadvantaged students got access to good education in private schools.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

### 22. Why members of the Bhil tribe have again demanded a separate 'Bhil Pradesh'

### Introduction



A large number of people from the Bhil tribe recently gathered at a rally in Rajasthan's Mangarh Dham, where Banswara's Member of Parliament Rajkumar Roat again raised the "long due" demand for an independent 'Bhil state'.

Babulal Kharadi, the minister for Tribal Area Development in the state's BJP-led government, responded in a statement: "In a democracy, there is freedom of expression. Every person has a right to demand, and there should be smaller states

as it is good for development. However, creating a state on the basis of caste is not apt. If it is Adivasis today, tomorrow you will have other communities demanding the same on the basis of their caste, which is not good for the society and the country, while we talk of social harmony."

The idea of a tribal state, comprising parts of Rajasthan, Madhya Pradesh, Gujarat and Maharashtra, has been discussed earlier, too. What is the basis of that demand and why has it been raised again?

### What is 'Bhil Pradesh'?

The demand for a separate tribal state in western India was previously put forward by regional parties such as the Bharatiya Tribal Party (BTP). The BTP was formed in 2017 in Gujarat, with this issue as a major agenda.

The Bhil community has been demanding that 49 districts be carved out of the four states to establish Bhil Pradesh.

### **Historical demand**

BTP Rajasthan president Dr Velaram Ghogra, now also the BTP national president, earlier told that Bhil social reformer and spiritual leader Govind Guru first raised the demand for a separate state for tribals back in 1913.

This was after the Mangarh massacre, which took place six years before Jallianwalla Bagh and is sometimes referred to as the "Adivasi Jallianwala". It saw hundreds of Bhil tribals being killed by British forces on November 17, 1913, in the hills of Mangarh on the Rajasthan-Gujarat border. However, BAP MP Roat says that "the sacrifice of the tribals in 1913 wasn't just for Bhakti movement but for the demand of Bhil Pradesh."

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

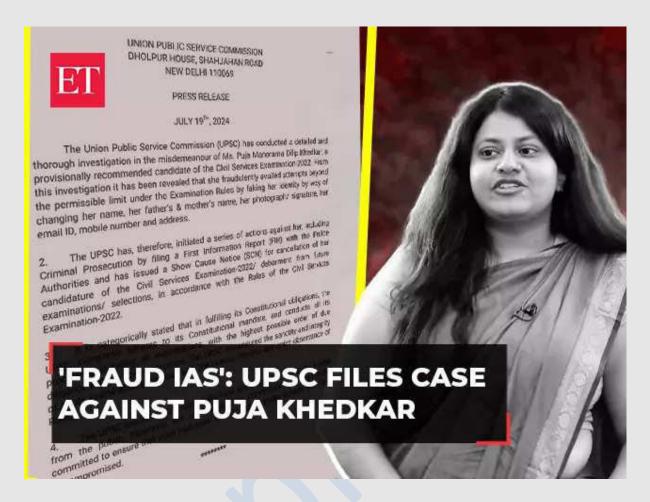
23. What are the rules for IAS probationers? Who conducts the examination? Who is responsible for checking details supplied by candidates?

### Why In News?

On July 19, the Union Public Service Commission (UPSC) said it has registered a criminal case against Puja Khedkar, a 2022 batch Indian Administrative Service (IAS) officer on probation, and issued a show cause notice cancelling her candidature from the Civil Services Examination-2022. It said she had fraudulently availed attempts beyond the permissible limit under the examination rules by faking her identity by changing her name, her father's and mother's name, photograph and signature, email ID, mobile number and address.

### How did things come to a head?

Earlier in July, Ms. Khedkar was transferred from Pune to Washim in Maharashtra following complaints of misuse of power by a senior officer. Ms. Khedkar, posted as Assistant Collector in Pune, allegedly demanded special privileges such as a separate office, house, car, and staff which she was not entitled to. Soon it transpired that the trainee officer, daughter of a retired bureaucrat who also contested the 2024 parliamentary elections from Ahmednagar, allegedly submitted fake disability and Other Backward Class (OBC) certificates to clear the civil services exam.



Following the controversy, on July 11, the Department of Personnel and Training (DOPT) constituted a single-member committee, chaired by a senior officer of the rank of Additional Secretary, to verify the candidature claims and other details of Ms. Khedkar. The committee will submit its report within two weeks. In an order in 2023, the Central Administrative Tribunal (CAT) said though Ms. Khedkar had successfully cleared the examinations, she skipped six medical examinations to prove her disability before a medical board at AIIMS, Delhi, adding that "her candidature is liable to be cancelled."

The CAT order was in response to a petition filed by Ms. Khedkar in 2021 seeking relaxation of the number of attempts by Persons with Benchmark Disabilities (PwBD). Despite the ruling, she was inducted in the services after she reappeared for the exams in 2022 and with a rank of 821 got PwBD reservation benefits under a different category — "visually impaired and hearing loss." In the previous instance, she had applied under the "visual impairment and mental illness" category. Significantly, the DOPT was a respondent in the 2021 petition.

By forging her identity, name etc., Ms. Khedkar appeared for the civil services examination 12 times. General category candidates are allowed six attempts till they attain 32 years of age. Those availing OBC and PwBD reservation are allowed nine attempts till the age of 35 and 42 years respectively. Candidates belonging to Scheduled Castes (SC) and Scheduled Tribes (ST) are allowed unlimited attempts till 37 years of age.

### How are documents scrutinised?

The UPSC conducts examinations and interviews on behalf of the Union Government after which candidates are recommended for appointment by the commission to various Services. At the examination stage, candidates have to submit documents supporting their claims for reservation under various categories — SC, ST, OBCs, Economically Weaker Section (EWS) and PwBD. The first phase of scrutiny is done by the UPSC, which only goes by the documents submitted by the candidates. After the personal interview, all candidates are sent for a medical check-up at government hospitals endorsed by the commission. PwBD candidates have to appear before a medical board at AIIMS, Delhi to determine the level of disability. The files are then sent to the DOPT, which accords the Service after accommodating various quotas.

### What is the probation period?

The probation period typically lasts two years, but it may be extended for a maximum of four years if the candidate needs improvement or has been unable to clear the examinations at the training academy. According to DOPT, "A person is appointed on probation in order to assess his suitability for absorption in the Service to which he has been appointed. Probation should not, therefore, be treated as a mere formality."

### What disciplinary action can be taken?

A probationer is discharged from service. The discharge can be on account of failure to clear the examinations at the training academy or "if the Central Government is satisfied that the probationer was ineligible for recruitment to the Service or is unsuitable for being a member of the Service." The discharge can also be ordered if in the opinion of the Central Government he/she has wilfully neglected his probationary studies or duties or is found lacking in qualities of mind and character needed for the Service.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

### 24. U-WIN, govt's new online vaccine portal

### Why in News?

Government has undertaken countrywide rollout of U-WIN, an online vaccine management portal for childhood vaccination — similar to CoWIN used during the Covid-19 pandemic.

With digitised and individualised immunisation records since birth, the government hopes to identify and reach the small proportion of children currently outside its vaccine net. The platform is already being piloted in several states, and national implementation is imminent.

### What is U-WIN? How does it work

Children, up to the age of six years, and pregnant mothers are registered on U-WIN using government ID like Aadhaar, and their mobile phone numbers. Upon registration, records of all 25 shots given to a child — and the two given to pregnant mothers — can be added.

For this, the platform generates a checkered vaccination certificate that colour codes all vaccines. After each shot is administered (and recorded on U-WIN), its date gets added to the card, which also shows the due date for the next set of vaccines.

### **Benefits to People**

The platform also sends SMS reminders to parents before their children are due for the next dose. The digital vaccine certificate — which can be downloaded by parents using their registered mobile numbers — does away with the need to maintain the physical vaccination booklet, and allows one to get vaccinated anywhere in the country. U-WIN itself can be used to locate the nearest vaccination centre, and book an available slot.

### **Benefits to Health Workers**

As for health workers, the platform can automatically generate a due-list of children in their respective areas. Once the database matures, U-WIN will allow the government to study microtrends across areas.

### **Data Gathered**

U-WIN also registers all births, the three vaccines against polio, hepatitis B, and tuberculosis administered at birth, a child's birth weight, and any physical deformities observed at birth. These data-points can be utilised by other government programmes as well — the idea is to eventually connect all digital records through ABHA (Ayushman Bharat Health Account) ID.

U-WIN will also be linked to the government's existing eVIN platform for inventory management. eVIN tracks all vaccine vials, from large central stores to each vaccination site in the country. It keeps track of the number of doses used, the number of doses that go to waste, and the number of open vials that are submitted back by the sites, and is used by sites to raise demands for vaccines.

eVIN also keeps track of, in real-time, the temperature and humidity that a vial has been subjected to using a sensor attached to each freezer.

With U-WIN running on the same principles, and using the same digital infrastructure as CoWIN, adoption should not be a major challenge.

### How will U-WIN help with immunisation?

There are a number of benefits that the government foresees with U-WIN.

- \* Reminders that U-WIN will furnish to parents are likely to improve compliance.
- \* U-WIN will ensure portability children who have received their first vaccines in one village/city can receive the rest of the doses elsewhere in the country. This will be especially useful to ensure that children of migrant workers do not drop out.
- \* The portal might help reduce errors. The platform can act as a decision support system. For instance, if a health worker is about to administer the wrong dose, or administer the shot before time, the platform will not allow them to update it, thereby alerting them.

\* U-WIN will provide granular, individualised details of childhood immunisation across the country.

Registration at birth may also help in bringing down the number of "zero dose" children — those who have not received any vaccinations.

Relevance: GS Prelims; governance

Source: Indian Express

### 25. What is Governor's immunity under Article 361, set to be reviewed by Supreme Court?

### Why in News?

The Supreme Court agreed to hear a plea seeking to redefine the contours of the constitutional immunity enjoyed by the Governor of a state.

Article 361 of the Constitution shields the President and Governor from criminal prosecution, and bars any judicial scrutiny of their actions. Given that the case could have significant ramifications on the role of the constitutional head of a state, the court also asked Attorney General for India R Venkataramani to weigh in.

A three-judge Bench — comprising Chief Justice of India DY Chandrachud, and Justices J B Pardiwala and Manoj Misra — took up the issue after a petition was moved by a contractual woman employee of West Bengal Raj Bhavan. She has alleged sexual harassment by Governor C V Ananda Bose. What is the immunity provided to Governors, and why is it under scrutiny?



### **Constitutional immunity**

Article 361 states that the President, or the Governor of a state, "shall not be answerable to any court for the exercise and performance of the powers and duties of his office or for any act done or purporting to be done by him in the exercise and performance of those powers and duties", unless it is by Parliament for impeachment from office.

The provision further says "no criminal proceedings whatsoever shall be instituted or continued"; "no process for the arrest or imprisonment" can take place while the President, or the Governor, holds office.

The interpretation of these phrases — in Article 361(2) and 361(3) — "criminal proceedings" and "process for the arrest or imprisonment" is what is now before the SC. The court will consider whether that process covers a registration of FIR, initiation of a preliminary inquiry, or a magistrate taking cognisance of an offence, which is the technical start of a criminal case.

### **Present case**

In the West Bengal case, the petitioner has argued that if none of the aforementioned actions can be taken against Governor Bose till he demits office, it could lead to a violation of rights, and impact the evidence in this case.

In its order, the SC said "the interpretation of clause (2) [of Article 361] arises for determination, more particularly, when criminal proceedings would be construed to have been 'instituted'."

### **Origins of Governor's immunity**

The protection given to the President and the Governor can be traced to the Latin maxim rex non potest peccare or "the king can do no wrong", which is rooted in English legal traditions.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

### 26. The history of Rashtrapati Bhavan's Durbar Hall and Ashok Hall, now renamed

### Why In News?

President Droupadi Murmu announced) the renaming of two halls in the Rashtrapati Bhavan – 'Durbar Hall' and 'Ashok Hall' – as 'Ganatantra Mandap' and 'Ashok Mandap', respectively. The press release said, "There has been a consistent endeavour to make the ambience of the Rashtrapati Bhavan reflective of the Indian cultural values and ethos" and the terms 'Durbar' and 'Hall' have therefore been replaced. 'Durbar' "refers to courts and assemblies of Indian rulers and the British. It lost relevance after India became a Republic, that is, 'Ganatantra'", it said.

Construction of the Rashtrapati Bhavan was completed in 1929 after King George V declared that the capital of British India would be shifted from Calcutta to Delhi in 1911. What is the history of these halls? We take a look.

### What is the Durbar Hall of the Rashtrapati Bhavan?



The hall hosts Civil and Defence Investiture Ceremonies, where the President confers honours to the recipients. Swearing-in ceremonies, like those of the Chief Justices of India, are also conducted here. Durbar Hall witnessed a historic moment in the swearing-in ceremony of independent India's first government in 1947.

### What is the history of the Ashok Hall?



'Ashok Hall' was originally a ballroom. It is now used for the presentation of credentials by Heads of Missions of foreign countries and as a formal place of introductions for the visiting

and Indian delegations before the commencement of the State Banquets hosted by the President. A loft-like space is used for playing the national anthem during important functions.

Relevance: GS Prelims; Governance

Source: Indian Express

### 27. 'Royalty is not a tax': How Supreme Court recognised states' powers to tax mining activities

### Why In News?

Royalty is not a tax, the Supreme Court has ruled. States have the power to tax mining activities. How did this long-pending matter reach a nine-judge Constitution Bench; what issues did the judges consider?

India's states have the power to tax mining activities, and collecting "royalties" from mining leaseholders is entirely separate from taxaing, and does not interfere with, the power to impose taxes, a nine-judge Constitution Bench ruled.

Following the judgment, states can generate additional revenues in the form of taxes on mining activities and on the land used to conduct these activities.



### Mineral Area Development Authority v M/s Steel Authority of India

The case, Mineral Area Development Authority v M/s Steel Authority of India, which had been pending for more than a quarter century, was decided by an 8-1 split.

### How did this matter reach the nine-judge Bench?

Royalties refer to the fees paid to the owner of a product in exchange for the right to use that product. For example, if a movie studio wants to use an existing piece of music by a specific artist in their new film, they will have to pay a royalty fee that goes to the artist.

Section 9 of the Mines and Minerals (Development and Regulation) Act, 1957 (MMDRA) requires those who obtain leases to conduct mining activities to "pay royalty in respect of any mineral removed" to the individual or corporation who leased the land to them.

This raises a question: If a state government is the entity leasing the land to a leaseholder, does this make royalties under the MMDRA a form of tax?

The Supreme Court answered this question for the first time in India Cement Ltd v State of Tamil Nadu (1989). A seven-judge Bench heard a challenge by the company to a Tamil Nadu law imposing a cess — a tax levied in addition to the normally taxable amount — on land revenues, including royalties.

The court held that states only have the power to collect royalties, not to impose taxes on mining activities. It said that the Centre has overriding authority over "regulation of mines and mineral development" under Entry 54 of the Union List to the extent provided by law (MMDRA in this case), and that states do not have the power to impose further taxes on the subject.

### So why did the majority decision hold that royalty is not a tax?

The majority held that a royalty is not a tax because there is a "conceptual difference" between royalties and taxes. Royalties are based on specific contracts or agreements between the mining leaseholder and the lessor (the person who leases the property) who can even be a private party.

Also, taxes are meant for public purposes such as welfare schemes and creating public infrastructure, whereas the payment of royalties is to a lessor in exchange "for parting with their exclusive privileges in the minerals".

### And why did the court find that states have the power to tax 'mineral development'?

The second aspect that the court considered was whether states have the power to tax mineral development activities, or whether such taxes are the sole province of the Centre under the MMDRA. This friction can be traced to the Seventh Schedule of the Constitution.

Under the State List, states are given the exclusive power to make laws relating to "Taxes on mineral rights subject to any limitations imposed by Parliament by law relating to mineral development" (Entry 50). However, Entry 54 of the Union List gives the Centre the power over "Regulation of mines and mineral development to the extent to which... is declared by Parliament by law to be expedient in the public interest".

According to the India Cement position, the royalty collected by state governments under the MMDRA would be in the form of a tax which "covers the field", barring any further taxes from being imposed. However, the court in Mineral Area Development Authority held that royalty is not a tax. As a result, "royalty would not be comprehended within the meaning of the expression 'taxes on mineral rights'" (under Entry 50 of the State List). Effectively, the court held that the MMDRA only gives states another revenue stream through royalties, and does not interfere with states' powers to impose taxes under Entry 50.

The court also held that Parliament's powers under Entry 54 of the Union List do not extend to imposing taxes, as that power exclusively rests with state legislatures. However, Entry 50 allows Parliament to place "any limitations" on states' power to impose taxes, which the court held "may include even a 'prohibition'" against imposing taxes.

The court did not limit states' power to tax mineral development activities to Entry 50, though. It held that the state also had the power to tax the land where mines and quarries are located as it includes "(i) all types of lands; and (ii) covers everything under or over land". These taxes, the court held, "will not be affected by the MMDR Act".

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

28. SC to examine acquitted man's 'right to be forgotten': What is the right, and how have courts ruled earlier?

### Introduction

Last week, the Supreme Court agreed to hear a case whose outcome will likely shape the contours of the "right to be forgotten", known in European information privacy regulation as the "right to erasure", in India. The top court now has to decide whether the right to be forgotten is a fundamental right and, if so, how it relates to other fundamental rights guaranteed by the Constitution of India.

A three-judge Bench headed by Chief Justice of India (CJI) D Y Chandrachud will hear a challenge against a Madras High Court ruling that on February 27 directed legal search portal Indian Kanoon to take down a judgment in a 2014 rape and cheating case. The acquitted man had moved the Madras HC in 2021, saying that he had been denied the citizenship of Australia because his name appears in the judgment that is publicly available on the legal portal.

### What is the right to be forgotten?

The right to be forgotten can be loosely described as the right to remove one's digital footprint (from Internet searches, etc.) where it violates the right to privacy. In May 2014, the Luxembourg-based Court of Justice of the European Union (CJEU), the highest court in matters concerning the application and interpretation of EU law, affirmed that there exists a right to be forgotten.



In what is commonly referred to as the "Google Spain case", the court ruled on the plea of Spanish lawyer Mario Costeja González to have Google remove information from 1998 regarding the forced sale of his property due to social security debt.

Citing Articles 7 (respect for private and family life) and 8 (protection of personal data) of the EU Charter on Fundamental Rights, the CJEU ruled that search engines must cater to individual requests to remove data that "appear to be inadequate, irrelevant or no longer relevant or excessive in the light of the time that had elapsed".

Informational self-determination — an individual's right to control and limit her personal information — is now widely recognised in EU law. Article 17 of the EU's General Data Protection Regulation (GDPR) describes the right to erasure. From victims of so-called "revenge porn" to individuals whose personal cases are on the Internet, the right to be forgotten is a crucial remedy.

### How is the right interpreted in India?

In India, there is no statutory framework that prescribes the right to be forgotten. However, not all constitutional rights need to be written in black and white. Until the 2017 judgment in Justice K S Puttaswamy v Union of India — in which the apex court explicitly recognised the right to privacy as a fundamental right, placing it as a facet of the right to life, right to equality, and the right to freedom of speech and expression — there were also questions on the right to privacy.

A concurring opinion in the Puttaswamy ruling by Justice S K Kaul mentions the right to be forgotten. Justice Kaul said that this right "does not mean that all aspects of earlier existence are to be obliterated... It would only mean that an individual who is no longer desirous of his personal data to be processed or stored, should be able to remove it from the system where the personal data/ information is no longer necessary, relevant, or is incorrect and serves no legitimate interest".

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

### 29. Can States tax mining activities?

### Why in News?

In a landmark ruling on July 25, the Supreme Court affirmed that States have the legislative authority to impose taxes on minerals in addition to the royalty levied by the Centre. Upholding the principles of federalism, the verdict clarified that the power of State legislatures to tax mineral activities within their respective territories is not constrained by Parliament's Mines and Minerals (Development and Regulation) Act, 1957 (1957 Act). The case which has been pending for more than a quarter century was decided by an 8:1 ruling with Chief Justice of India (CJI) D.Y. Chandrachud authoring the majority opinion. Justice B.V. Nagarathna gave a dissenting opinion where she cautioned that allowing States to impose additional levies

could hinder the development of the nation's mineral resources and disproportionately advantage mineral-rich States.



# States have power to levy tax on mineral rights, rules Supreme Court

### What was the case?

Section 9 of the 1957 Act requires those who obtain leases to conduct mining activities to "pay royalty in respect of any mineral removed" to the individual or corporation who leased the land to them. The key question for consideration was whether the royalties paid by mine leaseholders to State governments under the 1957 Act should be classified as "tax." Additionally, the court needed to determine whether the Centre could impose such charges or if the States possessed the sole authority to levy them within their jurisdictions.

### What is the difference between royalty and tax?

The majority ruling clarified the distinction between royalty and tax. It defined royalty as the "contractual consideration" paid by the mining lessee to the lessor (who may also be a private party) for the right to extract minerals. In contrast, a tax was characterised as an "imposition by a sovereign authority." The judges underscored that taxes are determined by law and can only be levied by public authorities to fund welfare schemes and public services. Meanwhile, royalties are paid to a lessor in exchange "for parting with their exclusive privileges in the minerals".

### Can States tax mining activities?

Entry 50 of the State List under the seventh Schedule of the Constitution gives States the exclusive authority to make laws regarding "taxes on mineral rights", but this power is limited by any laws Parliament may pass concerning mineral development. On the other hand, Entry 54 of the Union List gives the Centre the power to regulate "mines and mineral development," especially when Parliament decides it is necessary in public interest. During the proceedings, the Centre argued that Entry 50 in the State List had allowed Parliament to impose "any limitations" on taxes on mineral rights through the promulgation of laws relating to mineral development — in this case, the 1957 Act.

However, the majority reasoned that since royalties could not be classified as a tax, they do not fall within the category of "taxes on mineral rights "as defined in Entry 50 of the State List. As a result, it was held that the 1957 Act merely provided States with another source of revenue through royalties, without interfering with their authority to levy taxes on mineral rights under Entry 50.

While the Centre is empowered to regulate mining development under Entry 54 of the Union List, the court clarified that this authority does not include the power to impose taxes, which is exclusively under the jurisdiction of the State legislatures. However, this express power, it said, is subject to "any limitations" that may be imposed by Parliament which could even include a "prohibition'" against imposing taxes. This implies that if the Centre wanted to modify the existing legislative framework under the 1957 Act to divest States of their power to levy a tax, it could do so.

The majority also held that States have the power to tax the land where mines and quarries are located by virtue of Article 246 read with Entry 49 (taxes on lands and buildings) of the State List. "In other words, mineral-bearing lands also fall within the description of lands under Entry 49 of List 2," the CJI declared, adding that the income of the land yield can be adopted as a measure of tax.

### Why did Justice Nagarathna dissent?

Disagreeing with the majority, Justice Nagarathna held that royalties paid under the 1957 Act should be considered as tax for developing the country's mineral resources.

She pointed out that a central legislation, like the 1957 Act, was intended to promote mineral development and this objective could be severely undermined if States were allowed to impose levies and cesses (additional taxes) on top of the royalties they collect. The passage of the 1957 Act thus "denuded" States' powers to levy taxes by entrusting the Centre with complete control over mineral development and limiting States to generating revenue solely through royalties, she underscored.

Elucidating upon the likely consequences of allowing States to tax mineral rights, the judge highlighted that this would lead to an "unhealthy competition between the States to derive additional revenue" resulting in a steep, uncoordinated, and uneven increase in the cost of minerals. Such a scenario, she warned, might exploit the national market for arbitrage, where differences in pricing could be manipulated for profit, disrupting the market's stability.

### What happens next?

On July 31, the court will consider whether the verdict should be applied retroactively or prospectively.

If applied retroactively, it could result in significant financial benefits for mineral-rich States such as West Bengal, Odisha, and Jharkhand, which have enacted local laws to impose additional taxes on mining lessees.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

### **Bilateral Relations and International Organizations**

### 1. All you need to know about the Iran presidential elections

### Why in News?

On June 28, Iran held the first round of voting to elect a new President, necessitated by the death of Ebrahim Raisi in a helicopter crash in May. Since neither of the top two candidates — 69-year-old cardiac surgeon Masoud Pezeshkian, a reformist, and 58-year-old hardliner Saeed Jalili — won more than 50% of votes, they will face off in a run-off election on July 5.

What role does the President play in Iran's hybrid theocratic-democratic system, and where do these two candidates stand on various issues?



## What do terms like "reformist" and "hardliner" mean in Iranian politics?

The reformist-conservative (or "hardliner") divide in Iranian politics has existed since the beginning of the Iranian Revolution in 1979 and the subsequent formation of the Islamic Republic. Even when Ayatollah Khomeini led the new republic, there were moderate ayatollahs or senior Shia leaders from within

the religious establishment who were critical of his policies.

After Ayatollah Khomeini's death in 1989, there was a tussle for succession between the conservatives and the reformists within the clergy. Similar tussles were seen in elections for Iran's President as well.

During the period when the reformist Mohammad Khatami was President (1997-2005) there was some support for women and university students. He was followed in the presidency by hardliner Mahmoud Ahmadinejad (2005-13) who was not from the clergy, but conservative nonetheless.

Subsequently, reformist Hassan Rouhani (2013-21) came to power, followed by Raisi (2021-24), who was considered a hardliner.

### What views do the two candidates hold on major issues?

Pezeshkian has stated he will object to oppressive restrictions on women. Like previous reformers, he too wants a better relationship with the West, and believes that Iran's isolation due of Western economic sanctions needs to be ended.

US sanctions against Iran go back to the early days of the Islamic Republic. Iran negotiated with the West to sign the Joint Comprehensive Plan of Action (JCPoA), or the Iran nuclear deal,

in 2015. In exchange for certain limits on Iran developing nuclear weapons, the West agreed to ease some sanctions.

Donald Trump's unilateral withdrawal from the deal in 2018 dealt a blow to the reformists, and served as vindication for the conservatives who were opposed to the outreach to the West. The killing of the senior Iranian general Qassem Soleimani in 2020 by the United States further consolidated the conservative hold on power in Iran. Pezeshkian is also arguing for more liberal policies, but that's not easy to achieve.

Jalili had been part of Iran's nuclear negotiations with the West, but his statements during the campaign suggest that he is no longer in favour of a deal.

Jalili also supports closer relationships with China and Russia. He is part of one of the higher bodies of Iranian politics and security, the Expediency Council, indicating his proximity to the Supreme Leader, Ayatollah Ali Khamenei.

### How are the presidential candidates selected?

Many people apply to become candidates but the establishment oversees the selection process, and only vetted candidates can contest. Most candidates are from the establishment, and only a few reformists can enter the fray.

The Supreme Leader has been indirectly critical of Pezeshkian's position on improving relations with the US. However, these elections are taking place in the aftermath of tumultuous events like the 2022 women's protests, and the position taken by the reformist candidate has a certain resonance.

### What is the real extent of the President's power in Iran?

The final arbiter in the Iranian system is the Supreme Leader, and the President has to negotiate all major policy decisions with him.

The President's position in Iran can be compared to that of a Vice President elsewhere. While he does have a certain amount of executive power and some leeway in the day-to-day running of the system, broader policymaking must be in line with the overall ideology of the republic, and depends upon the President's negotiating capabilities with the Supreme Leader.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: Indian express

### 2. INDIA-MONGOLIA JOINT MILITARY EXERCISE NOMADIC ELEPHANT COMMENCES IN MEGHALAYA

### Why in News?

The 16th edition of India-Mongolia Joint Military Exercise NOMADIC ELEPHANT commenced today, at Foreign Training Node, Umroi (Meghalaya). The Exercise is scheduled to be conducted from 03rd to 16th July 2024.

### **Annual exercise**

Exercise NOMADIC ELEPHANT is an annual training event conducted alternatively in India and Mongolia. Last edition was conducted in Mongolia in July 2023.

### **Purpose of Joint exercise**

Exercise NOMADIC ELEPHANT will enable both sides to share their best practices in Tactics, Techniques and Procedures of conducting joint operations. The exercise will also facilitate developing inter-operability, bonhomie and camaraderie between the two armies. This will also enhance the level of defence cooperation, further augmenting bilateral relations between the two friendly nations.

# India-Mongolia Military Ex. 'Nomadic Elephant' commenced in Meghalaya



Venue: Umroi, Meghalaya Dates: 3 to 16 July 2024

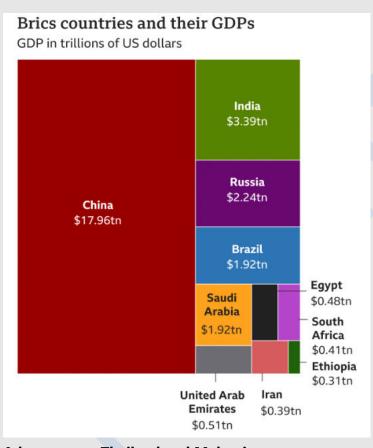
Relevance: GS Prelims; International Relations

### 3. BRICS undergoing expansion

### Why in News?

BRICS is attracting Southeast Asian countries, with Thailand and Malaysia being the latest to express their interest in joining the bloc.

Last month, Thailand submitted a membership request, while Malaysian Prime Minister Anwar Ibrahim said in an interview with Chinese news portal Guancha that his country would soon begin formal procedures.



### **Earlier expansion of BRICS**

Last year, BRICS — an acronym that was originally used to refer to Brazil, Russia, India, China, and South Africa — decided to expand its membership, inviting Egypt, Ethiopia, Iran, Saudi Arabia and the United Arab Emirates to join the bloc. The name for the expanded group has not yet been officially announced, but it could be called "BRICS+."

Combined, its members account for about 45% of the world's population — around 3.5 billion people. Their economies are worth around \$30 trillion (€28 trillion) — about 28% of the global economy, according to World Bank data.

### **Advantage to Thailand and Malaysia**

The bloc "can help Malaysia's digital economy grow faster by allowing it to integrate with countries that have strong digital markets and also take advantage of best practices from other members.

Thailand would also be able to draw investments in important industries including services, manufacturing, and agriculture.

The trade ties that Malaysia and Thailand already have with China have influenced their decisions to join BRICS. China has been Malaysia's largest trading partner for the past 15 years

and Thailand's biggest for 11 years, according to official data. Both these Southeast Asian nations becoming BRICS members "will enhance their relationship with China.

### **Thailand Neutrality**

Last month, Thai Foreign Minister insisted that Bangkok did not view joining BRICS as an act of "choosing sides," or as a way to counterbalance any other bloc.

Apart from BRICS, Thailand has also applied to join the Paris-based Organization for Economic Cooperation and Development (OECD), which has 38 mostly Western members.

### Malaysia bias towards China

In Malaysia, public sentiment is currently more in favor of China, the world's second-largest economy after the United States.

### Will other ASEAN nations follow?

Malaysia and Thailand are not the only countries in Southeast Asia interested in joining BRICS. Vietnam representative told a press briefing that "like many countries around the world, we are closely monitoring the process of BRICS membership expansion."

Vietnam, Laos and Cambodia "could be the potential applicants" as they already have good ties with China, India, and Russia — all key players in BRICS.

Relevance: GS Prelims & Mains Paper II; International Organisations

Source: Indian Express

### 4. What Labour election win means for India-UK Free Trade Agreement (FTA)

### Why in News?

New Delhi and London have been negotiating a proposed free trade agreement (FTA) for more than two years to boost trade between the two nations. The agreement could result in a mutual tariff relaxation on a range of goods such as cars, clothes, alcoholic beverages, and medical instruments.

However, a landslide victory for the Labour Party in the UK elections could lead to a change in the dynamic of the FTA negotiations.

### Political certainty a plus

Since the UK unexpectedly voted in a referendum to leave the European Union (EU), London has not seen the kind of political stability needed for a deal with India that has a high tariff regime.

But if Labour wins comfortably, there might finally be enough political legroom to sign a deal with India. Since Brexit, the majority of the trade deals signed by the UK have been rollover agreements, that resemble deals that London previously had when it was an EU member.



### Not an 'anti-India' Labour Party

Under Keir Starmer, Labour has changed. It is not the same party as that headed by his predecessor, Jeremy Corbyn, who called for international intervention in Kashmir.

Starmer has recognised the growing political clout of the UK's Indian origin population — the largest immigrant group in the country — and has tried to stamp out 'anti-India sentiments' within his party.

In fact, under Starmer's leadership, Labour has even raised questions regarding the Tories' delay in signing the FTA with India.

### Visas a likely sticking point

That said, immigration remains among the most heated issues in British politics. While the Tories and Labour disagree on how to restrict immigration into the UK, there is a bipartisan consensus on the fact that it must be restricted. This could be a sticking point for a trade deal with India.

New Delhi is seeking temporary visas for its service sector workforce under the FTA — this is where it expects to gain the most in the deal. With the UK being a powerhouse in the IT and financial services segment, India's service sector could benefit from the integration. But given the UK's political climate, Labour is likely to negotiate hard on the visa issue.

### **Tougher negotiations on climate**

India will also likely face tougher negotiations on climate from a Labour government, which has repeatedly cornered the Tories for deviating from the UK's 2030 net zero goals.

India has sought a relaxation on the carbon tax that the UK is expected to implement along the lines of the EU. New Delhi argued during the FTA negotiations that the proposed carbon

border adjustment mechanism could take away much of the tariff concessions agreed during the FTA.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: Indian Express

### 5. Iranians elect reformist Pezeshkian as President

### **Reformist President Iran**

Iran's reformist candidate Masoud Pezeshkian on Saturday won a run-off presidential election against conservative Saeed Jalili, the Interior Ministry said.

Mr. Pezeshkian received more than 16 million votes, around 54%, and Jalili more than 13 million, roughly 44%, out of about 30 million votes cast. Voter turnout was 49.8%, Mr. Eslami added, up from a record low of about 40% during the first round.



Iran's supreme leader Ayatollah Ali Khamenei, who has the final say on all major policy issues, congratulated Mr. Pezeshkian. Mr. Khamenei urged him to "continue the path of martyr Raisi and use the country's many capacities, especially the revolutionary and faithful youth, for the comfort of the people and the progress of the country.

### **About new President**

Mr. Pezeshkian is a 69-year-old heart surgeon whose only previous government experience came as Health Minister about two decades ago. He has called for "constructive relations" with Western countries to "get Iran out of its isolation". He favours the revival of the 2015 nuclear deal between Iran and global powers.

The election came against a backdrop of heightened regional tensions due to the Gaza war, a dispute with the West over Iran's nuclear programme, and domestic discontent over the state of Iran's sanctions-hit economy.

The U.S. unilaterally withdrew from the accord in 2018, reimposing sanctions and leading Iran to gradually reduce its commitment to its terms.

### Statement from the US

The U.S. said it would make no difference whether Mr. Pezeshkian or Mr. Jalili won. State Department spokesperson Vedant Patel said there was no expectation the vote would "lead to a fundamental change in Iran's direction" or improvement in human rights.

### **Policy under previous President**

The death of conservative President Ebrahim Raisi in a helicopter crash necessitated the election, which was not due until 2025. Under Raisi, Iran sought improved relations with China and Russia while mending ties with Arab neighbours, chiefly Saudi Arabia, to avert deeper isolation.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: The Hindu

### 6. PM Modi's first bilateral visit this term: Russia's importance for India

### Why in News?

Prime Minister Narendra Modi is in Russia to meet President Vladimir Putin. The two leaders have met a total 16 times since Modi became Prime Minister, but not since Russia invaded Ukraine in February 2022, provoking wide-ranging Western sanctions. Modi last went to Russia for the Eastern Economic Forum meeting in Vladivostok in September 2019; Putin last visited India in December 2021 for the annual bilateral summit.



### **Underlining a priority**

In choosing Russia for his first bilateral visit after being sworn in, Modi has broken with the tradition of India's new Prime Minister travelling first to a neighbouring country, a template that he followed in both June 2014 (Bhutan) and June 2019 (Maldives and Sri Lanka). He travelled to Italy last month, but that was for a multilateral meeting of G7 leaders.

The visit to Russia is a statement of the importance New Delhi accords to its relationship with Moscow, and an underlining of this foreign policy priority. Modi will be meeting Putin around the same time as leaders of the 32 nations in the North Atlantic Treaty Organisation (Nato) gather in Washington DC from July 9-11 to celebrate 75 years of the anti-Russia military alliance.

### Old age ties

India's relationship with Russia is seven decades old. Over the years, as India has diversified its relationships in a multi-polar world, the India-Russia relationship has stagnated in some areas and downgraded in others. Defence is the strongest pillar of the strategic partnership by far, with nuclear and space cooperation also occupying an important place.

### **Critical defence interest**

The USSR was India's main supplier of defence equipment during the decades of the Cold War, and even now, between 60 and 70 per cent of India's defence equipment is estimated to be of Russian and Soviet origin. The defence cooperation has evolved over time from a buyer-seller framework to one involving joint R&D, co-development and joint production.

India and Russia have signed agreements for the supply of S-400 Triumf mobile surface-to-air missile systems, MiG-29 fighter aircraft, and Kamov helicopters, and for the licensed production of T-90 tanks, Su-30MKI fighters, AK-203 assault rifles, and BrahMos supersonic cruise missiles. The INS Vikramaditya, one of the Indian Navy's two aircraft carriers, is the former Soviet and Russia warship Admiral Gorshkov.

Over the last 25 years, India has sought to look beyond Russia — especially to the United States, France, and Israel for the supply of defence equipment. However, it still cannot afford to alienate Moscow, particularly at a time when Indian soldiers are in a standoff with the Chinese People's Liberation Army along the Line of Actual Control in eastern Ladakh. It is essential for India to have a regular and reliable supply of equipment and spares from Russia, and for Moscow to not share its sensitive defence technologies with Beijing.

### War and oil boost to trade

Since the beginning of the war in Ukraine, India has been buying large amounts of Russian oil at a discount to cushion the inflationary impact of rising crude prices. In the face of international criticism, External Affairs Minister S Jaishankar reiterated during his visit to Moscow in November 2022 that India would continue to buy Russian oil in the interest of Indian consumers.

The purchase of Russian crude has pushed bilateral trade volumes beyond expectations and targets. Before the war, the bilateral trade target was set at \$30 billion by 2025. However, bilateral trade reached an all-time high of \$65.70 billion in FY 2023-24, according to data from the Department of Commerce. The balance of trade was heavily in Russia's favour, and India's \$61.44 billion imports were made up mostly by Russian oil and petroleum products, fertilisers, mineral resources, precious stones and metals, and vegetable oils.

### Walking diplomatic tightrope

The war has, however, put India in a delicate diplomatic position with its Western allies. New Delhi has walked the diplomatic tightrope, not explicitly condemning the Russian invasion but calling for an international probe into the Bucha massacre in the early weeks of the war, and expressing concern over threats of nuclear war issued by Russian leaders. India has abstained from voting against Russia in several resolutions at the United Nations Security Council.

On his November 2022 visit, Jaishankar had conveyed that India is on the side of "peace, respect for international law and support for the UN Charter", and "strongly advocates a return to dialogue and diplomacy".

### Lines open to Moscow and Kyiv

There is a perception that India is positioning itself as a neutral player that could be a mediator between the two sides. Modi is one of the few world leaders who have had phone conversations with both Putin and President Volodymyr Zelenskyy of Ukraine. Zelenskyy invited Modi to visit during their meeting at the G7 in Italy, and there has been some talk of the Prime Minister possibly travelling to Kyiv.

However, Modi stayed away from the peace summit on Ukraine hosted by Switzerland last month, and India did not sign the joint communique. Russia called the summit a "waste of time" and did not attend, and India took the position that "only those options acceptable to both parties can lead to abiding peace".

Relevance: GS Prelims & Mains Paper II; Bilateral Relations

Source: Indian Express

### 7. What is Order of Saint Andrew the Apostle, conferred upon PM Modi?

### Why in News?

Prime Minister Narendra Modi was recently awarded Russia's highest civilian honour, the Order of Saint Andrew the Apostle, during his visit to the country.

The award for the PM was announced in 2019, for "exceptional services in promoting special & privileged strategic partnership between Russia and India and friendly relations between the Russian and Indian peoples."

### What is the award, and who gets it?

The award is given to prominent government and public figures, military leaders, and outstanding representatives of science, culture, art, and various sectors of the economy for exceptional services to Russia. It can also be awarded to heads of foreign states for outstanding services to the Russian Federation.



Its name comes from Saint Andrew, who is believed to be one of the apostles or 12 original followers of Jesus. After Christ's crucifixion, the apostles are said to have travelled great distances to spread his message. Saint Andrew travelled to Russia, Greece, and other places in Europe and Asia, and founded the Church of Constantinople, which later led to the establishment of the Russian Orthodox Church. More than 90 million people follow the Church in Russia, out of the country's

population of around 140 million.

Saint Andrew is regarded as the patron saint of Russia and Scotland. The 'X' symbol on the flag of Scotland comes from the saint's symbol, called the 'Saltire'. It is believed that he was crucified on a cross of a similar shape.

Tsar Peter the Great (1672–1725) established the Order of Saint Andrew in 1698. The order was abolished in 1918 following the Russian Revolution, which overthrew the Tsarist regime. It was re-established in 1998 by an Executive Order of the President of Russia.

### Who has received the honour earlier?

Past recipients largely include influential figures in Russia, such as military engineer and gun designer Mikhail Kalashnikov, author Sergey Mikhalkov, the last leader of the Soviet Union Mikhail Gorbachev, Russian Orthodox Church leader Patriarch Alexy II, and the current head of the Russian Orthodox Church Patriarch Krill.

Foreign leaders who have been honoured in the past include Chinese President Xi Jinping in 2017, and the former President of Kazakhstan, Nursultan Nazarbayev.

Relevance: GS Prelims & Mains Paper II; Bilateral Relations

Source: Indian Express

### 8. Putin accepts PM's request to release recruits

### Why in News?

In what will be a relief for the families of men recruited into the Russian military to serve at the war front with Ukraine, Russian President Vladimir Putin has accepted Prime Minister Narendra Modi's request, to discharge those wishing to return to India.

According to sources, Mr. Putin has given instructions to this effect upon Mr. Modi's "direct intervention". Asked specifically if Indians who chose to remain would be allowed to do so, he said that Mr. Modi made it clear that he wanted "all" Indian military recruits to return. Pressure on Government



The demand for the discharge of the soldiers who claim they were recruited after being lured by agents on false promises has been increasing pressure on the government for several months.

According to those aware of the recruitment process and the routes taken by Indian men and agents who bring them, many Indian military

recruits have not registered with the Embassy, as they are lured by salaries of approximately ₹2 lakh a month, the promise of Russian residency papers, as well as the possibility of using illegal migrant routes to go further West to Schengen countries in Europe.

### View point of Russia

Russian government sources explained that the recruitment of foreign soldiers is permitted under law and conducted after "thorough mental and physical" checks. Recruits from Nepal, Sri Lanka, China, and African countries are all believed to have been trained for a few weeks and deployed similarly to the Indian recruits. The Nepali government has also made similar requests to the Kremlin and taken up the issue in Kathmandu and Moscow.

The decision by Mr. Putin is seen as a special gesture made for India given traditional ties, as well as his personal rapport with the Prime Minister.

Relevance: GS Prelims & Mains Paper II; Bilateral Relations

Source: The Hindu

### 9. How Prime Minister Modi's visit to Austria sends a message both to Moscow and the West

### Why in News?

Narendra Modi's visit to Vienna this week was the first by an Indian Prime Minister to Austria since June 1983, when Indian Gandhi travelled to the country.

The Prime Minister's decision to travel to Vienna immediately after he met President Vladimir Putin in Moscow was significant — Austria is a European country that is not a part of Nato, the US-led anti-Russia trans-Atlantic military alliance, whose 32 leaders gathered in Washington DC this week.

### Message to both sides

During the visit that Modi said was being watched by the "entire world", the Prime Minister told Putin that the death of innocent children causes "pain and the heart simply explodes", that "peace talks do not succeed amid bombs, guns and bullets", and that the "solution [to any conflict] cannot be found on the battlefield".



Modi's statements conveyed India's deep concern at a suspected Russian missile attack on a children's hospital in Kyiv. The attack, carried out when the Prime Minister was in Russia, reflected a pattern — in December 2023, when External Affairs Minister S Jaishankar visited Moscow to meet Putin and his Foreign Minister Sergey Lavrov, Russia launched its biggest air attack on Ukraine since the beginning of the war in February 2022, killing at least 31 people, according to the Ukrainian military.

So, speaking in Vienna with Chancellor Karl Nehammer the day after he met Putin, the Prime Minister stressed again that "this is not a time for war", that "problems cannot be solved on the battlefield", and that the "loss of innocent lives anywhere is unacceptable".

The reiteration was India's clear message to Western capitals concerned over Modi's bilateral meeting with Russia's leader.

### **Country born neutral**

Vienna was under Nazi occupation during World War II. After the end of the war, it was divided into four sectors by the US, the UK, France, and the Soviet Union, supervised by the Allied Commission. The Allies occupied Austria for a decade after the war ended.

In 1955, the four occupying powers signed the Austrian State Treaty with the Austrian government to establish Austria as an independent state. The Soviet Union demanded that

Austria, which is located strategically between capitalist western Europe and the communist bloc in the east of the continent, maintain neutrality on the model of Switzerland, with the four powers pledging to the integrity and inviolability of Austrian territory.

The 1955 treaty, which was ratified by all countries, thus bound Austria to neutrality. The constitution of Austria prohibits entering into military alliances, and the establishment of foreign military bases on Austrian territory.

### **Austria and Nehru**

In 1952-53, the Austrians approached Jawaharlal Nehru, who was respected by both Western nations and the Soviets, for help in securing a sovereign nation.

India was among the few countries that supported Austria's appeal at the United Nations General Assembly in 1952 for an end to the Allied occupation and the restoration of its sovereignty.

Köchler, the well known Austrian philosopher, quoted from a report published in the Austrian daily Neues Österreich on June 21, 1953: "Prime Minister Nehru...is without a doubt the only personality in international politics whose 'good offices' can be effective in supporting Austria in her efforts towards the realization of the State Treaty."

In June 1955, about a month after Austria had gained full independence through the conclusion of the State Treaty, Nehru paid a State Visit to the country, the first by a foreign leader.

#### **Evolution of ties**

Diplomatic relations between India and Austria were established on November 10, 1949 — this year marks its 75th anniversary.

The year after Indira's visit in 1983, Austria's Chancellor Fred Sinowatz came to India on a reciprocal visit. President K R Narayanan went to Austria on a State Visit in November 1999; Austria's President Dr Heinz Fischer came in February 2005, and President Pratibha Patil visited Austria in October 2011.

Relevance: GS Prelims & Mains Paper II; Bilateral Relations

Source: Indian Express

10. The Yuan Challenge: How India-Russia trade gap may threaten rupee internationalization efforts

### Why in News?

In a strategic move to curb its burgeoning oil import bill and reduce dependence on the expensive US dollar, New Delhi aims to bolster bilateral trade with Moscow to \$100 billion by 2030. However, the dynamics of India-Russia trade have been skewed since the onset of the Ukraine war in 2022. Russia has rapidly ascended to become India's top oil supplier, but Indian

exports to Russia have struggled, resulting in a \$57 billion trade deficit in the bilateral trade worth \$66 billion in FY24.

While India has managed to save over \$10 billion by importing cheaper Russian oil in the last two years and has benefited from exporting petroleum products by processing crude, meager exports to Russia mean that a historic geopolitical opportunity to cut dependence on the expensive US dollar has remained elusive. The continued unbalanced trade with Russia could force India to use the Chinese yuan, which runs counter to its efforts toward internationalizing the rupee.



# Why is the widening trade gap with Russia benefiting the yuan?

Unlike India, China has seized the export opportunities emerging in Russia amid crippling Western sanctions and a host of Western companies and banks exiting the war economy. Chinese exports to Russia have actually grown faster than imports of Russian oil. Chinese customs data shows that shipments to Russia jumped

by 47 per cent year-on-year to \$111 billion in 2023, while imports grew by 13 per cent to \$129 billion. The two-way trade crossed a record \$240 billion in 2023.

Since trade between the two countries is more balanced compared to India-Russia trade, it has fostered the use of domestic currency. The Russian government has stated that 95 per cent of trade between China and Russia occurs in domestic currency. As a result, the yuan is the most sought-after currency in the Russian stock market, even more popular than the powerful US dollar. Russian oil exports are therefore requesting payments from Indian refineries in Chinese currency, while the use of the rupee has remained restricted.

### How can India internationalise the rupee?

Even as India aims to reduce its dependence on the US dollar, it does not support the yuan as a currency for settling international trade due to recurrent border tensions with neighboring China. In July 2022, the Reserve Bank of India (RBI) issued a circular permitting an additional arrangement for settling trade using the rupee.

However, the FY23 Economic Survey states that one prerequisite for the emergence of an international currency is that it "needs to be increasingly used for trade invoicing." According to the BIS Triennial Central Bank Survey 2022, the US dollar is the dominant vehicle currency, accounting for 88 percent of global forex turnover, while the rupee accounts for just 1.6 per cent.

The survey indicated that if rupee turnover rises to equal the share of non-US, non-Euro currencies in global forex turnover (4 per cent), it will be regarded as an international currency.

### Why are exports to Russia challenging?

The biggest challenge has been the reluctance of private banks to facilitate trade with Russia due to fears of Western sanctions. Most private banks have significant business interests in Western countries and multiple branches that could face sanctions imposed by the European Union (EU) and the US.

### How are Russia and India planning to boost trade?

During Modi's visit, both countries decided to eliminate non-tariff and tariff barriers in trade and to initiate negotiations for a trade deal with the Russia-led Eurasian Economic Union (EEU), which could ease the flow of Indian products into the EEU. The EEU consists of five member states: Russia, Belarus, Kazakhstan, Kyrgyzstan, and Armenia, representing a \$5 trillion economy.

According to the joint statement, India and Russia agreed to cooperate in manufacturing sectors such as transport engineering, metallurgy, and chemicals.

Russia and India have also planned the implementation of joint projects in priority areas and emphasised the importance of expanding reciprocal trade flows of industrial products to increase their share in bilateral trade. The statement further reflected discussions on the migration and mobility partnership agreement between the two countries.

Relevance: GS Prelims & Mains Paper II; Bilateral Relations

Source: Indian Express

# 11. Former President Trump escapes assassination bid. There is a disturbing history of targeting top US leaders

### Why in News?

Former US President and current frontrunner in the 2024 race for the White House, Donald Trump, was shot at in an election rally in Butler Country, Pennsylvania. Trump sustained an injury to the ear but is not seriously hurt.



There is a history of political violence in the US targeting those in the highest office. Four US Presidents have been assassinated so far.

### 1. Abraham Lincoln (1865)

The 16th President, Abraham Lincoln, was assassinated on Good Friday, April 14, 1865, days after the American Civil War (1861 to 1865) had come to an end. Lincoln was seated to watch the play Our American Cousin at Ford's Theatre in

Washington DC when John Wilkes Booth, the assassin, slipped into the Presidential box and shot him in the head. Booth was a sympathiser of the Confederates, the losing side of the Civil

War. He was also a well-known actor at the time and disapproved of Lincoln's intent to extend equal voting rights to Black Americans. Lincoln died of his injuries the next morning.

### 2. James A Garfield (1881)

Barely six months after taking office, the 20th President of the United States, James A Garfield, was shot in the back and shoulder at the Baltimore and Potomac Railroad Station in Washington, D.C. on July 2, 1881. The President was on his way to deliver a speech at his alma mater Williams College, and had to pass through the station. The shooter, Charles J. Guiteau, was a supporter of Vice-President Chester A Arthur and wished to see him ascend to the Oval Office. Garfield died of his injuries two months later.

# 3. William McKinley (1901)

The 25th President, William McKinley, was six months into his second term when he was shot twice in the abdomen at close range while attending the Pan-American Exposition in Buffalo, New York on September 6, 1901. McKinley died of gangrene from his wounds eight days later, aged 56. Leon Czolgosz was charged with his murder. This incident supposedly expanded the mandate of the US Secret Service to Presidential protection.

# 4. John F Kennedy (1963)

The 35th President, John F Kennedy, was fatally shot in the head while riding with his wife and First Lady Jacqueline Kennedy in an open convertible in Dallas, Texas on November 22, 1963. He was gearing up to announce his re-election campaign. Lee Harvey Oswald was arrested for the shooting, and the police claimed he was motivated by personal reasons and disillusionment with the establishment. Several conspiracy theories continue to surround the case to date.

Relevance: GS Prelims & Mains Paper II; International Issues

Source: Indian Express

# 12. IPEF: India likely to sign clean, fair economy pacts

#### Why in News?

India is likely to soon be able to sign the clean economy and fair economy agreements under the U.S.-led Indo Pacific Economic Framework for Prosperity (IPEF) as the Cabinet notes on the pacts are in an advanced stage of finalisation, official sources said.

The country, however, is not yet ready to join the trade pillar of IPEF as it continues to be uncomfortable with some of its components, such as framing of high-standard rules on digital economy, including cross-border data flows and data localisation, and labour and environment issues, the source added.

India was the only country in the 14-member IPEF bloc that had not endorsed the clean economy and fair economy pacts at the Ministerial level meeting in Singapore held in June because of general elections. It had assured other members that it would get domestic clearances after a new government was in place.



# **Countering China**

In a move seen by many as an attempt to counter China's growing influence in the Indo-Pacific region, U.S. President Joe Biden unveiled the IPEF in Tokyo on May 23, 2022.

The 14 members include the U.S., India, Australia, Brunei, Fiji, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand and Vietnam.

#### **Four pillars**

The IPEF framework is structured around the four pillars of trade, supply chains, clean energy and tax and anti-corruption, but there are no provisions on tariff cuts on goods.

All 14 IPEF members, including India, signed the supply chains resilience agreement which entered into force on February 24.

## **Energy security**

The clean economy pact focusses on energy security and transition, climate resilience and adaptation; GHG (greenhouse gas) emissions mitigation; find/develop innovative ways of reducing dependence on fossil fuel energy; promote technical cooperation, workforce development, capacity building, and research collaborations; and collaborate to facilitate development, access, and deployment of clean energy and climate-friendly technologies.

# 'More transparency'

The agreement on fair economy intends to create a more transparent and predictable business environment that can spur greater trade and investment in the markets of member countries; enhance efforts to prevent and combat corruption by strengthening anti-corruption

frameworks, support efforts to improve tax transparency and exchange of information for tax purposes between competent authorities.

The pillar 1 of IPEF which deals with trade is nowhere near finalisation as the U.S. does not seem to be interested any more in the chapter on digital trade. India had opted out of the negotiations on trade pillar right at the beginning.

Relevance: GS Prelims & Mains Paper II; International Organisations

Source: The Hindu

# 13. Gaza's Tell Umm Amer in the World Heritage Site List

The World Heritage Committee (WHC) recently decided to include the Palestinian site of Tell Umm Amer in both the UNESCO World Heritage Site List and the Lost of World Heritage in Danger during its 46th session in New Delhi.

Also known as the 'Monastery of Saint Hilarion', the site lies in the Gaza Strip which continues to reel under Israel's relentless assault.



# Fourth century monastery

Situated on the coastal dunes of the Nuseirat Municipality, just 10 km south of Gaza city, the ancient Christian monastery was founded in the fourth century by Hilarion the Great (291-371 CE), considered by some to be the father of Palestinian monasticism.

Born in Tabatha, close to where

his monastery would eventually come up, Hilarion became a monk at the age of 15. As his fame grew, and people began coming to him for miracles, his small hermitage went on to become a thriving monastery, which attracted followers from all over, many of whom would choose Hilarion's mendicant lifestyle.

The present-day archaeological remains of the site span more than four centuries, from the time of Hilarion to the Umayyad period.

The monastery was likely abandoned after a seventh century earthquake, only to be uncovered by local archaeologists in 1999.

#### **Much-needed protection**

With Israel's ongoing onslaught reducing much of the Gaza strip to rubble, monuments and sites of cultural significance have not been spared either.

This is why Tell Umm Amer's inclusion in the aforementioned UNESCO lists matters. The World Heritage Convention of 1972, of which Israel is a party to, sets out duties for identifying, protecting, and preserving World Heritage sites. Crucially, states cannot take any deliberate measures which are likely to cause direct or indirect damage to this site.

In December 2023, UNESCO's Intergovernmental Committee for the Protection of Cultural Property in the Event of Armed Conflict had already decided to grant 'provisional enhanced protection' to the monastery under the 1954 Hague Convention and its Second Protocol.

The inclusion on the list of World Heritage in Danger automatically opens the door to enhanced international technical and financial assistance mechanisms to guarantee the protection of the property and, if necessary, to help facilitate its rehabilitation, the UNESCO statement on Friday said.

Relevance: GS Prelims; International Organisations

Source: Indian Express

# 14. Fourteen Palestinian groups, including Hamas and Fatah, sign China-brokered deal: Why it matters

Leaders of Palestinian groups Hamas and Fatah signed a China-brokered declaration in Beijing, "pledging to end division and strengthen unity". The two groups have competed in the past over the political leadership of Palestinian territories.

Representatives of 12 other Palestinian groups also participated in three days of talks. Foreign Minister Wang Yi said on closing day that "The most important consensus reached in the talks was for the reconciliation and unity of the 14 factions, with the core outcome being that the Palestine Liberation Organization is the sole legitimate representative of all Palestinian people."

Who are these groups and what is the significance of the declaration being signed in China?

#### Who are Hamas, Fatah and PLO?

Hamas and Fatah are major political groups in Palestinian territories, that is the Gaza Strip and the West Bank. Hamas is in power in Gaza, while Fatah heads the Palestinian Authority which governs some parts of the West Bank. Most of the West Bank is under Israeli control.

Hamas emerged as a resistance group against Israeli occupation after the First Intifada or uprising in 1987. There was dwindling faith among many about the prospects of Palestinian goals for independence being met at the time, and Hamas advocated the use of violence.

Prior to it, Fatah was established in the 1950s by Palestinian leader Yasser Arafat. It became the most powerful organisation in the Palestinian Liberation Organisation (PLO), created in 1964 to unite Palestinian groups. PLO is also the representative of Palestine at various

international organisations and Hamas is not a part of it. While they initially lodged strong opposition to Israel and employed tactics such as attacks on Israelis, that stance softened over time, around the 1990s.



Zionist project, but not against Judaism or Jews.

Particularly, the signing of the US-brokered Oslo Accords in 1993 between Arafat and Israeli Prime Minister Yitzhak Rabin led the PLO to recognise the State of Israel for the first time. PLO also resolved to give up violence, while Israel recognised it in turn as the sole representative of the Palestinians.

# How have their positions shifted over time?

Hamas and Fatah are often differentiated based on their approaches to Palestinian movement. For Hamas, the recognition of Israel means giving up the Palestinian right to lts statehood. Islamist positions also contrasted against the secular Fatah. In 2007, Hamas came to control Gaza after winning the elections with around 44% of the votes. Fatah came second, at 41%.

For a long time, Hamas championed a hardline stance on Jews. But by 2017, its new charter said it was against the "racist, aggressive, colonial and expansionist" aims of the

This shift has been observed in recent years as the Palestinian issue began to lose prominence in Middle East politics. More and more Arab states have signed trade agreements and normalisation agreements with Israel, giving it increased legitimacy.

# What is the significance of this declaration?

The Hamas attacks against Israel on October 7 followed Israel's military campaign in the Gaza Strip, and since then there has been no resolution to the brutal conflict. More than 39,000 people have been reportedly killed in Gaza according to the region's health ministry.

The lack of a Palestinian representative, who enjoys support among all parties, has been cited as a reason behind the slow progress on establishing peace. Israel, for instance, views Hamas as a terrorist group which needs to be completely destroyed. The US has also repeatedly condemned Hamas.

In this scenario, China has attempted to present itself as a mediator with "no selfish interests in the issue" and "a staunch advocate of justice and fairness". But its engagement with Palestinian leadership also comes from its long-standing support for Palestine. China was one of the first countries to recognise the PLO and the State of Palestine.

It also comes after another deal China negotiated in 2023 between regional rivals Saudi Arabia and Iran. China has attempted to position itself as a reliable partner for the Middle East and as an alternative to the United States' role so far. Its significant economic heft also allows it to form trade ties that supplement diplomatic relationships.

However, whether the declaration can result in a lasting impact on stability in the region remains to be seen. Hamas and Fatah have earlier said they will work together but such deals have fallen apart over internal disagreements.

Relevance: GS Prelims & Mains Paper II; International Relations

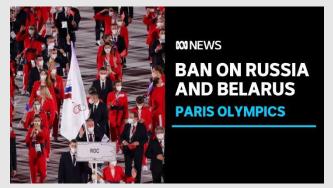
Source: Indian Express

# 15. Why are Russian athletes 'banned' from the 2024 Paris Olympics?

#### Why in News?

Athletes from Russia and Belarus have been banned from participating in the ongoing Paris Olympics under their nations' official flags. Many of them are instead competing under a separate category called Athlètes Individuels Neutres or AIN in French, meaning Individual Neutral Athletes.

Russian President Vladimir Putin earlier said, "Thanks to some of the leaders of the modern International Olympic Committee, we learned that an invitation to the Games is not an unconditional right of the best athletes, but a kind of privilege." He said it showed the Games can be used for "political pressure against people who have nothing to do with politics. And as gross, and in fact racist, ethnic discrimination."



# Why are Russia and Belarus banned from participation?

The International Olympic Committee (IOC) initially sanctioned the two nations soon after the Russian invasion of Ukraine began in 2022, just days after the Winter Olympics ended in Beijing on February 20, 2022. It said the invasion had violated the Games' Olympic Truce, which says nations are not to attack one another from one

week before the Olympic Games to one week after the Paralympic Games. The Paralympics are held shortly after the Olympics.

Belarus was also implicated for allegedly allowing Russia to use its territory for military purposes. Its western border is with Russia, while Ukraine borders it on the south.

In October 2023, the Russian Olympic Committee was officially suspended after it declared its authority over Ukrainian sports organisations in Donetsk, Kherson, Luhansk and Zaporizhzhia — regions the IOC recognised as part of the Ukrainian Olympic Committee.

The IOC also cited Russia's International Friendship Association (IFA), formed to conduct the Summer and Winter Friendship Games, as a political body and a blatant violation of the IOC charter. The charter says, "Recognising that sport occurs within the framework of society, sports organisations within the Olympic Movement shall apply political neutrality".

After Russia announced its Friendship Games for September 2024, the IOC said the Russian government "launched a very intensive diplomatic offensive" by having its delegations, ambassadors, and other governmental authorities approach governments globally, describing it as "a cynical attempt by the Russian Federation to politicise sport."

However, the concept of "political neutrality" is not based on any objective criteria and it can be difficult to arrive at a consensus on its interpretation, especially in large-scale global competitions. Critics also note that athletes from Israel, whose military invaded the Gaza Strip despite international condemnation last year, continue to be official participants.

# So who can participate from Russia and Belarus?

The IOC announced in 2023 that Russian and Belarusian athletes can participate in the Olympics, provided they don't represent their country or any associated organisation. Any athlete actively supporting the Russian invasion of Ukraine cannot compete.

According to the IOC, "AINs are athletes with a Russian or Belarusian passport who have qualified through the existing qualification systems of the International Federations (IFs) on the field of play."

The move aims to allow athletes to compete and improve their stature as athletes. While 32 athletes accepted the invite, another 28 who qualified declined the offer. The athletes will compete under a neutral flag and wear a neutral uniform. If they win medals, a neutral song will be played in place of their country's national anthem. The audience also cannot wave their flags.

# Has Russia been banned from the Olympics before?

Yes. In 2017, the World Anti-Doping Agency (WADA) reported a major scandal where over 1,000 individuals had benefited from a state-sponsored doping scheme between 2011 and 2014. This included athletes who won medals at the 2014 Winter Olympics in Sochi, Russia. The IOC then issued a ban, but individual athletes were allowed to apply as "Olympic athletes from Russia". In the 2018 Winter Olympics in Pyeongchang, South Korea, 168 Russians cleared the vetting process, while 45 others did not.

In 2019, the WADA also voted to ban Russia from the 2020 Tokyo Olympics and the 2022 Beijing Winter Olympics. Russia lost the right to bid for or compete in tournaments and government officials were banned from attending major Olympic events. At the Tokyo Olympics, Russian athletes competed under the Russian Olympic Committee (ROC) banner.

# Are independent athletes competing in the Olympics for the first time?

No. The Olympics has had a history of allowing athletes to participate as independent or neutral athletes.

Following the dissolution of the USSR, some athletes from the region competed in the 1992 Summer Olympics in Barcelona, Spain, as independent participants under the Olympic flag. This was allowed as the former Soviet states did not have Olympic committees.

The Indian Olympic Association was suspended from the IOC in 2014, due to its failure to comply with the Olympic Charter and its statutes relating specifically to "good governance". Three athletes who qualified for the Winter Olympics could compete under the Olympic flag. With the reinstatement of the Indian association on February 11, days after the games commenced, two of the three athletes could compete under the Indian flag with their events to be held in the remaining days.

In the 2016 Olympics at Rio de Janeiro in Brazil, the IOC allowed the formation of the Refugee Olympic Team so that athletes from displaced regions could compete.

Relevance: GS Prelims & Mains Paper II; International Organisations

Source: Indian Express

## **Economics**

# 1. What is Project Nexus that RBI has signed up for?

#### Why in News?

The Reserve Bank of India (RBI) has joined Project Nexus, a multilateral international initiative to enable instant cross-border retail payments by interlinking domestic Fast Payments Systems (FPSs). India's Unified Payments Interface (UPI) and FPSs of Malaysia, the Philippines, Singapore and Thailand will be interlinked through Nexus. Going ahead, the platform can be extended to more countries.



## **What is Project Nexus?**

Project Nexus is conceptualised by the Innovation Hub of the Bank for International Settlements (BIS). It seeks to enhance cross-border payments by connecting multiple domestic instant payment systems (IPS) globally. It is the first BIS Innovation Hub project in the payments area to move towards live implementation.

The Reserve Bank of India has been collaborating bilaterally with various countries to link India's Fast Payments System (FPS) – UPI, with their respective FPSs for cross-border Person to Person (P2P) and Person to Merchant (P2M) payments. While India and its partner countries can continue to benefit through such bilateral connectivity of FPS, a multilateral approach will provide further impetus to the RBI's efforts in expanding the international reach of Indian payment systems.

In over 70 countries today domestic payments reach their destination in seconds at near-zero cost to the sender or recipient. This is thanks to the growing availability of instant payment

systems. Connecting these IPS to each other can enable cross-border payments from sender to recipient within 60 seconds (in most cases), according to the BIS.

### What are the benefits of the platform?

Project Nexus is designed to standardise the way IPS connect to each other. Rather than a payment system operator building custom connections for every new country that it connects to, the operator can make one connection to the Nexus platform. This single connection allows a fast payments system to reach all other countries on the network. Nexus could significantly accelerate the growth of instant cross-border payments.

# Which countries have joined the platform?

Project Nexus aims to connect the FPSs of four Association of Southeast Asian Nations (ASEAN) — Malaysia, Philippines, Singapore, and Thailand; and India, who would be the founding members and first mover countries of this platform.

An agreement on this was signed by the BIS and the central banks of the founding countries i.e., Bank Negara Malaysia (BNM), Bank of Thailand (BOT), Bangko Sentral ng Pilipinas (BSP), Monetary Authority of Singapore (MAS), and Reserve Bank of India on June 30, 2024, in Basel, Switzerland. Indonesia will also join the platform in future.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian express

# 2. India's Balance of Payments position

## Why in News?

Last week, data from the Reserve Bank of India (RBI) showed that India's current account registered a surplus during the fourth quarter (Jan-Mar) of the 2023-24 financial year. This was the first time in 11 quarters that India had witnessed a surplus.

Movements in the current account are closely monitored as they not only impact the exchange rate of the rupee and India's sovereign ratings, but also because they point to the overall health of the economy.

However, the country's current account cannot be understood in isolation. The larger picture is provided by the so-called 'Balance of Payments' table alongside.

#### What is Balance of Payments?

The Balance of Payments (BoP) is essentially a ledger of a country's transactions with the rest of the world. As Indians trade and transact with the rest of the world, foreign exchange flows in and out of the country. The BoP shows how much foreign exchange (shown here in billions of US dollars) went out of the country and how much foreign exchange came in. All the foreign exchange coming into the country is marked positive and all the foreign exchange going out is marked negative. As such, in the BoP table, a minus sign points to a deficit.

The BoP matters because it captures the relative demand of the rupee vis-à-vis the demand for foreign currencies (represented in dollar terms). Hypothetically, if there were only two countries in the world, India and the US, every time an Indian wanted to buy an American good or service, or to invest in the US, they would have to hand over a certain number of rupees to first buy the dollars needed to complete that transaction. In the end, the exchange rate would be determined by the relative demand of the two currencies — if Indians demanded more dollars than Americans demanded rupees, the 'price' (or the exchange rate) of the dollar relative to the rupee would go up.

#### What are the constituents of the BoP?

The table shows the constituents of India's BoP. The BoP has two main 'accounts' — Current Account, and Capital Account.

Understanding	India's Balance of Payments
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(In \$ billion)			Q4 FY24	FY24	FY23	FY21	FY25#
			6	-23.3(0.7%ofGDP)	-67(2%ofGDP)	24(0.9%ofGDP)	-39(1%ofGDP
	Trade of Goods		-51	-242	-265	-102	-268
	Trade of Services (Invisibles)		57	218	198	126	229
		Services	43	163	143	89	171
		Transfers	29	106	101	74	106
			25	86	59	63	77
	Foreign investment		13	54	23	80	52
		FDI	2	10	28	44	20
		FII	11	44	-5	36	32
	Loans		2	2	8	6	10
	BankingCapital		7	41	21	-21	15
	OtherCapital		3	-10	7	-2	0
Balance of Payments*			31	64	-9	87	38
Change in Forex**			-31	-64	9	-87	

<sup>&</sup>quot;A minus sign is deficit; "' A minus sign shows increase in India's foreign exchange reserves; # Forecast by ICICI Securities Source: RBI, ICICI Securities, Indian Express Research

**CURRENT ACCOUNT:** The current account, as the name suggests, records transactions that are of a 'current' nature. There are two subdivisions of the current account: the trade of goods, and the trade of services.

The trade or merchandise account refers to the export and import of physical goods (cars or wheat or gadgets, etc), which determines the 'balance of trade'. If India imports more goods than it exports, it is running a trade deficit, which is shown by a negative sign.

The second part of the current account is made up by the 'invisibles' trade, so called because it refers to trade in services and other transactions that are typically 'not visible' in the same way as, say, the trade in cars or chairs or phones is.

'Invisible' transactions include services (e.g., banking, insurance IT, tourism, transport, etc.); transfers (e.g., Indians working in foreign countries sending back money to families back home); and incomes (such as the income earned from investments).

The net of these two kinds of trades is the current account. As can be seen from the table, in Q4, India registered a surplus on the current account. There was a surplus on the invisibles, but there was a deficit on the trade of goods account.

**CAPITAL ACCOUNT:** The capital account captures transactions that are less about current consumption and more about investments, such as Foreign Direct Investment (FDI) and Foreign Institutional Investments (FII). The table for Q4 shows a net surplus of \$25 billion on the capital account.

Lastly, the BoP table always balances through the change in the foreign exchange reserves column. When there is a BoP surplus — net of current and capital account — it implies dollars coming into the country.

Relevance: GS Prelims & Mains paper III; Economics

Source: Indian Express

# 3. Two Per cent tax on Ultra rich of the World

### Why in News?

French economist Gabriel Zucman has in a recent report commissioned by Brazil's G-20 presidency recommended an annual 2% tax on individuals holding wealth exceeding \$1 billion. Finance Ministers of the G-20 group are set to meet in Rio de Janeiro on July 25-26, and the proposal is expected to be discussed at the meeting.



# What exactly is the proposal?

Mr. Zucman, an economist who has extensively researched the accumulation, distribution and taxation of global income and wealth, has proposed the adoption of an internationally coordinated minimum tax standard for ensuring ultra-high-net-worth effective taxation of individuals. This he argues would be the basic requirement to safeguard global progressivity. At the minimum, he recommends that individuals possessing more than \$1 billion

in total wealth (assets, equity shares in both listed and unlisted companies, other ownership structures that enable participating in companies' ownership, etc.) would be required to pay a minimum amount of tax annually that would be equal to 2% of their wealth.

Such a minimum tax on billionaires could potentially raise \$200-\$250 billion a year globally from about 3,000 individuals, and were it to be extended to cover those with a net worth exceeding \$100 million, would add \$100-\$140 billion annually in global tax revenue.

#### What is the rationale for such a tax?

As per a key finding of the Global Tax Evasion Report 2024, prepared by researchers at the EU Tax Observatory, global billionaires benefit from very low effective tax rates, which range between 0% and 0.5% of their wealth. "When expressed as a fraction of income and considering all taxes paid at all levels of government (including corporate taxes, consumption taxes, payroll taxes, etc.), the effective tax rates of billionaires appear significantly lower than those of all other groups of the population," the researchers write.

## Why moot such a tax now?

The French economist cites research that shows contemporary tax systems worldwide are not effectively taxing the wealthiest individuals. As a result ultra-high-net-worth individuals tend to pay less in tax relative to their income than other social groups. This in turn deprives governments of substantial tax revenues and contributes to concentrating the gains of globalisation into relatively few hands, undermining the social sustainability of economic globalisation, he argues.

Also, the global social and political environment, and in some ways the regulatory climate too, are more conducive now to successfully implement such a proposal. He specifically cites the progress made in curtailing bank secrecy over the last 15 years through increased information exchange between countries.

The other major enabling factor is the 'historic decision' in 2021, when more than 130 countries and territories agreed to a common minimum corporate tax of 15% for large multinational companies (MNCs). The willingness on the part of countries worldwide to tax MNCs in a manner so as to prevent them from seeking to operate out of low or zero tax jurisdictions is, a template that can be built upon now for taxing billionaires.

#### How much support does the proposal have?

Brazil, Latin America's largest economy, is the main backer. France, Spain, Colombia, Belgium, the African Union and South Africa, which will assume the G-20 presidency next year, have also backed the idea.

Also, while U.S. Treasury Secretary Janet Yellen is reported to have said the U.S. could not support a global wealth levy, Mr. Zucman has cited President Joe Biden's proposed minimum income tax targetting individuals with more than \$100 million in wealth as yet another approach to tax the uber-rich.

#### What is its relevance to India?

India has seen a disproportionately sharper increase in wealth at the top of the pyramid over the nine-year period to 2023, according to a study titled 'Income and Wealth Inequality in India, 1922-2023: The Rise of the Billionaire Raj'. The authors of this working paper posit that

"by 2022-23, top 1% income and wealth shares (22.6% and 40.1%) are at their highest historical levels and India's top 1% income share is among the very highest in the world". The authors of this study on inequality go on to suggest: "a 'super tax' on the very wealthy might be a good place to start. Not only would it serve as a tool for fighting the growing inequalities we are observing today, but it would also provide additional fiscal space for the Indian government to enhance spending on essential social expenditures (health, education, nutrition) which have historically been low compared to global standards, including other countries at similar income levels".

"A tax of just 2% on the total net wealth of the 162 wealthiest Indian families in 2022 would yield revenue to the tune of 0.5% of national income (more than twice the central government's budget expenditures on the National Rural Employment Guarantee Act in recent years)," they add.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Hindu

# 4. What is the draft Digital Competition Bill?

# Why in News?

In February 2023, the Ministry of Corporate Affairs (MCA) constituted a Committee on Digital Competition Law (CDCL) to examine the need for a separate law on competition in digital markets. The CDCL deliberated on the issue for a year and came to the conclusion that there was a need to supplement the current ex-post framework under the Competition Act, 2002 with an ex-ante framework. It laid out this ex-ante framework in the draft Digital Competition Bill.



# What is an ex-ante framework?

The Competition Act, 2002 is the primary legislation concerned for preventing practices that have an adverse effect on competition. It establishes the Competition Commission of India (CCI) as the national competition regulator. As with competition law in all other jurisdictions, the Competition Act, 2002 is based on an ex-post framework. This

means that the CCI can use its powers of enforcement only after the anti-competitive conduct has occurred.

In the case of digital markets, the CDCL has advocated for an ex-ante competition regulation. This means that they want the CCI's enforcement powers to be supplemented such that it allows it to pre-empt and prevent digital enterprises from indulging in anti-competitive conduct in the first place.

#### **Unusual practice**

Ex-ante competition regulation is unusual. The European Union is the only jurisdiction where a comprehensive ex-ante competition framework, under the Digital Markets Act, is currently in force. The CDCL agrees with this approach because of the unique characteristics of digital markets. First, digital enterprises enjoy economies of scale and economies of scope, that is, reduction in cost of production per unit as the number of units increase and reduction in total costs of production with increase in number of services respectively. This propels them to grow rather quickly as compared to players in the traditional market. Second, this growth is aided by network effects — utility of the digital services increases with the increase in the number of users.

In this context, given that markets can tip relatively quickly and irreversibly in favour of the incumbents, it was found that the extant framework provided for a time-consuming process, allowing offending actors to escape timely scrutiny. Therefore, the CDCL has advocated for preventative obligations to supplement the ex-post facto enforcement framework.

#### What is the draft's basic framework?

The draft Bill follows the template of the EU's Digital Markets Act. It does not intend to regulate all digital enterprises, and places obligations only on those that are "dominant" in digital market segments. At present, the draft Bill identifies ten 'core digital services' such as online search engines, social networking services, video sharing platform services etc. The draft Bill prescribes certain quantitative standards for the CCI to identify dominance of digital enterprises. These are based on the 'significant financial strength' test which looks at financial parameters and 'significant spread' test based on the number of users in India. Even if the digital enterprise does not meet quantitative standards, the CCI may designate an entity as a "systemically significant digital enterprise (SSDE)" based on qualitative standards.

The primary obligation of SSDEs is to not indulge in anti-competitive practices. These require the SSDE to operate in a fair, non-discriminatory and transparent manner with its users. The draft Bill prohibits SSDEs from favouring its own products on its platform over those of third parties (self-preferencing); restricting availability of third-party applications and not allowing users to change default settings; restricting businesses users of the service from directly communicating with their end users (anti-steering) and tying or bundling of non-essential services to the service being demanded by the user. SSDEs also cannot cross utilise user data collected from the core digital service for another service and non-public data of users cannot be used to give unfair advantage to the SSDE's own service.

#### What has been the response?

The overriding sentiment towards the draft Bill has been one of opposition. First, there is considerable scepticism on how well an ex-ante model of regulation will work. This stems in part from the fact that it seems to be transposed from the EU to India without taking into account differentiating factors between the two jurisdictions and the lack of evidence of it actually working well there. This is compounded by concerns of its potential negative effects on investments for start-ups in India and that they might be deterred to scale up to prevent meeting quantitative thresholds. Studies have also shown that restrictions on tying and

bundling and data usage would negatively impact MSMEs that have come to rely significantly on big tech to reduce operational costs and enhance customer outreach.

Interestingly, a group of Indian start-ups have supported the draft Bill arguing that it would address concerns against monopolistic practices by big tech. However, they have argued for a revision of financial and user-based thresholds citing concerns that it may lead to domestic start-ups being brought within the regulatory net.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

## **5. Ambitious Upper Siang Project**

# The Upper Siang project

The Upper Siang project is a proposed 11,000 megawatt hydropower project on the Siang river in the Upper Siang district of Arunachal Pradesh.



The Siang originates near Mount Kailash in Tibet, where it goes by the name of Tsangpo. It traverses more than 1,000 km eastward, before forming a horseshoe bend around the towering Namcha Barwa peak, and enters Arunachal Pradesh as the Siang. Further downstream, in Assam, the river becomes the mighty Brahmaputra.

According to a November 2022 report by the Central Electrical Authority, there are 29 hydroelectric projects (installed capacity of over 25 MW) in the Siang river basin, with a combined installed capacity of 18,326 MW. The proposed Upper Siang project's installed capacity is roughly 60% of this figure.

# **Counter China's Super dam**

But more than its hydropower potential, the dam is being projected as a strategic imperative to counter China's hydel projects on the Tsangpo.

Officials have highlighted in particular the plan for a 60,000 MW 'super dam' in Tibet's Medog county, right on the border with Arunachal Pradesh. The super dam's installed capacity is almost three times that of the largest hydropower station on the planet — the Three Gorges Dam on the Yangtze river in China's Hubei province. It will be used to divert water to China's water-scarce northern regions.



Officials have stated that the Upper Siang project will act as a reservoir to counter the effects of a potentially-reduced flow.

#### **Displacement concerns**

Activists are concerned about the communities that will be displaced due to the project, which they say will submerge more than 300 villages belonging to the Adi tribe, including the Upper Siang district headquarters of Yingkiong.

Relevance: GS Prelims; Economics

Source: Indian Express

# 6. How is India's hunt for critical minerals going?

# Why in News?

In late June, the Centre declared the winning bidders for mining rights in six blocks of critical minerals, including graphite, phosphorite and lithium, for which India largely relies on imports. These are the first private players awarded such rights under the revamped Mines and Minerals law.

# Why are critical minerals important?

Minerals such as copper, lithium, nickel, cobalt are known as critical minerals, as they along with some rare earth elements, are essential for the world's ongoing efforts to switch to greener and cleaner energy.

In its Global Critical Minerals Outlook 2024 report, the agency has flagged that the world's goal to limit global warming to 1.5 degrees Celsius in the net zero emissions scenario, would translate into very rapid growth in demand for these minerals.

By 2040, the demand for copper is expected to rise 50%, double for nickel, cobalt and rare earth elements, quadruple for graphite and eightfold for lithium, which is crucial for batteries. The development of sustainable supply chains for such minerals is, therefore, an unavoidable task.

In India, the lack of ready reserves of critical minerals has resulted in 100% import dependence for minerals like lithium, cobalt, and nickel. Late last month, Union Mines Minister G. Kishan Reddy highlighted that 95% of India's copper requirements are met through imports. China is a key supplier or processor of many of these items.

#### What is being done to spur production?

- 1. While India has natural reserves of some of these minerals, they haven't been explored or tapped fully. For instance, India holds 11% of the world's deposits of ilmenite, the main source of titanium dioxide used in many applications, but still imports a billion dollars of titanium dioxide a year.
- 2. Then there is the "lucky" discovery of lithium reserves in the Union Territory of Jammu and Kashmir (J&K) while the Geological Survey of India (GSI) was exploring the State's terrain for limestone, which triggered hope of some self-sufficiency in the mineral. Announced as the first discovery of lithium in the country last February, these reserves were pegged at 5.9 million tonnes, enthusing the government to expedite its tapping.
- 3. The central government amended the Mines and Minerals (Development and Regulation) Act, 1957 in August 2023 to enable it to grant mining concessions for 24 critical and strategic minerals.
- 4. By November, the first auctions of 20 critical mineral blocks, with the lithium block identified in J&K's Reasi district on the list, were launched, followed by two more tranches with 18 more blocks offered this February and March. However, investor interest has been tepid the auction of most of the first 20 blocks was scrapped for lack of adequate bidders. After a delayed process, the Mines Ministry on June 24, announced six winners from the maiden

auction tranche for three blocks in Odisha, and one each in Tamil Nadu, U.P. and Chhattisgarh. The outcomes of the second and third round of auctions are still awaited, while the Ministry has initiated a fourth tranche, which includes 10 blocks that are being offered for the second time.

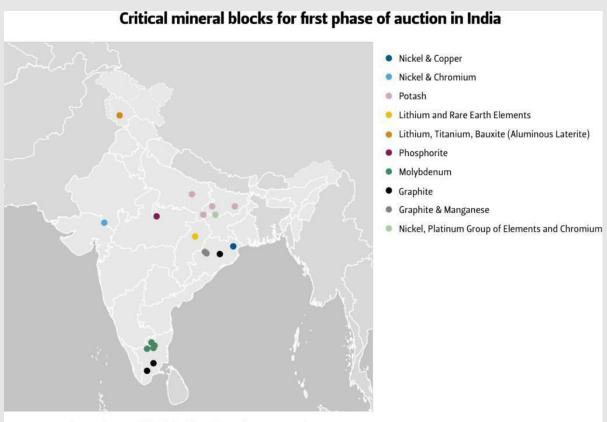


Figure 1. Map of critical mineral blocks for first phase of auction in India Source: Created by the authors based on data gathered from the Ministry of Mines, Government of India

# When is domestic production likely to begin?

Given the preliminary stage of exploration for most of the domestic blocks being auctioned, their commercialisation and associated benefits are unlikely to fully accrue in the current decade ending 2030, ICRA said. "India's manufacturing is thus likely to remain exposed to potential future supply shocks of these minerals till then," it concluded. Apart from spurring exploration and attracting more miners, the Centre is looking to acquire overseas assets from key resource-rich regions as a parallel measure to bolster mineral security. The first such mine, for lithium brine, was acquired in Argentina this year by Khanij Bidesh India Limited, a joint venture of NALCO, Hindustan Copper, and Mineral Exploration Company. While it scouts for more assets, India has also joined the U.S.-led Mineral Security Partnership, a block consisting of large buyers and sellers of critical minerals.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Hindu

## 7. Sebi's new asset class, positioned between MFs and PMS: how will it benefit investors?

# Why in News?

The markets regulator has proposed a new asset class that will offer investment products positioned between mutual funds (MFs) and portfolio management services (PMS) to fill an opportunity gap for investors and offer flexibility in portfolio construction.

## What is Sebi's new asset class?



The new category of products, which would be introduced under the mutual fund structure, would have a minimum investment of Rs 10 lakh. The new asset class will have a risk-return profile between that of MFs and PMS, which means it will be aimed at investors who have greater risk-taking capabilities and higher investment amounts than in MFs, but lower than in PMS.

# What are the ticket sizes of MF and PMS investments?

PMS are a category of professional financial services in which a skilled portfolio manager and stock market manager provides customised investment solutions to high net-worth individuals (HNIs) who are looking to invest in instruments such as equity, debt, gold, etc. The minimum investment limit in PMS is Rs 50 lakh.

PMS are different from MFs, where the minimum investment limit is just Rs 100, and a pool of money is managed by a professional fund manager.

#### What is the objective of the proposed investment product?

Sebi said that because of the gap between investment opportunities available in MFs and PMS, some investors in the segment are getting drawn towards unauthorised investment avenues. The new asset class will help in curbing the proliferation of unregistered investment products. The current range of investment products with varying risk-reward profiles are intended to meet the investment needs of retail, high net-worth, and institutional investors, Sebi said in the paper.

These products include MF schemes, which are focused on retail investors; PMS; and alternative investment funds (AIF), a privately pooled investment vehicle that collects funds from sophisticated investors, whether Indian or foreign, to make investments in accordance with a defined investment policy for the benefit of the investors. The floor investment in AIF is Rs 1 crore.

# How will investments in the new asset class work?

The new asset class is proposed to be introduced under the MF structure, with relaxations in prudential norms necessary for such a product category to be effective. The enhanced risks

due to the relaxations may be mitigated by putting a higher limit on the minimum investment size

The minimum investment amount for the new asset class has been proposed at Rs 10 lakh per investor within the asset management company (AMC)/ MF. An AMC is an institution which manages and oversees operations of mutual funds.

This means that an investor must invest a minimum of Rs 10 lakh, across one or more investment strategies, under the new asset class offered by an AMC/MF. "This threshold shall deter retail investors from investing in this product, while attracting investors with investible funds between Rs 10 lakh and Rs 50 lakh, who are today being drawn to unauthorized and unregistered portfolio management service providers," the market regulator said.

Relevance: GS Prelims; Economics

Source: Indian Express

# 8. Cryptocurrency firm WazirX suffered a major security breach. How did it happen?

## Why in News?



WazirX, one of the country's major cryptocurrency firms, suffered one of the biggest cyberattacks on an Indian exchange after hackers allegedly stole more than \$230 million of users' holdings, which was nearly half of the platform's reserves. The incident highlights the security challenges that cryptocurrency exchanges face, and how they have become a target for hackers worldwide.

WazirX called the security breach a "force majeure event" which was "beyond its control". "We have already blocked a few deposits and reached out to concerned wallets for recovery. We are in touch with the best resources to help us in this endeavour," the company said in a statement.

## What caused the WazirX security breach?

In its preliminary findings, WazirX said that the cyber attack stemmed from a discrepancy between the data displayed on Liminal's interface and the transaction's actual contents. Liminal is a separate digital asset custody and wallet infrastructure provider.

During the cyber attack, there was a mismatch between the information displayed on Liminal's interface and what was actually signed. WazirX's wallet custody service provider Liminal Custody, however, said no breach had happened within its ecosystem.

WazirX said its wallet had six signatories— five from its own team and one from Liminal, who were responsible for transaction verifications. A transaction typically requires approval from three of the WazirX signatories (all three of whom use Ledger Hardware Wallets for security), followed by the final approval from Liminal's signatory.

# What have been some of the biggest crypto breaches?

The WazirX cyberattack is not just the biggest security breach of a cryptocurrency exchange in India, but is among the top hacks in the world, too. 2022 was the biggest year for crypto hacks. According to blockchain data platform Chainalysis, over \$3.8 billion worth of cryptocurrency was stolen from users in 2022. In 2023, the number came down to about \$1.7 billion.

The biggest crypto hack so far took place in March 2022 when hackers attacked the Ronnin network. They stole about \$625 million worth of Ethereum and the USDC stablecoin. In August 2021, a hacker exploited a vulnerability in Poly Network's system, stealing over \$600 million in funds, but surprisingly did not leave with the entire amount and returned most of it. In October 2022, the Binance crypto exchange suffered a major security breach, resulting in a loss equivalent to \$570 million.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

# 9. Key takeaways from the 2023-24 Economic Survey

#### Why in News?

The Economic Survey for 2023-24 stands out from previous economic surveys in that it provides a more realistic picture of the challenges before India's economic growth. As such, despite India's GDP growing at more than 8% in FY 2023-24, the survey pegs the GDP growth rate for the current financial year (FY 2024-25) between 6.5% and 7%.

Here are some key challenges that the survey flags, and the recommendations it makes to address these.



#### The Survey's diagnosis

**Global headwinds:** The environment for foreign direct investment (FDI) to grow in the coming years is not highly favourable. High interest rates in developed countries have not only raised the cost of funding, but also increased the opportunity cost to invest in developing countries like India. Moreover, economies such as India have to compete

with industrial policies in the developed world involving considerable subsidies that encourage domestic investment. Geopolitical uncertainties also continue to play spoilsport.

**China challenge:** The Chief Economic Advisor (CEA) underscored how India continues to be overly dependent on China for imports, especially for renewable energy. He also stated that China has not let go of the low-skills manufacturing space that India wanted to occupy.

**Al threat:** The Survey notes that while there has been a boom in telecommunications and Internet facilitated business process outsourcing (BPO), the next wave of technological evolution might bring the curtains down on it.

Tepid private investment: The Survey emphasised that the corporate sector had not responded, despite the Union government cutting taxes in September 2019 to facilitate capital formation. "...Between FY20 and FY23, the profit before taxes of the Indian corporate sector nearly quadrupled...Hiring and compensation growth hardly kept up with it," the CEA stated in the Survey.

**Employment imperative:** The Indian economy needs to generate an average of nearly 78.5 lakh jobs annually until 2030 in the non-farm sector to cater to the rising workforce.

**Data deficiency:** A constant refrain against the government has been the lack of good quality and timely data especially related to employment. In the Survey, the CEA accepted that this was indeed a gap that was holding back a proper analysis. "The lack of availability of timely data on the absolute number of (formal and informal) jobs created even at annual intervals, let alone at higher frequencies, in various sectors — agriculture, industry including manufacturing and services — precludes an objective analysis of the labour market situation in the country," it stated.

**Lifestyle disadvantages:** The Survey notes that "social media, screen time, sedentary habits, and unhealthy food are a lethal mix that can undermine public health and productivity and diminish India's economic potential."

#### **Recommended solutions**

**Job creation by the private sector:** One of the central pillars of the past two Narendra Modi governments has been the determination to reduce the role of government in the economy and incentivise the private sector to take over the dominant position. In doing so, the government had hoped that the private sector would create jobs. The Survey reiterated that hope: "...It is in the enlightened self- interest of the Indian corporate sector, swimming in excess profits, to take its responsibility to create jobs seriously."

**Lifestyle changes by private sector:** "India's traditional lifestyle, food and recipes have shown how to live healthily and in harmony with nature and the environment for centuries. It makes commercial sense for Indian businesses to learn about and embrace them, for they have a global market waiting to be led rather than tapped," writes the CEA.

**Farm sector as the saviour:** Traditional economic theories suggest that as economies develop they make a structural transition from agriculture to manufacturing and services. But the Survey states that "trade protectionism, resource-hoarding, excess capacity and dumping,

onshoring production and the advent of AI are narrowing the scope for countries to squeeze out growth from manufacturing and services" and "forcing us" to turn conventional wisdom on its head. In other words, the CEA states, "A return to roots, as it were, in terms of farming practices and policy making, can generate higher value addition from agriculture, boost farmers' income, create opportunities for food processing and exports and make the farm sector both fashionable and productive for India's urban youth".

**Removing regulatory bottlenecks:** "The Licensing, Inspection and Compliance requirements that all levels of the government continue to impose on businesses is an onerous burden. Relative to history, the burden has lightened. Relative to where it ought to be, it is still a lot heavier," stated the CEA. He singled out the Medium, Small and Micro Enterprises (MSMEs) as one sector that required to be relieved of regulatory burden the most.

**Building state capacity:** The CEA noted that what was needed in the economy now was not big reforms but the grunt work. To this end it advocated building up state capacity for sustaining and accelerating India's progress.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

# 10. Making sense of the Budget

# Why In News?

The first Budget of Modi 3.0 recognises that despite several big policy reforms and decisions, and notwithstanding encouraging growth rates of GDP, there is considerable economic distress in the country.

The Union Budget for 2024-25 — Finance Minister Nirmala Sitharaman's seventh in a row and the twelfth Budget of the Narendra Modi government — departs significantly from all previous Budgets presented by this government in its approach towards managing India's economy. Budgets serve two essential purposes.



They provide details about a government's finances, how much the government earned, how much it spent, and how much it borrowed during the past financial year, and what its projections are on all these three counts for the next financial year.

Too much borrowing by the government (technically referred to as the fiscal deficit)

adds to the overall burden of the country's debt, which has to be paid by taxpayers — present or future. Prudential norms suggest that the government should always look to reduce deficits and spend in such a manner that overall debt — as a proportion of the country's total economic output or GDP — keeps coming down.

But budgets are also the most important instrument in the hands of the government to manage India's economy. Whom does the government tax and how much, where does it spend and how much — such questions qualitatively shape the fortunes of millions of businesses and billions of people across the various sectors of the economy.

#### Approach since 2014...

Prime Minister Modi's first two terms were unique in one very crucial respect: these were the only two governments since the beginning of economic reforms in the 1990s in which a single political party enjoyed a majority in Lok Sabha.

This situation allowed the BJP to boldly follow its economic philosophy for India's growth. Until then, ruling coalitions often pulled in different directions.

To be sure, Prime Minister Modi came to power with a bold declaration: "Minimum government, maximum governance". He appeared to believe that the Indian government should move out of the way and allow the private sector take the lead in the economy.

This meant that both in terms of the things that it did and the people that it employed, the government would shrink in size — even though the necessary governance that a modern economy requires would be protected.

In this philosophy, government revenues would go up not because the government would raise tax rates, but because it would reduces tax rates while widening the tax base and encouraging compliance.

Another necessary corollary would be strict adherence to prudential fiscal norms — driven by the understanding that if the government borrows less money from the market, it would leave more for the private sector to borrow (and presumably at lower interest rates) for their expansion needs.

While the government spends more and more on building essential infrastructure (technically called capital expenditure), the bustling private sector would provide jobs to the millions entering the Indian labour market each year.

More formalisation and digitalisation would allow the government to efficiently monitor the economy, raise resources without getting entangled in the inefficiencies that are typical of the public sector, and the rent-seeking and red-tape that are often a defining feature of large bureaucracies.

#### ...had limited success

For the past 10 years, expectations have been running high that India would finally usher in the so-called second generation reforms — pending on the agenda since the first generation of reforms that began in 1991, opening up the Indian economy to global competition, and liberalising it internally by removing the dreaded licence-permit raj and inspector raj.

That did not happen — however, the past decade has, indeed, witnessed several big reforms that had been left on the table by previous coalition governments. These included the restructuring of India's indirect taxes (called the Goods and Services Tax), the bolstering of the insolvency architecture (now called the Insolvency and Bankruptcy Code) and a massive push towards digitalisation and the financial inclusion of millions of Indians.

Perhaps the biggest bet taken by the government was the historic cut in the corporate tax rate that was announced in late 2019. This was in line with the broader philosophy espoused by the government — that lower taxes would encourage businesses to make fresh investments, which would create lots of jobs and which would, in turn, bring all round prosperity.

But as many have pointed out, the decision was poorly timed. India's economy had started to lose momentum from 2017 onward. In 2019-20, the GDP grew at less than 4%. All the data pointed to an alarming rise in unemployment and an all-round stagnation in incomes, which together started to take a toll on overall consumption levels in the economy.

And then came the Covid-19 pandemic that destroyed incomes and ate into people's savings. Low levels of consumption since — including a K-shaped recovery where the rich recovered much faster out of the pandemic than the majority of Indians — led to an unravelling of the government's growth strategy. Most Indian businesses simply pocketed the corporate tax breaks instead of creating fresh and additional capacity because they did not see the business case for doing so.

#### The 2024 election

Up until the time the Interim Budget was presented on February 1 this year and perhaps ever later, the government in its statements and decisions appeared to be in denial about the broader economic distress in the country.

At the same time, it questioned the private sector for not responding to the strategy it had laid out. Finance Minister Sitharaman compared India's corporate sector to Lord Hanuman in an episode of the Ramayana where He had forgotten about His ability to fly.

Then came the results of the Lok Sabha election. Contrary to expectations of the BJP retaining, if not improving upon, its 2019 tally of 303 in Lok Sabha, the election stripped the party of the majority it enjoyed in the House. The result in UP, which sends the most members to Lok Sabha, was a serious setback.

The proposals in the Union Budget should be viewed in this background: the broader economy hasn't been doing as well as the GDP growth numbers suggest, and the government has probably learnt that there can be a political cost to denial.

#### **Course-correction**

**A COALITION BUDGET:** Crucial NDA coalition partners in Bihar and Andhra Pradesh, Nitish Kumar's JD(U) and N Chandrababu Naidu's TDP respectively, have had several proposals

directed the way of their states. Bihar will get several road connectivity projects such as the Patna-Purnea and Buxar-Bhagalpur Expressways, and a bridge over the Ganga, flood control structures, and a new power plant in Pirpainti. The Finance Minister has announced that "new airports, medical colleges and sports infrastructure" will also be constructed in Bihar.

The FM's plan for the all-round development of the eastern regions of the country (called Purvodaya), will cover both Bihar and Andhra Pradesh, apart from Odisha (where the BJP has just won the state Assembly elections) and Jharkhand.

Andhra Pradesh will get funds for promoting industrial development and essential infrastructure such as water, power, railways and roads.

**RECOGNITION OF AGRARIAN & RURAL DISTRESS:** One of the oldest promises of the Modi government has been the doubling of farmer incomes. However, income growth has been disappointing, and farmers have seen repeated instances where either the prices of their produce were too low to be remunerative, or when policy measures stopped them from benefiting from higher prices.

One of the biggest policy flashpoints in the previous term (2019-24) was the three farm laws that aimed at modernising Indian agriculture. They were bitterly opposed, leading to their repeal.

The FM started her Budget speech by delineating nine top priorities, and agriculture topped the list. The Budget has promised to transform farm research, new missions aimed at boosting the output of pulses and oilseeds (which India imports in large quantities), and promoting natural farming.

**FOCUS ON JOBS & SKILLS:** In its previous term, the government had introduced a Production-linked Incentive (PLI) Scheme. The government would provide companies a subsidy that was linked to levels of production. Critics had pointed out that in a labour-surplus country, providing PLI was sub-optimal since it was possible for companies to replace labour with machinery and collect the subsidy.

PLI did little to boost job creation. Former RBI Governor Raghuram Rajan had pointed out that taxpayers have to shell out Rs 3.2 crore per job created at the proposed Micron semiconductor plant in Gujarat. Other economists have pointed out that previous Budgets did little to promote labour-intensive industries such as textiles and leather products.

This Budget's second biggest priority is Employment and Skilling. Within this, too, the first measure is a bunch of three schemes that follow "Employment-linked Incentive". In essence, these schemes will witness government providing financial assistance to first-time employees and their employers. It is a shift from PLI to ELI.

Apart from unemployment — which rises with educational attainment — unemployability is an acute problem. While unemployability is not new, the sheer scale of the problem with the

rise in the youth population is daunting. The Budget rededicates to skilling: "20 lakh youth will be skilled over a 5-year period," the FM said.

**BIG IMPORTANCE OF SMALL BUSINESSES:** Between sudden unexpected shocks such as demonetisation and the pandemic-induced lockdowns to structural policy changes such as the introduction of GST and digitalisation, India's small businesses (technically called the Medium Small and Micro Enterprises or MSMEs) have taken a financial battering.

These small businesses serve a great purpose — they contribute about 45% of manufacturing output, more than 40% of exports, and more than 28% of the GDP while employing more than 11 crore people, often far from the big cities. Yet most of the policy decisions and focus — such as the corporate tax cut — continued to focus on big businesses.

The fourth top priority in the Budget is "Manufacturing and Services", but what is crucial to note is that all the initiatives under this head pertain to alleviating the stress in the MSME sector. "This Budget provides special attention to MSMEs and manufacturing, particularly labour-intensive manufacturing," the FM said.

**RECOGNISING THE CENTRE CAN'T DO IT ALONE:** Over-centralisation in policymaking can undo even the best of policies when it comes to implementation since all implementation happens at the state level. The Centre having done its bit in terms of policy — be it the push towards capital expenditure or the cut in corporate tax rate or initiatives such as PLI — the Budget speech showed acceptance that genuine change requires working along with states as partners instead of political opponents. Across initiatives, the FM reiterated the need to work with the states.

While talking about second generation reforms (such as those relating to land and labour), the FM said: "Effective implementation of several of these reforms requires collaboration between the Centre and the states and building consensus, as development of the country lies in development of the states. For promoting competitive federalism and incentivising states for faster implementation of reforms, I propose to earmark a significant part of the 50-year interest-free loan."

Similarly, while talking about industrial parks, the FM said: "Our government will facilitate development of investment-ready 'plug and play' industrial parks with complete infrastructure in or near 100 cities, in partnership with the states and private sector, by better using town planning schemes."

#### The Budget upshot

Both in its priorities and in its approach, the Budget signals that the policy tools adopted during the time of the BJP's single-party majority are no longer the primary instruments. The first Budget of Modi 3.0 recognises that despite several big policy reforms and decisions, and notwithstanding encouraging growth rates of GDP, there is considerable economic distress in the country.

The recognition of distress is the first step towards finding solutions. Sitharaman has stated that the government will come out with an economic policy framework which will "delineate the overarching approach to economic development and set the scope of the next generation of reforms for facilitating employment opportunities and sustaining high growth."

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

# 11. Budget 2024: How will removal of indexation benefits for property sales impact real estate?

## Why In News?

In Budget 2024, Finance Minister Nirmala Sitharaman removed the indexation benefits previously available for property sales. The FM also announced a reduction in Long Term Capital Gains (LTCG) Tax on property sales from 20% to 12.5%.

Indexation adjusts the purchase price of an investment to account for inflation, effectively reducing taxable profits. Without indexation, the taxable income from long-term capital gains increases, leading to higher tax liabilities for investors.

Illustration on capital gains calculation in old vs new re	egime							
	Old regime				New regime			
Holding period (no. of years)	2.0	5.0	10.0	20.0	2.0	5.0	10.0	20.0
Cost of acquisition	100	100	100	100	100	100	100	100
Indexed cost of acquisition*	110	126	151	321	100	100	100	100
Tax rate	20%	20%	20%	20%	12.5%	12.5%	12.5%	12.5%
House price increase at 5% cagr								
Market value	110	128	163	265	110	128	163	265
LT capital gains	0.6	2.0	11.6	(55.9)	10	28	63	165
LT capital gains tax	0.1	0.4	2.3	(11.2)	1.3	3.5	7.9	20.7
% change in LTCG tax in new regime vs old regime					1000%	754%	238%	N/
House price increase at 7.5% cagr								
Market value	116	144	206	425	116	144	206	425
LT capital gains	6	18	55	104	16	44	106	325
LT capital gains tax	1.2	3.6	11.0	20.7	1.9	5.4	13.3	40.6
% change in LTCG tax in new regime vs old regime					65%	52%	21%	96%
House price increase at 10% cagr								
Market value	121	161	259	673	121	161	259	673
LT capital gains	11	35	108	352	21	61	159	573
LT capital gains tax	2.3	7.1	21.6	70.3	2.6	7.6	19.9	71.6
% change in LTCG tax in new regime vs old regime					16%	8%	(8%)	2%
House price increase at 12.5% cagr								
Market value	127	180	325	1,055	127	180	325	1,055
LT capital gains	17	55	173	733	27	80	225	955
LT capital gains tax	3.4	10.9	34.7	146.7	3.3	10.0	28.1	119.3
% change in LTCG tax in new regime vs old regime					(2%)	(8%)	(19%)	(19%

#### Tax calculations

Assume you bought a property for ₹5 crore. Global brokerage house CLSA has re-based this acquisition cost to 100 and used the government's Cost Inflation Index (CII) for calculating the indexed cost of acquisition under the old regime. They then compared this with the new regime (which excludes indexation) to calculate the LTCG tax at the reduced rate of 12.5% (down from 20% in the old regime).

According to the brokerage, under the new regime, the LTCG tax incidence is higher when the holding period is shorter (less than 10 years) and property price appreciation is moderate (less than 10% per annum). Conversely, for investors holding the property for a longer duration (10 years and more) and experiencing healthy property price appreciation (over 10% per annum), the LTCG tax in the new regime would be neutral or marginally beneficial.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Mint

12. What is indexation in calculating long term capital gains tax? Does the removal of indexation benefit in the Budget mean you will pay more tax?

### Why in News?

The changes in the long-term capital gains (LTCG) tax regime, particularly the withdrawal of the indexation benefit, has emerged as one of the most contentious decisions announced in the Union Budget for 2024-25. The announcement initially led to confusion and trepidation among various sections, prompting the government to issue a string of clarifications and explanations, claiming that it will be beneficial in most cases.

What is the concept of indexation, and what could be the consequences of the removal of indexation benefit from LTCG computation and related changes in the taxation regime?



### What is indexation?

Indexation is the process of adjusting the original purchase price of an asset or investment in order to neutralise the impact of inflation on it. Put simply, it involves revising upward the cost of acquisition of an asset based on the inflation over the period for which it was held.

Inflation reduces the value of money over time, and therefore, when an asset is sold or an investment is redeemed, indexation helps in arriving at the cost of acquisition with the impact of inflation over the holding period factored in.

The cost of acquisition thus arrived at, is called the indexed cost of acquisition. It resets the base for calculation of gains or losses from the sale or redemption. The returns calculated on

the indexed cost of acquisition are generally seen as more realistic than absolute gains calculated on the basis of the actual price at the time of purchase.

Without indexation, particularly in cases where the asset was held for an extended period, the gains may appear extremely high, but they may not paint a realistic picture. This is mainly because the inflationary impact on the asset's value was not taken into account. Now, if the gains accrued on the sale of assets or redemption of investments are taxed, the absence of the indexation benefit would increase the tax outgo, assuming that the rate of tax stays the same.

# What has the government done now?

The new LTCG regime proposed in the Union Budget for 2024-25 presented earlier this week by Finance Minister Nirmala Sitharaman does away with the indexation benefit available for calculation of LTCG on property, gold, and other unlisted assets, while reducing the LTCG tax rate to 12.5% from 20%.

For properties and other assets purchased prior to 2001, the fair market value as on April 1, 2001 would be considered as the cost of acquisition. According to the government, this exception has been made as even in the old LTCG tax regime, the same principle was used to determine the acquisition cost for such assets. This specific measure, the government argues, will ensure that inherited ancestral property and property bought decades ago is not subject to supernormal tax.

The government has justified its decision saying that it would simplify the capital gains tax structure without causing a loss to most taxpayers. This simplification, which removes the differential tax rates for various classes of assets, would help both taxpayers and tax authorities, the government has said.

# What made people nervous, and nudged the government to make efforts to calm frayed nerves?

There was confusion and apprehension, especially with regard to the residential real estate sector. The big fear was that the changes would result in a large increase in the LTCG tax liability for those who were looking to sell property. Sensing the anxiety, the Finance Ministry and Income Tax Department started issuing clarifications.

According to the government, the new LTCG tax regime, even without the benefit of indexation, would be beneficial in the vast majority of cases in the property sector.

Based on these assumptions, the Department said that for a property held for five years, the new regime would be beneficial when the value has appreciated 1.7 times or more, while for a property held for 10 years, the new regime would be beneficial when the value has increased to 2.4 times or more. For a property purchased in 2009-10, the new LTCG tax regime would be beneficial if the value has increased to 4.9 times or more.

The government also clarified that rollover benefits have not been touched, which means that if capital gains are invested in Section 54EC bonds or used for buying or constructing residential real estate up to specified limits, LTCG would be exempt from tax.

### Have the government's explanations satisfied stakeholders?

Various industry players and analysts have flagged concerns. There are apprehensions that the new regime without indexation benefit is likely to result in an increase in secondary market real estate sales, as people would not want to hold on to assets for more than 3-5 years.

Another concern that has been flagged by some industry watchers and Opposition lawmakers is that the new regime may incentivise the use of cash in property transactions, as sellers will be tempted to deflate the actual transaction value on paper in order to pay less tax.

One criticism that the move has attracted from various sections is the absence of grandfathering for purchases made over the past 24 years. Grandfathering is a provision that allows an old rule or law to be applicable to some or all situations up to a certain date, while the new rule or law is applicable to all situations after that date.

In the context of the new LTCG tax regime, grandfathering would refer to extending the indexation benefit till the time the old regime was effective — July 2024. Such a measure could have entailed using the current fair market value of assets as the base, like it is done for properties acquired before 2001. The government, however, claims that the reduction in LTCG tax rate by 7.5 percentage points offsets the benefit that such grandfathering would have provided.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

### 1. Critically endangered Great Indian Bustards' recovery program, and what lies ahead

#### Why in News?

Last month, the Compensatory Afforestation Fund Management and Planning Authority (CAMPA) approved Rs 56 crore funding for the next phase of the conservation program of the Great Indian Bustard (GIB) and the Lesser Florican for the 2024-2029 period.



The proposal for the next phase, prepared by the Wildlife Institute of India (WII), an autonomous body under the Union Environment Ministry, includes key targets such as rewilding Bustards bred in ex-situ conservation centres, conducting detailed population studies in Rajasthan and other Bustard range states and developing artificial insemination techniques.

The Bustard and Lesser Florican are both critically endangered species. Only 140 Bustards and less than 1,000 Lesser Floricans survive. Over 120 Bustards are found in the desert and semi-arid landscape of Rajasthan alone; the rest survive in the wild in other range states of Gujarat, Maharashtra, Karnataka, and Andhra Pradesh while Madhya Pradesh, another range state, has not recorded a Bustard sighting for several years.

Here's a look at what is the Bustard conservation program, what has been achieved so far and what needs to be done to secure their habitats

# **Decline in Great Indian Bustard Population**

The Great Indian Bustard is a large bird found only in India. It is known to be a key indicator species of the grassland habitat, which means its survival also signals the health of grassland habitats.

Over the past four decades, its population has declined steadily from being in the range of 700 individuals to less than 150 as of today, as per the Rajasthan Forest Department. Loss of their habitat to rising farmlands in semi-arid regions of Rajasthan, depredation of eggs by other predators such as dogs, monitor lizards and humans and more recently, death due to overhead power lines have caused their numbers to decline.

In fact, the threat from power lines was the subject matter of a recent plea before the Supreme Court which resulted in an important order. The Supreme Court, while agreeing with the government's contention that overhead power lines could not be entirely eliminated from the bustard's habitats, had constituted an expert committee to determine the "scope, feasibility and extent" of overhead and underground electric lines in the area.

The poor frontal vision of the GIB's and their inability to swerve away from overhead power lines in their flying path, owing to their large size, are two key factors leading to their collision with transmission lines. A 2020 WII study estimated that 18 GIB's die annually due to collision with overhead high-tension power lines in the Thar landscape. Such a high mortality rate can wipe away the bird's wild population, the WII had noted.

The committee was also asked for other measures for better conservation of the bird. While examining this case, the Supreme Court also recognised the right of the people against adverse impacts of climate change as part of the fundamental right to life and right to equality.

# **Recovery Programs**

The first steps to address the decline of the bustard population were taken between 2012-2013, when the Rajasthan government as well as the Environment Ministry began a long-term Bustard and Lesser Florican recovery project. The recovery project firmed up more in the year 2016 when it received a funding outlay of Rs 33.85 crore for seven years. This money was sanctioned to improve the bird's habitat and start a conservation breeding program.

The Compensatory Afforestation Fund, which consists of money collected for afforestation in lieu of diversion of forests for non-forest uses, funded this project. Later, in July 2018, a tripartite agreement was signed between the Ministry of Environment, Forest and Climate Change, Rajasthan Forest Department and Wildlife Institute of India (WII).

This involved opening long-term conservation breeding centres (CBC) in Ramdevra and Sorsan, implementing field research projects such as telemetry-based bird tracking and population surveys, habitat management as well as outreach to local communities.

## What has been achieved so far at the breeding centres?

Before the development of the CBC in Ramdevra, work on the conservation breeding in June 2019 at the temporary facility in Sam, Jaisalmer. conservation breeding began by collecting eggs from the wild. The eggs are incubated artificially at the centres and hand-reared in the breeding centre itself. Later, chicks that attained adulthood at the centre have mated and given birth to the next generation.

The breeding centres now have a founder population of 40 GIBs, of which 29 were those whose eggs were collected from the wild. The remaining 11 were born to those who were mated at the centre.

The scientific reasoning behind creating a founder population is to have a minimum viable population to prevent the probability of extirpation of the captive population and to capture

the genetic variability of the source population. A minimum of 20 adult birds including 15 females is needed to establish a minimum viable population in captivity, as per the 2018 tripartite agreement.

The WII team plans to continue collecting four to six eggs per year until the captive-bred birds are released in the wild. For Lesser Floricans, since their population is still around 1,000, only two or four eggs will be collected from the wild.

## What's planned ahead?

While the total length of the next phase of the GIB and Lesser Florican conservation is 2024-2033, the immediate next phase will run till 2029. The target of the project would be to complete the upgradation of the CBC at Ramdevra and development of the Lesser Florican CBC at Sorsan, both in Rajasthan. The Ramdevra facility would also include a new lab for artificial insemination, which the WII plans to use from 2026 onwards.

Conducting population surveys in Jaisalmer, other parts of Rajasthan and the range states of Gujarat, Maharashtra, Karnataka, Andhra Pradesh and Madhya Pradesh will be done in the next two years. The most important target in the next five years would be releasing the captive-bred GIBs in the wild. The actual release in the wild would be preceded by soft release in enclosures in Rajasthan. The captive-bred GIBs would also be trained for release in these enclosures, as per WII scientists.

# What has been done for habitat management and are they secure for rewilding of captive Bustards?

On its part, WII has mapped the threats posed by power lines and renewable infrastructure across the 20,000 sq km GIB landscape. In collaboration with Humane Society International, 801 dogs were sterilized in 23 villages in and around the Desert National Park in 2018-19 while GIB predators such as monitor lizards, foxes and dogs were also captured and translocated from Bustard breeding areas, as per WII's annual report on the recovery program.

Relevance: GS Prelims & Mains Paper III; Environment

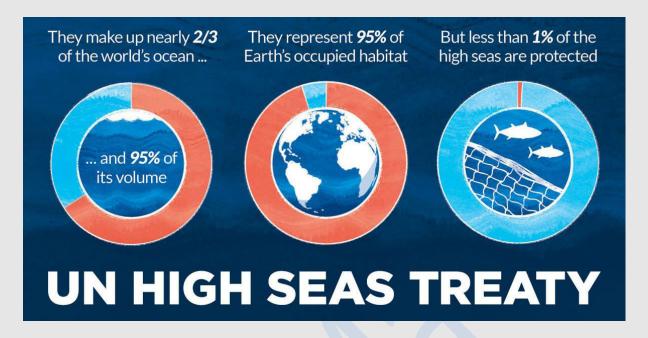
Source: Indian Express

# 2. India to ratify High Seas Treaty: What is the agreement — and its significance?

# Why in News?

The Indian government recently said it would soon sign and ratify the High Seas Treaty, a new international legal architecture for maintaining the ecological health of the oceans. The treaty, negotiated last year, is meant for reducing pollution, and for conservation and sustainable use of biodiversity and other marine resources in ocean waters.

High seas are areas outside the national jurisdiction of any country because of which the treaty is also known as the agreement on Biodiversity Beyond National Jurisdictions (BBNJ). It is formally called the Agreement on Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction.



India, like most other nations, was a party to the nearly 20 years of negotiation that resulted in the finalisation of the treaty last year. Ninety-one countries have already signed the treaty, while eight of them have also ratified it.

# **Landmark Agreement**

The High Seas Treaty has often been compared with the 2015 Paris Agreement on climate change in its significance and potential impact.

The treaty deals only with oceans that are outside the national jurisdiction of any country. Typically, national jurisdictions extend up to 200 nautical miles (370 km) from the coastline, an area that is called exclusive economic zones or EEZs. Areas outside of EEZs of every country are known as high seas or international waters. They constitute about 64%, roughly two-thirds, of the total ocean area and are considered global commons. They belong to no one and everyone enjoys equal rights for navigation, overflight, economic activities, scientific research, or laying of infrastructure like undersea cables.

# High Seas - No one's responsibility

But because these belong to no one, high seas are also no one's responsibility. As a result, many of these areas suffer from overexploitation of resources, biodiversity loss, pollution, including dumping of plastics, ocean acidification, and many other problems. According to UN estimates, about 17 million tonnes of plastics were dumped in the oceans in 2021, and this was only expected to increase in the coming years.

# **Governance mechanism**

It is not that there is no international governance mechanism for the oceans. The 1982 UN Convention on Laws of the Seas, or UNCLOS, is a comprehensive international law that lays down the broad frameworks for legitimate behaviour on, and use of, seas and oceans

everywhere. It defines the rights and duties of nations regarding activities in the oceans, and also addresses issues such as sovereignty, passage rights, and rights of exclusive economic usages. Demarcations of territorial waters, and EEZs are a result of UNCLOS.

UNCLOS also sets the general principles for equitable access and usage of ocean resources, and protection and conservation of biodiversity and marine ecology. But it doesn't specify how these objectives have to be achieved. This is where the High Seas Treaty comes in. Once it comes into force, this treaty would serve as one of the implementing agreements under the UNCLOS.

#### **Protection and Access**

The High Seas Treaty seeks to achieve three substantive objectives: conservation and protection of marine ecology; fair and equitable sharing of benefits from marine genetic resources; and establishment of the practice of mandatory environmental impact assessments for any activity that is potentially polluting or damaging to the marine ecosystem.

There is a fourth objective as well, that of capacity building and transfer of marine technologies to developing countries. This will help them make full use of the benefits of the oceans while also contributing towards their conservation.

Oceans are home to a very large number of diverse life forms, many of which may be of immense value to human beings. These ocean organisms can offer insights into evolution, and some of them might even be useful in drug discovery, making them commercially lucrative.

The High Seas Treaty seeks to ensure that the benefits from these ocean living resources, either through scientific research or commercial exploitation, is equally shared amongst all. The treaty does recognise that there might be costs involved in accessing these resources or their benefits but makes it clear that there cannot be proprietary rights of any country over these.

The treaty also makes it mandatory to carry out a prior environmental impact assessment (EIA) for any activity that is potentially polluting or damaging to the marine ecosystems, or to conservation efforts. The EIAs need to be made public. An EIA is to be carried out for activities within national jurisdictions as well if the impacts are expected in the high seas.

#### **Marine Protected Areas**

Protection and conservation of marine ecology is supposed to be achieved through demarcation of Marine Protected Areas (MPAs), much like the national parks or wildlife reserves. Activities in MPAs would be regulated, and conservation efforts also taken up. A few potential areas that may get recognised as MPAs have already been identified, and many more are expected to be added in due course.

#### Ratification

Like any other international law, the High Seas Treaty would come into force only when a certain minimum number of countries ratify, or accede to, it. In the case of this treaty, this

number is 60. The treaty would become international law 120 days after the 60th ratification is submitted.

Ratification is the process by which a country agrees to be legally bound to the provisions of an international law. This is separate from a mere signing on to an international law. Signing indicates that a country agrees with the provisions of the international law concerned, and is willing to abide by it. But till it ratifies it, the process for which varies from country to country, it is not legally bound to follow that law.

In countries that have legislative bodies like a parliament, ratification typically requires the consent of the legislature. In other countries, it might just need an executive approval or accession. It is possible for a country to sign on to but not ratify a treaty. In that case, it is not considered a party to the treaty. The United States, for example, signed the Kyoto Protocol, the predecessor to the Paris Agreement, but it did not ratify it because its Senate, the upper house of the legislature, did not give its approval.

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

#### 3. What is a climate finance taxonomy, announced by FM Sitharaman?

#### Why in News?

Presenting the Union Budget for 2024-25, Finance Minister Nirmala Sitharaman announced that the government would develop a 'climate finance taxonomy' to enhance the availability of capital for climate adaptation and mitigation. This will help India achieve its climate commitments and green transition.



#### What is a climate finance taxonomy?

A climate finance taxonomy is a system that classifies which parts of the economy may be marketed as sustainable investments. It helps guide investors and banks in directing trillions toward impactful investments to tackle climate change.

#### Why is a taxonomy significant?

With global temperatures soaring, and the adverse effects of climate change exacerbating, countries need to transition to a net-zero economy — the balance between the amount of greenhouse gas (GHG) that is produced, and the amount that is removed from the atmosphere.

Taxonomies can play a pivotal role in doing this as they can help ascertain if economic activities are aligned with credible, science-based transition pathways. They can also give impetus to deployment of climate capital, and reduce the risks of greenwashing.

For India, a taxonomy could bring in more climate funds from international sources. Currently, green finance flows in India are falling far short of the country's current needs — they only account for around 3% of total FDI inflows to India, according to the Landscape of Green Finance in India 2022 report, published by Climate Policy Initiative.

One reason for abysmally low green finance flows has been a lack of clarity in what constitutes sustainable activity. A taxonomy would change that.

#### What is the potential for green investments in India?

India has a climate-smart investment potential of \$ 3.1 trillion from 2018 to 2030, according to a report by the International Finance Corporation (IFC). The largest space for investment is in the electric-vehicle segment, at \$ 667 billion as India aims to electrify all of its new vehicles by 2030. India's renewable energy sector also continues to be a good investment avenue at \$ 403.7 billion, the report added.

#### Do other countries have taxonomies?

Yes. Many countries have either started to work on their taxonomy or finalised one. South Africa, Colombia, South Korea, Thailand, Singapore, Canada, and Mexico are some of the countries which have developed taxonomies. The European Union has done this as well.

#### What are India's climate commitments?

India aims to achieve net-zero economy by 2070. It has also pledged to reduce the emissions intensity of its GDP by 45% by 2030, from the 2005 level. India has committed to achieve about 50% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030 as well.

Relevance: GS Prelims & Mains Paper IIII; Environment

Source: Indian Express

#### 4. Why Economic Survey argues for climate adaptation, not mitigation

#### Why in News?

That the international framework for fighting climate change has been ineffective is evident from the fact that none of the targets set by it has ever been met. It is also well known that the system is highly inequitable. And yet, any suggestion of an alternative approach risks being seen as heresy.

The Economic Survey presented decided to risk it. Its two chapters on climate change were devoted almost entirely to pointing out the flaws and inequities in the system, and suggesting alternative pathways that incorporate, among other things, lifestyle and behavioural changes to reduce greenhouse gas emissions.

# Climate change adaptation VS Mitigation

Characteristic	Adaptation	Mitigation
Relation with climate	Adjusts society and ecosystems to endure climate change	Adjusts society and ecosystems to prevent climate change
Attitude towards climate change	Takes advantage of beneficial consequences while reducing negative consequences of climate change	Focuses on preventing climate change because of negative consequences
Relation to nonhuman environment	May adjust nonhuman as well as human elements of the environment	Focuses on human and human-caused elements of the environment

#### **Views of Economic Survey**

The Survey noted that the "excessive preoccupation" with meeting the 1.5- or 2-degree Celsius temperature target was putting impossible pressure on developing countries, forcing them to make choices they were not ready for, and diverting their focus and resources away from the more near-term imperatives of improving the lives of their people.

It went so far as to suggest that it was possible to imagine a warmer world that was more equitable and resilient than a world in which the 1.5-degree threshold was achieved at all costs. The Economic Survey does not deny climate change. These arguments are not new, and already have wide resonance in the developing world. Just that these views would be expressed in informal groups behind closed doors, and not in a policy document of the government. It is not clear though whether the Economic Survey was making an academic argument, or signalling of possible shift in India's energy transition trajectory.

#### **Increasing resilience**

In essence, the Economic Survey's argument is that adaptation should get at least as much importance as mitigation — more so because the impacts of climate change are already unfolding, and it is becoming increasingly clear that the 1.5-degree target will be breached very soon, no matter what the world does (or not) in response. In this situation, rapid improvement in incomes and overall well-being of the people is the best insurance against climate change.

It is important to understand that while there is near consensus in the scientific community that the frequency and intensity of climate impacts increase with rise in temperature, the 1.5-or 2-degree thresholds are chosen arbitrarily — they are not natural thresholds for climate change. There are no climate impacts that get triggered only after these limits are crossed, and not before.

To those who do not subscribe to the doomsday view that climate change would destroy the world in a few years, the argument of the developing countries will make sense. Since climate impacts cannot be stopped, the world must focus on rapid development and adaptation to increase resilience, especially among communities that are at the greatest risk.

The counter-argument: at these higher temperatures, the ferocity of climate impacts would increase so much that incremental improvements in resilience would be rendered useless.

Indeed, there are uncertainties on both sides. It is in this context that it is sometimes proposed that the rich and developed countries do the mitigation work while developing countries focus on adaptation. But this is easier said than done.

#### **Inequities and hypocrisy**

The Economic Survey articulates the impatience of developing countries with the developed world's hypocrisy. The United States has the largest historical responsibility, but has been the biggest laggard on emissions reductions. Its 2019 emissions were about 6% higher than in 1990, and is even now only marginally lower. The developed countries as a bloc have not fulfilled any of their emission reduction targets, or their commitments to provide finance or technology to the developing countries.

The responsibility for these failures have been sought to be passed on to the rest of the world in the form of calls for enhanced climate action. In fact, the international climate architecture has always been less about saving the planet from the consequences of climate change and more about preserving the existing world order. It has become the vehicle to perpetuate the dominance of the rich and industrialised world by mandating transitions that are more suited to them.

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

#### 5. Why Al's present and future bring some serious environmental concerns

#### Why in News?

In its annual environment report released earlier this month, Google reported a 13% increase in its emissions footprint in 2023 compared with the previous year. The rise was attributed mainly to the increased electricity consumption in its data centres and supply chains. Google said its data centres consumed 17% more electricity in 2023, and added that this trend was expected to continue in the coming years because of greater deployment and usage of its artificial intelligence (AI) tools.



#### Power guzzling intelligence

Al, which is expected to enable transformative changes across several domains, including attempts to find solutions to climate change, has a very heavy emissions footprint, the scale of which is becoming evident only now.

Studies have shown that a simple AI query, like the ones posted to OpenAI's chatbot ChatGPT, could be using between 10 and 33 times more energy than a regular Google search. Image-based AI searches could be using even more energy.

#### Why emissions are higher

Al models typically work much more than a simple Google search even when the same question is addressed to both. They sift through much more data while processing and formulating appropriate responses. More work means a greater number of electrical signals are required when the computer is processing, storing, or retrieving data.

More work also generates and releases more heat, which then requires more powerful airconditioning or other forms of cooling in the data centres.

#### A worrying prognosis

As AI tools are deployed more widely, their impact on energy consumption worldwide is expected to rise sharply. Already, data centres account for between 1% and 1.3% of the global electricity demand. This could double (become between 1.5% and 3%) by 2026, according to recent projections of the International Energy Agency (IEA). By contrast, despite the large number of electric vehicles on the road, their share of global electricity consumption was just about 0.5%, the IEA said.

At the level of countries, the electricity consumption of data centres as a share of the national demand has already crossed double digits in several regions.

In Ireland, which has a disproportionately large number of data centres because of the tax breaks and incentives it offers, this share has reached 18%, IEA numbers show. In the United States, the country with the largest number of data centres, this number was estimated to be between 1.3% and 4.5%. The numbers for India were not available.

#### **Alternative view**

Other estimates suggest that the large-scale deployment of AI could help in significant reductions of emissions globally. A recent study by the Boston Consulting Group found that application of AI to corporate and industrial practices could result in a 5-10% reduction in global emissions by 2030, while generating a value worth \$1.3 trillion to \$2.6 trillion through additional revenues or cost savings.

Emissions reductions can happen if AI is deployed to monitor and predict emissions in existing processes, and optimise these to eliminate wastage or inefficiencies.

Relevance: GS Prelims & Mains Paper IIII; Environment

Source: Indian Express

#### 6. Why Paris Olympics will be the most climate friendly in history

#### Introduction

Paris 2024 is set to be the greenest Games in history. The Games' organising committee has pledged to halve the Olympics' carbon emissions — from roughly 3.5 million tonnes each in Tokyo 2020, Rio 2016, and London 2012 to 1.75 tonnes this time around. Olympics during climate crisis



All evidence points to the planet being in a climate emergency, driven by anthropogenic emissions of greenhouse gasses (GHG). In this context, mega sporting events, with their massive carbon footprint, might appear to be profligacy humanity can ill-afford.

At the same time, such events can also

act as opportunities to further the fight against climate change. "Mega-events like the Olympic Games and the FIFA World Cup require massive public investments. Therefore, they should be good stewards of the public interest,"

#### Paris 2024's climate efforts

Paris 2024 will majorly be powered by renewable energy sources like geothermal and solar power. A number of climate-friendly moves are being implemented.

**Eating:** Paris 2024 is trying to promote plant-based, local and sustainable food. The Food and Agriculture Organization has estimated that the meat and dairly industries account for 18% global GHG emissions. All food-related infrastructure developed for the Games will see reuse after the Olympics.

**Transport:** Most Olympic venues are easily accessible by public transport. Paris will run special services to ensure that tourists do not have trouble getting around. Moreover, Paris has developed 1,000 km of dedicated cycle lanes, with an additional 3,000 pay-as-you-go cycles available for rent during the Games.

**Construction:** Unlike London, which built eight new venues for the Olympics, and Tokyo, which constructed 11 new sites, 95% of events in the Paris Games will be held in existing buildings or temporary infrastructure. The competition venue that Paris is building, the Aquatics Centre in Saint-Denis, is solar-powered, and uses recycled, natural bio-based building material. Globally, the construction industry is among the highest GHG emitters, responsible for 37% of global emissions.

**Living arrangements:** While the high temperatures in Paris have forced organisers to install 2,500 temporary cooling units for athletes, instead of being AC-free as originally planned, the athletes' living arrangements are nonetheless fairly sparse. Their mattresses are made from recycled fishing nets, and beds made from reinforced cardboard. Significant amount of the furniture being used during the Games is rented, rather than bought, and will see reuse after the Olympics. The 2,800 new apartments in the Olympic Village will be converted to homes after the event.

#### Not completely eco-friendly

The Olympics will host 15,000 athletes, 45,000 volunteers, and 26,000 media professionals. Paris expects to host more than 10 million tourists during the Games. This means a lot of air travel, and consequently, a lot of GHG emissions.

#### **Alternative view**

Many experts however say that offsetting amounts to little more than "greenwashing". It gives you a guilt-free feeling, a feeling that you have done your part to be 'carbon neutral'. In reality, many offsetting projects are not implemented, and even if they are, there is no monitoring to ensure that they continue to work as intended.

Nonetheless, Paris 2024 will still go down as the most climate-friendly Olympics in history, and provide a blueprint for major sporting events in the future. As Orr put it, the developments for the Games, such as the use of rented and reused material wherever possible, and improvements in public transit infrastructure and cycle lanes, "will all offer long-term benefits to Parisians".

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

#### 7. Should India focus on natural farming?

What are the concerns on yields? What have been the findings on the ground? How did two studies on the yield potential of natural farming differ? What happened when Sri Lanka decided to ban chemical fertilizers, substituting it with natural ones?



#### Why in News?

In her Budget proposals for 2024-25, Union Finance Minister Nirmala Sitharaman announced that in the next two years, one crore farmers across the country will be initiated into natural farming supported by certification and branding. Implementation will be through scientific institutions and gram panchayats, adding that 10,000 need-based bio-input resource centres will be established.

#### What is the mission?

As part of the National Mission on Natural Farming (NMNF), the government intends to motivate farmers to adopt chemical-free farming and draw them towards adopting natural farming willingly on the system's merit. The government believes that the success of the NMNF will require a behavioural change in farmers to shift from chemical-based inputs to cow-based, locally-produced inputs. The natural farming scheme under the 'Bharatiya Prakritik Krishi Paddhati' has a total outlay of ₹4,645.69 crore for six years (2019-20 to 2024-25).

#### What is natural farming?

In natural farming, no chemical fertilizers and pesticides are used. It promotes traditional indigenous practices which are largely based on on-farm biomass recycling with a stress on biomass mulching, use of on-farm cow dung-urine formulation; managing pests through diversity, and exclusion of all synthetic chemical inputs directly or indirectly.

Those advocating natural farming believe that it holds the potential to enhance farmers' income while delivering many other benefits, such as restoration of soil fertility and environmental health, and mitigating and/or reducing greenhouse gas emissions.

#### What are the challenges and concerns?

Agriculture and food experts have their reservations surrounding a large-scale transition from chemical farming to natural farming in a country like India, which has a huge population. Catering to its food-growing needs isn't an easy task, they point out. There are mixed results on Natural farming.

For instance, a study has found that in the case of a variety of crops, lower cost of biological inputs suggested under ZBNF has led to improved yields of crops and farmers' incomes, thus increasing the food and nutritional security of farmers practising ZBNF. However, findings of agro-scientists of the ICAR-IIFSR, a government institute, show a 59% decline in wheat yields and a 32% decline in basmati rice yield compared to integrated crop management, adversely impacting food supply.

#### What are the lessons from Sri Lanka?

It's vital that before launching a large-scale transition from chemical to natural cultivation, extensive studies and assessments are conducted. A couple of years ago, neighbouring Sri Lanka went through economic and political turmoil after it decided to turn completely organic, and banned the import of chemical fertilizers. The government's policy shift had severe consequences with farmers struggling to get natural fertilizers; they faced a reduction in yields of key crops including rice, the staple, putting the country's food security at risk. A sharp price escalation was witnessed in the country, resulting in huge protests and unrest.

#### What is the way forward?

Noted economist and former professor at the Ludhiana-based Punjab Agricultural University, M.S. Sidhu, asserts that natural farming could be beneficial at a localised level, but in a populous country like India, adopting natural farming at a large scale may not be a successful model

Relevance: GS Prelims & Mains Paper III; Environment

Source: The Hindu

#### 8. India's Plastic Waste Challenge

#### **Overview of the Problem**

India, like other large economies, faces a significant plastic waste problem. According to a 2020-21 report by the Central Pollution Control Board (CPCB), four million tonnes of plastic waste are generated annually. Unfortunately, only a quarter of this waste is recycled or treated, with the rest ending up in landfills or being disposed of unsustainably.

#### **Plastic Waste Management Rules**

Since 2016, the Plastic Waste Management Rules have mandated that users of plastics are responsible for collecting and recycling their waste. These requirements, known as Extended Producer Responsibility (EPR) rules, were initially voluntary but are now enforced through an online EPR trading platform.

#### **Extended Producer Responsibility (EPR) System**

The EPR system involves packagers, importers, and large industrial users of plastic packaging, as well as professional recyclers, registering with the CPCB. Recyclers, who have networks to collect plastic waste, recycle the waste and receive validated certificates for each tonne recycled. These certificates can be uploaded to a dedicated CPCB portal and purchased by plastic packaging companies that fall short of their annual recycling targets.

#### **Challenges and Issues**

In 2022-23, the CPCB estimated that certificates for nearly 3.7 million tonnes of recycled plastic were generated. However, not all of these certificates were legitimate, with approximately 600,000 fraudulent certificates discovered. Additionally, hackers reportedly stole several thousand certificates last year and sold them to companies. A criminal investigation is ongoing, and it remains unclear how much of the claimed 3.7 million tonnes was genuinely recycled.



#### **CPCB's Response**

In response, the CPCB has taken two significant actions:

- **1. Audit:** Commissioned an audit of nearly 800 firms, representing almost a fourth of the 2,300 registered recyclers who had traded certificates.
- **2. Security Overhaul:** Undertook a comprehensive overhaul of the security features on the EPR trading platform, although this has delayed the process of filing returns for 2023-24 by several months.

#### **Future Steps**

The CPCB has described these problems as "teething issues" associated with implementing a large-scale electronic system. While the audit is necessary, it should be a one-time initiative to avoid undermining trust in the system with annual, lengthy investigations. Although the CPCB has the authority to impose heavy fines, the process is lengthy and fraught with legal challenges.

#### Conclusion

A market-driven approach to solving plastic waste has a significant but limited effect. Greater efforts must be made to curb plastic production and promote sustainable alternatives. Addressing the root causes of plastic waste and enhancing the effectiveness of recycling systems are crucial in mitigating India's plastic waste problem.

Relevance: GS Prelims & Mains Paper III; Environment

#### 9. Behind Leh flight cancellations: high temperatures, low air

#### **Overview**

Sizzling day-time temperatures in Leh, Ladakh, led to many flight cancellations recently. The mercury peaked at 33.5 degree Celsius in the day. "High ground temperatures and runway restrictions in #Leh have necessitated the cancellation of all flights for today," Indigo, posted on X. Why did Leh's high temperatures lead to flight cancellations?

#### First, how do aircraft fly?

Aircraft wings are shaped such that their top is slightly more curved than the bottom. So when an aircraft begins to move, the air over the top of the wings moves faster than that under the bottom.

This faster-moving air then creates a lower pressure above the wing (as per Bernoulli's principle), when compared to the pressure under it. This difference in the pressure generates a force (called lift) underneath the wings that helps the aircraft take off.

#### How do higher temperatures affect an aircraft's flight?

1. **Less lift to push plane up:** Higher temperatures expand the air, making it less dense or thinner. In other words, they create more space between the air molecules which means that fewer molecules are available underneath the aircraft's wings to create enough lift to push the plane into the sky.

Aircraft usually get 1% less lift with every 3 degree Celsius of temperature rise.

- 2. **Reduces Engine Performance:** Thin air also affects the performance of an aircraft's engine. For instance, the combustion that creates an engine's power is severely impacted as there are fewer molecules of oxygen to mix with the fuel. The thrust the force which moves an aircraft through the air produced by the engines is also reduced due to thin air.
- 3. **Need for Longer Runways:** Higher temperatures mean that planes require longer runways and more powerful engines to take off. If an aircraft requires 6,500 feet of runway at 20 degree Celsius, it is going to require 8,200 feet at 40 degree Celsius.
- 4. **Difficult Landing:** Thinner air also makes landings more challenging. In addition to the brakes on the wheels, pilots use reverse thrust (literally, thrust in the opposite direction to the movement of the aircraft) to slow down the aircraft while landing. In case of thin air, the reverse thrust generated might not be enough to perform the task.

These aforementioned issues are particularly felt in airports located in higher altitudes (like the one in Leh), where the air is anyway thin and runways are often shorter.

#### What is in the future?

The extreme heat which is affecting take-offs and landing of aircraft is a consequence of global warming. The global average temperature has increased by at least 1.1 degree Celsius since 1880. In India, annual mean temperatures have risen by about 0.7 degree Celsius compared to 1900 levels.

Aircraft manufacturers are always working towards making their planes lighter and more efficient. But much of that progress has likely been already made.

As a result, in the short term, airports will need to schedule flights in cooler times, increase the runway lengths, and decrease the take-off weight to deal with climate change-induced disruptions.

However, in the long run, the best bet would be to radically curb the burning of fossil fuels that contribute to global warming.

Relevance: GS Prelims & Mains Paper III; Environment

Source: The Hindu

#### **Science & Technology**

#### 1. How the world's first brain implant to control epileptic seizures works

#### Why in News?

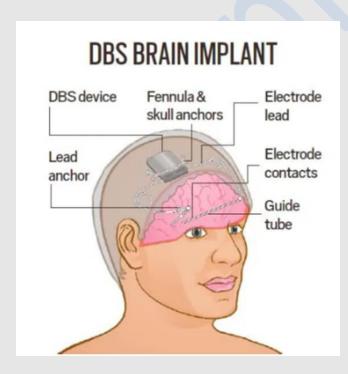
A UK-based teenager, Oran Knowlson, has become the first person in the world to be fitted with a brain implant to help bring his epileptic seizures under control. The deep brain stimulation (DBS) device, which sends electrical signals deep into the brain, has reduced Knowlson's daytime seizures by 80%.

#### What is epilepsy?

Epilepsy, a condition that leads to recurring seizures, sees a person experience jerking of arms and legs, temporary confusion, staring spells, or stiff muscles. It is caused by abnormal electrical activity in the brain.

The disease has no identifiable cause in nearly 50% of the cases. However, head trauma, tumours in the brain, some infections like meningitis, or even genetics can lead to epilepsy. It can increase the risk of accidents, drownings, and falling.

In India, according to estimates between 3 and 11.9 per 1,000 people suffer from epilepsy. Although several anti-seizure medicines are available in the market, 30% of the patients remain resistant to treatment.



can be recharged by a wireless headphone.

#### How does the device work?

The neurostimulator delivers constant electrical impulses to the brain to disrupt or block abnormal seizure-causing signals.

A 3.5 cm square, 0.6 cm in thickness, the device was surgically implanted in Knowlson's skull and anchored using screws. The doctor then inserted two electrodes deep into his brain until they reached the thalamus — a relay station for all the motor and sensory information. The ends of the electrodes were connected to the neurostimulator.

The device was switched on after Knowlson recovered from his surgery. It

#### What is DBS?

The device uses DBS, which is also utilised for movement disorders associated with Parkinson's, and other neurological conditions. Although DBS has been tried before for childhood epilepsy, until now neurostimulators were placed in the chest (instead of the brain), with wires running up to the brain where the leads were placed on the affected region.

#### **Other Treatment Options**

It is not the first line of treatment for epilepsy. Doctors first use anti-seizure medicines and a ketogenic diet, which is high in fats and low in carbohydrates. Although the reasons are not well understood, a ketogenic diet is known to reduce seizures, even in children with treatment-resistant epilepsy. If that does not work, doctors can carry out brain surgery to remove a portion of the brain where the seizures originate.

Another surgery called corpus callosotomy may be suggested in some children. In this, doctors remove a part that connects both halves of the brain, which does not allow abnormal electrical signals to travel from one half of the brain to another.

Surgery is still preferable to implanting a DBS device. Currently, the DBS devices available in the market reduce seizures by around 40%. In comparison, seizures drop by nearly 90% if the patient undergoes surgery.

Relevance: GS Prelims; Science & Technology

Source: Indian Express

#### 2. The risk of international spread of wild type-1 polio cases from Pakistan is great

#### Why in News?

The ambitious goal of eradicating wild-type poliovirus type-1 (WPV1) by 2026 appears to have become tougher. WPV1, which is endemic only in Pakistan and Afghanistan, is showing signs of a resurgence since 2023.

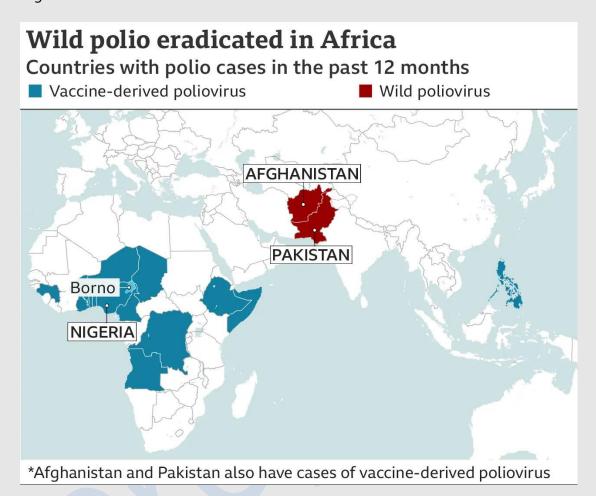
#### Possible increase in cases

With Afghanistan and Pakistan reporting six WPV1 cases each in 2023 — there were two cases in Afghanistan and 20 cases in Pakistan in 2022 — the total incidence of type-1 cases in both countries in 2023 might appear to have nearly halved. But with six cases in Afghanistan and five cases in Pakistan already this year, there appears to be an uptick. If this continues, the total cases being reported from the two countries might be close to or even surpass the 2022 numbers.

#### Rising virus in environment

The concern about WPV1 is not limited to the number of cases in children. The circulation of the virus in the environment is seen to be rising, and, most importantly, after a gap of two years, positive environmental samples have been increasingly collected in Pakistan, in 2023 and till early June this year, from cities which have been historical reservoirs for the virus. Last year, 125 positive environmental samples were collected from 28 districts in Pakistan. Of these,

119 belonged to a genetic cluster (YB3A), which suggests that these were imported from Afghanistan. By June 1 this year, there have been 153 positive environmental samples from 39 districts. As of April 8, 2024, 34 positive environmental samples were collected from Afghanistan.



#### **WHO** view

According to the World Health Organization, the presence of positive environmental samples in "epidemiologically critical areas and historical reservoirs" such as Karachi, Quetta and the Peshawar-Khyber blocks in Pakistan, and Kandahar in Afghanistan, represents a significant risk to the gains made in the past.

Rising positive environmental samples are a reflection of polio campaigns not really achieving their desired coverage; fake finger marking sans vaccination is a persisting problem. Though children in Pakistan's cities are largely immunised, there is a heightened risk of the virus striking any unvaccinated or not fully vaccinated children — in 2023, two of the six cases were from Karachi city. The situation in Pakistan appears worse than it is in Afghanistan with the actual spread of WPV1 seen "predominantly in Afghanistan in 2022 now being detected in Pakistan in 2023 and 2024".

#### **Risk of international Spread**

There is also the grave risk of international spread from Pakistan, particularly to Afghanistan. With over 0.5 million Afghan refugees forced to leave Pakistan, and an estimated 0.8 million to be evicted soon, there is an increased risk of cross-border spread of the virus. There is a large pool of unvaccinated and under-immunised children in southern Afghanistan, increasing the risk that returning refugees can pose.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: The Hindu

#### 3. How to manage 'brain-eating amoeba' cases

#### Why in News?

There have been four cases, including three deaths, of the rare, but fatal primary amoebic meningoencephalitis (PAM) in Kerala in the last two months. A 14-year-old boy from Thikkodi in Kozhikode district tested positive for the infection on July 5. He is undergoing medical treatment now and his condition is reported to be stable.

#### Where have the fatalities occurred?

There have been three deaths so far — E.P. Mridul, 12, from Feroke in Kozhikode district, died at a private hospital in Kozhikode city on July 3. V. Dakshina, 13, of Kannur, succumbed to it at a private hospital in the city on June 12. Fadva, 5, of Munniyur in Malappuram, died at the Government Medical College Hospital, Kozhikode, on May 20.



#### What is PAM?

Primary amoebic meningoencephalitis or PAM is caused by Naegleria fowleri, an amoeba that thrives in warm freshwater lakes, ponds and rivers. It can also survive in poorly maintained swimming pools in rare cases. As it can infect the brain and destroy the tissues there, this one-celled organism is also called 'brain-eating amoeba'. These infections, though rare, are fatal and 97% of the patients don't survive. The infection happens when people go for a swim in lakes, ponds or rivers, during the summer. Experts say that it could occur if the atmospheric temperature is high and water levels are

low. The amoeba enters the body through the nose and reaches the brain. It destroys brain tissues and causes their swelling. In recent cases, children have been found to be more vulnerable to it. The infection does not spread from people to people. Swallowing water containing the amoeba does not lead to it either.

#### What are the symptoms of PAM?

According to the Centers for Disease Control and Prevention (CDC) in the U.S., headache, fever, nausea, and vomiting are its early symptoms. The disease, however, can progress rapidly. Stiff neck, confusion, lack of attention to people and surroundings, loss of balance, and

hallucinations are the later symptoms. It usually leads to coma and death after five days, says the CDC. Most people die within one to 18 days.

Experts point out that warming of the atmosphere and stagnant and unhygienic water resources could be some of the conditions leading to the infection. This type of amoeba is found to be more active in warm water.

#### How is it diagnosed and treated?

The infection can be diagnosed through PCR tests of the cerebrospinal fluid. However, as PAM is a rare condition, detection can sometimes be hard. In Kozhikode, doctors at the Government Medical College Hospital suspected its possibility in the five-year-old girl from Malappuram after she exhibited symptoms similar to that of bacterial meningitis, whose instances have come down in recent times, mainly due to vaccination. There are no standard treatment methods available and the doctors are following the guidelines of the CDC for now. According to sources, the State Health department has procured miltefosine, a broad-spectrum antimicrobial drug, from Germany for the treatment of infected persons. Paediatricians say that Azithromycin and Amphotericin B, some of the other medicines suggested, are available.

#### Has it been reported in Kerala before?

First detected in the Alappuzha municipality in 2016, it was reported in Malappuram in 2019 and 2020, Kozhikode in 2020, Thrissur in 2022, and again in Alappuzha in 2023. Health Minister Veena George convened a meeting on July 1 to take stock of the situation and it was decided to formulate special guidelines for the treatment.

Health officials have said that there is a chance of the amoeba entering the brain through the holes in a layer that separates the nose and the brain or through possible holes in the ear drum. So, children having infections in their ear have been advised against taking baths in ponds or in stagnated water resources. Diving too should be avoided. Those running water theme parks and swimming pools have been asked to chlorinate the water there at regular intervals. Kerala Chief Minister Pinarayi Vijayan convened another meeting on July 5 and issued directions to keep water resources clean. Children have been asked to use swimming nose clips to prevent the infection.

#### What can be done to reduce the risk?

Holding the nose or wearing a nose clip while jumping or diving into fresh water are some of the steps suggested to avoid the infection. The head should be kept high while entering warm water. Steer clear from digging in shallow waters, say experts. Distilled or boiled water should be used for clearing nasal passages.

Relevance: GS Prelims; Science & Technology

Source: The Hindu

#### 4. ISRO wants to venture into planetary defence

#### Why in News?

Indian Space Research Organisation (ISRO) Chairman S Somanath said last week that "we should be able to go and meet" the asteroid Apophis when it passes by Earth at a distance of 32,000 km in 2029. However, "it is yet to be decided in what way [ISRO] should participate". The Indian space agency might send its own spacecraft, or collaborate with other space agencies. A NASA mission has already been confirmed.

Somanath's remarks reveal ISRO's intent to develop capabilities in planetary defence — an area it has so far not entered. A mission to study an asteroid would be the first step towards building a programme aimed at preventing celestial bodies from colliding with Earth with potentially catastrophic consequences.

#### An alarming asteroid

When Apophis was discovered in 2004, scientists thought there was a 2.7% chance of a collision with Earth — the highest probability of any large asteroid hitting Earth in the recent past. Initial observations showed that if not in 2029, Apophis could hit Earth in 2036 or 2068. Given the asteroid's size — it measures about 450 m at its widest — a collision with Earth could cause large-scale damage. Some scientists compared the potential impact to the event that wiped out dinosaurs and most other extant life some 66 million years ago.

Subsequent observations showed these initial fears to have been unfounded — the Earth did not face any risk from Apophis in 2029, 2036, or 2068. The asteroid will come the closest to Earth in 2029, when it flies by at a distance of 32,000 km. This is close enough to be visible to the naked eye, and at a distance at which some communication satellites operate.

### SPACE OBJECTS

ASTEROID: Rocky/ metallic objects moving around Sun, mostly leftovers from the formation of solar system. Asteroids less than 1 metre in diameter are called meteoroids.

METEOR: The streak of light produced when an asteroid/ meteoroid encounters friction of Earth's atmosphere. METEORITE: Unburnt fragment of asteroid that falls to Earth

### **HOW BIG?**

APOPHIS: About 450 m at its widest

CHELYABINSK, which exploded over Russia in 2013: about 20 m at its widest

ASTEROID THAT ELIMINATED DINOSAURS: 10-15 km wide

#### Threats from space

Apophis may not pose a threat, but asteroids are headed towards Earth all the time. In fact, thousands enter the Earth's atmosphere every day. Most are very small and burn up in the atmosphere due to friction — some of the larger ones burn spectacularly, and show up as fireballs in the sky. In some cases, unburnt fragments make it to surface, although they are not large enough to cause much damage.

Once in a while, however, asteroids do cause damage. In 2013, a 20-metre wide asteroid entered the atmosphere and exploded about 30 km above a Russian town, releasing energy equivalent to the blast yield of 400-500 kilotons of TNT — 26 to 33 times the energy released by the atom bomb that detonated over Hiroshima. While most of this energy was absorbed by the atmosphere, shock waves travelled to the ground, flattened trees, damaged buildings, and injured 1,491 people, according to the Russian Ministry of Health.

Worryingly, the asteroid was detected only after it entered the atmosphere. This was in part because it came from the direction of the Sun, and was hidden by its glare.

Scientists know of at least 1.3 million asteroids, but there could be more surprises in store. A planetary defence programme seeks to track and neutralise these threats.

#### From sci-fi to reality

In 2022, NASA demonstrated technology that has long been a science fiction staple. A spacecraft launched in the previous year crashed into an asteroid named Dimorphos, and changed both its shape and its trajectory. Dimorphos did not pose a threat to Earth, and was circling the Sun some 11 million km away from our planet. But this showed the beginning of a planetary defence programme.

#### **Interest in Asteroids study**

Asteroids are yet to be studied in detail, and very few missions have been dedicated to them. This is why the approach of Apophis has generated huge interest among space agencies around the world. While formal announcements are yet to be made, several missions, including those from private agencies, are expected to be launched in order to study the asteroid from close quarters.

NASA has already redirected one of its spacecraft, one that previously studied the asteroid Bennu, to track Apophis. This spacecraft will go within a distance of 4,000 km of Apophis in April 2029, and then trail the asteroid for 18 months, collecting data and analysing its surface. ISRO's intention to join such an endeavour displays its growing confidence in taking on newer challenges, and contributing proactively to global space objectives. It is also a reaffirmation of its continuing evolution into a well-rounded space agency, with capabilities that match the best in the world.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: Indian Express

# 5. NASA's CHAPEA project: Why 4 people spent a year in an airlocked space simulating Mars

#### Why in News?

On July 6, four volunteer crew members of NASA's Mars simulation mission emerged after a year of living in a habitat replicating the Red Planet.

A part of NASA's Crew Health and Performance Exploration Analog (CHAPEA) project, it was the first of three planned simulations to understand the challenges Mars poses for space explorers



#### How was the Mars simulation created?

A 3D printed airlocked habitat of 1,700 sq feet was created and set up at the Johnson Space Center in Houston, Texas, dubbed "Mars Dune Alpha". The crew entered the simulated space on June 25, 2023, and emerged after 378 days. They were put through several scenarios that astronauts could expect on Mars, including conducting spacewalks in suits (called "Marswalks"), growing vegetables, and facing stressors such as communication delays with mission control on Earth, limited resources and prolonged isolation.

#### What is the habitat like on Mars?

The temperature on Mars ranges between 20 degrees Celsius and -153 degrees Celsius. The planet has a rocky surface with canyons, volcanoes, dry lake beds, and craters, all covered in red dust.

Winds can create dust storms, with tiny ones resembling tornadoes and large ones occasionally enveloping the entire planet. They are visible from Earth using telescopes. It has about one-third the gravity of Earth and the atmosphere is much thinner than Earth's, containing more than 95% carbon dioxide and less than 1% oxygen.

The planet turns on its axis more slowly than Earth, and being farther from the Sun, takes longer to revolve around the Sun. A day on Mars is 24.6 hours and a year is 687 Earth days long.

#### What are the other challenges involved in a mission to Mars?

The biggest challenge is the long duration of a Mars mission because even a one-way trip would take six to nine months. Other challenges include logistics for life support, and maintaining supplies and crew health.

Mars's thin atmosphere also makes it difficult to slow down a spacecraft for a safe and precise landing. Given the distance, communications from and to Earth could have as much as a 20-minute lag, which would be too long in case of real-time help during emergencies.

#### What are India's plans for a Mars mission?

ISRO is preparing for astronomy missions and exploratory missions to the Sun, Mars and Venus in the next few years.

In 2014, India tasted success with its Mars Orbiter Mission (MOM) or Mangalyaan, becoming the first nation to reach Martian orbit in its first attempt.

Relevance: GS Prelims; Science & Technology

Source: Indian Express

# 6. India could soon allow 'game-changing' weight-loss drug tirzepatide: How it works, its side effects

#### Why in News?

The development of various weight loss drugs has been a game changer for obesity treatment in recent years, especially in the US and Europe. But these drugs are yet to be commercially available in India, with pending regulatory clearances and high demand abroad delaying their arrival in the country.

But this might soon change. Last week, in a first, an expert committee of India's drug regulator gave the green light to the drug tirzepatide. Following a review of this recommendation, the drug will be given final approval by the regulator, allowing its manufacturer, Eli Lilly, to launch the product in the Indian market.

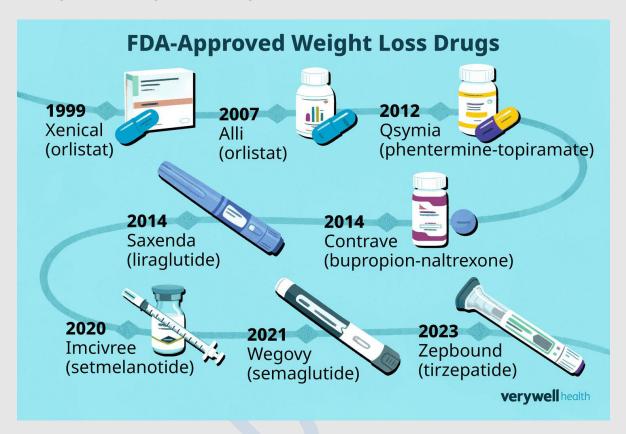
#### **Diabetes drug for weight loss**

In 2017, the US Food and Drugs Administration (FDA) approved Danish pharma giant Novo Nordisk's Ozempic, with the active ingredient semaglutide, to manage type 2 diabetes. Soon, doctors in the US saw an interesting side-effect — weight loss.

They started prescribing Ozempic off-label (the practice of prescribing a drug for a different purpose than what has been approved) to treat obesity. A social media frenzy followed, with influencers flooding TikTok and Instagram with posts about their dramatic weight loss transformations, all courtesy Ozempic.

This made Novo Nordisk explore semaglutide as a weight loss drug for people without diabetes. In 2021, the company released Wegovy, a semaglutide injection, as an FDA-approved

obesity treatment. The key difference between Ozempic and Wegovy: the maximum approved dose of semaglutide is slightly higher with Wegovy than Ozempic. Currently, there is a global shortage of both drugs amid soaring demand.



In November 2023, Eli Lilly, another US pharma major, got FDA approval for the drug Zepbound to treat obesity. This came just over a year after its type 2 diabetes medication, Mounjaro, was launched. Like Ozempic, Mounjaro too led to weight loss among users, and began to see rampant off-label use. Zepbound and Mounjaro contain tirzepatide as the active ingredient. Both face shortages in the global market.

#### Semaglutide vs tirzepatide

The FDA has approved Wegovy (semaglutide) and Zepbound (tirzepatide) for chronic weight management in adults. These drugs can be prescribed to those who are obese (with a body mass index of over 30), or overweight (with a BMI between 27 and 30), and have at least one other health condition related to their weight (such as high blood pressure, high cholesterol, or type 2 diabetes).

Both are administered as under-the-skin injections, and are intended to be used alongside a reduced-calorie diet and increased physical activity. The dosage is increased gradually, reaching a maximum dosage of 2.4 mg for semaglutide and 15 mg for tirzepatide. This does not, however, mean that the latter is 'stronger' than the former.

Semaglutide and tirzepatide are polypeptides, small proteins that boost the levels of naturally-occurring hormones in the body, including that of glucagon-like-peptide 1 (GLP-1), which control weight through the brain and digestive tract.

Higher GLP-1 levels, released in the gut, spark a reaction by stimulating neurons that alter gut function, leading to a sense of fullness. This process also taps into a brain mechanism that lights up neural pathways, triggering the sensation of satiety — the feeling of being satisfied and having had enough to eat.

They also help manage glucose levels, making them an effective treatment for diabetes. Semaglutide only targets GLP-1 receptors. On the other hand, tirzepatide also boosts a second hormone: glucose-dependent insulinotropic polypeptide (GIP). The GIP also regulates weight through receptors in brain and fat cells. Eli Lilly claims that the combined action of GLP-1 and GIP enhance each other's effects.

#### Weight back if drug is stopped

Obesity drugs are also not one-time miracle solutions for weight loss — data from trials indicate that these drugs need to continue to be taken for their weight loss and other effects to last. Improvements in heart and metabolic health seen during the treatment period also tended to revert to baseline levels once the treatment was stopped.

Relevance: GS Prelims; Science & Technology

Source: Indian Express

#### 7. National Quantum Mission: Why India has a lot of catching up to do

#### Why in News?

India launched the National Quantum Mission last year and became one of the few countries in the world to have a dedicated programme to harness the power of quantum technologies. However, A new report, surveying the existing capabilities of the country in this area, has found that countries like China and the United States have a huge head start over India. These countries have not just invested much more money in funding research, they also have more people working in this sector.

They have been publishing far greater numbers of scientific papers, and register many more patents as well.

But the good thing, as Indian science leaders have been emphasising, is that quantum technologies are still under development, and India is not exactly starting from zero. In fact, in some areas, Indian scientists are very much at the forefront of global research.

#### The quantum mission

After several years of discussions, India in 2023 announced the setting up of the National Quantum Mission to build capabilities in quantum-related science and technology. The mission focuses on four key domains: computing, communications, sensors, and materials.

Quantum technologies try to make use of the fact that matter behaves in a very unexpected and counter-intuitive manner at its smallest scale. Sub-atomic particles such as electrons seemingly exist at multiple locations at the same time, and can influence the behaviour of a like-particle, with which they have had a prior interaction, over infinitely large distances.

These strange properties have been experimentally verified hundreds of times. However, it is only in recent years that scientists have acquired capabilities to put them to some beneficial uses. Some of these properties, like the ability to exist in multiple states at the same time — a phenomenon called superposition — can be used to perform real-life tasks that conventional technologies are unable to achieve.

Quantum computers are already a reality, though their capabilities are quite limited at this point. More mature quantum computers would be able to do calculations that would be either impossible for normal computers, or would take far too long to perform.

By overcoming the limits of current technologies, a quantum-enabled transformation can build the foundations of a new economy in a decade or two. This is why India wants to try and rapidly build its capabilities in these areas. Partnering in technology development would ensure early fruits of success, which can trigger rapid economic growth. It would also make leading technologies accessible to India.

Country	Investment (in bn \$)		Patents gained (2015 to 2020)	
India	0.75	1,711	339	82,110
China	15	12,110	23,335	57,693
United States	3.75	13,489	8,935	45,087
European Union	1.1	NA	NA.	1,35,511

#### A lot of ground to cover

The National Quantum Mission, however, is just the first step and there is a lot of ground to cover, according to the Landscape of Indian R&D in Quantum Technologies report. The report has been prepared by itihaasa Research and Digital, a not-for-profit company that seeks to study the evolution of technology and business in India.

The Rs 6,000 crore (around \$0.75 billion) earmarked for the mission is impressive by Indian standards but it pales in comparison to what other countries are spending on quantum-related research, the report said. China is estimated to be investing \$15 billion in this effort, while the

US is pumping in about \$3.75 billion. The United Kingdom has put in about \$4.3 billion and countries like Germany, South Korea, and France have all committed to spend more than \$2 billion

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: Indian Express

# 8. Children die of suspected Chandipura virus infection in Gujarat: What is the disease, and what are its symptoms?

#### Why in News?

The Gujarat government recent said that six children have died of suspected Chandipura virus

### CHANDIPURA VIRUS

Named after Chandipura village in Bhandara dist where it was first reported in 1965

### **HOW IS IT TRANSMITTED**

Human beings get the virus from sand fly which thrives in cattle sheds. It transmits



Symptoms | Acute fever during night, convulsions, gastro-intestinal

disturbance causing vomiting

**Treatment** | No vaccine and hence the disease is treated symptomatically

(CHPV) infection in the state since July 10. So far, a total of 12 suspected cases have been reported. Two patients are from Rajasthan, and one is from Madhya Pradesh. They received treatment in Gujarat.

# What is CHPV infection and how is it transmitted?

CHPV is a virus of the Rhabdoviridae family, which also includes other members such as the lyssavirus that causes rabies. Several species of sandflies like Phlebotomine sandflies and Phlebotomus papatasi, and some mosquito species such as Aedes aegypti (which is also the vector for dengue) are considered vectors of CHPV. The virus resides in the salivary gland of these insects, and can be transmitted to humans or other vertebrates like domestic animals through bites. The infection caused by the virus can then reach the central nervous system which can lead to encephalitis — inflammation of the active tissues of the brain.

# What are the symptoms of CHPV infection?

The CHPV infection presents initially with flu-like symptoms such as acute onset of

fever, body ache, and headache. It may then progress to altered sensorium or seizures and encephalitis.

Retrospective studies from India have also reported other symptoms such as respiratory distress, bleeding tendencies, or anaemia.

The infection often progresses rapidly after encephalitis, which may then lead to mortality within 24-48 hours of hospitalization. Susceptibility has largely remained limited to children below 15 years.

#### How can the infection be managed?

The infection can only be symptomatically managed as currently there is no specific antiretroviral therapy or vaccine available for treatment. As a result, it becomes crucial to manage brain inflammation to prevent mortality.

Disease progression can be as rapid as a patient reporting high fever in the morning, and their kidneys or liver being affected by the evening. This makes it harder to manage the symptoms.

#### Which are the worst affected regions in India?

The CHPV infection was first isolated in 1965 while investigating a dengue/chikungunya outbreak in Maharashtra. However, one of the most significant outbreaks of the disease in India was seen in 2003-04 in states such as Maharashtra, northern Gujarat and Andhra Pradesh, with the three states reporting more than 300 deaths of children.

Gujarat, during the 2004 outbreak, saw a case fatality rate (CFR) of around 78% while CFR in Andhra Pradesh, during the 2003 outbreak, was pegged at around 55%.

The infection has largely remained endemic to the central part of India, where the population of CHPV infection-spreading sandflies and mosquitoes is higher.

Relevance: GS Prelims; Science & Technology

Source: Indian Express

#### 9. Cave on the Moon: What this discovery means for space exploration

#### Why in News?

Scientists have confirmed the presence of a cave on the Moon, not far from the site of the first lunar landing 55 years ago. This discovery can, in the future, provide astronauts with a welcoming habitat on the Moon.

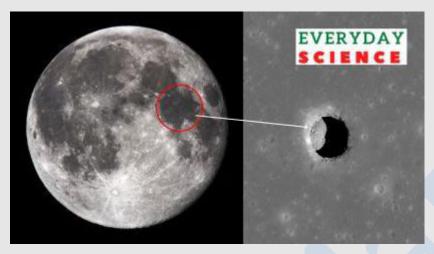
#### The finding

A moon cave at the Sea of Tranquillity (a large lunar mare — large, dark, basaltic plains formed by lava) has been found.

Situated 400 kilometres from where astronauts Neil Armstrong and Buzz Aldrin landed on the Moon in 1969, the cave is roughly 45 metres wide and up to 80 metres long, having an area equivalent to 14 tennis courts. While the existence of lunar caves has been theorised for over 50 years, this is the first time the entry point of a cave has been discovered.

Study authors Leonardo Carrer, Lorenzo Bruzzone, and others analysed photos taken in 2010 by NASA's Lunar Reconnaissance Orbiter (LRO) spacecraft of this area, known to house the

deepest known pit on the moon. They concluded that the pit was the entry point to a cave created by the collapse of a lava tube — a tunnel formed when molten lava flows beneath a field of cooled lava.



# Protecting humans from harsh lunar conditions

The Moon is exposed to solar radiation 150 times stronger than Earth, with NASA stating that the lunar surface heats to about 127 degrees Celsius during the day, and cools to around -173 degrees Celsius at night.

However, caves such as the

one recently discovered, harbour stable average temperatures of around 17 degrees Celsius. They would also potentially shield human explorers on the Moon from the dangers of radiation, and micrometeorites. This, scientists believe, could make them a viable spot to establish a future lunar base, or an emergency shelter.

That being said, the depth of such caves could present a challenge with regards to accessibility. They may also carry risks of potential avalanche and cave-ins.

Further research is required to understand and map the properties, particularly the structural stability of the caves, which could be done using ground-penetrating radar, robots or cameras. To become completely viable habitats, caves would need systems to monitor movement or seismic activity, as well as safety zones for astronauts to take shelter in the event of a cave collapse.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: Indian Express

# 10. Al which could conduct research and plan ahead: What is OpenAl's secret project 'Strawberry'?

#### Why in News?

The AI race is intensifying, with tech giants pumping billions into the research and development of new models. US-based OpenAI became a major player in the field after launching its AI chatbot ChatGPT, with its capabilities including answering questions based on prompts and processing images. But that may change.

OpenAI is reportedly building a new AI model, which may dramatically improve AI reasoning capabilities and allow them to undertake 'autonomous' internet research — something

existing models cannot do. What is the project and why does it have the potential to be disruptive?

#### What is Project Strawberry?



Nearly six months ago, a secretive OpenAl project named Q\* (Q-Star) made headlines. It was reportedly a plan for making Al capable of training itself in a new way, so that it would have planning, logical reasoning, and capabilities similar to that of a human brain.

Recently, a report in Reuters revealed more about the project, saying OpenAI is

working on a new reasoning technology under the code name "Strawberry", believed to be the new name for Project Q\*. Internal documentation from the company mentioned OpenAl's intention to use Strawberry for deep research. As of now, the project's exact features and details are closely guarded, including its release date.

However, it is certain that with Strawberry models, OpenAI wants AI models to plan ahead, scour the internet autonomously, and do deep research.

#### How will it be different from existing AI models?

As of now, Large Language Models (LLMs), which form the basis of AI chatbots, can summarise dense texts and compose prose instantly. However, they struggle with common sense problems and multi-step logic tasks. Strawberry models, with their enhanced reasoning, would be seen as a catalyst for AI to make some landmark scientific discoveries and undertake complex problem-solving.

According to experts, reasoning involves enabling AI to plan, understand the physical world around them and its functions, and handle multi-step problems. Currently, LLMs cannot plan ahead effectively without the support of external frameworks.

With Strawberry, AI would perform tasks that require planning and a series of actions over an extended time. In the past, OpenAI CEO Sam Altman had discussed why AI models should take time, even days to think through problems and provide the best answers. If this is achieved, it could revolutionise AI's ability to accomplish any given complex task all by itself.

#### How will such powerful AI models be used?

Strawberry models are aimed at significantly improving AI capabilities. Such models could undertake advanced research — conduct experiments, analyse data, and suggest new hypotheses. This could lead to multiple breakthroughs in sciences. In medical research, they could assist in drug discovery, research in genetics, and even analyse vast datasets to devise personalised medicines.

With enhanced problem-solving abilities, AI could solve complex mathematical problems, help in engineering calculations, and even participate in theoretical research. It could handle problems requiring logical deductions and be helpful in legal analysis and strategic planning. The models could also greatly aid education by offering personalised tutoring, creating educational content and interactive lessons.

In business, these models could analyse market trends, predict economic changes, assess risks, and help with investment decisions. Similarly in creative fields, it could also aid in writing, creating art and music, generating videos, and designing video games.

With human-like reasoning skills, these models could affect change across industries. Improved AI capabilities would also further existing criticism of AI in terms of its impact on jobs, the vast amounts of power it requires to run, and the ethical questions surrounding its reproduction of existing works by humans.

Relevance: GS Prelims; Science & Technology

Source: Indian Express

#### 11. Windows outage: how a faulty software update hit businesses worldwide

#### Why in News?

A major disruption in Microsoft Corp's cloud services caused service disruptions to a number of businesses around the world, including in India.

### MICROSOFT FACES GLOBAL OUTAGE



### What

Widespread IT outage causing 'Blue Screen Of Death' error messages

## • B S O D

# About 'Update'

Using a single sensor and unified threat interface, Falcon Identity Threat Protection stops identitydriven breaches in real time

### When

Early morning on July 19, continued for hours afterwards

### **Impacted**

Microsoft users globally; flights, banks, hospitals, media outlets and other companies

### What went wrong

Faulty update was caused by CrowdStrike's Falcon Sensor to malfunction and conflict with the Windows system

#### What caused the outage?

Microsoft said that a preliminary cause for the disruption was a configuration change "in a portion of [its] Azure backend workloads", which resulted in connectivity failures that affected Microsoft 365 services dependent on these connections. Azure is Microsoft's cloud computing platform.

At the heart of the issue was a software update issued by US cybersecurity firm CrowdStrike for Windows systems, which ended up malfunctioning and caused system downtimes. The issue was specific to Falcon, one of the company's main software products, which is deeply embedded with the Windows operating system. Major corporations across the world use software developed by CrowdStrike, which is why all their systems faced the outage at the same time.

#### What is Falcon?

In cybersecurity parlance, Falcon is described as "endpoint detection and response" (EDR) software. It is a complex software, but its basic job is to monitor activity on computers on which it is installed, and constantly scan them for any potential threats such as malware. All major businesses around the world, including several Fortune 500 companies, are understood to use the service.

To carry out its job, Falcon first gets access to deep details of a system. This includes, among other things, the communications that computers are sending over the internet, what programs they are running, and the files that are being opened.

In that sense, Falcon is a 'privileged software' given its deep rooted integration at the operating system level. Since a number of businesses use systems which run on Windows, Falcon is deeply embedded within those systems — this was the major reason why a faulty code in the Falcon update primarily impacted Windows PCs.

#### Which sectors in India were the most impacted by the outage?

In India, the impact of the outage was most pronounced in the aviation sector. Hundreds of flights were delayed, and several cancelled, as airline operators found their systems inoperational, forcing them to switch to manual processes.

The Ministry of Civil Aviation, in collaboration with the Airports Authority of India, implemented manual backup systems to maintain operational continuity. Extra staff was deployed to assist passengers, and address their concerns.

The aviation sector saw major disruptions worldwide. Major US carriers like Delta, United, and American Airlines had flights grounded by authorities. Airlines in Europe and the Asia-Pacific also reported disruptions.

In India, at least ten banks and NBFCs faced minor disruptions, which have either been resolved or are being resolved, the Reserve Bank of India said. It added that overall, the financial sector in India remained insulated from the global outage since critical systems of most banks were not in the cloud, and only a few banks are using the CrowdStrike tool.

A number of Windows PC-users were also greeted with the infamous 'blue screen of death', where their systems simply did not start up beyond a blue screen displaying an error message. According to Microsoft, a Windows device displays blue screen errors if the operating system has encountered a serious problem that has forced it to shut down or restart unexpectedly.

Relevance: GS Prelims; Science & Technology

Source: Indian Express

#### 12. What is a PC emulator, and why did Apple allow it on the App Store?

#### Why In News?

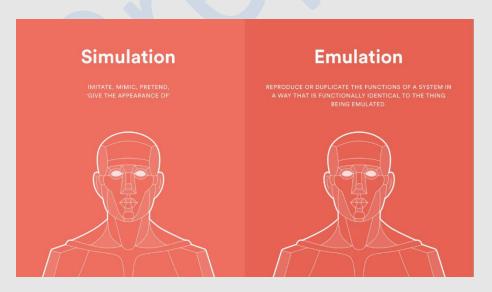
Apple approved a PC emulator for iOS for the first time this week. The move will allow users to run classic software, mostly games.

#### What is an emulator in PC?

An emulator, as the name suggests, is a software that allows a computer device to emulate another software. The difference in how a device operates allows it to run and use software designed for other, previously, incompatible devices.

For example, software designed for a Windows PC will have to be redesigned to run on macOS. This redesign will have to be done by developers, who may choose to not include all the functionalities available on Windows to Mac users.

An emulator can be used in this scenario to run software designed for Windows on macOS by emulating the design architecture of Windows. Emulators are commonly used to run applications designed for different operating systems, play video games from older consoles, and test software across different platforms.



#### Are PC emulators legal?

Using an emulator is considered legal if users own the software they are running on the emulator. However, if they use the emulator to run pirated copies of a software or use the emulator to distribute or download Read-only memory (ROM) of software they do not own, it is considered illegal.

#### Are emulators risky?

Unlike proprietary software, which receives timely updates to ensure smooth and secure functions, using an emulator can be a risky proposition. Especially, if the emulator is downloaded from unofficial sources. These can contain malware that can compromise the security of a system.

Additionally, depending on the software users choose to emulate, they may inadvertently end up violating licensing agreements or copyright laws. This can result in refusal by the Original Equipment Manufacturer (OEM) to provide maintenance, or technical support and even lead to users being penalised for using proprietary ROMs.

Emulators can also impact the performance of a device. They are resource-intensive and may lead to decreased CPU performance, overheating, and potential damage to the battery. Additionally, poorly designed and untested emulators may lead to data corruption, especially if the emulator crashes or if there are combability issues with the ROMs or software being used.

#### Are emulators banned?

Due to their ability to help developers use different operating ecosystems for testing purposes without having to switch hardware or the underlying software, emulators are not typically banned in any country. However, the legal status of emulators depends on specific laws in each country, and on how they are used in that jurisdiction.

#### Are emulators legal in India?

In India, the laws do not specifically ban the use of emulators. However, their use is subject to copyright and intellectual property laws.

While it is legal to use and distribute emulators in India, users may land in trouble if they use emulators to run software such as games, operating systems, or applications without the proper licences or ownership. Distributing ROMs without proper ownership can be problematic.

Additionally, the concept of fair use applies if users own an original copy of the software and are using the emulator as a backup.

Relevance: GS Prelims; Science & Technology

Source: Indian Express

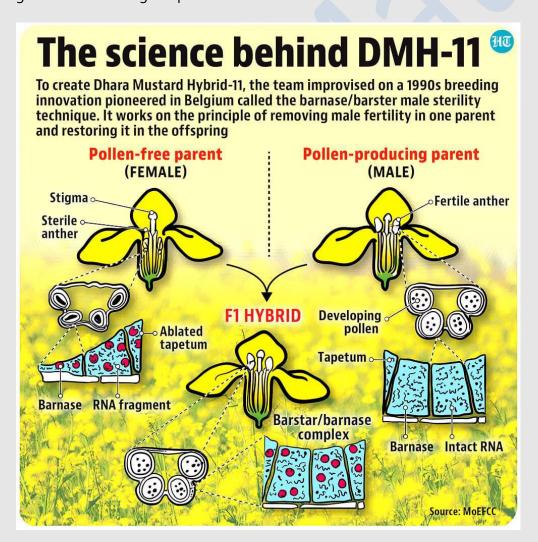
#### 13. Why SC couldn't agree on environmental release of GM mustard

#### Why in News?

A two-judge Bench of the Supreme Court on Tuesday delivered a split verdict on whether to allow the "environmental release" of Genetically Modified (GM) mustard.

Justices B V Nagarathna and Sanjay Karol disagreed on whether the approval given by the Genetic Engineering Appraisal Committee (GEAC) to proceed with field trials following the environmental release was done properly. GEAC is the body that is responsible for approving proposals relating to genetically engineered organisms. This was the GEAC's second major push to introduce GM mustard as the first GM crop that is meant for human consumption. Bacillus thuringiensis cotton (or Bt cotton) is the only GM crop that has been approved for cultivation in India so far.

When a split decision is delivered, the case is referred to the Chief Justice of India for placing before a larger Bench. However, both judges directed the Union of India "to evolve a National Policy with regard to GM crops", and to consult experts, farmer representatives, and state governments during the process.



#### Story of GM mustard

On September 15, 2015, the Centre for Genetic Manipulation of Crop Plants (CGMCP) at the Delhi University sought the GEAC's approval for the environmental release of a genetically engineered hybrid mustard called DMH-11 (commonly known as GM mustard).

Mustard flowers contain both female (pistil) and male (stamen) reproductive organs, which makes the plant largely self-pollinating. The GM mustard developed by the DU scientists contains two alien genes — the first, 'barnase', gene interferes with pollen production and renders the plant male-sterile, and the resulting plant is crossed with fertile mustard flowers containing the second, 'barstar', gene which blocks the action of the barnase gene. The resulting plants are meant to be high-yield variants of mustard.

Along with the proposal, the CGMCP submitted a biosafety dossier, and the GEAC created a sub-committee to examine its contents. Following some revisions, the sub-committee considered the dossier and submitted its report. In September 2016, the report was published and comments were invited.

On May 11, 2017, the GEAC recommended the environmental release of GM mustard. If approved, this would allow field tests to be conducted to examine the effects of cultivating the crop.

However, after receiving several representations, the Ministry of Environment sent the proposal back to the GEAC for re-examination in March 2018. The GEAC then directed the CGMCP to examine the effect of GM mustard on honey bees and soil microbial diversity. But these tests were deferred through 2020-21.

In May 2022, gene scientist Prof Deepak Pental on behalf of the CGMCP wrote to the Minister for Environment urging him to accept the recommendation for the environmental release of GM mustard. The GEAC sought comments from various government departments, which recommended releasing GM mustard. The proposal was submitted on October 18, 2022. It was accepted by the Centre on October 25, and recommendations and conditions regarding the field tests were sent to Prof Pental.

#### Case before the SC

Environmentalist Aruna Rodrigues and the research and advocacy organisation Gene Campaign challenged the decision to approve the environmental release of GM mustard before the Supreme Court.

In their split decision, the judges disagreed on two key aspects: first, whether the GEAC's decision-making process was legal and, second, whether it violated the "precautionary principle" for scientific innovations. The precautionary principle, a standard test in environmental litigation, is recognised as a facet of the right to a clean environment, a subset of Article 21 (fundamental right to life).

JUSTICE NAGARATHNA said that the field tests that the GEAC committed to conducting with the CGMCP did not take place. Instead, the GEAC did a "volte-face" after Prof Pental sent the

letter to the Centre in May 2022, and recommended the environmental release of GM mustard regardless. This shift in stance without providing any reasons, shows there was no "application of mind" by the GEAC, which is in "gross violation of the principle of public trust", Justice Nagarathna ruled.

She also said that the GEAC did not sanction any studies on the long-term effects that GM mustard could have on future generations. The process adopted by the GEAC "has failed to take into consideration the precautionary principles while approving the environmental release of the transgenic mustard", violating both the precautionary principle and the right to a safe and healthy environment, she said.

JUSTICE KAROL held that environmental release and the following tests and trials were in line with "the development of a scientific temper" and abided by the precautionary principle. "Without field trials, the performance of the plant in the field or environmental safety of such plant cannot be known. Studies, being conducted in open environment is necessary for studying the impact on human health and biodiversity, for the performance of a GM crop is dependent on a host environment," he said.

Justice Karol held that the GEAC's process was "independent" and "reasoned". He observed that the GEAC-appointed expert committee had found that honeybees do not discriminate between other GM crops such as genetically engineered canola. He noted that the Department of Biotechnology and the Department of Agricultural Research and Education had both recommended the environmental release of GM mustard.

Relevance: GS Prelims & Mains Paper IIII; Science % Technology

Source: Indian Express

#### 14. What to know about the Listeria outbreaks in the US and Canada

#### Why in News?

Two separate outbreaks of listeria, a bacteria which can contaminate food, have been reported in the United States and Canada in recent weeks. The US government's Centers for Disease Control and Prevention (CDC) reported an outbreak across 12 states, attributing it to the consumption of undercooked meats sliced at deli counters (counters in a supermarket which serve different types of cheese, cold cooked meat, prepared salads, etc). Two deaths have been reported, while 28 people have been hospitalised.

The Canadian government's public health notice recently said 12 cases had been reported and two of them resulted in deaths. Here is what to know.

#### What is listeria and listeriosis?

Listeria or Listeria monocytogenes is a type of bacteria found in soil, vegetation, water, sewage and even the faeces of animals and humans. Listeria-contaminated food can lead to an infection called listeriosis.



# What are the symptoms of listeriosis?

Most people who ingest listeria-infected food do not fall sick or develop symptoms. The bacteria can be present in the infected person's system for up to two months until the symptoms present themselves, making it difficult to establish the connection between what was consumed and the infection.

Symptoms include vomiting, nausea, cramps,

severe headache, constipation and fever.

## Who is vulnerable to listeriosis?

People with compromised immune systems, pregnant persons and their offspring and the elderly (aged 65 and above) are vulnerable. The US outbreak has a median age of 75. Listeria can result in hospitalisation and even death for the immunocompromised and the elderly.

According to the CDC, pregnant women are 10 times more likely to develop a listeria infection and risk pregnancy loss, premature birth or even life-threatening infection in the newborn.

Some foods are more likely to have listeria than others, including milk, raw sprouts, deli meats and hot dogs, soft cheeses and smoked seafood.

#### What is the treatment for listeriosis?

Treatment depends on the extent of the infection. In many cases, intestinal listeriosis manifests within a day or two of consuming the contaminated food item and may lead to diarrhoea and vomiting. The treatment is similar to one for a routine stomach infection and could require antibiotics.

If the infection spreads beyond the intestines, it leads to invasive listeriosis. Severe symptoms present themselves two weeks after the food has been consumed.

#### Has any advisory been issued?

The CDC has advised the public, especially high-risk groups, to avoid unheated deli meats, cheeses and salads and opt for packaged items instead. Deli equipment, surfaces and food can be easily contaminated, while refrigeration of deli items does not kill the bacteria. All deli meats are recommended to be heated to an internal temperature of 165 degrees F before consumption to kill Listeria, if present.

Refrigerators, containers and surfaces that have come into contact with deli meats are advised to be thoroughly sanitised. Finally, all patients displaying symptoms, especially those in the high-risk groups, are advised to seek medical attention immediately.

Relevance: GS Prelims; Science & Technology

# Source: Indian Express

# 15. Government slashes prices for targeted cancer drugs

#### Introduction

In her Budget 2024-25 speech, Finance Minister Nirmala Sitharaman announced customs duty exemptions on three targeted cancer drugs — trastuzumab deruxtecan, osimertinib, and durvalumab. Before the Budget announcement, the customs duty on these drugs stood at around 10%.

The decision is likely to make these drugs more accessible to Indian patients, and reduce the overall cost of cancer therapies.



# First, what are targeted cancer drugs?

Targeted cancer drugs are designed to attack only the cancer cells, leaving the normal cells unaffected. They target specific genetic changes in cancer cells that help them grow, divide, and spread.

These drugs have better outcomes and fewer side effects compared to traditional chemotherapy drugs that indiscriminately target all cells.

Newer targeted cancer therapies such as immunotherapy do not target the cancer itself by using any drug. Instead, they train the patient's immune system to find and attack the cancer cells.

# How do these three drugs work?

**Trastuzumab deruxtecan** is an antibody-drug conjugate — a substance made up of a monoclonal antibody (a laboratory-made protein that acts like human antibodies) chemically linked to a drug. It is used to treat any cancer with HER-2 receptor (a protein that appears on the surface of some breast cancer cells) that has metastasised or cannot be operated on.

Developed by Daiichi Sankyo and marketed by Astrazeneca as Enhertu, trastuzumab deruxtecan is a second-line treatment, which is used when traditional therapies have failed. In 2019, the drug was approved for the treatment of breast cancers, and, in 2021, for targeting certain types of gastrointestinal cancers.

Earlier this year, it became the first drug in its class to receive "tissue-agnostic approval" from the US Food and Drug Administration (FDA) — meaning it can be used to treat any cancer with HER-2 receptor regardless of where it originates.

Cost: The drug costs around Rs 1.6 lakh per vial.

**Osimertinib** is the most commonly used of the three cancer drugs in India. Marketed as Tagrisso by AstraZeneca, the drug is used to treat lung cancers that have epidermal growth factor receptors (EGFR) — they are thought to be involved in the development of cancer. Osimertinib blocks these receptors on cancer cells, and stops the cancer from growing.

The drug can be prescribed after the tumour has been removed surgically, or even as a first-line treatment when the cancer has metastasised. The drug can be consumed till it fails and the cancer starts to progress again, or till there is a case of severe toxicity.

According to expert "Osimertinib has survival benefits over other available treatments as it can extend the life of cancer patients by four to five years".

Cost: The drug, however, is quite expensive — it costs 1.5 lakh per strip of ten pills, and has to be taken every day.

**Durvalumab** — an immunotherapy treatment — is used for the treatment of certain lung cancers, biliary tract cancers, bladder cancer, and liver cancer. It attaches itself to PD-L1 proteins — they are present on the surface of cancer cells, and help them escape immune detection — and allows the body's immune system to recognise cancer cells and kill them. Studies have shown that patients on the drug remained in remission and live longer.

Cost: Sold as Imfinzi, durvalumab costs around Rs 1.5 lakh for every 10ml vial.

## What will be the impact of the customs duty exemptions?

The customs duty exemptions on these drugs is widely expected to help reduce the financial burden on cancer patients and their families.

#### What is the cancer profile in India?

The number of cancer cases is rising in India. An estimated 14.6 lakh new cancer cases were detected in 2022, up from 14.2 lakh in 2021, and 13.9 lakh in 2020, according to the National Cancer Registry data. The number of deaths due to cancer increased to an estimated 8.08 lakh in 2022, up from 7.9 lakh in 2021, and 7.7 lakh in 2020.

The incidence of cancer is higher among women — 103.6 per 100,000 population in 2020 — compared to 94.1 among men. Among men, the most common cancers were of the lung, mouth, prostate, tongue, and stomach; for women, they were breast, cervix, ovary, uterus, and lung.

The therapies that will become cheaper are useful for the treatment of lung and breast cancers, which are among the most common cancers in men and women, respectively.

One in nine Indians will develop cancer during their lifetime, according to an Indian Council of Medical Research (ICMR) study, which used data from population-based cancer registries. One in 68 men will develop lung cancer, and one in 29 women will develop breast cancer, the study said.

Relevance: GS Prelims & Mains Paper III; Science & Technology

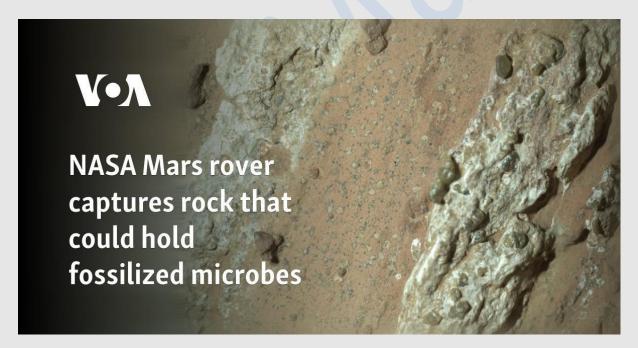
Source: Indian Express

# 16. NASA did not say it found life on Mars but is very excited about the discovery of a rock.

Scientists working with NASA's Perseverance rover state emphatically that they are not claiming to have discovered life on Mars.

But many would regard a rock that the rover just finished studying as "Most Likely to Contain Fossilized Microbial Martians." The rover has drilled and stashed a piece of the rock, which scientists hope can be brought back to Earth in the coming years for closer analysis and more definitive answers.

"What we are saying is that we have a potential biosignature on Mars," said a scientist. She describes a biosignature as a structure, composition or texture in a rock that could have a biological origin.



#### What the Perseverance rover found

The rock, which scientists named Cheyava Falls, possesses features that are reminiscent of what microbes might have left behind when this area was warm and wet several billion years ago, part of an ancient river delta. The scientists clarified that they did not spot anything that they thought might be actual fossilized organisms.

Scientists have wondered if life could have arisen on early Mars when it possessed a dense atmosphere and flowing water. Martian rocks could hold important clues.

Within the rock, Perseverance's instruments detected organic compounds, which would provide the building blocks for life as we know it. The rover also found veins of calcium sulfate — mineral deposits that appear to have been deposited by flowing water. Liquid water is another key ingredient for life.

Relevance: GS Prelims; Science & Technology

Source: Indian Express



# **Internal Security and Disaster Management**

# 1. How urban expansion makes Delhi susceptible to flooding

#### Why in News?

Unchecked and ill-thought-out urban expansion is the principal reason behind chronic urban flooding in Delhi, and the larger National Capital Region (NCR).

# Low-lying areas around the Yamuna are flood prone



Areas on both sides of the Yamuna River are prone to flooding during the monsoon season.



Water-logging under the Minto Bridge in New Delhi on June 28. Pracen Khanna

#### MANY CITIES, SAME PROBLEM

#### BENGALURU

13 cm of rainfall in Bengaluru's Rainbow Drive Layout in 2022; one of the worst floods in 15 years

"We must notoverlook the critical role of the storm water drain network in replenishing the se (Bengaluru's lakes) water bodies. It is a network which is crucial to the health of the city and its lakes."

## NARESH V NARASIMHAN,

ARCHITECT, URBAN PLANNER

#### MUMBAI

94.4 cm rain on July 26, 2005; wettest 24 hours ever; city stopped entirely; more than 1,000 dead

"We need to make an assessment of our storm water drains and see if they are capable of handling excessive rain... We need to then improve early warning systems... An evacuation strategy is important."

SUBIMA LIGHOSH, HEADOF CLIMATE STUDIES, IT BOMBAY

#### KOCHI & OTHER KERALA CITIES

Worst ever floods in mid-Aug 2018; 4 districts of Kerala submerged; Kochi inundated for days

"We need stronglegal systems in place to ensure future structures follow the lay of the land, allow water to percolate, and don't narrow down streams."

MANOJ KINI, MD. KERALA TOURISMINFRASTRUCTURE LTD.

# SHIMLA & OTHER HILL TOWNS

Catastrophic rainfall in July-Aug 2023 wreaked havoc in Mandi, Kuliu, Manali, Shimla

"There should be new paradigms of the architecture of governance. Communities should be made custodians and some kind of insurance model should be developed."

#### TIKENDER PANWAR, URBANSPECIALIST

(The experts spoke to The Indian Expressin 2023)

Last week, a spell of heavy rain brought parts of Delhi to a standstill. Streets across the city and in the larger NCR were inundated, leading to hours-long traffic snarls in some places. Water-logging also led to lengthy power cuts, property damage, and loss of life, with at least 11 people dying due to structural collapses and electrocution.

While the rainfall last week was unprecedented — the India Meteorological Department (IMD) recorded 228.1 mm rainfall in its Safdarjung station over a 24-hour period from June 27-28, an 88-year high — flooding and water-logging have now become a part and parcel of Delhi's

monsoons. Factors such as inadequate desilting of drains by civic authorities also play a part, but at the heart of it, Delhi is ailed by a more fundamental problem.

# A rapidly growing city

Delhi is undergoing one of the world's fastest urban expansions. According to data from NASA's Earth Observatory, the geographic size of Delhi almost doubled from 1991 to 2011. Most of this expansion has occurred on the peripheries of New Delhi, with erstwhile rural areas becoming engulfed in the capital's urban sprawl. Cities outside Delhi, but a part of the NCR — Bahadurgarh, Ghaziabad, Faridabad, Noida, and Gurugram — have also witnessed rapid urbanisation.

According to the United Nations' The World's Cities in 2018 data booklet, Delhi will overtake Tokyo as the world's most populous city by 2030, with an estimated population of nearly 39 million, roughly two and a half times its population in 2000.

## **Topography and drainage**

This urban expansion, however, has paid little heed to Delhi's natural topography. Topography determines drainage patterns. If one looks at Delhi's historic cities — from Tughlakabad, Mehrauli, and Shahjahanabad to Civil Lines, New Delhi, and the Cantonment area — all were carefully selected, and built on higher ground. In Delhi's villages too, the centre of the village would always be five to six metres higher than the village periphery.

This allowed rainwater to drain out. But as the city has expanded, not enough thought has gone behind building with regards to the land's drainage capacities.

Thus, with high-intensity rain there is significant run-off (unconfined flow of water, which occurs when there is more water on the land's surface than it can absorb), and existing drainage systems have been inadequate.

Relevance: GS Prelims & Mains Paper III; Disaster Management

Source: Indian Express

# 2. Roads in Ayodhya and Ahmedabad cave-in: What causes road cave-ins — and how can they be avoided

#### Why in News?

Heavy rainfall has led to incidents of road cave-ins in several cities in the last few days. For instance, last week, the newly built Ram Path in Ayodhya suffered road cave-ins at multiple spots. Similarly, a road in Ahmedabad caved in, leaving a huge sinkhole.

#### What causes road cave-ins?

The cave-ins or cavities that look like holes in the ground are a product of the incessant rain. Continuous rain leads to overflowing of drains, which can cause leaks in the pipeline. When a pipeline leaks and water from the pipeline flows into the layers of earth around it, the earth starts to erode and with time, it gets washed away with the water in the pipeline.



Eventually, the portion of the road over it collapses because of the erosion. How long this takes, would depend on the size of the pipelines and the leak.

# How do you fix the road after a cave-in?

Once such an incident takes place, authorities concerned stop the flow of the water through the pipelines, which can take some time. They then try to

find the leakage in the pipelines. As soon as the location of the leak is established, work on the pipeline starts.

After the work is complete, authorities then fill the cavity with the required material. In smaller cavities, they use gravel while larger ones are filled with sand since it can be compacted easily.

#### How can such cave-ins be avoided?

To avoid such cavities, the integrity of the pipelines would have to be checked. Engineers suggest that one of the ways that such cave-ins can be avoided includes creating a system wherein the leakage can be plugged earlier on. Installing a system that checks the flow at the start point and one at the endpoint, would be able to help authorities know that there is a leak. If the leakage is plugged early, the cave-in can be avoided.

Relevance: GS Prelims & Mains Paper III; Disaster Management

Source: Indian Express

## 3. Hathras stampede kills 121: Why stampedes take place

# Why in News?

121 people, almost all women, were killed on July 2 in a stampede during a religious gathering in Uttar Pradesh's Hathras district.

This is not the first time when a large number of people have lost their lives in a stampede at a religious gathering. According to collated data, 79% of all stampedes in India from 1954-2012 took place in religious mass gatherings.



# First, what is a stampede?

Stampede is defined as "an impulsive mass movement of a crowd that often results in injuries and deaths"

It can also be described as the "disruption of the orderly movement of crowds... leading to injuries and fatalities", often "in response to a perceived danger, loss of physical space", or "a will to attain something seen as gratifying".

# Why do stampedes kill?

Most stampede casualties are caused by traumatic asphyxia — there is partial or complete cessation of respiration due to external compression of the thorax and/or upper abdomen.

Notably, significant compression forces, enough to hurt and kill humans, have been reported in even moderate crowds of six to seven people pushing in one direction.

Other possible reasons for stampede-related deaths include myocardial infarction (heart attack, caused by decreased or complete cessation of blood flow to a portion of the heart), direct crushing injury to internal organs, head injuries, and neck compression.

# How does human psychology lead to stampedes?

Stampedes almost always take place during mass gatherings — either spontaneous gatherings, like in a metro station during the rush hour, or planned ones, like the Hathras satsang.

Almost all stampedes are either triggered or made worse by panic. In panic-producing situations cooperative behavior is needed for success and is rewarding to individuals as long as everybody cooperates. However, once the cooperative pattern of behavior is disturbed, cooperation ceases to be rewarding to the individuals.

Taking the example of a fire emergency in a movie theatre, while it pays to cooperate and not push each other, if a few uncooperative individuals block the exits by pushing, "any individual who does not push can expect that he will be burned". Thus pushing becomes an advantageous (rather least disadvantageous) form of behaviour for individuals, but at the level of the group, it can lead to disastrous circumstances.

#### **Psychology behind Hathras Stampede**

Some stampedes may also be triggered by what sociologist Neil J Smelser refers to as "craze". In Theory of Collective Behavior (1962), he defined the term as "[the] mobilisation for action based on a positive wish-fulfillment belief". This belief can be rational or irrational. But in large group settings, it percolates to every member and can make them act in detriment to their own individual interests.

Take for example what happened in Hathras. Uttar Pradesh Chief Secretary Manoj Kumar Singh, after visiting the site of the tragedy, said: "I am told that people rushed to touch his [the preacher's] feet and tried to collect soil [from where he walked], and a stampede took place".

#### How does the physical organisation of spaces contribute to stampedes?

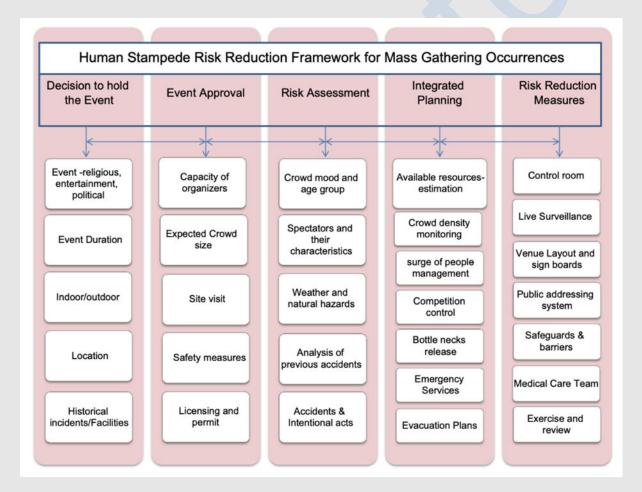
Psychology of mass behaviour, however, is not the only factor behind stampedes. Many stampedes can be prevented simply through better design of spaces where mass gatherings take place (or are likely to take place spontaneously). This in turn may even prevent panic from setting in.

Crowd density (number of people per unit of area) should play a crucial role in determining how spaces for mass gatherings should be decided.

#### How to better prevent stampedes, or at least, mitigate their risks?

In an ideal scenario, planners must not allow more than a number of people to enter a contained space. But this is not always possible. In such situations, the number and placement of exits becomes crucial, as does event organisers' vigilance, monitoring, and real-time preventive interventions.

Illyas and others wrote: "Planning for mass gatherings is an inter-agency, multi-disciplinary approach which relies on the identification of potential hazards to the design and execution of appropriate mitigation measures". They developed the following stampede risk-reduction framework.



Among other things, the researchers emphasised on live surveillance of the crowd to "enable the organisers to monitor the pressure buildup, increase in crowd density, bottlenecks, and to identify the source of crowd disturbance". This, they argue, can help organisers manage crowds.

Also crucial is communication, between organisers who are often from different bodies, organisations (temple authorities, local administration officials, and the police), as well as between organisers and the crowd. Organisers for a situation where a warning has to be issued, and know "who will be responsible for issuing the warning and how the crowd will be informed".

# What are some notable deadly stampedes which took place in India? Why did they occur?

**Allahabad, India (1954):** Probably the most fatal Kumbh Mela stampede in history. The first post-Independence Kumbh was plagued by a lack of crowd control mechanisms, poor planning, and excessive presence of VIPs. What triggered the tragedy was a crowd surge that broke through the barriers, separating them from a procession of sadhus. Around 800 died. Lessons from the 1954 tragedy continue to be foundational for the management of the Kumbh Mela, the largest religious gathering in the world.

**Wai, India (2005):** The annual pilgrimage at the Mandhardevi temple in Maharashtra's Satara district turned tragic when more than 340 people were trampled to death, and hundreds injured. The stampede occurred when some people fell down the steps made slippery by devotees breaking coconuts.

Relevance: GS Prelims & Mains Paper III; Disaster Management

Source: Indian Express

4. Why is militancy on the rise in Jammu? Are acts of terrorism in Jammu & Kashmir shifting to the Rajouri-Poonch-Kathua sector after being quiet for two decades?

#### Why in News?

On July 8, five Army soldiers were killed and five injured as two Army vehicles were ambushed by militants on a hilly tract in the Kathua district of Jammu and Kashmir. This was not an isolated incident. From June 9, five terror strikes have occurred in the Jammu division of the Union Territory, in which eight security personnel and 10 civilians have been killed.

## Is a new pattern emerging?

The attacks follow a pattern which suggest concerted attempts to revive militancy in the Jammu region since the past three years — in the Chenab Valley comprising Doda, Kishtwar, Ramban, Kathua, Udhampur and Reasi districts and south of the Pir Panjal comprising Rajouri and Poonch districts. While terror incidents have been common in the Kashmir Valley, the resurgence of militant activity in the Jammu belt, that has remained free of such incidents in the past two decades, has sent alarm bells ringing among the security establishment. This region was a hotbed of militancy in the late 1990s and the early 2000s.

#### What does the data show?

Since 2021, the Jammu region has witnessed 31 terror incidents in which 47 security forces and 19 civilians have been killed other than 48 terrorists who were killed in various encounters.

The Kashmir Valley, meanwhile, reported 263 terror incidents in which 68 security forces and 75 civilians were killed. As many as 417 alleged terrorists have also been killed in the Valley since 2021. A plain reading of numbers shows that incidents in Jammu remain far fewer than the Valley, yet it is the frequency and the nature of attacks, targeting pilgrims and security forces that is worrying.



# What could be the possible reasons?

After the 2020 Galwan clashes in eastern Ladakh, in which 20 soldiers were killed, a large contingent of the Army was pulled out of Jammu and deployed along the China border. This led to the thinning of the security grid, making the area vulnerable, pointed out security experts.

As there is a heightened state of alert in the Kashmir Valley and little leg room for statesponsored terrorists, it is convenient to launch terror attacks in Jammu where the guard is relatively down.

#### Is infiltration the cause?

According to various estimates, there are around 20-25 hardened militants who are likely to have infiltrated from Pakistan. The 192-km international border (IB) along Jammu is secured by the Border Security Force (BSF) while the 740-km Line of Control (LoC), the effective border in the Kashmir Valley and parts of Jammu, is under the operational control of the Army. Officials said though measures are in place, tough terrain and forested areas along the LoC and vulnerable patches along the IB may have been used for fresh infiltration.

Relevance: GS Prelims & Mains Paper III; Internal Security

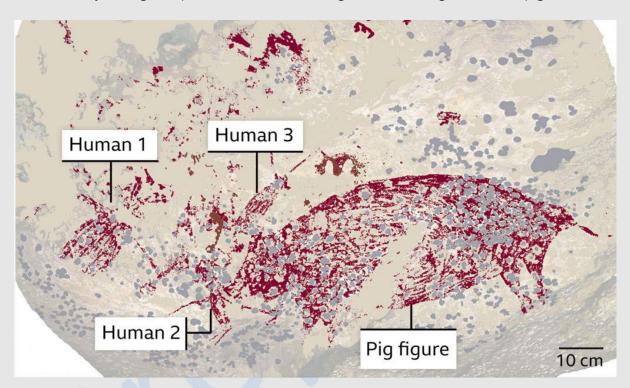
Source: The Hindu

#### Miscellaneous

# 1. World's oldest cave painting in Indonesia shows a pig and people

# **Discovery of Ancient Cave Painting**

On the ceiling of a limestone cave on the Indonesian island of Sulawesi, scientists have discovered the world's oldest-known confidently dated cave painting. This artwork, created at least 51,200 years ago, depicts three human-like figures interacting with a wild pig.



## **Dating the Painting**

Researchers used a new scientific approach to determine the minimum age of the painting inside the Leang Karampuang cave. They utilized a laser to date a type of crystal called calcium carbonate that naturally formed on top of the painting. Maxime Aubert, an archaeological science specialist at Griffith University in Australia, highlighted that this method is a significant improvement over previous methods and could revolutionize rock art dating worldwide.

#### **Description of the Artwork**

The painting features a pig measuring 36 inches by 15 inches (92 cm by 38 cm) standing upright, along with three smaller human-like figures, all painted in dark red pigment. The researchers interpreted the scene as a narrative, suggesting it is the oldest-known evidence of storytelling in art.

#### **Reassessment of Other Paintings**

Using the same dating method, researchers reassessed the age of another Sulawesi cave painting from Leang Bulu' Sipong 4. This painting, depicting part-human, part-animal figures hunting pigs and dwarf buffalo, turned out to be at least 48,000 years old, 4,000 years older than previously thought.

#### **Origins of the Painters**

Little is known about the people who created the Sulawesi cave paintings. Some archaeologists have suggested that these paintings could be older than the determined minimum age, possibly dating back to the first Homo sapiens wave that migrated through the region and eventually reached Australia about 65,000 years ago.

Relevance: GS Prelims; Miscellaneous

Source: The Hindu

# 2. Puja Khedkar controversy: What are the rules governing civil servants

# Why in News?

The Centre recently constituted a single-member committee under the Department of Personnel and Training (DoPT) to examine all documents submitted by probationary IAS officer Puja Khedkar to secure her candidature in the civil services.



Khedkar secured a rank of 821 in the 2022 UPSC Civil Services Examination, and was allotted the Indian Administrative Service (IAS) under the Other Backward Classes (OBC) and Physically Handicapped (PH) quotas. Questions have been raised about her appointment under these categories.

Khedkar also faces multiple allegations of misconduct, from seeking special privileges she is not entitled to as a probationer and "occupying" the ante chamber of the District Collector's office, to using an unauthorised red-blue beacon on her private car, a luxury Audi sedan which she claims to have received as a "gift".

In light of this controversy, the Maharashtra government on July 8 decided to transfer Khedkar from Pune to Washim.

#### **Applicable Rules**

Khedkar's actions as a civil servant are governed primarily by two rules: the All India Services (Conduct) Rules, 1968, and the Indian Administrative Service (Probation) Rules, 1954. What do these rules say?

# Rules on 'integrity' of services

All IAS, Indian Police Service (IPS) and Indian Forest Service officers are governed by the AIS (Conduct) Rules from the time they are allotted their service, and begin training.

AIS (Conduct) Rule 3(1) states: "Every member of the Service shall at all times maintain absolute integrity and devotion to duty and shall do nothing which is unbecoming of a member of the Service."

Rule 4(1) is more specific about what is "unbecoming". It states that officers must not use their "position or influence" to "secure employment for any member of his family with any private undertaking or NGO".

In 2014, the government added a few sub-rules. This included that officers should maintain "high ethical standards, integrity and honesty; political neutrality; accountability and transparency; responsiveness to the public, particularly to the weaker sections; courtesy and good behaviour with the public".

Also added were specific directions as to how officers must make decisions. They must do so "solely in public interest... declare any private interests relating to his public duties... not place himself under any financial or other obligations to any individual or organisation which may influence him... not misuse his position as civil servant and not take decisions in order to derive financial or material benefits for himself, his family or his friends...".

According to Rule 11(1), officers may accept gifts from "near relatives" or "personal friends" with whom they have "no official dealings", on occasions such as "weddings, anniversaries, funerals and religious functions". However, they must report (to the government) any gift whose value exceeds Rs 25,000. This threshold was last updated in 2015.

#### **Rules for probationers**

There is an additional set of rules that govern the conduct of officers during their probation period, which lasts for at least two years after selection to the services. This includes the period of the officers' training at the Lal Bahadur Shastri National Academy of Administration (LBSNAA) in Mussoorie. At the end of two years, officers sit for an examination, after clearing which they are confirmed in their respective services.

During the probation period, officers draw a fixed salary and travel allowance. But they are not entitled to, as a right, a number of benefits that confirmed IAS officers receive. These include, among other things, an official car with a VIP number plate, official accommodation, an official chamber with adequate staff, a constable, etc.

Rule 12 gives the circumstances in which probationers can be discharged. These include, among other things, the central government finding the probationer "ineligible for recruitment" or "unsuitable to be a member of" the service; the probationar "wilfully"

neglecting her probationary studies or duties; and the probationer lacking in "qualities of mind and character" needed for the service.

The Centre holds a summary enquiry before passing an order under these rules — like the one that has been initiated against Khedkar by the DoPT. The committee will submit its report within two weeks.

# **Furnishing false information**

Since the batch of 1995, 27% seats in the services have been reserved for the OBC category. The PH reservation was introduced with the batch of 2006 — 3% seats in every category (General, OBC, SC, and ST) are reserved for the differently abled.

Despite her low rank, Khedkar was allotted IAS, India's premier civil service, due to these quotas. However, if her OBC and PH certificates are proven to have been falsified, Khedkar stands to be discharged from service. Probationers are "discharged", while confirmed officers are "dismissed".

A DoPT circular from 1993 states: "Wherever it is found that a Government servant...had furnished false information or produced a false certificate in order to secure appointment, he should not be retained in service...". This is applicable even if the person in question is not a probationer, and has already been confirmed.

However, such a dismissal would likely be challenged in court, before the Central Administrative Tribunal (CAT), and the National OBC Commission — challenges which may drag on for years. In the interim, the officer may still continue to be in service.

Khedkar was previously embroiled in a legal battle at the CAT regarding her PH status. As per a CAT order dated February 23, 2023, UPSC had asked Khedkar to undergo a medical examination at the AIIMS, New Delhi in April 2022 but she sought a postponement citing a Covid-19 infection.

She did not arrive at the rescheduled examination as well, although she is learnt to have later submitted an MRI report from a private facility to support her claims. "Despite making multiple attempts by the duty officer in AIIMS to contact the applicant, no response was received from her. Therefore the percentage of visual disability could not be assessed," the CAT order read.

Critics have pointed to Khedkar's ostensibly well-to-do background to question her OBC (non-creamy layer) status. The OBC category is subdivided into the creamy and non-creamy layers, with only the latter benefiting from reservations in government services and institutions. The idea is to specifically benefit those OBC members who come from economically, socially, and educationally less privileged backgrounds. This determination is made based on the parents' income, and occupational background.

For those whose parents work in the private sector, the current threshold to qualify for the non-creamy layer status is an income of under Rs 8 lakh annually. For those with parents who

work in the public sector, income is not taken into account. Rather, as per DoPT rules, what qualifies people to be in the creamy layer is either parent becoming a Group-A official before the age of 40, or both being Group-B officials with similar ranks.

Puja Khedkar's father, Dilip, is a retired Maharashtra Pollution Control Board officer, who is now in politics.

Relevance: GS Prelims & Mains Paper IV; Ethics

Source: Indian Express

# 3. What is the International Centre for Audit of Local Governance, which the CAG inaugurated in Gujarat?

#### Why in News?

According to the CAG's note, the International Centre for Audit of Local Governance (iCAL) will be a collaborative platform for policymakers, administrators and auditors linked with local governments.

Comptroller and Auditor General (CAG) of India Girish Chandra Murmu inaugurated the International Centre for Audit of Local Governance (iCAL) in Rajkot. The institute, a first in the country as per the CAG office, will function out of the office building of the Accountant General (account & entitlement and Audit-1) in Rajkot and aims to set global standards for auditing local governance bodies.

#### How will iCAL work?

According to the CAG's note, iCAL will be a collaborative platform for policymakers, administrators and auditors linked with local governments. It will enhance the local government auditors' independence to ensure improved financial performance assessment, service delivery, and data reporting. It will also serve as a centre of excellence for capacity building of local government auditors.



#### How are local bodies audited in India?

India has a three-tier governance structure comprising the Union or Central government, state governments, and local bodies at urban and rural levels. Panchayati Raj Institutes (PRIs) like village panchayats, taluka (block) panchayats and district panchayats have been set up for self-governance in rural areas, with Urban Local Bodies such as municipal corporations and municipalities in urban areas.

While keeping accounts is the responsibility of the concerned local body, many state governments have an

Examiner of Local Fund Accounts (ELFA) or Director of Local Fund Accounts (DLFA) for auditing

their accounts. In Gujarat, for instance, the ELFA is an autonomous office functioning under the aegis of the finance department.

ELFA audits the utilisation of funds granted by the state government to local bodies. Other institutions, such as universities, also audit their performance. The CAG, on the other hand, conducts audits of all funds (including the state and Central governments). It also exercises control and supervision over the proper maintenance of accounts and auditing for all three levels of PRIs/ULBs. Under its technical guidance and support initiative, CAG also advises and supports ELFA or DLFA and thereby supplements the latter's work.

# Why was a need felt for it?

Murmu said during his visit to Rajkot in January that there are around 2.5 lakh panchayats and 8,000 urban local bodies (ULBs) in India. He said 40 countries have their respective supreme audit institutions (SAIs) conducting audits of local bodies and there is a need to promote global good practices.

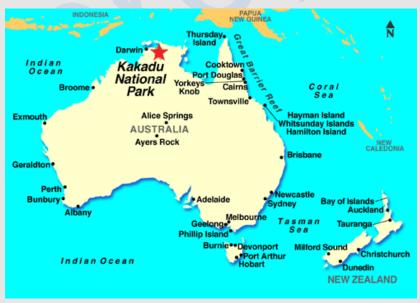
While the CAG said that a lot of funds are flowing to local bodies now and there is a need for proper auditing of these institutions, there have long been concerns about the lack of funding available to local bodies, and its utilisation.

Relevance: GS Prelims Source: Indian Express

# 4. Why Australia has banned mining in one of the world's largest uranium deposits

#### Introduction

Australia took steps recently to ban mining at an Indigenous site surrounded by Kakadu National Park, which is home to one of the world's largest deposits of high-grade uranium.



#### Rationale by PM

Prime Minister Anthony Albanese said the heritagelisted national park would be extended to include the Jabiluka site, which has long been in the sights of mining companies seeking exploit it against the wishes of its Indigenous custodians, the Mirarr people.

The prime minister said the planned extension of the

park was in line with the wishes of the Mirarr.

#### **View of Opposition**

The move comes after the opposition conservative Coalition recently unveiled plans to build nuclear power plants across the country if it wins the next election, overturning a 26-year nuclear ban.

Relevance: GS Prelims Source: Indian Express

# 5. India's underwhelming Olympic opening ceremony outfit: How was the outfit chosen?

#### Why in News?

The social media blitz over the uniform of the Indian contingent at the Olympics — with reactions ranging from its "tacky" and underwhelming look, to an "injustice" to Indian weaving traditions and motifs — focusses on the need for putting more thought and time into making sporting attire an extension of brand India. So how is the uniform for an Olympic contingent decided?

# Who decides on the design for a uniform?

This works as a partnership between the Indian Olympic Committee (IOC) and the designer/design house, who is contracted after a fair bid. The selection process factors in both the financial and creative aspects of the agency.

The aspirant agency should be qualified enough to create a visual motif that can strengthen brand India and at the same time have enough money and resources to execute it. That's why every design house and sportswear brand vies for this contract with their respective country Olympic committees around the world. This is the first time that the uniform for Team India was entrusted to a designer — Tarun Tahiliani via Tasva, the premium affordable menswear label launched by him and Aditya Birla Fashion and Retail Limited.

Many couture brands feature in the Paris Olympic 2024 list of uniform-makers, including Ralph Lauren for the United States, Berluti for France and Emporio Armani for Italy.



# Has a designer been given the contract for the Olympic team uniform before?

So far, the dress code has just been sari, salwar suits, suits, bandhgalas, turbans and blazers for athletes. The Government has so far used designers for uniforms of the national carrier, Air India, and khadi promotion.

What are considerations for clearing a design?

According to Tahiliani, "A designer has to follow a set of guidelines put out by the Indian Olympic Committee (IOC). The team has to factor in the colours of the tricolour as most countries follow their flag because that's all that is visible from afar. The current design was chosen by a vetting committee from multiple sketches and multiple options."

#### Why has Tahiliani come under criticism

That's because smaller nations like Mongolia and Sri Lanka have created more thoughtful and representative designs that many feel reflect their handcrafted traditions and culture better. Mongolia featured embroideries with birds for freedom, mountains as a nod to the nation's landscapes and hard work, gold and silver accents for a touch of elegance and the Mongolian national colours of blue, red and white. Sri Lanka's white garments use silk, handmade embroidery, and beadwork to represent the looks of the royal courts of the 19th century.

The criticism around Tahiliani was that he used cotton instead of silk, did not use weaves or embroideries and chose digital ikat prints instead, which some interpreted as an insult to our handloom and handcrafting traditions.

Of course, even designers like Ralph Lauren and Armani have been criticised for making bland designs compared to smaller nations who seem to have taken their jobs seriously.

#### What's Tahiliani's defence?

Responding to criticism why he didn't use cotton, Tahiliani said, "Paris can be boiling hot in July. That's why the athletes were in cotton and viscose crepe so that they could breathe easily. As for criticism that he could have used ikat weaves instead of digital prints, he said, "Yes, we used prints because we couldn't weave in three weeks, the timeline given to us. It's so ridiculous to expect that. Only the shoes were brocade from Banaras." Mongolian designers, in comparison, had three months to design for just 32 athletes.

Relevance: GS Prelims Source: Indian Express

# **Practice Questions**

- 1. Bhartiya Naya Sanhita punishes sexual intercourse through deceitful means by maximum imprisonment of
- (a) 5 years
- (b) 7 years
- (c) 10 years
- (d) 12 years
- 2. Project Nexus is for
- (a) Facilitating cross border digital payments
- (b) Enhancing tourism
- (c) Curbing cross border crime and drug supply
- (d) Promoting Joint Defence Projects
- 3. Section 420 of Indian Penal code dealt with Cheating. Which Section of Bhartiya Nyaya Sanhita deals with the same offence?
- (a) 420
- (b) 320
- (c) 119
- (d) 318
- 4. 'Nomadic Elephant', Joint Military Exercise is held between India and
- (a) China
- (b) Kazakhstan
- (c) Tajikistan
- (d) Mongolia
- 5. Which of the following countries is not a member of BRICS?
- (a) Egypt
- (b) UAE
- (c) Argentina
- (d) Saudi Arabia
- 6. Wild Polio virus cases have been found in recent years in
- (a) China
- (b) Pakistan
- (c) Sudan
- (d) Mali

- 7. Which of the following items in India's Balance of Payments always has positive balance?
- (a) Trade of Goods
- (b) Trade of Services
- (c) Current Account
- (d) Capital Account
- 8. Naegleria fowleri is also called
- (a) Brain Eating Amoeba
- (b) Environment Cleaning Amoeba
- (c) Digestion Facilitating Amoeba
- (d) Invasive Amoeba
- 9. The bilateral trade between India and Russia has drastically increased in 2023-24 due to
- (a) Exports of Software Services
- (b) Exports of Pharmaceuticals
- (c) Imports of Defence Purchases
- (d) Imports of Oil and Petroleum Products
- 10. Zero FIRs means the FIRs which can be filed in a police station
- (a) that has jurisdiction over crime spot
- (b) that has jurisdiction over the accused
- (c) that has jurisdiction over victim
- (d) that does not have jurisdiction over crime spot
- 11. Agreement on Biodiversity Beyond National Jurisdictions is an implementing agreement under
- (a) Convention on Biological Diversity
- (b) Paris Climate Change Agreement
- (c) UN Convention on Laws of the Seas
- (d) Kyoto protocol
- 12. The ambitious Upper Siang project to generate 11,000 MW hydropower is being constructed in which State?
- (a) Arunachal Pradesh
- (b) Assam
- (c) Sikkim
- (d) Nagaland
- 13. Austria shares border with which of the following countries?

(a) Switzerland (b) Poland (c) Ukraine (d) Romania 14. Which of the following countries is not a member of Eurasian Economic Union? (a) Russia (b) Belarus (c) Armenia (d) Romania 15. Semaglutide and Tirzepatide have been in news. These are (a) Most potent poisons (b) Drug salts to treat obesity (c) Biological weapons (d) Invasive species of micro-organisms 16. The Subject of 'Law & Order' falls under (a) Union List (b) State List (c) Concurrent List (d) None of the Above 17. PM SHRI scheme is applicable to the field of (a) Education (b) Sports (c) Health (d) Agriculture 18. Which of the following countries is not a member of US led Indo Pacific Economic Framework for Prosperity (IPEF) (a) China (b) India

(a) Rajkot

(c) Japan

(d) South Korea

- (b) Hubli
- (c) Ujjain
- (d) Lucknow

- 20. Cloud Computing Service 'Azure' is provided by
- (a) Microsoft
- (b) Google
- (c) Amazon
- (d) IBM
- 21. WazirX is a/an
- (a) Cryptocurrency Exchange
- (b) Technology Services Provider
- (c) Sovereign wealth Fund
- (d) International group of Hackers
- 22. U-WIN is a/an
- (a) Application to help students in choosing right career
- (b) Portal to record vaccination details
- (c) Website to promote Sports
- (d) Social Security initiative
- 23. What is Climate Finance Taxonomy?
- (a) Part of Climate Finance which is taxable
- (b) Part of Climate Finance which is exempt
- (c) Classification of economic activities into sustainable and non-sustainable
- (d) Sources of Climate Finance
- 24. DMH-11 is a/an
- (a) Satellite launched to study carbon emissions
- (b) Genetically modified form of Mustard
- (c) Super-Solvent
- (d) Smart Material
- 25. 2024 Olympics are going to be held in
- (a) Tokyo
- (b) London
- (c) Berlin
- (d) Paris
- 26. According to Mineral Area Development Authority v M/s Steel Authority of India
- (a) Royalty collected form mines includes tax
- (b) State governments cannot collect cess from mines
- (c) Only Centre can collect cess from mines

- (d) State governments have the power to tax the mines
- 27. As per budget 2024-25, the long-term Capital gains tax on Real Estate is
- (a) Exempt
- (b) Is Taxable at rate of 10% after indexation
- (c) Is Taxable at rate of 12.5% without indexation
- (d) Is Taxable at rate of 20% without indexation
- 28. Which of the following conveys the most appropriate meaning of 'Right to be Forgotten'?
- (a) Change Name and Address
- (b) Change Citizenship
- (c) Deletion of Digital footprints
- (d) Deletion of identity from Government Records
- 29. Which of the following territory is adjoining Mediterranean Sea?
- (a) Gaza strip
- (b) West Bank
- (c) Goal Heights
- (d) Sea of Galilee
- 30. Which of the following countries are not allowed to participate in 2024 Paris Olympics?
- (a) Israel and North Korea
- (b) Iran and North Korea
- (c) Russia and Ukraine
- (d) Russia and Belarus

# **Answer Key**

1.(c)	2.(a)	3.(d)	4.(d)	5.(c)	6.(b)
7.(b)	8. (a)	9. (d)	10.(d)	11.(c)	12.(a)
13.(a)	14.(d)	15.(b)	16.(b)	17.(a)	18.(a)
19.(a)	20.(a)	21.(a)	22.(b)	23.(c)	24.(b)
25.(d)	26.(d)	27.(c)	28.(c)	29.(a)	30.(d)

# **DETAILED SUMMARY OF THE UNION BUDGET 2024-2025**



#### **PART A**

Despite global economy remaining under the grip of policy uncertainties, India's economic growth continues to be the shining exception and will remain so in the years ahead. Minister of Finance and Corporate Affairs Smt Nirmala Sitharaman, while presenting the Union Budget 2024-25 in Parliament today said that India's inflation continues to be low, stable and moving towards the 4 per cent target. Core inflation (non-food, non-fuel) currently is 3.1 per cent and steps are being taken to ensure supplies of perishable goods reach market adequately.

# **Interim Budget**

The Finance Minister said that as mentioned in the interim budget, the focus is on 4 major castes, namely 'Garib' (Poor), 'Mahilayen' (Women), 'Yuva' (Youth) and 'Annadata' (Farmer).



# **Budget Theme**

Dwelling on the Budget theme, Smt Sitharaman said, turning attention to the full year and beyond, in this budget, we particularly focus on employment, skilling, MSMEs, and

the middle class. She announced the Prime Minister's package of 5 schemes and initiatives to facilitate employment, skilling and other opportunities for 4.1 crore youth over a 5-year period with a central outlay of ₹2 lakh crore. This year, ₹1.48 lakh crore has been allocated for education, employment and skilling.

# **Budget Priorities**

The Finance Minister said, for pursuit of 'Viksit Bharat', the budget envisages sustained efforts on the following 9 priorities for generating ample opportunities for all.

- 1. Productivity and resilience in Agriculture
- 2. Employment & Skilling
- 3. Inclusive Human Resource Development and Social Justice
- 4. Manufacturing & Services
- 5. Urban Development
- 6. Energy Security
- 7. Infrastructure
- 8. Innovation, Research & Development and
- 9. Next Generation Reforms



Priority 1: Productivity and resilience in Agriculture

The Finance Minister announced that the government will undertake a comprehensive review of the agriculture research setup to bring the focus on raising productivity. New 109 high-yielding and climate-resilient varieties of 32 field and horticulture crops will be released for cultivation by farmers.



In the next two years, 1 crore farmers across the country will be initiated into natural farming supported by certification and branding.

10,000 need-based bio-input resource centres will be established.

For achieving self-sufficiency in pulses and oilseeds, government will strengthen their production, storage and marketing and to achieve 'atmanirbharta' for oil seeds such as mustard, groundnut, sesame, soybean, and sunflower.

Government, in partnership with the states, will facilitate the implementation of the Digital Public Infrastructure (DPI) in agriculture for coverage of farmers and their lands in 3 years.

Smt Sitharaman announced a provision of ₹1.52 lakh crore for agriculture and allied sector this year.





# Productivity and Resilience in Agriculture

- Digital Public Infrastructure: Digital crop survey for Kharif using DPI to be taken up in 400 districts.
- Issuance of Jan Samarth based Kisan Credit Cards to be enabled in 5 states
- Financial support for setting up a network of Nucleus Breeding Centres for Shrimp Broodstocks to be provided
- National Cooperation Policy to be framed with an objective to Fast-tracking growth of rural economy & generation of employment opportunities

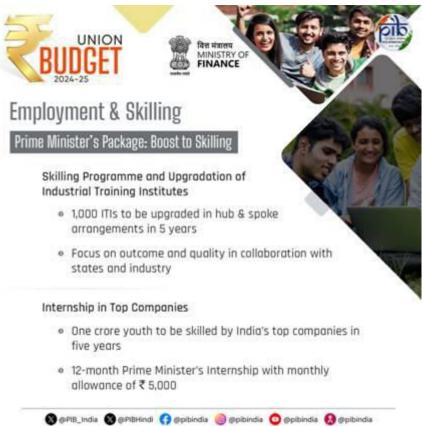


## **Priority 2: Employment & Skilling**



The Finance Minister said that the government will implement 3 schemes for 'Employment Linked Incentive', as part of the Prime Minister's package. These will be based on enrolment in the EPFO, and focus on recognition of first-time employees, and support to employees and employers.

Government will also facilitate higher participation of women in the workforce through setting up of working women hostels in collaboration with industry, and establishing creches.



Referring to the Skilling programme, the Finance Minister announced a new centrally sponsored scheme, as the 4<sup>th</sup> scheme under the Prime Minister's package, for skilling in collaboration with state governments and Industry. 20 lakh youth will be skilled over a 5-year period and 1,000 Industrial Training Institutes will be upgraded in hub and spoke arrangements with outcome orientation.

She also announced that the Model Skill Loan Scheme will be revised to facilitate loans up to ₹7.5 lakh with a guarantee from a government promoted Fund, which is expected to help 25,000 students every year.

For helping the youth, who have not been eligible for any benefit under government schemes and policies, she announced a financial support for loans upto ₹10 lakh for higher education in domestic institutions. E-vouchers for this purpose will be given directly to 1 lakh students every year for annual interest subvention of 3 per cent of the loan amount.



# Priority 3: Inclusive Human Resource Development and Social Justice

Talking about the Saturation approach, the Finance Minister emphasised that implementation of schemes meant for supporting economic activities by craftsmen, artisans, self-help groups, scheduled caste, schedule tribe and women entrepreneurs, and street vendors, such as PM Vishwakarma, PM SVANidhi, National Livelihood Missions, and Stand-Up India will be stepped up.

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#### Purvodaya

Government will formulate a plan, Purvodaya, for the all-round development of the eastern region of the country covering Bihar, Jharkhand, West Bengal, Odisha and Andhra Pradesh. This will cover human resource development, infrastructure, and generation of economic opportunities to make the region an engine to attain Viksit Bharat.

# Pradhan Mantri Janjatiya Unnat Gram Abhiyan

The Finance Minister announced that for improving the socio-economic condition of tribal communities, government will launch the Pradhan Mantri Janjatiya Unnat Gram Abhiyan by adopting saturation coverage for tribal families in tribal-majority villages and aspirational districts covering 63,000 villages and benefitting 5 crore tribal people.



More than 100 branches of India Post Payment Bank will be set up in the North East region to expand the banking services.

She said, a provision of ₹2.66 lakh crore for rural development including rural infrastructure was made this year.



# Priority 4: Manufacturing & Services Support for promotion of MSMEs

Smt Sitharaman said, this budget provides special attention to MSMEs and manufacturing, particularly labour-intensive manufacturing. A separately constituted self-financing guarantee fund will provide, to each applicant, guarantee cover up to ₹100 crore, while the loan amount may be larger. Similarly, Public sector banks will build their in-house capability to assess MSMEs for credit, instead of relying on external assessment. She also announced a new mechanism for facilitating continuation of bank credit to MSMEs during their stress period.

#### **Mudra Loans**

The limit of Mudra loans will be enhanced to ₹ 20 lakh from the current ₹ 10 lakh for those entrepreneurs who have availed and successfully repaid previous loans under the 'Tarun' category.

# **MSME Units for Food Irradiation, Quality & Safety Testing**

Financial support for setting up of 50 multi-product food irradiation units in the MSME sector will be provided. Setting up of 100 food quality and safety testing labs with NABL accreditation will also be facilitated. To enable MSMEs and traditional artisans to sell their products in international markets, E-Commerce Export Hubs will be set up in public-private-partnership (PPP) mode.

# **Internship in Top Companies**

The Finance Minister said that as the 5<sup>th</sup> scheme under the Prime Minister's package, government will launch a comprehensive scheme for providing internship opportunities in 500 top companies to 1 crore youth in 5 years.



# **Priority 5: Urban Development**

# **Urban Housing**

Under the PM AwasYojana Urban 2.0, housing needs of 1 crore urban poor and middle-class families will be addressed with an investment of ₹ 10 lakh crore. This will include the central assistance of ₹ 2.2 lakh crore in the next 5 years.

# **Water Supply and Sanitation**

In partnership with the State Governments and Multilateral Development Banks, government will promote water supply, sewage treatment and solid waste management projects and services for 100 large cities through bankable projects.

## **PM SVANidhi**

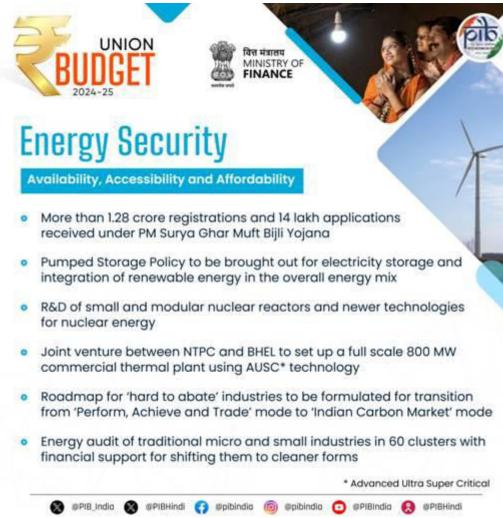
She added that building on the success of PM SVANidhi Scheme in transforming the lives of street vendors, Government envisions a scheme to support each year, over the next five years, the development of 100 weekly 'haats' or street food hubs in select cities.



**Priority 6: Energy Security** 

The Finance Minister said, in line with the announcement in the interim budget, PM Surya Ghar Muft Bijli Yojana has been launched to install rooftop solar plants to enable 1 crore households obtain free electricity up to 300 units every month. The scheme has generated remarkable response with more than 1.28 crore registrations and 14 lakh applications.

Nuclear energy is expected to form a very significant part of the energy mix for Viksit Bharat.



# **Priority 7: Infrastructure**

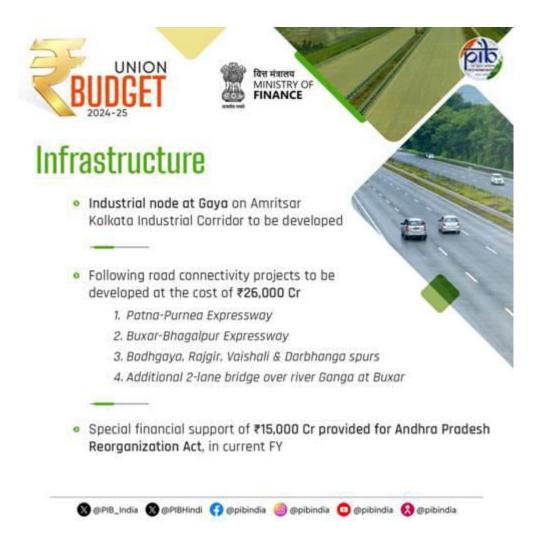
The Finance Minister underlined that significant investment the Central Government has made over the years in building and improving infrastructure has had a strong multiplier effect on the economy. Government will endeavour to maintain strong fiscal support for infrastructure over the next 5 years, in conjunction with imperatives of other priorities and fiscal consolidation. ₹11,11,111 crore for capital expenditure has been allocated this year, which is 3.4 per cent of our GDP.



# Pradhan Mantri Gram SadakYojana (PMGSY)

The Finance Minister announced that Phase IV of PMGSY will be launched to provide all-weather connectivity to 25,000 rural habitations which have become eligible in view of their population increase.

For Irrigation and Flood Mitigation in Bihar, through the Accelerated Irrigation Benefit Programme and other sources, government will provide financial support for projects with estimated cost of ₹11,500 crore such as the Kosi-Mechi intra-state link and 20 other ongoing and new schemes including barrages, river pollution abatement and irrigation projects. Government will also provide assistance to Assam, Himachal Pradesh, Uttarakhand and Sikkim for flood management, landslides and related projects.



# Priority 8: Innovation, Research & Development

The Finance Minister said that government will operationalize the Anusandhan National Research Fund for basic research and prototype development and set up a mechanism for spurring private sector-driven research and innovation at commercial scale with a financing pool of ₹1 lakh crore in line with the announcement in the interim budget.

## **Space Economy**

With our continued emphasis on expanding the space economy by 5 times in the next 10 years, a venture capital fund of ₹1,000 crore will be set up.



# **Priority 9: Next Generation Reforms**



# **Economic Policy Framework**

The Finance Minister said that the government will formulate an Economic Policy Framework to delineate the overarching approach to economic development and set the scope of the next generation of reforms for facilitating employment opportunities and sustaining high growth.

#### Labour related reforms

Government will facilitate the provision of a wide array of services to labour, including those for employment and skilling. A comprehensive integration of e-shram portal with other portals will facilitate such one-stop solution. Shram Suvidha and Samadhan portals will be revamped to enhance ease of compliance for industry and trade.



Government will develop a taxonomy for climate finance for enhancing the availability of capital for climate adaptation and mitigation.

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# **Foreign Direct Investment and Overseas Investment**

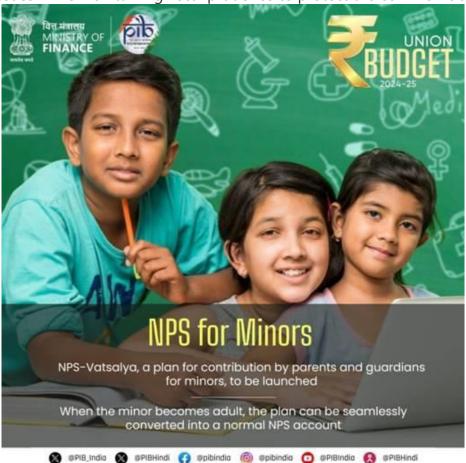
The rules and regulations for Foreign Direct Investment and Overseas Investments will be simplified to (1) facilitate foreign direct investments, (2) nudge prioritization, and (3) promote opportunities for using Indian Rupee as a currency for overseas investments.

## **NPS Vatsalya**

NPS-Vatsalya, a plan for contribution by parents and guardians for minors will be started. On attaining the age of majority, the plan can be converted seamlessly into a normal NPS account.

# **New Pension Scheme (NPS)**

The Finance Minister said that the Committee to review the NPS has made considerable progress in its work and a solution will be evolved which addresses the relevant issues while maintaining fiscal prudence to protect the common citizens.



# **Budget Estimates 2024-25**

The Finance Minister informed that for the year 2024-25, the total receipts other than borrowings and the total expenditure are estimated at ₹32.07 lakh crore and ₹48.21 lakh crore respectively. The net tax receipts are estimated at ₹25.83 lakh crore and the fiscal deficit is estimated at 4.9 per cent of GDP.

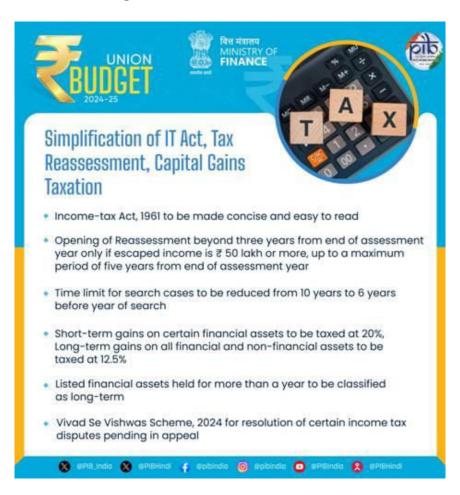
She said, the gross and net market borrowings through dated securities during 2024-25 are estimated at ₹14.01 lakh crore and ₹11.63 lakh crore respectively.

Smt Sitharaman emphasised that the fiscal consolidation path announced by her in 2021 has served economy very well, and the government will aim to reach a deficit below 4.5 per cent next year.

#### **PART B**

Apart from giving relief to four crore salaried individuals and pensioners of the country in the direct taxes, Union Budget 2024-25 seeks to comprehensively review the direct and indirect taxes in the next six months, simplifying them, reducing tax incidence and compliance burdens and broadening the tax nets. The Budget proposes comprehensive rationalization of GST tax structure along with review of the Custom Duty rate structure to improve the tax base and support domestic manufacturing.

A comprehensive review of Income – Tax Act is targeted at reducing disputes and litigations and to make the act lucid, concise and easy to read. Minister of Finance and Corporate Affairs Smt. Nirmala Sitharaman said that simplification of tax regimes without exemptions and deductions for corporate and personal income tax has been appreciated by tax payers as over 58 per cent of corporate tax came from simplified tax regime in 2022-23 and more than two third tax payers have switched over to the new personal income tax regime.

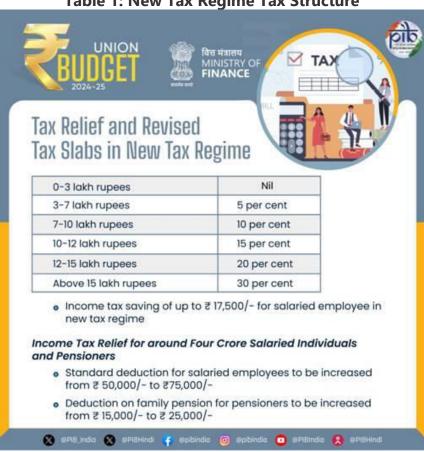


Budget 2024-25 increased standard deduction of salaried employees from  $\stackrel{?}{\sim} 50,000/$ -to  $\stackrel{?}{\sim} 75,000/$ - for those opting for new tax regime. Similarly, deduction on family pension for pensioners enhanced from  $\stackrel{?}{\sim} 15,000/$ - to  $\stackrel{?}{\sim} 25,000/$ -. Assessments now, can be reopened beyond three years up to 5 years from end of year of assessment, only if,

the escaped income is more than ₹ 50 Lakh. The new tax regime rate structure is also revised to give a salaried employee benefits up to ₹ 17,500/- in income tax.

Income Slabs	Tax Rate
0 – 3 Lakh rupees	NIL
3 – 7 Lakh rupees	5 per cent
7 – 10 Lakh rupees	10 per cent
10 – 12 Lakh rupees	15 per cent
12 – 15 Lakh rupees	20 per cent
Above 15 Lakh rupees	30 per cent

**Table 1: New Tax Regime Tax Structure** 



To promote investment and foster employment, Budget has given boost to entrepreneurial spirit and start-up ecosystem, abolishing angel tax for all classes of investors. Further, a simpler tax regime for foreign shipping companies operating domestic cruises is proposed looking at the tremendous potential of cruise tourism. Foreign mining companies selling raw diamonds in the country can now benefit from safe harbor rates which will benefit the diamond industry. Further, corporate tax rate on foreign companies reduced from 40 to 35 per cent to attract foreign capital.

Budget further simplified the direct tax regime for charities, TDS rate structure and capital gains taxation. The two tax exemption regimes for charities will be merged into one. 5 per cent TDS on many payments to be merged into 2 per cent TDS and 20 per cent TDS on repurchase of units by mutual funds or UTI stands withdrawn. TDS rate on e-commerce operators reduced from 1 per cent to 0.1 per cent. Now credit of TCS will be given on TDS deducted from salary. Budget decriminalized delay of payment of TDS up to the due date of filing of TDS statement. Standard Operating Procedure soon for simplified and rationalized compounding guidelines for TDS defaults.

On Capital gains, short term gains shall henceforth attract a rate of 20 per cent on certain financial assets. Long term gains on all financial and non-financial assets to attract 12.5 per cent rate. Limit of exemption of capital gains has been increased to ₹1.25 Lakh per year to benefit lower and middle-income classes. Listed financial assets held for more than a year and unlisted assets (financial and non-financial) held for more than two years to be classified as long term assets. Unlisted bonds and debentures, debt mutual funds and market linked debentures will continue to attract applicable capital gains tax.

Acknowledging that GST has decreased tax incidence on common man and terming it as a success of vast proportions, Union Finance Minister Smt Nirmala Sitharaman said that GST has reduced compliance burden and logistics cost for trade and industry. Now the Government envisages further simplifying and rationalizing the tax structure to expand it to remaining sectors. Budget also proposed to further digitalise and make paperless the remaining services of Customs and Income Tax including rectification and order giving effect to appellate orders over the next two years.

Custom duties have been revised to rationalize and revise them for ease of trade and reduction of disputes. Giving relief to cancer patients, Budget fully exempted three more cancer treating medicines from custom duties, namely, Trastuzumab Deruxtecan, Osimertinib and Durvalumab. There will be reduction in Basic Customs Duty (BCD) on X-ray machines tubes and flat panel detectors. BCD on mobile phones, Printed Circuit Board Assembly (PCBA) and mobile chargers reduced to 15 per cent. To give a fillip to processing and refining of critical minerals, Budget fully exempted custom duties on 25 rare earth minerals like lithium and reduced BCD on two of them. Budget proposed to exempt capital goods for manufacturing of solar panels.

To boost India's seafood exports, BCD on broodstock, polychaete worms, shrimps and fish feed reduced to 5 per cent. Budget will foster competitiveness of Indian leather and textiles articles of export. BCD reduced from 7.5 per cent to 5 per cent in Methylene Diphenyl Diisocyanate (MDI) used for manufacture of spandex yarn. Custom duties on gold and silver reduced to 6 per cent and on platinum to 6.4 per cent. BCD on ferro nickel and blister copper removed, while, BCD on ammonium nitrate

increased from 7.5 to 10 per cent to support existing and new capacities in pipeline. Similarly, BCD on PVC flex banners increased from 10 to 25 per cent considering the hazard to environment. To incentivize domestic manufacturing, BCD on PCBA of specific telecom equipments increased from 10 to 15 per cent.



For dispute resolution and dispose-off backlogs, Union Finance Minister proposed Vivad se Vishwas Scheme, 2024 for resolsution of certain income tax disputes pending in appeal. The monetary limits for filing appeals related to direct taxes, excise and

service tax in High Courts, Supreme Courts and tribunals has been increased to ₹ 60 Lakh, ₹ 2 Crore and ₹ 5 Crore, respectively. Further to reduce litigation and provide certainty in international taxation, scope of safe harbour rules to be expanded and transfer pricing assessment procedure to be streamlined.