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ELECTORAL
BOND

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1. Why did the SC invalidate electoral bonds?

Why in news?

The Supreme Court has declared the Electoral Bonds Scheme as unconstitutional. Donor anonymity was the main feature of the scheme, which has been criticised for long by transparency activists. These bonds constituted an important means of funding political parties since 2018. The court found that the scheme violated the citizens' right to information about the sources of finances raised by political parties. It directed the full disclosure of all details of contributors, recipient parties and denominations.

What was the scheme?

An electoral bond is in the nature of a promissory note which shall be a bearer banking instrument that does not carry the name of the buyer or payee. Any citizen or company could buy these bonds in denominations of ₹1,000, ₹10,000, ₹1 lakh, ₹10 lakh, and ₹1 crore and donate it to a political party. It can be encashed only through a bank account with an authorised bank. The State Bank of India was the bank authorised to issue and encash these bonds.

What changes were made for the scheme?

Section 13A of the Income Tax Act earlier said political parties must maintain a record of contributions above ₹20,000. The Finance Act 2017 amended this to make an exception for contributions through electoral bonds. As a result, parties were not required to maintain any record of what they received through the bonds.

Section 29C of the Representation of the People Act (RPA), 1951, earlier said parties should prepare a report on contributions in excess of ₹20,000 from any person or company in a financial year. This was amended in 2017 to the effect that contributions through electoral bonds need not be included in the report. Under Section 182(3) of the Companies Act, companies were required to disclose details of contributions to a political party, including the amount and the party's name, in its profit-and-loss account. However, after the amendment, it was only required to reveal the total amount given to parties in a financial year.

How did the government defend it in court?

The government's main points in defence of the scheme was that it allowed any person to transfer funds to political parties of their choice through legitimate banking channels and helped prevent unregulated contributions through cash. The confidentiality assured to the donors is beneficial to them as it promotes contribution and clean money to political parties. The use of banking channels will curb the role of black money in election funding and anonymity ensures that the donors do not fear retribution or coercion from parties to which they have not contributed. In an interesting argument, the government claimed that citizens did not have a general right to know the funding of political parties. The right to know was not general in nature, but one evolved by courts for the specific purpose of enabling the voter's choice of electing clean candidates.

What did the SC rule?

In past judgments, the apex court has held that voters have a right to information that is essential for them to exercise their freedom to vote. The court, therefore, held that information about funding to a political party is essential for a voter to express the freedom to vote in an effective manner. The Electoral Bond Scheme, to the extent that it infringes on this right to information by anonymising contributions through bonds, violates Article 19(1)(a), which pertains to freedom of expression.

As far as the purpose of curbing black money was concerned, the court applied a proportionality test, viz., whether the abridging of the voters' right to know through donor anonymity was achieved through the least restrictive means. It said alternatives such as funding through electronic transfer (for small contributions) and donations to an Electoral Trust (for larger amounts) were available. As the government was unable to establish that the scheme is the least restrictive means to balance the right of "informational privacy" to contributors and the right to information on political contributions, the amendments to IT Act and RPA were unconstitutional.

On the changes to the Companies Act, it ruled that the deletion of the disclosure requirement on details of contributions violated the voter's right to information. Also, the scheme allowed both profit-making and loss-making companies to make political contributions. Earlier, companies could only donate a percentage of their net profit. As the harm in the form of quid pro quo is much higher in the case of loss-making companies, the amendment was ruled manifestly arbitrary.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

2. Bharat Ratna for L K Advani: How his Rath Yatra contributed to the rise of the BJP



L K Advani addressing a gathering during his Rath Yatra

Why in news?

Prime Minister Narendra Modi announced that veteran BJP leader L K Advani will be conferred with the Bharat Ratna, India's highest civilian honour.

Advani, 96, was instrumental in transforming the Bharatiya Janata Party into a national political force in the late 1980s and early 1990s. His 1990 Rath Yatra was taken out to mobilise volunteers for the Ram Janmabhoomi movement, and was central to the party's rise.

From Gandhian Socialism to Hindutva

The BJP emerged in 1980 following the dissolution of the Janata Party. In its first national conference, held in Mumbai that year, party president Atal Bihari Vajpayee's address underscored that the BJP was not simply a new incarnation of Syama Prasad Mookerjee's Bharatiya Jana Sangh. Rather, Vajpayee claimed the legacy of Jayprakash Narayan, and declared Gandhian Socialism to be the party's foundational ideology.

But this position did not reap rewards in the 1984 general elections. The Rajiv Gandhi-led Congress won over 400 seats on the back of a sympathy wave after Indira Gandhi's assassination. The BJP won only two. This failure, however, was pivotal for the BJP's eventual rise. Advani took over the party's reins, and guided it towards a new direction.

Cashing in on the Ram Janmabhoomi Movement

In the 1980s, Hindu nationalist organisations such as the Vishwa Hindu Parishad (VHP) upped the ante on the Ram temple issue. While the earliest proposal to build a Ram temple in Ayodhya came up in the 19th century, the 1980s saw the movement gather momentum.

The BJP, under Vajpayee, had been somewhat sceptical about openly wading into the matter. But Advani sensed that the growing Ram temple agitation offered a unique opportunity to consolidate the Hindu vote. In 1989, the party officially took on the Ram Janmabhoomi cause in its historic Palampur Resolution. With Advani also stepping up pressure on Rajiv Gandhi over his (mis) handling of Sri Lanka and Kashmir, as well as the Bofors scandal, the BJP quickly emerged as a potent political force.

In the 1989 general elections the BJP won 85 seats. But Advani sensed that even greater inroads could be made — and needed to be made. In 1990, V P Singh decided to grant OBC reservations for government jobs, accepting the Mandal Commission's recommendations. This, Advani felt, could seriously undermine the BJP's Hindutva. Thus, he took to the road, with the intention to create pan-Hindu pressure to construct a Ram temple on the Babri Masjid site.

The Rath Yatra

On September 25, 1990, L K Advani commenced his Rath Yatra from Somnath, Gujarat. He planned to traverse across the country on a rath (a chariot, or in Advani's case, a modified car made to look like a chariot), building momentum for the Ram Janmabhoomi movement, and ultimately arriving at Ayodhya to stake claim to the Babri Masjid site.

Thronged by thousands of 'activists', Advani's procession was marked by songs and slogans, all with a singular aim to galvanise pan-Hindu support for the temple.

As he travelled through the country, Advani's Yatra left a trail of violence in its wake. Communal violence intensified especially after Advani's arrest in Bihar, on the orders of Chief Minister Lalu Prasad Yadav.

The Rath Yatra was a raging success for Advani and the BJP. In the 1991 elections, the BJP emerged, after the Congress (244 seats), as the second largest party in the Parliament, raising its tally to 120 seats. It also formed the government in Uttar Pradesh.

The Babri demolition and after

On December 6, 1992, around 100,000 kar sevaks descended upon the Babri Masjid and razed it to the ground. Advani too was in Ayodhya that day, but was not prepared for what had happened. He would later say that the events of December 6 "bothered him".

A wave of communal violence would once again sweep through the country, and although Advani did not condone the mosque's demolition, his party nonetheless reaped the benefits of it. Over the course of the 1990s, the BJP strengthened its national presence on the back of its role in the Ram Janmabhoomi temple, with Atal Bihari Vajpayee taking oath as the prime minister three separate times.

Advani gave way to Vajpayee in the aftermath of the Babri demolition, to allow the party to be helmed by a more "moderate" face. He would never be able to meet his prime ministerial aspirations. Nonetheless, his role in the rise of the BJP to its current, seemingly infallible position, remains undeniable.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

3. Nitish sworn in as CM for 9th time: Seven things to know about the Bihar leader

Why in news?

JD(U) leader Nitish Kumar took oath as Bihar's Chief Minister for the ninth time, switching sides for the fifth time in little over 10 years.

As Nitish goes back to an alliance with a BJP he has vociferously criticised, and as the BJP accepts with open arms an ally it had aggressively attacked, here are seven things one should know about Nitish, the seemingly indispensable figure of Bihar politics.

1. Nitish first joined hands with the BJP back in 1996

Nitish was part of the socialist crop of leaders in Bihar who came to prominence during the JP Movement of 1974-75. He spent his first few years in politics in the shadow of the more charismatic Lalu Prasad Yadav and the firebrand George Fernandes. Fernandes and Nitish together formed the Samata Party in 1994. In an early display of political canniness, Nitish realised his party's interests would be best served by aligning with the NDA, which he did in 1996, winning the Lok Sabha seat from Barh. He also became the Bihar CM for a short seven days in 2000 with the NDA's support.

2. Resigned as Railway Minister on moral grounds

Nitish was the Union Minister for Railways and Minister for Surface Transport in Atal Bihari Vajpayee's NDA government. On August 2, 1999, two trains collided in Gaisal in West Bengal, killing around 285 people. Nitish resigned as minister, taking responsibility. His short tenure was praised for reforms like internet ticket booking facility and the tatkal system.

The same year, he was appointed the Union minister for agriculture, and in 2001, the Railway ministry was restored to him.

3. Walked out of the NDA after Modi was chosen PM candidate

Before the 2014 Lok Sabha elections, when it became clear that Gujarat CM Narendra Modi would be the NDA's PM face, Nitish walked out of the alliance, saying its leader should have a "clean and secular image".

4. Resigned after JD(U)'s poor performance

After the JD(U)'s Lok Sabha seats tally fell from 20 to 2 in 2014, Nitish resigned as CM, taking responsibility for the poor show. Briefly, Bihar had a Chief Minister other than Nitish — Jitan Ram Manjhi was appointed to the top post. However, months later, Manjhi was asked to resign, and when he refused to do so, was expelled from the JD(U). Nitish came back as Chief Minister.

5. His son stays away from politics

Like Nitish, his son Nishant Kumar is also an engineer. He, however, has stayed away from politics, a fact Nitish flaunts to highlight his difference from "dynastic" parties.

6. Why all parties want him

Despite his unreliable track record, there's a reason Nitish is welcomed back into any alliance he chooses to join. The RJD, despite its larger social base of loyal voters and the enduring popularity of Lalu Yadav, lacks Nitish's credentials of good governance and development. The BJP, even with its massive appeal on the national level, lacks a leader of stature in Bihar, and understands the value of Nitish's vote-bank of extremely backwards castes and beneficiaries of government welfare schemes.

7. More terms, but shorter tenure

While Nitish Kumar has been sworn in as Chief Minister nine times, many others have served as CM longer than he has, in fewer tenures. Nitish has been CM for over 17 years, but many, like Sikkim's Pawan Kumar Chamling (24 years), Odisha's Naveen Patnaik (23 years), Bengal's Jyoti Basu (23 years), have been in power for longer than he has.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Indian Express

4. Champai Soren is 12th CM of Jharkhand

Why in news?

Jharkhand Mukti Morcha (JMM) leader Champai Soren took oath as the twelfth Chief Minister of Jharkhand, even as his predecessor Hemant Soren was remanded to five days in the custody of the Enforcement Directorate in an alleged land scam case.



Jharkhand Chief Minister Champai Soren during the swearing-in ceremony at Raj Bhavan in Ranchi

Threat of Opposition

Soon after the ceremony, 39 MLAs of the ruling coalition, who have been staying in the Ranchi Circuit House, were rushed straight to the airport and flown to Hyderabad by chartered plane in a bid to prevent them from being poached by the Opposition before the new government seeks a vote of confidence on February 5. The JMM-led alliance has submitted letters of support from 47 MLAs to the Raj Bhavan.

Arrest of Hemant Soren

Earlier in the day, a special Prevention of Money Laundering Act court granted the ED five days remand of Mr. Hemant Soren, who was arrested in connection with a money laundering case linked to an alleged land scam. The Supreme Court has refused to entertain his plea against his arrest, and asked him to approach the High Court. The former CM had resigned after ED officials held him for over seven hours of questioning for the second time, at his official residence.

After his resignation, senior JMM leader and Transport Minister Champai Soren was elected as the leader of the legislative party. A five-time MLA from Saraikela, Mr. Champai Soren earned the nickname of 'Jharkhand Tiger' while playing an active role in the movement for Jharkhand's Statehood in the 1990s, alongside JMM patriarch Shibu Soren. Before taking oath, the new CM went to meet the party chief — who is also Mr. Hemant Soren's father — and sought his blessings.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Indian Express

5. What is the 8.5-acre land case in which Hemant Soren was arrested, what is he accused of

Why in News?

Arrested in an alleged land scam case, Former Jharkhand Chief Minister Hemant Soren Monday (February 5) challenged the BJP and the ED that if they could produce any record naming him as the owner of 8.5 acres of land in Ranchi, he would leave politics and the state itself.



Former Jharkhand CM Hemant Soren after his party won the floor test in the state Assembly, in Ranchi

In custody of the Enforcement Directorate (ED), Soren was allowed to vote in the trust motion that the Jharkhand Mukti Morcha (JMM)-led alliance won. He was arrested on the evening of January 31, after he submitted his resignation to the Governor.

What is the genesis of the allegations against Soren?

The ED had been investigating various cases in Jharkhand, including illegal mining, a MGNREGA 'scam' of 2009, and the alleged illegal sale and purchase of an Army plot in Ranchi. It was during the Army land investigation that the name of then revenue sub-inspector of Bargaain Circle Office, Bhanu Pratap Prasad, popped up. Prasad was eventually linked to Soren.

The ED claimed that Prasad was part of a syndicate involved in acquiring properties illegally, through force as well as by falsifying government records. According to the agency, Prasad was the custodian of several original registers — also known as Panji 2 — in which land records (particularly ownership details) were falsified.

During searches on April 13, 2023, ED said that 11 trunks of property documents along with 17 Panji 2 were seized from him. This information was shared by the ED with the then Chief Secretary of State. This FIR became the genesis of the registration of the ECIR — ED's equivalent of an FIR — in which Soren was arrested.

What are the allegations against Soren?

According to the ED, Soren is among the people Bhanu Pratap "hatched conspiracies with" to take over properties. The agency alleged that details of the illegally acquired/possessed properties have been found on Soren's mobile phone. While the former CM was in custody, his phone's data was extracted, and several chats related to cash transactions, illegal benefits to others in acquiring land, etc., were identified, the ED claimed.

The land parcels, totalling an area of 8.5 acres in Bargain area of Ranchi, were physically verified by Prasad on instructions from the CMO, the ED alleged. It said its survey of the area under the PMLA confirmed that Soren had illegal possession of the land.

What has been Soren's response?

While responding to the ED summons, Hemant Soren in his letter said the 8.5 had been "wrongfully alleged to be owned" by him. In his plea to the Supreme Court against the arrest, Soren said that the ED appeared to be making a "fishing and roving enquiry" for "political gain".

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

6. Delhi's property geo-tagging exercise

Why in news?

The national capital's property geotagging deadline has been extended, according to a statement released by the Municipal Corporation of Delhi (MCD). For the financial year 2024–2025, residents will have until February 29 to finish the geotagging procedure and receive a 10% refund on their lump sum advance tax payments.

What is geo-tagging?

Geotagging is the process of allotting geographic coordinates to media based on the location of a mobile device. Geotags can be applied to photos, videos, websites, text messages, and QR codes, and could also include time stamps or other contextual information.

Nowadays, smartphones and digital cameras come equipped with GPS (Global Positioning System) or use other location-based technologies to automatically geotag photos. By default, every photo you take with your iPhone or Android tags your GPS location and stores that data with your photo. In the context of photographs, for example, geotagging allows users to associate a specific location with the image.

Geotagging properties means digitally mapping a property with the geographic information system (GIS). This means that a property can be identified on a map with its unique and permanent latitude and longitude coordinates. MCD officials say that the capital's property geotagging exercise will have several benefits, not only for the corporation but also for residents.

Why is geo-tagging important?

According to an MCD official, geo-tagging properties will prove instrumental in boosting tax collection potential. By distinguishing between tax-paying and non-tax-paying entities, it will reduce tax evasion and help enhance revenue collection.

Another advantage of geotagging is the ability to pinpoint illegal and unauthorised properties and colonies. This will help in urban planning, as it will allow the civic body to take corrective actions as required.

According to the MCD, geotagging will also streamline essential services such as sanitation and road repairs in colonies, and help recognise area-based residential needs. This will make it easier for civic bodies to ensure more efficient service delivery.

In times of emergencies, such as natural disasters or accidents, geotagged information can become crucial for quick and targeted interventions in future as responders can utilise the data to navigate and address issues. It can help in maintaining healthy urban spaces by monitoring environmental factors like green spaces, pollution sources, and ecological reserves.

Which other cities have made attempts to geotag properties?

Prior to the MCD, several other cities have made attempts to geo-tag. The Municipal Corporation of Greater Mumbai (MCGM) has been working on geotagging properties to improve urban planning and service delivery.

The Bruhat Bengaluru Mahanagara Palike (BBMP) has also undertaken geotagging initiatives for property tax assessment and urban planning. Initiatives to geo-tag trees, potholes were also announced by the BBMP.

Municipal Corporations of Chennai, Hyderabad, Ahmedabad and Pune have previously shown interest in geo-tagging of different public entities.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Indian Express

7. The four issues CJI DY Chandrachud highlighted within the legal profession

Why in news?

Delivering the Foundation Day address on the Supreme Court's 75th year of establishment on January 28, the CJI highlighted four issues within the judiciary that will have to be addressed through "difficult conversations".

These were "adjournment culture" among lawyers, limiting the length of oral arguments, the length of court vacations, and providing a level playing field for first-generation lawyers from diverse backgrounds.

1. What "adjournment culture" is; its effect on justice delivery

This address was far from the first time a Supreme Court judge has singled out the practice of lawyers asking for repeated adjournments as a cause for concern.

An adjournment refers to the court practice of delaying a scheduled hearing to a later date. Order XVII of the Civil Procedure Code, 1908 provides rules for courts to follow when faced with adjournment requests. Among other rules, it states that courts shall not grant an adjournment to a party more than three times during the hearing of a suit, that sufficient cause must be shown and that the circumstances are beyond the control of the party.

While adjournments are often necessary, the delay caused has a cascading effect of increasing the number of pending cases. The 239th Law Commission Report (2012) listed causes for delay in criminal cases at the trial court stage. It stated, "The heavy workload in the courts is taken advantage of by the advocates to press for adjournments." This presents a vicious cycle where adjournments lead to heavier workloads, which lead to even more adjournments. Similar is the case with the apex court.



2. Keeping the length of oral arguments in check

Often in constitutional bench matters (cases that require 5 or more SC judges to decide an important question of law), the court will direct the parties to confer and create a time schedule for oral arguments. This is to ensure efficiency and so that arguments are not repeated by lawyers on the same side.

Another option is adopting an approach similar to the Supreme Court of the United States, where lawyers are instructed to strictly limit their arguments to 30 minutes a side. This was considered in the 99th Law Commission Report (1984). However, a majority of the people whose opinions were sought were against imposing a strict limit. In 2009, the 230th Law Commission Report suggested limiting oral arguments to one-and-a-half hours, unless the case involved constitutional interpretation or a complex question of law.

3. Alternatives to long court vacations

Here, the CJI referred to the possibility of alternatives like flexi-time for lawyers and judges. This is a practice where employees are allowed to choose their daily working hours so long as they work for a set total number of hours in a given period.

In the past, the Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice, headed by BJP MP Brij Lal, suggested in its 133rd report that High Court judges take turns going on vacation to tackle the mounting pendency of cases. The report stated that court vacations are a "colonial legacy" that "causes deep inconvenience" to litigants.

The central government has also brought up the issue of court vacations earlier. In 2022, then-Law Minister Kiren Rijju criticised the judiciary for taking long vacations even as pending cases hit record levels every year

The last time the Supreme Court took action on vacation length was in 2014. The court notified the new Supreme Court Rules which state that summer vacation shall not exceed seven weeks (reduced from 10 weeks). This was in line with suggestions in the Malimath Committee Report (2003), which recommended an increase in working days at the SC by three weeks.

4. A level playing field for first-generation lawyers

CJI Chandrachud also stressed the need to provide a level-playing field for first-generation lawyers and those from marginalised segments who have the "will to work" and "potential to succeed".

The Supreme Court Annual Report (September 2023) took note of the Supreme Court Advocates-on-Record Association's (SCAORA) efforts to facilitate more diversity in the legal profession. This included providing better facilities for women lawyers, giving more "weightage" to first-generation lawyers when designating Senior Advocates, and allowing lawyers to appear via video conference on all working days so that first-generation lawyers and women lawyers with young children can appear with fewer obstacles.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

8. A Bill to prevent the use of unfair means in job recruitment exams has been brought in Parliament with tough penalties. What are unfair means, and what is the government's rationale for such a law?

Why in news?

The Public Examinations (Prevention of Unfair Means) Bill, 2024, was introduced in Lok Sabha. The Bill aims to prevent "unfair means" in order to "bring greater transparency, fairness and credibility to the public examinations system".

What is meant by the use of "unfair means" in an examination?

Section 3 of the Bill lists at least 15 actions that amount to using unfair means in public examinations "for monetary or wrongful gain".

These acts include: “leakage of question paper or answer key or part thereof” and colluding in such leakage; “accessing or taking possession of question paper or an Optical Mark Recognition response sheet without authority”; “tampering with answer sheets including Optical Mark Recognition response sheets”; “providing solution to one or more questions by any unauthorised person during a public examination”, and “directly or indirectly assisting the candidate” in a public examination.

The section also lists “tampering with any document necessary for short-listing of candidates or finalising the merit or rank of a candidate”; “tampering with the computer network or a computer resource or a computer system”; “creation of fake website” and “conduct of fake examination, issuance of fake admit cards or offer letters to cheat or for monetary gain” as illegal acts.

Which exams are “public examinations” as defined in the Bill?

Under Section 2(k), a “public examination” is defined as any examination conducted by a “public examination authority” listed in the Schedule of the Bill, or any “such other authority as may be notified by the Central Government”.

The schedule lists five public examination authorities: (i) the Union Public Service Commission (UPSC), which conducts the Civil Services Examination, Combined Defence Services Examinations, Combined Medical Services Examination, Engineering Services Examination, etc.; (ii) the Staff Selection Commission (SSC), which recruits for Group C (non-technical) and Group B (non-gazetted) jobs in the central government; (iii) the Railway Recruitment Boards (RRBs), which recruit Groups C and D staff in the Indian Railways; (iv) the Institute of Banking Personnel Selection (IBPS), which hires at all levels for nationalised banks and regional rural banks (RRBs); and (v) National Testing Agency (NTA), which conducts the JEE (Main), NEET-UG, UGC-NET, the Common University Entrance Test (CUET), etc.

Apart from these designated public examination authorities, all “Ministries or Departments of the Central Government and their attached and subordinate offices for recruitment of staff” will also come under the purview of the new law.

The central government can add new authorities in the schedule through a notification as and when required.

What punishment does the proposed law provide for violations?

Section 9 of the Bill states that all offences shall be cognizable, non-bailable, and non-compoundable — which means that an arrest can be made without a warrant and bail will not be a matter of right; rather, a magistrate will determine whether the accused is fit to be released on bail. A non-compoundable offence is one in which the case cannot be withdrawn by the complainant even when the complainant and the accused have reached a compromise, and a trial must necessarily follow.

Punishment for “any person or persons resorting to unfair means and offences” can be three to five years in prison, and a fine up to Rs 10 lakh.

Under Section 10(2), a service provider who is engaged to provide “support of any computer resource or any material, by whatever name it may be called” for the conduct of the examination can be fined up to Rs 1 crore, along with other penalties.

The Bill provides for harsher punishment in cases of organised paper leaks, where “organised crime” is defined as unlawful activity by a group of persons colluding in a conspiracy “to pursue or promote a shared interest for wrongful gain in respect of a public examination”.

Section 11(1) says the punishment for organised crime will be “imprisonment for a term not less than five years but which may extend to ten years” and a fine “which shall not be less than one crore rupees”.

Why has the government brought this Bill?

There have been a very large number of cases of question paper leaks in recruitment exams across the country in recent years. An investigation found at least 48 instances of paper leaks in 16 states over the last five years, in which the process of hiring for government jobs was disrupted. The leaks touched the lives of at least 1.51 crore applicants for about 1.2 lakh posts.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

9. The new process for picking Election Commissioners, what led to it

Why in news?

Election Commissioner Anup Chandra Pandey is set to retire on February 14, and his successor will be picked through a consultative process being adopted for the first time.

The selection will be made by a committee comprising Prime Minister Narendra Modi, Lok Sabha Leader of Opposition Adhir Ranjan Chowdhury, and a Union minister. A similar committee, comprising the PM, Chowdhury, and Home Minister Amit Shah, met recently to appoint the Lokpal and the Central Vigilance Commissioner.

Before this, members of the Election Commission were appointed solely at the discretion of the government.

What prompted the change?

It was the Supreme Court that forced the government. Four petitions were filed before the apex court in 2015, 2017, 2021, and 2022, which broadly called for a fair and transparent system to choose Election Commissioners.

On October 23, 2018, while considering the 2015 petition, a two-judge bench felt that the matter required interpretation of Article 324 of the Constitution, which deals with the role of the Election Commission of India. This issue hadn't been discussed before in the Supreme Court, and so it was referred to a Constitution bench. In September 2022, a five-judge Constitution bench led by Justice KM Joseph started hearing the petitions.

The petitioners pointed out that Article 324(2) specifies the President's role in appointing Election Commissioners, with the caveat that this appointment is subject to any law passed by Parliament. However, successive governments had not shown any inclination to enact such a law. They criticised the current appointment system for being opaque and said it raises doubts about the institution's independence. They called for a consultative process in which a collegium or a body of persons is tasked with the responsibility to select the Election Commissioners.

How were Election Commissioners appointed then?

The power to make appointments rested exclusively with the Executive (the Union government). The government maintained a database of serving and retired officers, primarily Secretaries to the Government of India and Chief Secretaries, from which the Law Ministry would create a shortlist. The Prime Minister held the power to decide the appointment, with the President formally appointing the chosen candidate.

Notably, past Election Commissioners were predominantly retired officers of the Indian Administrative Services (IAS), with very few exceptions.

What was the Supreme Court's ruling?

On March 2, 2023, the five-judge bench ruled on the matter.

The Supreme Court delved into the legislative history of Article 324, including the discussions in the Constituent Assembly regarding the role of the Election Commission and the appointment of its members. The Court observed that it was evident that the founding fathers of the Constitution did not want the Executive to have exclusive authority in appointing Election Commission members. Therefore, the inclusion of the words "subject to any law to be made by Parliament" in Article 324 (2) was representative of the need for Parliament to legislate on this matter.

The absence of such a law, the court noted, left a vacuum. Taking note of the "devastating effect of continuing to leave appointments in the sole hands of the Executive", the court deemed it appropriate to lay down a process for the appointment of election commissioners. Accordingly, it ruled that "the appointment of the Chief Election Commissioner and the Election Commissioners shall be made by the President on the advice of a Committee consisting of the Prime Minister, the Leader of the Opposition of the Lok Sabha, and in case no Leader of the Opposition is available, the leader of the largest opposition Party in the Lok Sabha in terms of numerical strength, and the Chief Justice of India."

However, the Court was careful to specify that these norms were "subject to any law to be made by Parliament". In other words, Parliament was free to enact a law on the appointment process in the future.

What happened after the SC judgment?

The Centre introduced a Bill in Parliament in August last year, outlining a procedure for appointing Election Commissioners. Since the Court had specified that its appointment norms are "subject to any law to be made by Parliament," the government was well within its right to

bring a Bill. However, the appointment process proposed in the Bill raised concerns regarding its potential to undermine the reforms sought by the Court.

The Bill, passed by Parliament in December 2023, establishes a committee comprising the Prime Minister, the Leader of Opposition in the Lok Sabha, and a Cabinet Minister nominated by the PM. The selection will be made from five names shortlisted by a screening panel headed by the Law Minister and comprising two Union secretaries.

The composition of the committee was criticised by the Opposition. This is because, as per the intent of the Constitution's framers, the Election Commission should be an independent body. The proposed committee's composition effectively sidelines the Leader of Opposition, who could be consistently outvoted by the Prime Minister and the Union minister.

This Bill was passed by Parliament in December 2023 and the President gave her assent within a week.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Indian Express

10. Key takeaways from Uttarakhand's Uniform Civil Code Bill

Why in news?

Uttarakhand Chief Minister Pushkar Singh Dhami tabled the state's proposed Uniform Civil Code Bill in the Legislative Assembly. An expert panel had earlier made recommendations for the Bill, which seeks to "govern and regulate the laws related to marriage and divorce, successions, live-in relationships, and matters related thereto."

Here's what the Bill says on some major areas related to personal laws:

1. Provisions of the UCC Bill do not apply to tribal communities

Currently, personal laws in India are complex, with each religion following its specific regulations. The idea of the UCC is to create a set of uniform laws applicable to all the communities in India when it comes to personal laws on marriage, inheritance, divorce, etc.

However, this Bill's provisions will not apply to tribal communities. Given the unique customary practices of tribal communities, many have criticised the idea of the UCC over the years.

2. The Bill aims to regulate live-in relationships

The Bill makes it "obligatory for partners to a live-in relationship within a State, whether they are resident of Uttarakhand or not, to submit a statement of live-in relationship under sub-section (1) of section 381 to the Registrar within whose jurisdiction they are so living."

The procedure for doing so is also mandated, where partners living together must submit a "statement of live-in relationship to the Registrar concerned..."

The registrar will then conduct a "summary inquiry" to ensure that the relationship does not fall under any of the categories mentioned under Section 380. This includes: "where at least

one of the persons is a minor” and “where at least one of the persons is married or is already in a live-in relationship”.

For couples who have been in a live-in relationship for more than a month and have not submitted the statement, a punishment has been prescribed – with imprisonment up to three months or a fine up to Rs 10,000 or both.

Also, the registrar will have to be informed in case of termination of the relationship through the submission of a “statement of termination of relationship”.

3. The Bill prohibits bigamy or marriages with more than one person

Under Section 4, the Bill lists five conditions for marriage. It says a marriage may be solemnised or contracted between a man or a woman if those conditions are fulfilled. The first condition is: “neither party has a spouse living at the time of the marriage”, thus prohibiting bigamy or polygamy.

4. Marriage age of men and women, and “degrees for prohibited relationship” exception remain

The third condition under Section 4 on marriage relates to the minimum age for marriage. The marriageable age for men and women remains 21 and 18, respectively.

Under the fourth condition, the Bill retains the “custom” exception from the Hindu Marriage Act for married parties within the “degrees of prohibited relationships”.

Two people are said to be within the “degrees of prohibited relationship” if they share a common ancestry or they are the wife/husband of a common ancestor. This exception applies to those communities, which have an established custom allowing marriage within the degrees of prohibited relationships.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Indian Express

11. Uttarakhand UCC Bill: What changes in marriage, divorce, guardianship, and adoption?

Why in news?

The Uttarakhand Uniform Civil Code (UCC) Bill, 2024 proposes some significant changes on marriage, adoption, and related aspects. Here’s how the existing position changes.

What are the existing laws on marriage and divorce?

They are governed by the secular Special Marriage Act (SMA), 1954, and personal laws that include the Hindu Marriage Act, 1955, the Indian Christian Marriages Act, 1872, the Indian Divorce Act, 1869, the Parsi Marriage and Divorce Act, 1936, and uncodified (Shariat) and codified Muslim law through the Dissolution of Muslim Marriages Act, the Muslim Women (Protection of Rights on Marriage) Act, 2019, and the Muslim Women (Protection of Rights on Divorce) Act, 1986.

And what are the existing laws on parent-child relations?

Parent-child relations are regulated by laws on guardianship. While natural guardianship is governed by personal laws, court-appointed guardianship is covered by the secular Guardians and Wards Act (GWA), 1890.

All personal laws on guardianship follow the archaic common law principle wherein the father is deemed the guardian of the child, and has the right to take decisions in relation to the child and the child's property.

The mother is the custodian of the child, and is thus relegated to the role of a caretaker. Further, all personal laws treat children born out of wedlock as "illegitimate", and deny them certain rights, such as those pertaining to inheritance.

While the Supreme Court has attempted to correct this discrimination by stating that the mother can be appointed the guardian of the child if the father fails at discharging his functions as a guardian, and has granted inheritance rights in ancestral property to children born out of void and voidable marriages, these developments are limited to Hindu law.

As far as adoption is concerned, Hindus, Buddhists, Jains, and Sikhs can adopt under the Hindu Adoption and Maintenance Act (HAMA), 1956, and everyone irrespective of religion can adopt under the secular Juvenile Justice (JJ) Act, 2015.

What is the framework on registration of marriages proposed by the Uttarakhand UCC Bill?

The Bill has made the registration of marriage and a decree of divorce compulsory with retrospective application.

While there is no requirement of notice and objection for registration of marriage, upon registration, the Register of Marriages is open to public inspection. Although this may have been introduced with an intent to prevent bigamy and fraudulent marriages, it will likely disproportionately affect inter-caste and inter-faith couples by making them vulnerable to surveillance.

Under the Bill, while an unregistered marriage remains valid, the failure to register a marriage after issue of notice by the sub-registrar attracts a fine of Rs 25,000. Thus, the Bill uses a penal mechanism to nudge people towards compulsory registration of marriages.

In case of non-registration for live-in relationships, the punishment includes imprisonment.

What are some of the main features in the UCC Bill with regard to personal law and customs around marriage and divorce?

Marriages may be solemnised through any ceremonies or rituals applicable to the parties to the marriage. Prohibition on bigamy has been extended to all communities.

Enforcement of any customs imposing conditions on remarriage between divorced spouses is criminalised. Extrajudicial modes of divorce through modes not prescribed under the Code

have been penalised. Local customs such as customary divorce deed or panchayat divorce are punishable under the Code.

Divorce in the form of talaq-us-sunnat (pronouncement of divorce by the husband during the period between menstruation followed by sexual abstinence), talaq-i-biddat (triple talaq), khula (divorce on the instance of the wife), maba'arat (divorce by mutual consent), zihar (availability of judicial divorce to wife if husband compares her to any woman within prohibited degrees of relationship) are all punishable with imprisonment.

Mehr and dower have been acknowledged as payable in addition to any maintenance payable under the provisions of the Bill.

What does the Uttarakhand UCC mean for guardianship?

The Bill is silent on the question of guardianship, which means that the position under personal laws will continue to prevail. Similarly, the GWA will continue to govern court-appointed guardians.

Consequently, under the Bill, the father will be the guardian of the child, while the mother will be the custodian. The provision on custody under the Bill reinforces this by stipulating that the custody of a child up to the age of five will ordinarily be with the mother, while failing to clarify whether the mother will also be an equal legal guardian.

The Law Commission in 2018 had recommended that guardianship laws must treat both parents on an equal footing to address the discrimination faced by mothers. This recommendation is not reflected in the Bill.

On a positive note, the Bill clarifies that all children born out of void and voidable marriages and live-in relationships will be deemed legitimate, and will have the same rights as children born within wedlock. However, since live-in relationships have been defined to be in the "nature of marriage", children born in relationships that fall short of this threshold may continue to be deemed illegitimate.

How does the UCC change the position on adoption?

The HAMA and the JJ Act will continue to prevail.

Adoption under HAMA involves the giving and taking of the child between the surrendering parent or guardian and the adoptive parents. Demands have been made for reforming HAMA, because there is no requirement of registration of adoption or institutional oversight to address concerns of misuse such as trafficking of children.

The JJ Act, on the other hand, provides sufficient safeguards to protect the safety and best interests of the child being adopted.

The Uttarakhand Bill encourages mandatory registration of marriages and live-in relationships, but it fails to do the same for adoptions made under Hindu law. This is a missed opportunity to reform Hindu adoption.

What are some of the concerns around criminalisation?

The Bill relies on criminalisation for enforcement. This is likely to disproportionately impact minority communities, as several religious and customary practices of religious minorities have been outlawed.

Further, the surveillance regime enabled by the Bill can be misused to harass inter-faith and inter-caste couples.

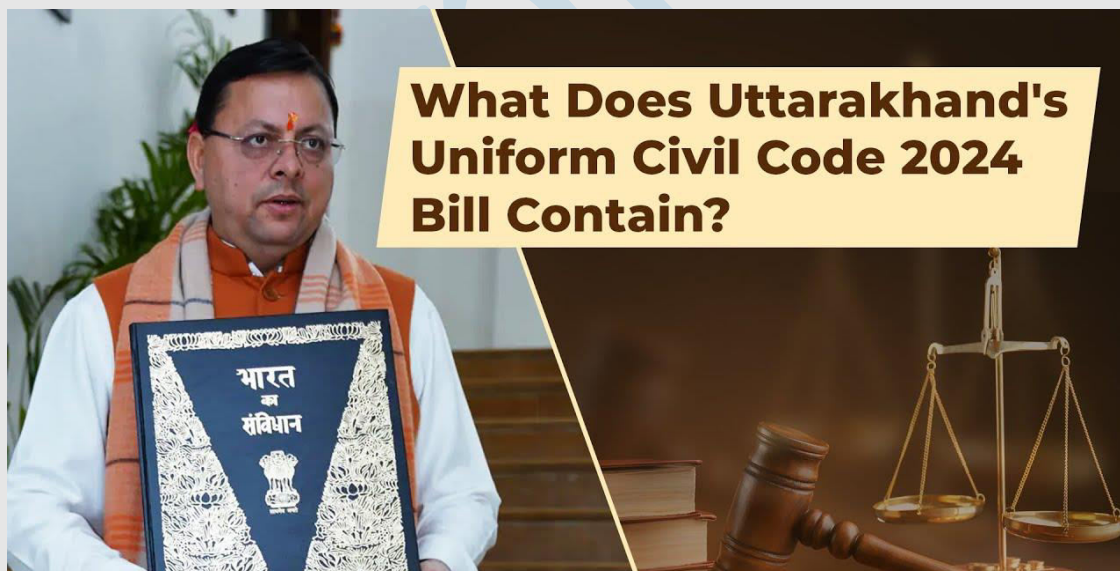
Relevance: GS Prelims & Mains Paper II; Governance

Source: The Indian Express

12. What does Uttarakhand's UCC entail? How will the Uniform Civil Code Bill impact divorce, inheritance of property, and live-in relationships? What are the penalties if the new law is violated? Has any community been left outside its purview? Are other BJP-ruled States also considering formulating a UCC?

Why in News?

On February 7, the Uttarakhand Assembly passed the Uniform Civil Code (UCC) Bill, becoming the first legislature in independent India to pass a law that proposes common rules on marriage, divorce, inheritance of property, and live-in relationships for all citizens, irrespective of their religion. This stems from Article 44 of the Constitution (Directive Principles of State Policy) which although not enforceable, obligates the State to strive to implement such a uniform law. The Bill will now be sent to the President for her assent after which it will become a law.



Who is the Bill applicable to?

It applies to all residents of Uttarakhand except the tribal community which constitutes 2.9% of the State's population. The community has been averse to a UCC from the very beginning. Accordingly, Section 2 stipulates — "Nothing contained in this code shall apply to the members of any Scheduled Tribes."

How does it regulate live-in relationships?

The Bill imposes an obligation on all heterosexual couples (irrespective of whether they are residents of Uttarakhand or not) to register their live-in relationships by submitting a “statement” to the concerned Registrar. Even if such a relationship is terminated, the Registrar has to be kept informed. In case either of the partners is less than 21 years old, the declaration will also be sent to their parents or guardians.

Subsequently, the Registrar will conduct a “summary inquiry” to ensure that the relationship does not fall under any of the prohibited categories mentioned under Section 380 — if a partner is married or in another relationship, if he or she is a minor, and if his or her consent was obtained by “coercion, fraud or misrepresentation”. The Registrar will then have to decide within 30 days. If the registration is refused, reasons have to be conveyed in writing.

Notably, a woman is eligible to claim maintenance in case she is “deserted” by her live-in partner.

In case a couple has spent a month without registering their live-in relationship, they can face a jail term of up to three months or a maximum fine of ₹10,000, or both. Any false statement by them will also attract the same jail term, but a higher fine amount of ₹25,000, or both. Upon being issued a notice, if they still do not register, they may face six months of imprisonment or a fine of ₹25,000 or both.

The Bill abolishes the concept of “illegitimate children” by extending legal recognition to children born in void and voidable marriages, as well as children born in live-in relationships.

Is bigamy or polygamy permitted?

One of the conditions stipulated under Section 4 for a valid marriage is that neither party should have “a spouse living at the time of the marriage” thus prohibiting practices such as bigamy or polygamy. The minimum age of marriage, however, will remain the same.

Do marriages have to be registered?

Marriages that occur after the enactment of the law have to be compulsorily registered within 60 days. This applies to marriages solemnised within the State or outside its territory, provided that at least one party to the marriage is a resident of Uttarakhand. Although non-registration of marriage will not invalidate it, parties can attract a penalty of up to ₹10,000. A three-month jail term and a fine of ₹25,000 will be also awarded in case false information is intentionally rendered during marriage registration.

Marriage ceremonies can be conducted in accordance with any religious and customary rites detailed under legislations such as The Anand Marriage Act, 1909, Arya Marriage Validation Act, 1937, and The Special Marriage Act, 1954, among others.

What about divorce proceedings?

No marriage can be dissolved without a court order or else it can attract imprisonment up to 3 years. Grounds for divorce also include religious conversion but not “irretrievable breakdown of marriage” despite the latter being recognised in several Supreme Court judgments.

Importantly, Section 28 prohibits the initiation of divorce proceedings unless one year has elapsed since the date of marriage. However, an exception can be made if the petitioner has suffered “exceptional hardship” or if the respondent has exhibited “exceptional depravity”. Women can specifically seek a divorce in case the husband has been found guilty of rape or any kind of unnatural sexual offence or if he has more than one wife. Following a divorce, the custody of a child up to 5 years remains with the mother.

How are inheritance rights affected?

A distinct feature of the Bill is that it abolishes the coparcenary system governing ancestral property under the Hindu Succession Act, 1956. Thus, the same scheme of succession will now apply to both ancestral and self-acquired property for Hindus.

In the event of intestate succession, the Bill guarantees equal property rights for the spouse, children, and parents — a departure from existing personal laws that limit such rights. If there is no immediate family, the property will be equally divided among second-line relatives — first cousins from the paternal side. Others can also stake a claim if no eligible claimants are found.

Does the Bill criminalise Muslim personal law practices?

Existing Muslim personal law practices governing marriage and divorce such as nikah halala, iddat, and triple talaq have been criminalised without explicitly naming them. For instance, Section 30(1) stipulates that the right of a person to remarry the divorced spouse can only be exercised without any condition, such as marrying a third person before such a marriage. This therefore prohibits the practice of nikah halala.

Section 32 further provides that anyone who “compels, abets or induces” to observe any such condition before remarriage will be punished with imprisonment up to three years and also be liable to pay a fine of ₹1 lakh.

What do experts have to say?

The mandatory registration of live-in relationships is intrusive and definitely in breach of the fundamental right to privacy as it forces you to submit yourself to the state on something as intimate as a personal relationship.

Madhya Pradesh and Gujarat have also appointed committees to initiate the formulation of a UCC. This effectively defeats the purpose of Article 44 since the Constitution framers did not intend for every State to have its own different version of a UCC.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

13. 'SWATI' (Science for Women-A Technology & Innovation) Portal launched

Why in News?

Government of India today launched "Science for Women-A Technology & Innovation (SWATI)" Portal, aimed at creating a single online portal representing Indian Women and Girls in STEMM (Science, Technology, Engineering, Mathematics & Medicine)

The Portal is a complete interactive database; and the first-of-its-kind in India which is developed, hosted and maintained by the National Institute of Plant Genome Research (NIPGR), New Delhi.

Objectives behind Portal

The Portal will be beneficial towards dissemination of knowledge, new advances in fundamental science and role/importance of innovation and entrepreneurship development in strengthening the backbone of Atmanirbhar Bharat. This would also provide an opportunity to discuss and evolve a roadmap for 'Women in Science' & 'Science for Women'.

The other objectives of the SWATI Portal include to scale up the effort exponentially to include each and every Indian woman in science, across all career stages and subjects, spanning both Academia and the Industry enabling reliable and statistically significant long term research on the issues of equality, diversity and inclusivity in India; Inclusion of each and every Indian WiS, career stages, subjects, spanning both Academia and the Industry; Enabling reliable and statistically significant long term research on the issues of equality, diversity and inclusivity in India, developing active search engine and searchable database (Name, Affiliation, Area of Interest).

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

14. Should some SCs get more quota benefits than others: What is the debate, in which apex court has reserved verdict

Why in News?

A seven-judge Constitution Bench headed by Chief Justice of India D Y Chandrachud reserved judgment in the sub-classification among Scheduled Castes (SCs) case.

Some states have argued that despite reservation, some castes are grossly underrepresented in comparison with the so-called dominant Scheduled Castes. They want to create a separate quota for such castes within the SC quota of 15%, to ensure that the benefits are adequately distributed.

In 2004, a five-judge Constitution Bench in 'E.V. Chinnaiah v State of Andhra Pradesh' held that only the President could notify which communities could receive reservation benefits as per Article 341 of the Constitution, and that states did not have the power to tamper with this.

A number of states have now returned to the Supreme Court to argue against the Chinnaiah decision, claiming that states do have the power to make sure reservation benefits are distributed to communities that need them the most. The respondents on the other hand, defended the Chinnaiah judgment and argued that all Scheduled Castes must be treated equally.

The beginning

In 1975, the Punjab government issued a notification dividing its 25% SC reservation at that time into two categories. In the first category, seats were reserved solely for the Balmiki and Mazhabi Sikh communities, which were and continue to be considered two of the most economically and educationally backward communities in the state. Under the policy, they were to be given first preference for reservation in education and public employment. The second category consisted of the rest of the SC communities.

While the notification remained in force for nearly 30 years, it ran into legal hurdles when in 2004, a five-judge Constitution Bench struck down a similar law introduced by Andhra Pradesh in 2000. In 'E.V. Chinniah v State of Andhra Pradesh', the Supreme Court struck down the Andhra Pradesh Scheduled Castes (Rationalisation of Reservations) Act, 2000 for being violative of the right to equality. The law contained an expansive list of Scheduled Caste communities in the state and the quota of reservation benefits provided to each of them.

The court held that the sub-classification would violate the right to equality by treating communities within the category differently, and said that the SC list must be treated as a single, homogenous group. The rationale was that since the Constitution classifies certain castes in a Schedule as they historically faced discrimination due to untouchability, they cannot be treated differently from one another.

The court also drew attention to Article 341 of the Constitution, which gives the President the power to create a list of SC communities for the purposes of reservation. The five-judge Bench held that this meant states did not have the power to "interfere" or "disturb" this list, including through sub-classification.

Two years after the apex court ruling, the Punjab & Haryana High Court in 'Dr. Kishan Pal v. State of Punjab' struck down the 1975 notification.

The appeal

In October 2006, four months after the Punjab & Haryana High Court struck down the notification, the Punjab government attempted to bring back the law by passing the Punjab Scheduled Caste and Backward Classes (Reservation in Services) Act, 2006. This Act reintroduced the first preference in reservations for the Balmiki and Mazhabi Sikh communities.

In 2010, the High Court once again struck down this provision. The Punjab government then moved the Supreme Court.

In 2014, the Supreme Court in 'Davinder Singh v State of Punjab', referred the appeal to a five-judge Constitution Bench to determine if the 2004 E V Chinniah decision required reconsideration, since it needed an inquiry into the interplay of several constitutional provisions. Interpretation of the Constitution requires a Bench of at least five judges of the Supreme Court.

Reconsidering the E V Chinniah ruling

In 2020, the Constitution Bench headed by Justice Arun Mishra held that the court's 2004 decision required reconsideration. The ruling noted that the court and the state "cannot be a silent spectator and shut its eyes to stark realities." The ruling disagreed with the premise that Scheduled Castes are a homogeneous group and said there are "unequals within the list of Scheduled Castes, Scheduled Tribes, and socially and educationally backward classes."

Crucially, since the E V Chinnaiah decision, the concept of a "creamy layer" has also trickled down to SC reservations.

In the landmark 2018 ruling in 'Jarnail Singh v Lachhmi Narain Gupta', the Supreme Court upheld the concept of "creamy layer" within SCs too. The 'Creamy layer' concept puts an income ceiling on those eligible for reservations. While this concept applies to Other Backward Castes (OBC), it was applied to promotions of SCs for the first time in 2018.

States have argued that the sub-classification is essentially an application of the creamy layer formula, where instead of excluding the better-off castes from the Scheduled Caste list, the state is merely giving preferential treatment to the most disadvantaged castes.

Since the Davinder Singh Bench was also of five-judges (same as E V Chinnaiah), a larger seven-judge Bench is now hearing the issue — only a larger Bench's judgement can prevail over the decision of a smaller Bench.

Apart from Balmikis and Mazhabi Sikhs in Punjab and Madiga in Andhra Pradesh, Paswans in Bihar, the Jatavs in UP, and Arundhatiyars in Tamil Nadu will also be impacted by the sub-classification strategy.

The arguments on both sides

The Advocate General of Punjab, Gurminder Singh, argued that E.V. Chinnaiah was mistaken when it held that states could not tamper with the classes that comprised the Presidential list under Article 341.

Highlighting the language used in Article 16(4) of the Constitution, he pointed out that the Article allows the State to provide reservations for backward classes who are not "adequately represented" in State services. As the phrase used is "adequately" and not "equally", Singh argued, there is no obligation to provide the same opportunities to every community in the Presidential list.

Additional Advocate General of Punjab Shadan Farasat pointed out that the recently introduced Article 342A on the Constitution made it clear that the Chinnaiah decision could no longer apply. This provision specifically empowers States and Union Territories to maintain a list of Socially and Economically Backward Classes which may be different from the Presidential list.

Former Attorney General KK Venugopal also made a rare return to court to argue in favour of sub-classification. Recalling his experience arguing in the Chinnaiah case, he stated that without sub-classification, the weakest sections of society will be left behind, defeating the very purpose of reservations.

Senior Advocate Sanjay Hegde, appearing for the respondents, argued that all the communities included in the Presidential list suffered from the “taint of untouchability”, and the Constituent Assembly made a choice not to enter into comparisons of who suffered the most.

He then claimed that if a community named in the Presidential list did not receive reservation benefits, they would only be left with the stigma of being a Scheduled Caste. Another intervenor similarly argued that states did not have the discretion to ignore some Scheduled Castes in favor of others.

The Bench took note of this point and CJI Chandrachud acknowledged that the court would have to lay down criteria to ensure popular politics does not affect the granting of reservations.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Polity & Governance

15. Bharat Ratna awards and Politics behind it

Why in news?

Prime Minister Narendra Modi recently announced that former Prime Ministers P V Narasimha Rao (1991-96) and Chaudhary Charan Singh (July 1979-January 1980), and the pioneer of the Green Revolution Dr M S Swaminathan, would be conferred the Bharat Ratna, the country's highest civilian honour.

The Prime Minister had earlier announced the Bharat Ratna for veteran BJP leader L K Advani and for OBC reservations pioneer and former Bihar Chief Minister Karpoori Thakur.

BJP signals for elections

The announcements are especially significant because they have come barely a couple of months ahead of Lok Sabha elections. By conferring the Bharat Ratna on Dr Swaminathan and Charan Singh, the government appears to be signalling it cares about farmers and agriculture. Charan Singh is also among the tallest Jat leaders the country has seen. While Jats have stood firmly behind the BJP in Uttar Pradesh since 2014, the community is said to be unhappy with the party in Haryana.

The honour for Narasimha Rao is even more significant. It rubs in the message that the Congress had for years ignored one of its most able administrators, the man who pulled the country out of a deep financial crisis and set it on the path of economic growth, only because he had differences with Sonia Gandhi.

It also underscores the point the Prime Minister sought to make in Parliament recently — that while the BJP puts the nation above all else, for the Congress, the Nehru-Gandhi family always comes first.

The Ratna for Rao is also significant for coming soon after the consecration of the Ram Temple in Ayodhya. The Congress has been accused of putting the blame for the demolition of the

Babri Masjid on Rao, who was Prime Minister at the time, by his alleged miscalculation of the situation on the ground at the time.

For Temple and Mandal

The Bharat Ratna for Advani was noteworthy given his role in making the Ram Temple a reality — as BJP president at the time, it is Advani who put the Ram Janmabhoomi movement at the forefront of the party's agenda. The highest civilian honour for Advani is likely to contribute to the BJP's narrative on the temple in the run-up to the elections.

The honour for Karpoori Thakur came at a time when the Opposition has been hoping to build its demand for a caste census into a plank that might be able to reduce the post-Ram Temple Hindutva fervour in favour of the BJP.

Recognition for the man whom Nitish Kumar and Lalu Prasad consider their political guru — but whose contribution to social justice has never been recognised by the Congress — was intended to signal the BJP's empathy and concern for the backward castes, especially in Bihar and UP. Days after the announcement of the Ratna, Bihar Chief Minister Nitish Kumar, who had spearheaded the demand for a caste census and carried out a survey of castes in his state, shifted his allegiance to the NDA.

Past recipients

Before the announcement of these five Bharat Ratnas, the Modi government has conferred the honour on five others over its two terms in power.

They are educationist, freedom fighter, and once-Congress president Pandit Madan Mohan Malviya, former Prime Minister Atal Bihari Vajpayee, former President and Congress leader Pranab Mukherjee, the legendary Assamese musician Bhupen Hazarika, and RSS leader Nanaji Deshmukh.

The honour for Malviya and Vajpayee came in 2015, within a year of the Modi government coming to power.

While Malviya was elected Congress president in 1909, 1918, and 1932, he was always to the Hindu right in the ideological spectrum that the party represented before Independence. Malviya founded the Akhil Bharatiya Hindu Mahasabha in 1907 and the Banaras Hindu University in 1916, and served as its Vice Chancellor from 1919 until 1938. The Sangh Parivar has always claimed the legacy of Pandit Malviya.

Vajpayee, of course, was a towering stalwart who had friends across parties. In his four-decade career in Parliament, he served nine terms in Lok Sabha and two in Rajya Sabha, and took oath as Prime Minister thrice. In 2004, he became the first non-Congress PM to complete a full five years in power.

In 2019, the Modi government picked Mukherjee, one of the Congress's most senior leaders, for the Bharat Ratna. A year previously, Mukherjee had accepted an invitation to deliver a lecture at the RSS headquarters in Nagpur.

The honour for Mukherjee was seen, again, as the BJP 'correcting' the Gandhis' "sidelining" of a man who had played a central role in the party for decades. In his five-decade political career, Mukherjee occupied top positions under Congress governments, including Minister for Finance and Home — and making him President in 2012 was seen as a way to "retire" him as Rahul Gandhi came to the fore in the party.

Bhupen Hazarika, who was honoured in 2019, was one of the foremost cultural icons of the Northeast, and the award fulfilled a long-standing demand from his fans and the region as a whole.

Chandikadas Amritrao Deshmukh, better known as Nanaji Deshmukh, who also received the Ratna in 2019, worked in the fields of education, health, and rural self-reliance, but his greatest contribution was seen as building the Bharatiya Jana Sangh, the precursor of the BJP, into a formidable force.

As treasurer of the BJS, Deshmukh's efforts brought the party the support, political and financial, of the big business community of Bombay and Guajarat.

Ratna before Modi era

Under Congress governments, the choices for Bharat Ratna were more conventional — and included sitting Prime Ministers Jawaharlal Nehru (1955) and Indira Gandhi (1971, after the Bangladesh War), and Lal Bahadur Shastri (1966) after his sudden death.

In 1988, the government of Rajiv Gandhi conferred the Ratna on former Tamil Nadu Chief Minister M G Ramachandran ahead of Assembly elections in that state.

In 1990, the Janata Dal government headed by V P Singh and supported by the BJP picked Dr B R Ambedkar for the honour. That same year, the Ratna was awarded to Nelson Mandela.

In 1991, the Narasimha Rao government gave the award to former Prime Ministers Rajiv Gandhi (who had been assassinated recently) and Morarji Desai, and Sardar Vallabhbhai Patel. In 1992, Maulana Abul Kalam Azad, stalwart of the freedom movement, and industrialist JRD Tata were honoured.

Under the short-lived coalition governments after 1996, Gulzarilal Nanda, who served as acting PM twice, freedom fighter Aruna Asaf Ali, and scientist Dr A P J Abdul Kalam (who would later become President) were among those who were honoured.

The Vajpayee government gave the Ratna to socialist icon and social reformer Jayaprakash Narayan, economist Amartya Sen, and musicians Ravi Shankar and Bismillah Khan.

Under the Manmohan Singh government from 2004 to 2014, only three Bharat Ratnas were conferred: to Hindustani classical musician Bhimsen Joshi, cricketer Sachin Tendulkar, and scientist CNR Rao.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Indian Express

16. SC says jail, not bail, is the rule under the UAPA: How courts have been granting bail in UAPA cases

Why in news?

Underlining that the oft quoted phrase, 'bail is rule, jail is the exception', does not find any place in the stringent anti-terror Unlawful Activities Prevention Act (UAPA), the Supreme Court on February 7 denied bail to Gurwinder Singh, an accused in an alleged "Khalistan module." Singh was arrested when he was found hanging cloth banners on which "Khalistan Jindabad" and "Khalistan Referendum 2020" was written. He is now accused of a being part of a larger conspiracy with Sikhs for Justice, a pro-Khalistan group banned by the Indian government.

While the higher bar for granting bail under the UAPA is indeed antithetical to ordinary criminal law, there are some cases in which courts have granted bail. How have courts interpreted Section 43D (5) of the UAPA? Why do courts deny bail in most cases despite some rulings that have raised the bar for the state to argue against bail?

The law

Section 43D (5) reads: "Notwithstanding anything contained in the Code, no person accused of an offence punishable under Chapters IV and VI of this Act shall, if in custody, be released on bail or on his own bond unless the Public Prosecutor has been given an opportunity of being heard on the application for such release.

"Provided that such accused person shall not be released on bail or on his own bond if the Court, on a perusal of the case diary or the report made under section 173 of the Code is of the opinion that there are reasonable grounds for believing that the accusation against such person is prima facie true."

The law essentially says that while relying only on the police version — the case diary and the police report — the accused must show to the court that it is unreasonable to believe the accusations are prima facie (Latin for "at first sight") true. In shifting the onus on the accused, the cardinal principle of criminal law that a person is innocent till proven guilty is upended in the alternate framework of the UAPA.

Narrowing the room for bail

In 2019, the Supreme Court in a two-judge bench ruled in Zahoor Ahmed Shah Watali v NIA, that for granting bail under UAPA, courts must not examine the evidence but only accept it at face value.

Once charges are framed in the case, the court in Watali said, effectively an accused "may have to undertake an arduous task to satisfy the court that despite the framing of charge, the materials presented along with the charge-sheet (report under Section 173 of Cr.P.C.), do not make out reasonable grounds for believing that the accusation against him is prima facie true" in order for the court to grant bail.

In the Gurwinder Singh case, the two-judge bench headed by Justice M M Sundaresh relied on the Watali ruling entirely.

Relevance: GS Prelims & Mains Paper II; Governance
Source: Indian Express

17. What is Nazool land, behind recent dispute and violence in Haldwani?



Why in News?

Violence erupted in Uttarakhand's Haldwani district after the administration conducted a demolition drive at the site of a mosque and madrasa, allegedly on Nazool land, killing five and injuring many more.

What is Nazool land?

Nazool land is owned by the government but most often not directly administered as state property. The state generally allots such land to any entity on lease for a fixed period, generally between 15 and 99 years.

In case the lease term is expiring, one can approach the authority to renew the lease by submitting a written application to the Revenue Department of the local development authority. The government is free to either renew the lease or cancel it — taking back Nazool land.

In almost all major cities of India, Nazool land has been allotted to different entities for a variety of different purposes.

How did Nazool land emerge?

During British rule, kings and kingdoms which opposed the British frequently revolted against them, leading to several battles between them and the British Army. Upon defeating these kings in battle, the British would often take their land away from them.

After India got Independence, the British vacated these lands. But with kings and royals often lacking proper documentation to prove prior ownership, these lands were marked as Nazool land — to be owned by the respective state governments.

How does the government use Nazool land?

The government generally uses Nazool land for public purposes like building schools, hospitals, Gram Panchayat buildings, etc. Several cities in India have also seen large tracts of land denoted as Nazool land used for housing societies, generally on lease.

Very often, the state does not directly administer Nazool land, but rather leases it to different entities.

How is Nazool land governed?

While several states have brought in government orders for the purpose of framing rules for Nazool land, The Nazool Lands (Transfer) Rules, 1956 is the law mostly used for Nazool land adjudication.

Is the Halwani land where the demolition drive took place registered as Nazool land?

As per the Haldwani district administration, the property where the two structures are situated is registered as the Nagar Nigam's (Municipal Council's) Nazool land. The administration says that for the last 15-20 days, a demolition drive has been underway in connection with Nagar Nigam properties to free roads from traffic congestion.

However, Shakeel Ahmad, Councillor of Ward Number 31, where the incident took place, said that the locals had requested the administration to wait till the next date of hearing in the High Court on February 14.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

18. What are the changes in the new Water Act? Will the amendments weaken the laws that protect rivers and water bodies from industrial pollution?

The Lok Sabha this week passed the Water (Prevention and Control of Pollution) Amendment Act, 2024. The legislation, which was introduced and passed earlier by Rajya Sabha, makes important changes to the Water (Prevention and Control of Pollution) Act, 1974.

What is the Water (Prevention and Control of Pollution) Act, 1974?

This Act was the first piece of legislation in independent India that identified the need to have an institutional structure to address contamination of water bodies. This led to the creation, in September 1974, of the Central Pollution Control Boards (CPCB) and State Pollution Control Boards (SPCB) that were charged with monitoring and preventing public water resources from getting contaminated by sewage and industrial effluents. This Act made it mandatory for industrial units to get permission from their respective State boards before setting up factories and submitting themselves to checks on whether their manufacturing and other processes were complying with prescribed norms.

"The Parliament of India in its wisdom enacted the Water (Prevention and Control of Pollution) Act in 1974 with a view to maintaining and restoring wholesomeness of our water bodies. One of the mandates of the Central Pollution Control Board (CPCB) is to collect, collate and

disseminate technical and statistical data relating to water pollution," the website of the CPCB notes. While the CPCB is empowered to conduct checks and provide guidance on technical standards to be adhered to, the SPCB files cases and is expected to enforce compliance. Violating the provisions of the Water Act can mean industries being shut down; monetary fines as well as imprisonment of up to six years. That said, there have been no instances of companies or people in India having been imprisoned due to environmental violations.

What are the amendments?

Water is a State subject, and the Centre cannot directly pass legislative laws influencing water management. However, the Centre can create legislation, if two or more States demand it, and this can be made applicable by States over their territories if they adopt the legislation in their Assemblies. The amended version of the Act, passed by both Houses of Parliament, will currently apply to Himachal Pradesh and Rajasthan and the Union territories.

The original Act, passed in 1974, is applicable in 25 States. The most important change is that it removes the provisions of imprisonment for several violations, deemed "minor", and replaces them with fines, to the tune of ₹10,000 extending up to ₹15 lakh.

As per the original Act, the SPCB's permission is needed for establishing any industry or treatment plant, which could discharge sewage into a water body, sewer, or land. In the amendment, the Bill specifies that the Centre, "... in consultation with the CPCB, may exempt certain categories of industrial plants from obtaining such consent...."

However, operating or establishing an industrial unit without SPCB consent can still land you in jail for six years along with a fine.

The Bill also adds that the Centre may issue guidelines for the grant, refusal, or cancellation of consent granted by the SPCB. It also penalises tampering with monitoring devices used in determining whether any industry or treatment plant can be set up. The penalty will be between ₹10,000 and ₹15 lakh. The amended Act also empowers the Centre to frame rules to select the chairpersons of SPCBs and frame guidelines that States can follow on matters for establishing industries and new operating processes.

What has been the response?

Explaining the rationale behind the amendments, Environment Minister, Bhupendra Yadav, who steered the Bill, said outdated rules and regulations caused a "trust deficit." The imprisonment provisions for minor violations, which are simple infringements and did not lead to any injury to humans or damage to the environment, often caused "harassment" to businesses and citizens and was not in consonance with the spirit of "ease of living and ease of doing business," he added. In discussions on the Act in the Lok Sabha, Members of Opposition parties raised concerns that the amendments weakened the laws that protected rivers and water bodies from industrial pollution. They argued that the fear of imprisonment acted as an effective deterrent to industrial units that were lax with complying with strict regulations.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

19. How can child safety be ensured online?

Why in news?

In early February, Meta CEO Mark Zuckerberg provided a public apology to parents whose children were victims of online predators during a Congressional hearing, that could be described as hostile to not just Meta, but other tech majors including X, TikTok, Snapchat, and Discord. The Big Tech and the Online Child Sexual Exploitation Crisis hearing was reportedly called "to examine and investigate the plague of online child sexual exploitation" and all their executives were pinned on their abdication of responsibility to protect children on social media platforms.



What are the issues with children's safety online?

Tech majors are increasingly finding themselves in the midst of a maelstrom of protests across the world, not just over privacy concerns, but also with the security of users online. Across the world, parents and activists are aggressively advancing the agenda of having the tech companies take

responsibility, or provide platforms that are 'safe by design' for children and young users.

Are the risks significant?

The potential risks to children are significant, the report points out. "These include safety concerns such as exposure to graphic sexual content, bullying, sexual harassment and abuse, which in immersive virtual environments can feel more 'real' than on current platforms." Further, vast amounts of data, including about non-verbal behaviour are collected, potentially allowing a handful of large tech companies to facilitate hyper-personalised profiling, advertising and increased surveillance, impacting children's privacy, security, other rights and freedom.

Then there is the mental health aspect, with children facing the prospect of trauma, soliciting and abuse online, which can leave deep psychological scars that impact lives in the real world too. Innocuous and innocent sharing of images online can also be twisted by depraved predators. End-to-end encryption is essential to protect the information that children share online.

What about the reach of generative AI?

The Davos World Economic Forum in a paper last year explained that generative AI brings potential opportunities, such as homework assistance, easy-to-understand explanations of difficult concepts, and personalised learning experiences that can adapt to a child's learning style and speed. "Children can use AI to create art, compose music and write stories and software (with no or low coding skills), fostering creativity," it says. For children with disabilities, a world opens up as they can interface and co-create with digital systems in new ways through text, speech or images.

But Generative AI has been shown to instantly create text-based disinformation indistinguishable from, and more persuasive than, human-generated content. AI-generated images are sometimes indistinguishable from reality. Children are vulnerable to the risks of mis/disinformation as their cognitive capacities are still developing. There is also a debate about how interacting with chatbots that have a human-like tone will impact young minds.

What can be done to keep children safe online?

The primary responsibility is that of the tech companies who will have to incorporate 'safety by design'. The proceedings of the Congressional hearings have made it obvious that these companies are fully cognisant of the extent to which their apps and systems impact children negatively.

Drawing on the Convention on the Rights of the Child, UNICEF offers guidance that lists nine requirements for child-centred AI, including support for children's development and well-being, and protecting children's data and privacy. UNICEF recommends that tech companies apply the highest existing data protection standards to children's data in the metaverse and virtual environments.

In addition, governments have the burden of assessing and adjusting regulatory frameworks periodically to ensure that such technologies do not violate children's rights, and use their might to address harmful content and behaviour inimical to children online.

Ultimately, everyone must start from the assumption that all the rules that exist in the real world to protect children, should also prevail online.

Relevance: GS Prelims & Mains Paper II; International Issues

Source: The Hindu

20. Parliament also passes the Constitution (Scheduled Tribes) Order (Amendment) Bill, 2024 and the Constitution (Scheduled Castes and Scheduled Tribes) Orders (Amendment) Bill, 2024

Jammu and Kashmir

The Constitution (Jammu and Kashmir) Scheduled Tribes Order (Amendment) Bill, 2024 was passed by the Parliament, to include 'Pahari Ethnic Group, Paddari Tribe, Koli and Gadda Brahmin' communities in the list of STs of UT of Jammu and Kashmir.

The Rajya Sabha passed the bill on 9th February 2024 to amend the Constitution (Jammu & Kashmir) Scheduled Tribes Order, 1989 with respect to the UT of J&K. Earlier, the Bill had been passed by the Lok Sabha on 6th February 2024.

Andhra Pradesh and Odisha

Earlier, the Constitution (Scheduled Tribes) Order (Amendment) Bill, 2024 in respect of Andhra Pradesh and the Constitution (Scheduled Castes and Scheduled Tribes) Orders (Amendment) Bill, 2024 in respect of Odisha were passed by the Lok Sabha on 8th February 2024, in order to effect inclusions in their respective lists of Scheduled Tribes. The bill was earlier passed by the Rajya Sabha on 6th February 2024.

The Minister said that the Government is committed to the welfare of tribal communities of the country. She said that with this Bill, the Particularly Vulnerable Tribal groups will get justice.

Andhra Pradesh

The Constitution (Scheduled Tribes) Order (Amendment) Bill, 2024 is intended to amend the Constitution (Scheduled Tribes) Order, 1950 to modify the list of Scheduled Tribes regarding Andhra Pradesh. The following inclusions will be made in list of Scheduled Tribes of Andhra Pradesh: -

a. Inclusion of 'Bondo Porja' and 'Khond Porja', that are Particularly Vulnerable Tribal Groups (PVTGs), at entry 25 in the ST list of Andhra Pradesh.

b. Inclusion of 'Konda Savaras', that are Particularly Vulnerable Tribal Groups (PVTGs), at entry 28 in the ST list of Andhra Pradesh.

Odisha

The Constitution (Scheduled Castes and Scheduled Tribes) Orders (Amendment) Bill, 2024 proposed to amend the Constitution (Scheduled Castes) Order, 1950 and the Constitution (Scheduled Tribes) Order, 1950 to modify the list of Scheduled Castes and Scheduled Tribes in relation to Odisha. The following changes/inclusions will be made in list of Scheduled Tribes of Odisha: -

I. Four Particularly Vulnerable Tribal Groups (PVTGs), which are proposed to be included in their own names in the list of STs:

i. Pauri Bhuyan, Paudi Bhuyan as synonyms of Bhuiya, Bhuyan

ii. Chuktia Bhunjia as synonym of Bhunjia

iii. Bondo as sub-entry under STs "Bondo Poraja, Bonda Paroja. Banda Paroja"; and,

iv. Mankidia as synonym of ST "Mankirdia".

II. Inclusion of communities through New Entry:

i. Muka Dora, Mooka Dora, Nuka Dora, Nooka Dora with area restriction (in undivided Koraput District i.e., Koraput, Nowrangapur, Rayagada & Malkangiri districts).

ii. Konda Reddy, Konda Reddi.

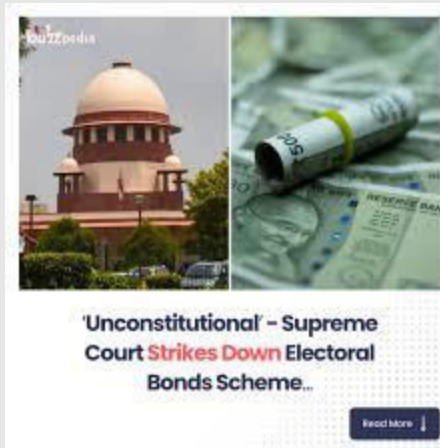
After the Bills become an Act, member of the communities newly listed in the revised list of Scheduled Tribes of J&K, Andhra Pradesh and Odisha will also be able to derive benefits meant for STs under the existing schemes of the Government.

Some of the major schemes run by the Ministry of Tribal Affairs include Pre- and Post-Matric Scholarship, National Overseas Scholarship, National Fellowship and Scholarship Schemes, along with concessional loans from National Scheduled Tribes Finance and Development Corporation, Hostels for ST boys and girls etc. In addition to above, they will also be entitled to benefits of reservation in services and admission to educational institutions as per Government policy.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

21. Electoral Bonds verdict



Why in News?

Underlining that the restrictions on free speech by the electoral bonds scheme are not “proportional” to its goal, a five-judge Constitution Bench of the Supreme Court, headed by Chief Justice of India (CJI) DY Chandrachud, unanimously struck down the scheme.

Essentially, the judicial review of the electoral bonds scheme involved examining whether the extent of the state’s encroachment into the rights of individuals was proportional to achieve its objectives — curbing black money and protecting donor privacy.

What is the proportionality test?

In the 2018 SC ruling that upheld the Aadhaar Act, Justice Chandrachud in his dissenting opinion said that the proportionality test is “the dominant best practice judicial standard for resolving disputes that involve either a conflict between two rights claims or between a right and a legitimate government interest.” The test is deemed necessary to guard against arbitrary action, so that the state cannot extinguish the right entirely even in pursuance of a legitimate state interest. For example, the right to life cannot be taken away to ensure law and order.

The govt’s argument

In the electoral bonds case, the government had argued that curbing black money and protecting donor anonymity are both legitimate aims for the state. While tackling black money is fairly non-contentious, the government argued that donor anonymity is also a legitimate state interest since it seeks to give effect to a fundamental right — the right to privacy of the donor.

On the extent of interference with the voter’s right to know, the government argued that the right to information only operates against information in the possession or in the knowledge of the state. It cannot operate for seeking information not in the knowledge or possession of the state, Solicitor General Tushar Mehta argued.

Finally, on the issue of safeguards, Mehta said that on a court order, all the details can be furnished for a criminal investigation.

How the test was used

Justice Khanna, applying the proportionality test in his separate opinion, said that donor anonymity cannot be a legitimate state aim. He also held that voters’ right to know supersedes anonymity in political party funding.

CJI Chandrachud, however, applied the “double proportionality” test. Since the case involves balancing facets of two competing fundamental rights — the right to information and the right to privacy, the proportionality test would not be enough.

According to him, the proportionality test is for when a right is directly tested against state action, but for a “balancing” of rights, the court needs to go further. Essentially, the court will have to examine the matter from the perspective of both rights and decide if the state has adopted the “least restrictive” methods to realise both rights. Additionally, whether the measure has a disproportionate impact on any one of the two rights also has to be looked at.

The CJ in his opinion pointed out that there are less intrusive methods, such as the electoral trusts scheme, to achieve the objective of curbing black money and protecting donor anonymity.

What is Electoral Trusts Scheme?

Before the controversial Electoral Bonds (EB) Scheme was introduced in 2018, there was something called an Electoral Trusts (ET) Scheme, which was introduced by the UPA government in 2013.

Both schemes were meant to facilitate donations to political parties by corporates and individuals. But while the EB scheme seeks to ensure anonymity for the donor, the electoral trusts under the previous scheme were required to submit to the Election Commission of India a report on contributions from individuals and companies, and their donations to parties every year.

This is how the two schemes have worked so far.

First, what are electoral trusts?

Under the scheme notified by the UPA-2 government on January 31, 2013, any company registered under Section 25 of the Companies Act, 1956, can form an electoral trust.

Under Section 17CA of the Income-tax Act, 1961, any citizen of India, a company registered in India, or a firm or Hindu Undivided Family or association of persons living in India, can donate to an electoral trust.

ELECTORAL TRUSTS YEARLY DONATION (2013-14 to 2021-22)	
Year	Donation (in Rs cr)
2013-14	85.37
2014-15	177.4
2015-16	49.50
2016-17	325.27
2017-18	194.78

2018-19	266.14
2019-20	424.66
2020-21	258.43
2021-22	487.05
Total	2,268.6

Source: Annual contribution reports of ETs to ECI (2013-2014 till 2021-2022)

The electoral trusts have to apply for renewal every three financial years. They must donate 95% of contributions received in a financial year to political parties registered under the Representation of the People Act, 1951. The contributors' PAN (in case of a resident) or passport number (in case of an NRI) is required at the time of making contributions.

And how does the working of this scheme differ from that of the EB Scheme?

The electoral trusts route is transparent on contributors and beneficiaries. Where there is only one contributor and one beneficiary of a particular trust, the public can know for sure who is funding whom. For instance, in 2018-19, the Janhit Electoral Trust had just one contribution of Rs.2.5 crore from Vedanta, and the entire amount was donated to the BJP, as per the trust's annual contribution report.

However, if there are multiple contributors and recipients of donations, it cannot be specified which company is funding which party. So, Prudent Electoral Trust, which was known as Satya Electoral Trust before 2017, received contributions from a host of companies such as DLF, GMR, and Bharti Airtel, as well as several individuals, and donated to a range of national and regional parties. But it is difficult to pinpoint which donor gave to which party.

Electoral bonds, on the other hand, are exempt from disclosure requirements. Parties inform the ECI of the aggregate donations received through EBs, but give no details of the donors, which they are required to do in case of donations in cash or by cheque or bank transactions over Rs.20,000 each. The government argues that this lack of transparency in donations through EBs is to maintain the privacy of donors.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Indian Express

22. Criticism against court vacations



The Supreme Court has 193 working days a year for its judicial functioning, while the High Courts function for approximately 210 days, and trial courts for 245 days.

Why in news?

Chief Justice of India DY Chandrachud recently spoke about the criticism often made towards the number of vacation days awarded to Indian judges.

In 2022, then Union Law Minister Kiren Rijiju said in Parliament that “there is a feeling among people of India that the long vacation which the courts obtain is not very convenient for justice-seekers”, and that it is his “obligation and duty to convey the message or sense of this House to the judiciary”.

What are court vacations?

The Supreme Court has 193 working days a year for its judicial functioning, while the High Courts function for approximately 210 days, and trial courts for 245 days. High Courts have the power to structure their calendars according to the service rules.

The Supreme Court breaks for its annual summer vacation which is typically for seven weeks — it starts at the end of May, and the court reopens in July. The court takes a week-long break each for Dussehra and Diwali, and two weeks at the end of December. While this judicial schedule has its origins in colonial practices, it has come under criticism for quite some time now.

What happens to important cases during court vacations?

Generally, a few judges are available to hear urgent cases even when the court is in recess. The combination of two or three judges, called “vacation benches”, hear important cases that cannot wait. Cases such as bail, eviction, etc. often find precedence in listing before vacation benches.

Why are court vacations criticised?

Like Rijiju said, extended frequent vacations are not good optics, especially in the light of the mounting pendency of cases and the snail’s pace of judicial proceedings. For an ordinary litigant, the vacation means further unavoidable delays in listing cases.

The colonial origins of the practice are not lost on the critics. The summer break perhaps began because European judges of the Federal Court of India found Indian summers too hot — and took the winter break for Christmas.

In 2000, the Justice Malimath Committee, set up to recommend reforms in the criminal justice system, suggested that the period of vacation should be reduced by 21 days, keeping in mind the long pendency of cases. It suggested that the Supreme Court work for 206 days, and High Courts for 231 days every year.

In 2014, when the Supreme Court notified its new Rules, it said that the period of summer vacation shall not exceed seven weeks from the earlier 10-week period.

What are the arguments in favour of court vacations?

Within the legal fraternity, the long breaks are strongly defended. Lawyers have often argued that in a profession that demands intellectual rigour and long working hours — both from lawyers and judges — vacations are much needed for rejuvenation.

Judges typically work for over 10 hours on a daily basis. Apart from the day's work in court from 10:30 am to 4 pm, they also spend a few hours preparing for the next day. A frequently-made argument is that judges utilise the vacation to write judgments.

Another argument is that judges do not take leave of absence like other working professionals when the court is in session. In 2015, even after the Supreme Court heard a midnight plea against the execution of Yakub Memon, Justices Dipak Misra and Prafulla Pant returned to work the next morning. Family tragedies, health are rare exceptions, but judges rarely take the day off for social engagements.

Legal experts also point out that cutting down on court vacations will not see a dramatic decrease in pendency of cases, at least in the Supreme Court.

Data show that the Supreme Court roughly disposes of the same number of cases as are instituted before it in a calendar year. The issue of pendency relates largely to legacy cases that need to be tackled systemically. The argument that cutting the vacation period would be a solution to pendency is not backed by data, and takes away from real issues that contribute to the pendency problem.

What is the practice in other countries?

The Indian Supreme Court has the highest caseload among the apex courts around the world and also works the most. In terms of the number of judgments delivered too, with 34 judges, the Indian Supreme Court leads the way. In 2021, 29,739 cases were instituted before the Supreme Court, and 24,586 cases were disposed of by the court in the same year.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Indian Express

23. Art 142, why SC quashed Chandigarh mayor's election, and why it matters

Why in news?

The Supreme Court has quashed the result of the January 30 election for the Mayor of Chandigarh after finding that presiding officer had deliberately invalidated eight ballots cast in favour of the Aam Aadmi Party (AAP)-Congress candidate Kuldeep Kumar 'Tita'.

The Bench, comprising Chief Justice of India (CJI) D Y Chandrachud, while setting aside the result as "contrary to law" and declaring Kuldeep Kumar as the "validly elected candidate", refused to quash the election process itself.

On what grounds did the court strike down the result?

The court used its power under Article 142 of the Constitution to do "complete justice" and protect the sanctity of electoral democracy.

The Bench said it was evident that "while the petitioner is reflected to have polled 12 votes, the eight votes which are treated as invalid were wrongly treated to be so", and "each of those...invalid votes were in fact validly cast...in favour of the petitioner".

It follows that Kuldeep had in fact received 20 votes, while Manoj Sonkar, the BJP candidate, had won 16. "We accordingly order and direct that the result of the election as declared by the presiding officer shall stand quashed and set aside," the court said.

Why was this mayoral election important?

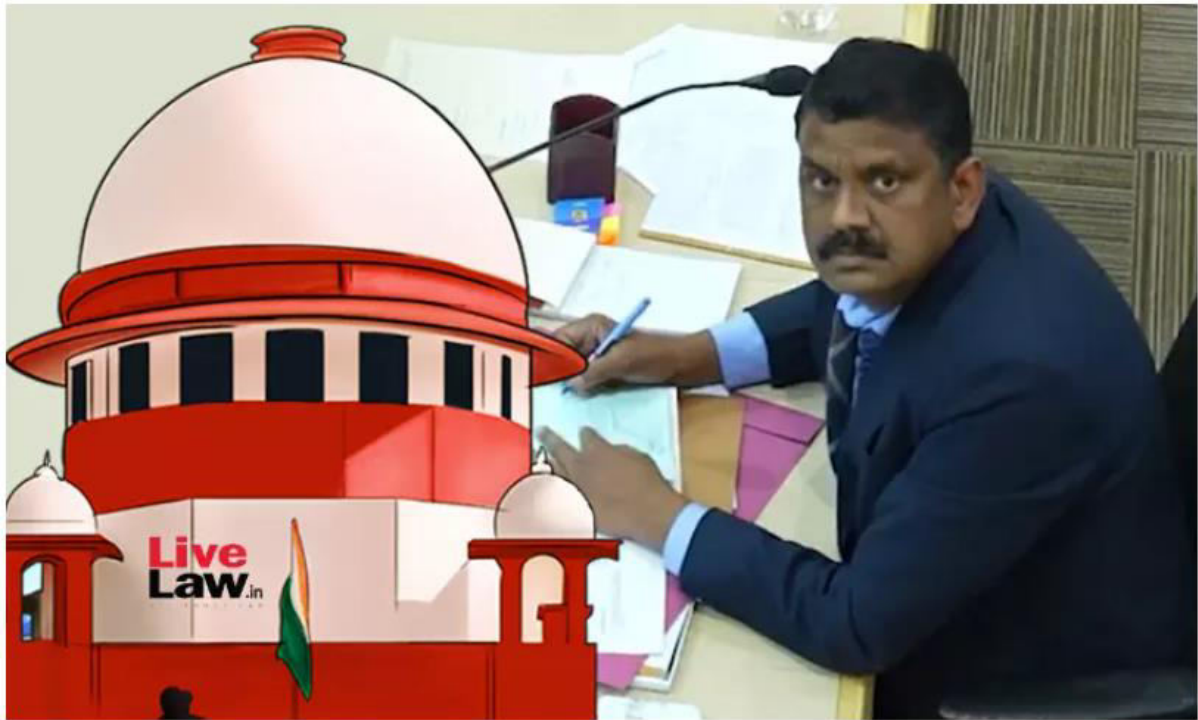
The powers of the Mayor of Chandigarh Municipal Corporation are limited to calling meetings and deciding the agenda. Although the corporation has a five-year term, the Mayor is elected for only one year. The post is reserved for a woman candidate in the first and fourth year of each corporation. The last election to the corporation was held in 2021.

This year's election was politically significant because it saw an alliance, for the first time, between the AAP and Congress against the BJP, setting the stage for potential alliances for the Lok Sabha elections. The parties are together in the opposition INDIA bloc, and have been in talks for a seat-sharing deal in Delhi, even though they have decided to contest separately in Punjab.

What happened after the mayoral election?

After videos showed Masih marking ballot papers so they could be declared invalid, Kuldeep moved the High Court and then Supreme Court.

On February 5, CJI Chandrachud observed that it was obvious that Masih has defaced the ballots, and that "this man has to be prosecuted". The court said it was "appalled" at the "mockery" and "murder" of democracy, and summoned Masih on January 19. Consequently, Supreme Court has initiated criminal proceedings against the presiding officer.



Defection

Meanwhile, three AAP councillors joined the BJP on Sunday. Had the court ordered a fresh election instead of merely quashing the result, the AAP-Congress tally would have fallen to 17 from 20, while the BJP's votes would have risen to 19 (including the SAD councillor's vote), giving the party the majority (along with MP Kher's vote) of the 36 ballots that would be cast. Unlike in elections for Parliament or state Assemblies, there is no anti-defection law in municipal elections.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

24. Why has the Assam government decided to repeal the state's Muslim Marriage Act?

Why in news?

The Assam state Cabinet has decided to repeal the Assam Muslim Marriage and Divorce Registration Act of 1935. In the meeting, the Cabinet approved the 'Assam Repealing Ordinance 2024' which will repeal the 89-year-old Act.

But first, what is the Act meant for?

Enacted in 1935, the Act lays down the process for registration of Muslim marriages and divorces. A 2010 amendment replaced the word 'voluntary' in the original Act with 'compulsory', making registration of Muslim marriages and divorces compulsory in the state of Assam.

The Act authorises the state to grant licences to "any person, being a Muslim" to register marriages and divorces, with Muslim registrars deemed to be public servants. It lays down the process through which marriage and divorce applications can be made to the registrar, and the process for their registration. Crucially, the Act is in line with Muslim personal law.

What is the Assam government's rationale behind repealing the Act?

Assam Chief Minister Himanta Biswa Sarma called this decision "another significant step towards prohibiting child marriages in Assam," stating that the Act contains provisions allowing marriage registration even if the bride and groom have not reached the legal marriageable age of 18 and 21, respectively.

A note on the Cabinet meeting referred to it as "obsolete pre-Independence Act of the British for the then Province." It also stated that the registration machinery in the Act is "informal" therefore "leaving a lot of scope for non-compliance of extant norms".

Why did the state government link this decision to its crackdown on child marriages?

Last year, the Assam government had launched an unprecedented punitive crackdown against child marriages, arresting more than 4,000 and prosecuting most of them under the Protection of Children from Sexual Offences (POCSO) Act. The government has resolved to "eradicate" child marriage by 2026.

What is the political background for the Assam Cabinet's decision?

In Uttarakhand, which has already introduced a UCC, Muslims make up 13.95 per cent of the population. In Assam, they make a much higher proportion of the population — some 34 per cent as per the 2011 Census.

A majority of this population are Muslims of Bengali-origin, and Assamese nationalist politics has been largely in opposition to them, often tagged as "illegal immigrants" from Bangladesh, with one of the central anxieties in the state being the impact of this migration on its demography.

Over the last year, the State government has made a number of interventions in the realm of the family, marriages, and reproduction, which are perceived to be acting on these anxieties. Along with its crackdown on child marriage — 62 per cent of more than 3,000 people put behind bars in the first round of arrests were Muslim — it has also capped the number of children one can have to be eligible for a new financial support scheme for rural women.

The government is also working on a bill to ban polygamy, and make it a criminal offence. The Chief Minister has, on multiple occasions, stated that the Assam government is working towards introducing a UCC, although that the state's tribal communities will be exempt from it.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

25. Upholding Equality in the Workplace

Why in news?

In a recent landmark decision, the Supreme Court of India has taken a strong stand against discriminatory practices towards women employees. The court's ruling highlights the need for

workplaces to ensure fair treatment and equal opportunities for all employees, regardless of gender or marital status.

The Case for Equality

The Supreme Court has unequivocally declared that penalizing women employees for getting married is a form of gender discrimination and inequality. Such patriarchal rules undermine human dignity, the right to non-discrimination, and fair treatment. The case of Selina John, a former lieutenant and Permanent Commissioner Officer in the Military Nursing Service, serves as a poignant example. Despite facing termination from service in 1988 for getting married, Ms. John's rights were upheld by the Court, which directed the Union Government to pay her ₹60 lakh in compensation.

Challenging Discriminatory Norms

The Court's decision underscores the persistent struggle for gender parity within the military and civilian sectors alike. Discriminatory practices, such as asking women uncomfortable personal questions during job interviews and imposing barriers to education and employment opportunities, continue to hinder women's participation in the workforce. To address this, societal mindsets must evolve, and institutional barriers must be dismantled.

A Call for Action

Efforts to promote gender equality must extend beyond rhetoric to tangible action. The low labor participation rate of women, as highlighted in the latest data, underscores the urgent need for change. Government initiatives aimed at empowering women will only yield results if they are accompanied by measures to challenge restrictive social and cultural norms.

Creating Inclusive Workplaces

The Supreme Court's condemnation of rules that discriminate against women based on marital status should serve as a wake-up call for all organizations. Workplaces must become enablers of equality, fostering an environment where all employees can thrive regardless of gender. By heeding the Court's words, organizations can contribute to building a more inclusive and equitable society.

In conclusion, ending discrimination in the workplace requires collective action and a commitment to upholding the principles of equality and fairness. It is imperative that organizations heed the Court's ruling and strive to create environments where every individual is valued and respected, regardless of gender or personal circumstances.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

26. CBI raids places linked to Satya Pal Malik: What is the Kiru Hydel Project, focus of corruption allegations?

Why in news?

The Central Bureau of Investigation (CBI) conducted raids recently at 30 locations on three places linked to former Jammu and Kashmir Governor Satya Pal Malik. The agency is

investigating alleged corruption in the award of a contract for the Kiru Hydel Project, in J&K's Kishtwar district.

What is the Kiru Hydel Power Project?

It is being constructed between the existing Kirthai II (upstream) and Kwar (downstream) hydel power projects, at an estimated cost of Rs 4,287 crore. It will be developed near the convergence point of river Chenab and the Singad and Bela streams, near the Patharnakki and Kiru villages in Kishtwar district. The deadline for initiating commercial operations is July 2025. It will have a 123-m tall dam from the Chenab's river bed level.

Who is developing the Kiru hydel project?

The Chenab Valley Power Projects Private Limited (CVPPPL) is a joint venture of the National Hydroelectric Power Corporation, the Jammu & Kashmir State Power Development Corporation and the Power Trading Corporation. Both the NHPC and JKSPDC have a stake of 49 per cent each and the remaining 2 per cent is with the PTC.

What are the corruption allegations in the Kiru project?

A construction company named Patel Engineering was awarded civil works worth more than Rs 2,200 crores for the construction of a diversion tunnel, concrete dam, pressure shafts, coffer dams, tailrace tunnels, and a powerhouse in 2019.

The award of civil works to Patel Engineering Ltd has been called into question. On its website, PEL calls itself a major infrastructure and construction company that was founded in 1949. Its areas of operation include dams, tunnels, bridges, refineries, real estate, and more.

The CBI has booked then CVPPPL chairman and IAS officer Naveen Choudhary, MD MS Babu, and Directors M K Mittal and Arun Mishra, along with Patel Engineering. The FIR says an investigation had been conducted by the J&K Anti-Corruption Bureau and the Power Department.

The FIR alleges that guidelines for e-tendering in the awarding of civil works in the project were not followed. A decision was taken in the 47th Board Meeting of CVPPPL for re-tender through reverse auction, where the bidder quoting the lowest price is to be awarded a contract. After the ongoing tendering process was cancelled, reverse auction through e-tendering was not implemented. The tender was finally awarded to M/s Patel Engineering, according to the FIR. Further, allegations of substandard work and failure to provide jobs to local youth have been made against the hydel project.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

1. To bypass Red Sea, new trade route to Israel involving Mundra port

Why in news?

As Houthis continue to attack Israel-linked ships in the Red Sea, Israeli transport minister Miri Regev recently announced an alternative route for trade, involving the Mundra port in Gujarat.

What is happening in the Red Sea?

Yemen's Houthi rebels have been attacking ships linked to Israel in the Red Sea, in solidarity with Gaza, suffering under a relentless Israeli military campaign. This has disrupted global trade, some 12% of which passes through the Red Sea. The Red Sea links the Indian Ocean with the Mediterranean Sea via the Suez Canal. To avoid the danger zone, ships are going all the way to the south of Africa and crossing the Cape of Good Hope, increasing both costs and the time taken.

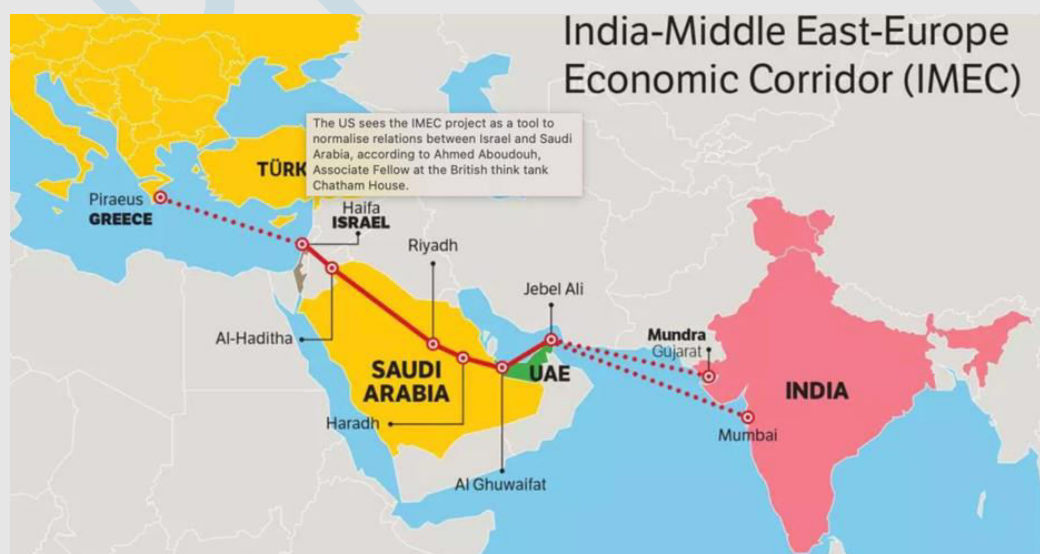
In fact, seafarers now have the right to refuse to sail on ships passing through the Red Sea, in a new industry agreement signed last week.

What is the new route?

In this scenario, Israel has been looking for ways to carry out trade bypassing the Red Sea. On February 13, Transport minister Regev posted a video on X, in which she is standing at the Mundra port and describing the new route.

Under this, goods move from Mundra to ports in the UAE, such as Dubai's Jebel Ali Port, by sea, and then via land through Saudi Arabia and Jordan to Israel. A major part of the land transport will be carried out on trucks. According to reports in Israeli and Arab media, these trucks will be operated by two shipping companies, Israel's Trucknet and the UAE's PureTrans.

Crucially, a similar route might be used in the India Middle East Europe Economic Corridor (IMEC) too. The ambitious project aims to link India to Europe via the Middle East, but its final shape is yet to be decided and the Gaza war has thrown a spanner in its progress.



What are the benefits, costs of the new route?

This land route has not been thought of suddenly, but had been in the works for some time. Infact, the land corridor had first been proposed at the time of the Abraham Accords (aimed at normalising ties between Israel and some Arab states) in 2020.

The land route will significantly cut travel time and costs for Israel, and will generate revenue for Saudi Arabia and Jordan in terms of transport fee and duties.

However, trucks can carry far fewer goods than a ship can, and to that extent, trade will be limited. Also, the route depends on Israel maintaining friendly ties with the two countries, in a rapidly fluctuating situation in the Middle East.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: The Indian Express

2. Israel's plans to invade Rafah, and why US, others have criticised it

Why in news?

The Israeli government has announced its plans to increase the spread of its military actions in the south of Gaza, amid the ongoing conflict with the Palestinian militant organisation Hamas.

On October 7, 2023, Hamas launched an attack on Israel in which 1,200 people died and 250 were taken hostage. Israel's counteroffensive since then has led to nearly 28,000 deaths in Gaza, the majority being women and children. It has claimed it aims to completely "eliminate" Hamas and that some of its contentious actions – such as sending forces inside Gaza's hospitals – have been against hidden Hamas targets.

Why does Israel want to invade Rafah?

On February 9, a translation of a message from the office of Israeli Minister Benjamin Netanyahu said: "It is impossible to achieve the war objective of eliminating Hamas and leaving four Hamas battalions in Rafah. On the other hand, it is clear that a massive operation in Rafah requires the evacuation of the civilian population from the combat zones. That is why the Prime Minister directed the IDF and the defense establishment to bring to the cabinet a dual plan for both the evacuation of the population and the disbanding of the battalions."

Essentially, Netanyahu has said that this military action will end only when Hamas is "eliminated". He also said that telling Israel not to enter Rafah is like telling them to lose the war against Hamas.

What is the significance of Rafah?

According to the United Nations, more than 1.4 million people are currently in Rafah, which was once a city of 300,000 people. This is because Israeli forces attacked all other areas of the narrow Gaza Strip. Barely a week after the Hamas attacks, on October 13, its military told 1.1 million people living in the north of Gaza to evacuate within 24 hours as its offensive began.

Rafah is also located close to Egypt and has a border crossing which helps supply food and fuel to Gaza. Since Gaza borders the Mediterranean Sea to its west and Israel to its east, its population has no other functioning checkpoints to exit the region at the moment. In November 2023, a partial opening of the Rafah crossing was allowed, allowing critically injured people and foreign nationals to go to Egypt.

As is the case with this conflict, there are roots to this issue in history. Back in 1967, Israel fought a war with Egypt (which had controlled Gaza since 1957) and Jordan (which occupied the remaining Palestinian region of the West Bank since 1950).

Israel took control of these regions after the war but let go of some control in the 1990s after the Oslo Accords were signed with Palestinian leaders. However, Israelis continued living there (referred to as "settlers"). Its government withdrew settlements in 2005, claiming threats to safety. The purpose of the plan was to improve Israel's security and international status in the absence of peace negotiations with the Palestinians.



Why Palestinians are worried

With the bombardment of the Strip in recent months, there are not many viable options for safety and shelter for Palestinians. Already, access to basic amenities such as food, water and electricity is limited.

Further, some also believe that this military movement could lead to more Israeli settlements in the Gaza Strip. In March 2023, Israel's Parliament "repealed a 2005 Act that saw four Jewish settlements in the occupied West Bank dismantled at the same time as Israeli forces withdrew from the Gaza Strip".

But, it's not just the Palestinians who are critical.

Israel's strongest ally, the United States, has also spoken about the ongoing attacks. President Joe Biden said on February 9 that Israel's response is "over the top."

Egyptian Foreign Minister Sameh Shoukry said any Israeli ground offensive on Rafah would have "disastrous consequences". Qatar and Saudi Arabia also warned of repercussions. Egypt has threatened to suspend its peace treaty with Israel.

This is also significant because Egypt has refused to take in refugees from Gaza. The reluctance is perhaps explained by the fact that it does not want to become involved in a conflict which seems to have no definite end at the moment.

Egypt has been concerned about the activities of Hamas in the past and helped destroy many of the underground tunnels in the region, used for Hamas members' movement.

Relevance: GS Prelims & Mains Paper II; International Issues

Source: The Hindu

3. Pakistan polls: With Imran's team of independents in the lead, what happens now?

Why in News?

Uncertainty continues in Pakistan over who will form the next government, three days after its elections. While the polls seemed pretty much set to favour Nawaz Sharif-led Pakistan Muslim League-N (PML-N), which had the backing of the military, voting threw up a surprise, and the final tally — released after much delay amid accusations of rigging — saw independent candidates secure the maximum of 101 seats. Most of these independents are backed by Imran Khan's Pakistan Tehreek-e-Insaf (PTI), as they were barred from contesting on the party's symbol by the Election Commission.

The PML-N came second with 75 seats, and the Pakistan People's Party (PPP) led by Bilawal Bhutto-Zardari stood third with 54 seats.

No bloc is in the position to form a government and the high number of independents has created an unprecedented situation.

How do National Assembly numbers stack up?

Pakistan's National Assembly consists of 336 seats. As many as 266 members are elected through direct voting, while 70 seats are reserved — 60 for women and 10 for non-Muslims. PML-N and PPP have run a coalition government before this, but even if they join hands this time, they won't reach the halfway mark.

The reserved seats present an added complication, as they are filled on the basis of each party's numerical strength in the Assembly, but this time, the highest number is that of independents.

What are the rules for independents?

Under Rule 92(6) of Pakistan's election regulations, once their win is announced, independent candidates have three days to join a political party. The independent candidate has to apply to the head of the political party, who then informs the Election Commission.

The independents can also choose to band together under a name.



So what are the PTI-backed independents likely to do?

There's no clarity. PTI as of now is staging protests, alleging its actual tally is higher and the poll results have been rigged. It has also filed a number of petitions in court, alleging election malpractices.

There's a possibility that some of the 101 winners will join hands with parties opposed to the PTI and be part of the government.

Is there any precedent to such a high number of independents?

There is and there isn't. In the 1985 elections, no political party was permitted to participate, and thus every candidate, though with party allegiance and backing, had contested in his or

her individual name. It was only the elected representatives who were allowed to form political parties, after the elections.

This time, while the PTI candidates fought as independents, others contested under the name and symbol of their parties.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

4. Shehbaz Sharif set to return as Pak PM

Why in News?

Shehbaz Sharif of the Pakistan Muslim League (Nawaz) (PML-N) looks set to take over as the Prime Minister of Pakistan, as his party secured an alliance with other players to achieve the necessary numbers.

The choice of Shehbaz as PM face comes as a surprise, as his older brother Nawaz Sharif was widely expected to take the top post. Shehbaz's elevation has caused some disquiet within the PML-N, and even set off speculations that Nawaz's political career might be over, something his daughter Maryam was quick to quash.



Who is Shehbaz Sharif?

Shehbaz, 72, was the Prime Minister of Pakistan till August 2023, when the National Assembly was dissolved for fresh elections. He had come to power just over a year ago, in April 2022, after the ouster of Imran Khan. Before that, he served as the Chief Minister of Punjab thrice — from 1997-1999, after which he and his family were exiled to Saudi Arabia by Pervez Musharraf; from 2008-2013; and from 2013-2018.

Shehbaz is the second son of industrialist Muhammad Sharif, and is also involved in the family-owned Ittefaq Group of steel industries. The family originally hails from Anantnag in Jammu and Kashmir.

As Chief Minister of Punjab, Shehbaz was known for his efficient working style and for his rapid infrastructure development, including providing Lahore with a modern mode of mass transport, the Lahore Metrobus. He also set in motion several social development schemes.

Why is Shehbaz getting the PM chair and not Nawaz?

Maryam Nawaz, Nawaz Sharif's daughter and political heir, has said this was because her father did not want to head a coalition government. Pakistan's elections threw up a surprise verdict this time, with independents backed by Imran Khan's PTI winning a high number of seats.

Another reason being cited for Shehbaz's elevation is that the powerful military shares a better equation with him than his older brother. While Nawaz has clashed several times with the military, which plays an oversized role in Pakistan's civilian administration, Shehbaz is known to get along better with the generals.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: The Indian Express

5. Qatar frees Indian Navy veterans

What happened recently?

Qatar has released the eight former officers of the Indian Navy after dropping their death sentences, crediting the Qatari emir for the decision more than 18 months after the arrest challenged diplomatic relations.



A combination of pictures shows the ex-Indian Navy veterans, who were in custody in Qatar, have arrived at the Delhi airport. Seven of the eight Indian Navy veterans were sentenced to death on 'espionage' charges.

What were the charges?

The Indian Navy veterans were accused of spying for Israel, news agency Reuters reported, though India and Qatar did not confirm the charges against them. Their death sentence, handed down in October, was dropped in December.

The veterans, who were released by the Qatar court, are Captain Navtej Singh Gill (retired), Captain Saurabh Vasisht (retired), Commander Purnendu Tiwari (retired), Captain Birendra Kumar Verma (retired), Commander Sugunakar Pakala (retired), Commander Sanjeev Gupta (retired), Commander Amit Nagpal (retired) and Sailor Ragesh (retired).

The veterans, employed by a private company, were supporting a number of programmes and activities for the Qatari Navy, a person with knowledge of the case told Reuters.

Why the case was so important for India?

India engaged in talks for months with Qatar after the veterans were arrested in August 2022 and the case challenged ties with Doha, a crucial natural gas supplier to India, which is one of the world's top energy importers.

The news of the release comes days after Qatari and Indian companies signed their biggest single deal for supplies of liquefied natural gas and after Modi met Sheikh Tamim on the sidelines of the COP28 climate summit in Dubai in December and discussed the "well-being of the Indian community in Qatar".

More than 8 lakh Indian citizens live and work in Qatar.

Where is another veteran?

People familiar with the matter said Commander Purnendu Tiwari stayed back in Doha and is likely to come back to India soon.

The ministry of external affairs in a statement said India appreciates the decision by the Emir of Qatar to enable the release and homecoming of the Indians, who were arrested in August 2022.

Timeline of the case

- On October 26, 2023, the Indian Navy veterans were given death sentences by Qatar's Court of First Instance.
- On December 28, the Court of Appeal in the Gulf nation commuted the capital punishment and sentenced them to jail terms for durations ranging from three years to 25 years. The Court of Appeal had also given 60 days to appeal against the prison terms.
- In December last year, Prime Minister Modi met Qatari Emir Sheikh Tamim bin Hamad Al-Thani on the sidelines of the COP28 Summit in Dubai and discussed the well-being of the Indian community in Qatar.
- It is learnt that National Security Adviser Ajit Doval played a role in the negotiations with the Qatari authorities in securing the release of the Indians.
- The charges were filed against the eight Indian Navy veterans on March 25 last year and they were tried under Qatari law.
- In May last year, Al-Dhara Global closed its operations in Doha. All those working there (primarily Indians) have since returned home.

Relevance: GS Prelims; Bilateral Relations
Source: Hindustan Times

6. China's 'Xiaokang' border defence villages along the LAC, now being occupied



India has also focused on strengthening its border infrastructure and improving forward connectivity

Why in News?

The Chinese people have started occupying several of the country's model 'Xiaokang' border defence villages, along its border with India's northeastern region.

Since 2019, China has been building villages along the Line of Actual Control (LAC), which separates India and China, but they were unoccupied until a few months ago.

Some villages along the LAC, and opposite the Lohit Valley and the Tawang sector of Arunachal Pradesh, are now being occupied by residents

What are these Xiaokang border defence villages?

China has been constructing 628 such Xiaokang or "well-off villages" along India's borders with the Tibet Autonomous Region for over five years now. These have been constructed all along the LAC, including the Ladakh and Arunachal Pradesh borders.

The structures include mostly double-storey, large and spacious buildings. The construction for most of these planned villages has already been completed, as per officials.

The exact purposes of these villages have remained unclear, but they were understood to be dual-use infrastructure — can be used both for civil and military purposes — and have thus been a concern from a defence perspective. The strategic community looks at it as a way to assert Chinese claims over certain areas along the LAC.

Notably, the exact extent of the LAC has been a source of contention between the two countries for years. India considers it to be 3,488 km long, while China says it is around 2,000 km.

How is India responding to it?

The Indian government announced the Vibrant Villages Programme in 2022 to develop its border villages into modern villages with all amenities and as tourist attractions. The programme builds on the existing Border Area Development Programme (BADP) under the Union Ministry of Home Affairs.

Under the programme, India plans to develop 663 border villages into modern villages in the first phase.

What other infrastructure is being developed by China along India's northeast?

China has been constantly building infrastructure all along the LAC, including in Arunachal Pradesh's Tawang region and the Siang Valley.

This includes the construction of new roads and bridges to improve connectivity through the passes. China has also been constructing houses and other infrastructure in Bhutanese territory.

India has also focused on strengthening its border infrastructure and improving forward connectivity with the construction of new roads, bridges, and helipads. There has also been a push to develop alternate routes to the LAC and improve inter-valley connectivity in the northeast.

Relevance: GS Prelims & Mains Paper III; Internal Security

Source: The Indian Express

7. Why did Kosovo face delays in Schengen approval?

Why in news?

Kosovo recently secured visa-free access to the Schengen zone in Europe, world's largest zone of free movement, becoming the last western Balkan non-European Union nation to be waived visa requirements. The zone is known after Schengen, the tiny Luxembourg village bordering France and Germany, where the agreement was signed in 1985 among five of the six EU founding members except Italy. Citizens of Kosovo can now enter the Schengen as tourists for 90 days within 180 days. Croatia, a European Union (EU) member since 2013, joined Schengen in 2023, while Romania and Bulgaria, EU members since 2007, will gain partial Schengen entry in March.

Why was Kosovo's application kept pending for years?

The single biggest obstacle to the country's Schengen visa waiver was strong opposition from several EU members, which do not recognise the 2008 unilateral declaration of independence by the breakaway state from Serbia.

Kosovo has not been accorded legal statehood by the UN and denied recognition by Russia and China.



Is admission to Schengen mandatory for EU members?

Yes and no. When the Schengen agreement took effect in 1995, only seven of the entire 15 member union at the time joined the passport-free area. Today, 23 of the 27 EU states are part of the passport-free zone. But then, the Schengen area comprises 27 countries, including four non-EU members: Iceland, Liechtenstein, Switzerland and Norway.

What are the advantages of the EU's border-free policy?

For nationals of any country, the benefit is the freedom to travel with a single Schengen visa to other European nations within the borderless area. For EU states, the Visa-free borderless travel, alongside the single currency adopted by 20 EU countries, is the most visible symbol of European integration.

Relevance: GS Prelims & Mains Paper II; International Organisations

Source: The Hindu

8. Indians can travel to Iran without a visa

Indians can now travel to Iran without a visa, as long as they meet a few conditions. While the announcement for this had been made in December last year, the conditions have been announced now, and the relaxation has come into effect from February 4.

Who can travel visa-free to Iran?

Indians holding ordinary passports can go to Iran without a visa, as long as they are visiting the country for tourism purposes. Also, they must enter Iran via air. The relaxation does not apply to those travelling for other purposes, like work or study.

How long can you stay in Iran?

Those entering Iran without a visa can stay for a maximum of 15 days. They can re-enter the country after six months.

Why has Iran lifted visa requirements?

In December 2023, Iran had announced the relaxation for India as well as 32 other countries. The move was aimed at boosting tourism and attracting more visitors from across the world.

Which other countries allow visa-free travel for India?

Malaysia, Sri Lanka, and Vietnam have also recently waived visa requirements for the citizens of India.

In December 2023, Thailand — another neighbouring country whose economy relies heavily on tourism — had announced a visa exemption for Indian citizens, from November 10 that year to May 10, 2024.

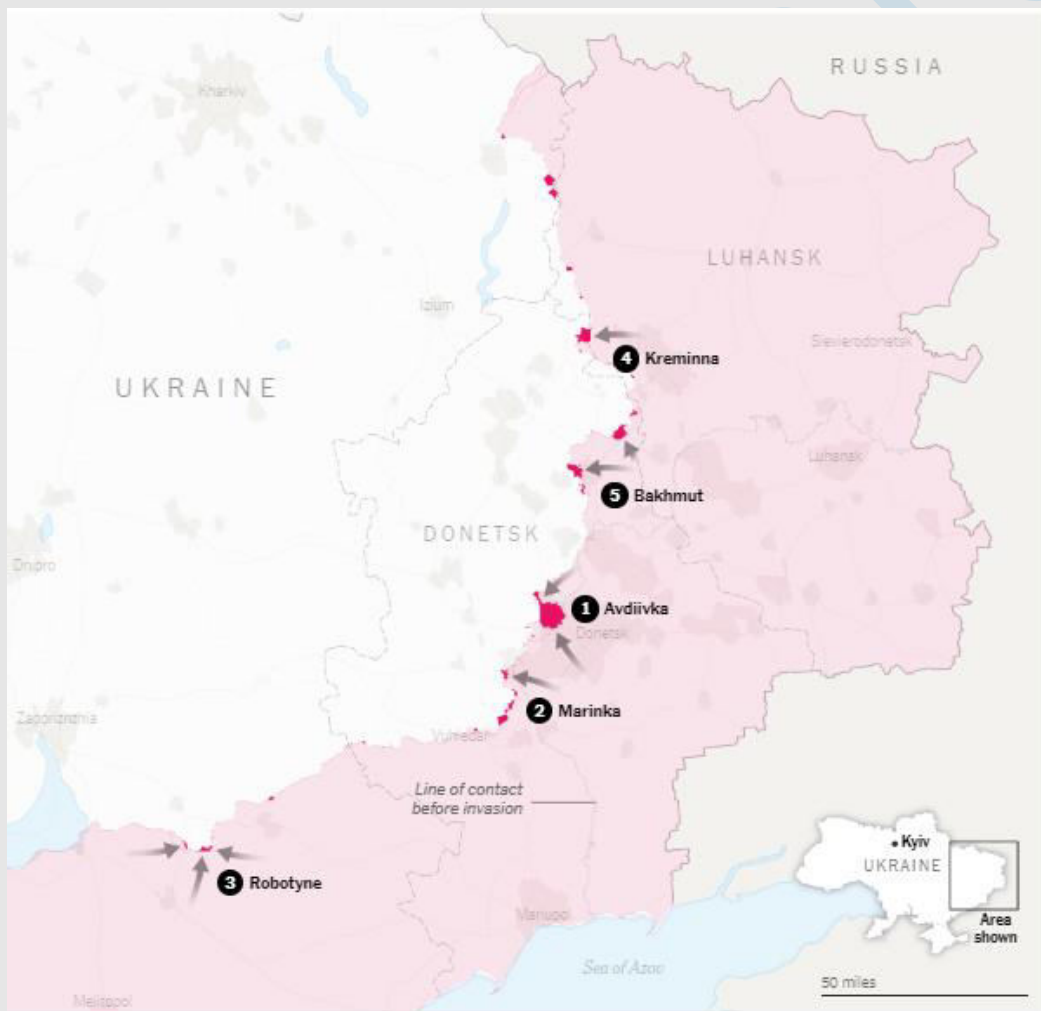
In October 2023, Sri Lanka lifted visa requirements for the citizens of seven countries including India, with the exemption to continue till March 31, 2024.

At present, 27 countries provide visa-free entry to the citizens of India. These include Kenya, Indonesia, Barbados, Bhutan, Dominica, Haiti, Maldives, Mauritius, Nepal, Samoa, and Trinidad and Tobago, among others.

Relevance: GS Prelims & Mains Paper II; Bilateral Relations

Source: Indian Express

9. Avdiivka falls: Five places Russia is fighting to break through Ukrainian lines



Russian forces captured the longtime Ukrainian stronghold of Avdiivka recently, Moscow's first major battlefield gain since it took Bakhmut last May. But across the entire 600-mile long front, Ukraine is short on ammunition without renewed US military assistance, and it is struggling to replenish its own depleted forces after two years of brutal fighting.

Russia's assault has split into five major lines of attack, spanning towns and cities across much of the front in eastern and southern Ukraine. Here is the status of Russia's offensive in five crucial battles:

Avdiivka: Russia captured a longtime Ukrainian stronghold.

The now-destroyed city of Avdiivka covers only some 12 square miles. It sits only a few miles from the city of Donetsk, which Russia has occupied since 2014.

4 Other places in Ukraine where the war is going on are

1. Marinka
2. Robotyne
3. Kreminna
4. Bakhmut

Relevance: GS Prelims; International Issues
Source: The Indian Express and New York Times

10. Northern Ireland gets a govt after two years



Newly elected First Minister Michelle O'Neill and Deputy First Minister Emma Little-Pengelly

Why in news?

Northern Ireland finally got a functional government, two years after its Parliament was paralysed over new trade rules between the European Union and the United Kingdom necessitated by Brexit. The new first minister, Michelle O'Neill, has created history, as she belongs to Sinn Féin, a political party linked to the paramilitary group Irish Republican Army, which has a long history of fighting the British.

Why was Northern Ireland's government not working? What has changed now, and what effect will it have?

First, Northern Ireland's unique position

Northern Ireland was created in May 1921 by partitioning Ireland, and consists of the six northeastern counties of the island. In 1922, the rest of Ireland gained independence from the British (today's Republic of Ireland, with its capital in Dublin). Northern Ireland remained with the United Kingdom, but tensions simmered between the side loyal to the Crown, mostly Protestants, and the faction wanting to join the Republic, mostly Catholics. Today, the side loyal to the British Union are called unionists, while those who support a united and free Ireland are called nationalists.

By the end of the 1960s, a bloody conflict was raging in Northern Ireland among those who wished to remain with the UK and those who wanted to join Ireland. The British Army and the police, frequently accused of excesses, worsened the violence. Finally, on April 10, 1998, the Good Friday Agreement was signed to end the bloodshed, and gave Northern Ireland a unique system of governance.

Thus, both unionists and nationalists share power in Stormont, the Parliament buildings in Belfast. Both sides have to cooperate for the government to work. While the faction that wins more votes in elections gets the post of First Minister, the other side gets the chair of Deputy First Minister, with equal power.

Collapse of parliament in 2022

After the UK (England, Scotland, Wales, and Northern Ireland) left the European Union, Northern Ireland now shared a land border with an EU member, the Republic of Ireland. Since the EU and the UK have different product standards, border checks would be necessary before goods could move from Northern Ireland to Ireland. However, given the history of violence here, it was decided to leave this border alone, and checks were introduced between Great Britain (England, Scotland, and Wales) and Northern Ireland instead. This was called the Northern Ireland Protocol.

This system angered the unionists, who believed it undermined Northern Ireland's position with the UK.

The new deal

Various efforts were made to resolve the problem, including the Windsor Framework of February 2023, which introduced a system of green lanes for goods that would stay in Northern Ireland and red lanes (with more checks) for those that would go to the EU. It also brought in the 'Stormont Brake', which allowed Northern Ireland lawmakers and London to veto any EU regulation they believed affects the region adversely.

However, for the Unionists, these measures were far too little. Now, a new deal has been reached, published as a command paper called 'Safeguarding the Union' by the UK government.

Its three main points, as stated on the UK's Institute for Government, include: The green lane is now called the UK Internal Market channel, on which checks and customs paperwork have been reduced further, to only "risk and intelligence-based checks" relating to "criminality, smuggling and disease"; there's a "Internal Market Guarantee" which says that at least 80% of

Great Britain to Northern Ireland goods will pass through this channel; the UK government will extend a £3.3 billion package to help Northern Ireland's finances.

What does the new deal change in practice?

Under the Brexit deal, certain goods have to be checked when they enter Northern Ireland from Great Britain

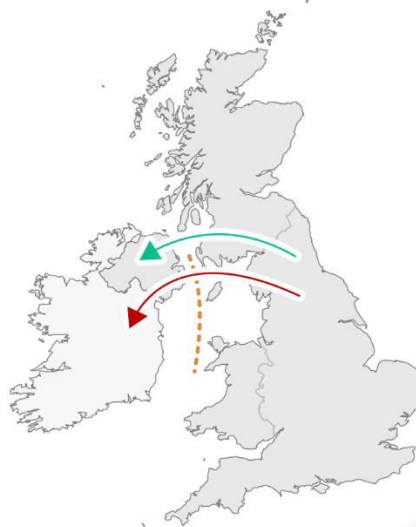
The current process

- The goods are checked at ports in Northern Ireland on arrival
- They can then be moved into the Republic of Ireland once checked



The new plan

- The goods are split into two different lanes
- Goods destined for Northern Ireland go into the **Green Lane** meaning they wouldn't have to be checked and would require minimal paperwork
- Goods destined for Ireland and the EU go into the **Red Lane** and checks are carried out



The new government's long list of tasks

While matters like security, foreign policy, tax laws, immigration, etc. are looked after by the UK government for Northern Ireland, its devolved government has powers over local matters, such as health, social services, etc. The prolonged deadlock had affected public services, while public sector employees were protesting delayed salary hikes. With a new First Minister taking power, the business of governance will finally take off.

Relevance: GS Prelims & Mains Paper II; International Issues

Source: The Indian Express

11. Court orders Trump to pay over \$350 million: What is the case — and can the former president afford the penalty?

Why in news?

Former US President Donald Trump must pay more than \$350 million plus interest charges potentially adding another \$100 million for fraudulently overstating his net worth to dupe lenders, a New York court judge ruled.

Capping the yearslong case, Judge barred Trump from holding top positions at any New York company, including parts of his own Trump Organisation, for three years. The judge also handed over a two-year ban to Trump's adult sons and ordered them to pay more than \$4 million each.

What was the case?

In 2022, New York Attorney General Letitia James filed a civil suit against Trump, his adult sons, and his former aide Allen Weisselberg. She accused them of lying to lenders and insurers by fraudulently overstating the value of properties to "either lower his tax bill or improve the terms of his loans.

What did the court say?

In September 2023, the judge found Trump and other accused guilty of committing fraud and ruled that no trial was needed to ascertain the accusations levelled by James.

Ultimately, the Judge ordered Trump to pay more than \$350 million plus interest and banned him from doing business in New York for three years. He also ruled that no bank chartered or registered in New York should lend to Trump and several of his businesses and entities for three years.

Will Trump be able to pay the penalty?

According to a Forbes Magazine report, Trump's total net worth is around \$2.6 billion. The penalty imposed on the former president accounts for 14-17% of his wealth.

Relevance: GS Prelims; International Issues

Source: The Indian Express

12. Raisina Dialogue: Everything you need to know about the conference

The ninth edition of the Raisina Dialogue is being held in New Delhi. The conference was inaugurated by Prime Minister Narendra Modi. Greece's Prime Minister Kyriakos Mitsotakis joined the inauguration session as the chief guest.

What is Raisina Dialogue?



The Raisina Dialogue is an annual conference on geopolitics and geoeconomics, which aims to address the most challenging issues faced by the world. The conference takes place in New Delhi and is attended by people from political, business, media, and civil society backgrounds.

The Dialogue is structured as a multi-stakeholder, cross-sectoral discussion, involving heads of state, cabinet ministers and local government officials, who are joined by thought leaders from the private sector, media and academia. Delhi-based think tank Observer Research Foundation, in partnership with the Ministry of External Affairs, hosts the conference.

What is the theme of this year's edition?

The theme of the 2024 edition is "Chaturanga: Conflict, Contest, Cooperate, Create".

Who will attend the 2024 edition of the Raisina Dialogue?

More than 2,500 participants from around 115 countries will be joining the conference in person. The Dialogue is expected to be viewed by millions across the world on various digital platforms.

The participants include ministers, former prime ministers and presidents, military commanders, technology leaders, academics, journalists, scholars on strategic affairs, and experts from leading think tanks.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: The Indian Express

13. Protecting Indian Emigrants from Conflict Zones

Indian Nationals Recruited by Russian Army in Ukraine

The Indian government acknowledges that some Indians have been recruited by the Russian Army and placed within Ukrainian borders now under Russian control.

Government Response and Efforts

The Ministry of External Affairs (MEA) confirms the recruitment of Indian nationals for support roles and asserts efforts for their early discharge, dismissing accusations of non-responsiveness.

Addressing Recruitment Challenges

The government faces criticism for delayed acknowledgment and urges awareness campaigns to deter Indians from joining conflict zones, highlighting the need to investigate unethical recruiters.

India must update emigration protocols for conflict-afflicted countries, enhancing vetting processes for job contracts and providing better advisory and protection measures.

Regional Cooperation and Conflict Zones

Collaboration with neighboring countries like Nepal, Pakistan, and Bangladesh can strengthen efforts against exploitative employment networks, particularly in conflict zones.

Reviewing Recruitment Drives

The government faces scrutiny for approving recruitment drives to conflict zones like Israel, raising concerns about the safety and welfare of Indian workers.

Addressing Economic Distress

Instances of Indians seeking risky employment abroad reflect underlying economic challenges. The government must show empathy and implement comprehensive support structures for emigrants facing peril.

Relevance: GS Prelims & Mains Paper II; Indian Diaspora

Source: The Hindu

1. Why the Union Budget’s plans for deep tech and research funding are significant

In her Interim Budget speech, Finance Minister Nirmala Sitharaman announced a Rs 1 lakh crore fund to provide long-term, low-cost or zero-interest loans for research and development. She also promised to launch a new scheme to strengthen deep-tech capabilities in the defence sector — an announcement that is likely to be followed up later in the year with a larger policy to promote deep tech startups across all sectors, not just defence.

The separate announcements on the fund and defence deep tech are intricately linked, and must be seen together with the government’s other plans for the R&D sector.

ALLOCATIONS IN INTERIM BUDGET 2024-25				(incr)
	2023-24 BE	2023-24 RE	2024-25 IB	Change*
Department of Atomic Energy	25,078.49	26,799.78	24,968.98	-0.41%
Department of Space	12,543.91	11,070.07	13,042.75	4.51%
Department of Science & Technology	7,931.05	4,891.78	8,029.01	2.00%
Department of Biotechnology	2,683.86	1,607.32	2,251.52	-26.90%
CSIR	5,746.51	6,202.53	6,323.41	9.30%
Ministry of Earth Sciences	3,319.88	2,879.02	2,521.83	-27.72%
Department of Agriculture Research	9,504.00	9,876.60	9,941.09	4.43%
Department of Medical Research	2,980.00	2,892.83	3,001.73	0.75%
Department of Defence Research	12,850.00	12,942.85	13,208.00	2.77%

*BE: Budget Estimates, RE: Revised Estimates, IB: Interim Budget *2023-24 BE to Interim Budget*
Source: Budget documents

Allocations for Science research in the Union Budget 2024-25.

Why deep tech matters

Deep tech refers to advanced and disruptive technologies, many of which are still under development, that have the potential to trigger transformative change, and provide solutions for the future.

The term is used to describe cutting-edge research in nanotechnology, biotechnology, material sciences, quantum technologies, semiconductors, artificial intelligence, data sciences, robotics, 3D printing, etc. These technologies are expected to play a key role to address complex global challenges like climate change, hunger, epidemics, energy access, mobility, physical and digital infrastructure, and cyber security.

Building an ecosystem

Over the past few years, the government has tried to incentivise research in some of these areas by setting up a National Mission on Transformative Mobility and Battery Storage and, more recently, a National Quantum Mission.

Last year, a policy framework to create an enabling environment for companies working in these technology areas was finalised. The National Deep Tech Startup Policy (NDTSP), piloted by the Department for Promotion of Industry and Internal Trade and the Office of the Principal Scientific Adviser, is currently awaiting government approval.

The policy seeks to address specific challenges faced by technology startups, and to provide them with a platform to compete and collaborate with the best in the world. The idea is to create a deep tech startup ecosystem by offering the right incentives to companies that invest time and money in innovation and research. More than 10,000 startups working in these technology domains were identified as part of the effort.

The NDTSP talks about some of the things that need to be done in this regard: create opportunities for long-term funding; a simplified but stronger intellectual property rights regime; tax incentives; a conducive regulatory framework; development of standards and certifications; nurturing of talent; and linkages between industry, research centres, and educational institutions.

The challenge of funding

One of the key policy recommendations in the NDTSP is to open up opportunities for long-term funding of research projects. It acknowledges that most deep tech projects are time- and money-intensive, with relatively high funding requirements.

Lack of adequate research funding has been a major complaint of the scientific community. India's expenditure on research is far below the global average, and significantly lower than the scientifically advanced countries with which India competes.

For more than two decades now, the Indian government's stated objective has been to allocate at least 2% of GDP for research and development. Absolute spending has increased, but expenditure on research as a share of GDP has come down in the last few years. India currently spends just about 0.65% of its national GDP on research and development activities. The global average is about 1.8%.

Going by recent decisions, the thinking in the government seems to be that R&D spends cannot rise substantially without partnering with the private sector. Efforts are being made to create better synergies between industry, research labs, and educational institutions in order to broad-base both research activity and the funds to support it. The National Research Foundation (NRF), which became operational recently, seeks to do this — about 70% of the Rs 50,000 allocation for NRF over the next five years is supposed to come from private industry.

The 1 lakh crore corpus

It is here that the Rs 1 lakh crore corpus to finance research and development becomes important. Startups and other private sector ventures who can obtain seed money for their projects are expected to be the main beneficiaries. The idea is to start the flow of money in

the research ecosystem — and the hope is that as projects take off, industry would be encouraged to invest its own money, and the pool would grow, benefiting everyone in the research community.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

2. 'Specific duration' clause in draft India-EFTA pact may affect drug industry

Specific Duration Clause

A clause in a draft free trade agreement text being negotiated between India and the European Free Trade Association (EFTA) could delay access to affordable, generic versions of patented drugs in India by a minimum of six years.

A leaked draft of the Trade and Economic Partnership Agreement (TEPA) says that within six months of the agreement being signed, signatories should include a "specific duration" during which applicants seeking consent from their country's regulators to sell a drug would not rely on "undisclosed test data" to gain market approval for at least six years.

The "signatories", here, refer to the countries and "applicants" being the pharmaceutical companies. The "undisclosed test data", in this case, is on the drug's efficacy and impact on people.

India's Generic drug industry

India, which has over decades, mushroomed a thriving generics drug industry has resisted attempts by foreign pharmaceutical companies to extend monopoly rights over patented drugs.

This is mostly because India's generic drug industry has over the years made affordable versions of expensive drugs and become a large global supply itself.

The Indian pharma industry is the third largest in the world and produces over 60,000 generic drugs across 60 therapeutic categories and had an annual turnover of ₹3.4 lakh crore, Minister of State (Chemicals and Fertilizers) Bhagwant Khuba told Parliament in July 2023.

Unavailability of drugs

"These effectively mean that drugs such as bedaquiline (for TB) under provisions of data exclusivity wouldn't be available.

Patented drugs give exclusive marketing rights to the inventor, or whoever files for the patent first, for 20 years.

This has often resulted in essential drugs and medicines being unaffordable in several countries, including in India. Under internationally accepted provisions of compulsory licensing, Indian law allows drug maker to reverse-engineer and sell generic, or copy-cat versions of the drug, after only three years of it being patented in India.

Relevance: GS Prelims; Economics

Source: The Hindu

3. National Research Foundation

Why in News?

By approving the National Research Foundation (NRF) Bill, the Indian Union Cabinet has taken a major step to enhance scientific research in the country. The NRF intends to address India's persistent gap in research and development investments and foster a strong research environment within higher education institutions.



What is the National Research Foundation (NRF)?

NRF is a proposed entity that will replace the Science and Engineering Research Board of India (SERB) and catalyse and channel interdisciplinary research.

The NRF's Goals:

1. Promote interdisciplinary research that will address India's most pressing development challenges.
2. Minimize duplication of research efforts.
3. Promote the translation of research into policy and practice.

Composition of NRF

1. The NRF will be presided by the Prime Minister and consist of 10 major directorates, focusing on different domains of science, arts, humanities, innovation and entrepreneurship.
2. The NRF will have an 18-member board with eminent Indian and international scientists, senior government functionaries and industry leaders.
3. The NRF will be registered as a society and have an independent secretariat.

Expectations from NRF

1. Increasing India's investment in R&D from 0.7% of GDP to 2% of GDP by 2030
2. Enhancing India's share of global scientific publications from about 5% to 7% by 2030
3. Creating a pool of talented researchers across disciplines and sectors
4. Developing innovative solutions for India's development challenges
5. Translating scientific knowledge into social and economic benefits

Declining Research Investment

India's research and development (R&D) expenditure-GDP ratio of 0.7% is very low when compared to major economies and is much below the world average of 1.8%, while it was much higher in countries like the US (2.8%), China (2.1%), Israel (4.3%) and South Africa (4.2%).

How will NRF Promote Inter-disciplinary and Problem-solving Research?

1. The NRF will provide the unifying platform for multi-disciplinary and multi-institutional collaborative research that can address complex challenges that require solutions from different disciplines and sectors.

2. The NRF will seek to involve different stakeholders in the scientific enterprise, such as the private sector, state governments, state level institutions and civil society organisations.

The private sector is viewed as a key partner, to infuse corporate and philanthropic funding that can augment the government's own committed contribution and also to infuse new ideas and stimulate innovation.

3. State governments and state level institutions are vital for enhancing India's capacity for conducting locally relevant scientific research.

4. Community participation is essential for identifying people relevant priorities for the research agenda, engaging in participatory research, monitoring and evaluating implementation and its impact as well as supporting implementation through community mobilisation.

Only then can the scientific enterprise become a "Jan Andolan" or people's movement.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Miscellaneous

4. Why was the fiscal deficit estimate announced in the recent Union Budget considered to be ambitious? How does a government fund its expenditure? What is the difference between fiscal deficit and national debt? How much is the Centre expected to borrow from the market?

Why in news?

Union Finance Minister Nirmala Sitharaman announced during her Budget speech that the Centre would reduce its fiscal deficit to 5.1% of gross domestic product (GDP) in 2024-25. She further added that the fiscal deficit would be pared to below 4.5% of GDP by 2025-26. The FM's projections surprised most analysts who expected the government's fiscal deficit target would be slightly higher, at about 5.3% or 5.4% of GDP. The government's revised estimates also lowered the fiscal deficit projection for 2023-24 to 5.8% of GDP.

What is fiscal deficit?

Fiscal deficit refers to the shortfall in a government's revenue when compared to its expenditure. When a government's expenditure exceeds its revenues, the government will

have to borrow money or sell assets to fund the deficit. Taxes are the most important source of revenue for any government. In 2024-25, the government's tax receipts are expected to be ₹26.02 lakh crore while its total revenue is estimated to be ₹30.8 lakh crore. The Union government's total expenditure, on the other hand, is estimated to be ₹47.66 lakh crore.

When a government runs a fiscal surplus, on the other hand, its revenues exceed expenditure. It is, however, quite rare for governments to run a surplus. Most governments today focus on keeping the fiscal deficit under control rather than on generating a fiscal surplus or on balancing the budget.

Difference with National Debt

The fiscal deficit should not be confused with the national debt. The national debt is the total amount of money that the government of a country owes its lenders at a particular point in time. The national debt is usually the amount of debt that a government has accumulated over many years of running fiscal deficits and borrowing to bridge the deficits. The fiscal deficit is generally expressed as a percentage of a country's GDP since it is believed that the figure shows how easily the government will be able to pay its lenders. In other words, the higher a government's fiscal deficit as a share of GDP, the less likely its lenders will be paid back without trouble. Countries with larger economies can run higher fiscal deficits (in terms of absolute numbers of money).

How does government fund its fiscal deficit?

In order to fund its fiscal deficit, the government mainly borrows money from the bond market where lenders compete to lend to the government by purchasing bonds issued by the government. In 2024-25, the Centre is expected to borrow a gross amount of ₹14.13 lakh crore from the market, which is lower than its borrowing goal for 2023-24, as it expects to fund its spending in 2024-25 through higher GST collections. Economists were expecting that the Centre would set a borrowing target of about ₹15.6 lakh crore for 2024-25.

It should be remembered that central banks such as the Reserve Bank of India (RBI) are also major players in the credit market, although they may not always directly purchase government bonds. The RBI may still purchase government bonds in the secondary market, from private lenders who have already purchased bonds from the government. So, when a government borrows from the bond market, it not only borrows from private lenders but also indirectly from the central bank. The RBI purchases these bonds through what are called 'open market operations' by creating fresh money, which in turn can lead to higher money supply and also higher prices in the wider economy over time.

Government bonds are generally considered to be risk-free as the government can — under the worst-case scenario — get help from the central bank, which can create fresh currency to pay off the lenders. So governments generally do not find it hard to borrow money from the market. The bigger problem is the rate at which they are able to borrow the money. As a government's finances worsen, demand for the government's bonds begins to drop forcing the government to offer to pay a higher interest rate to lenders, and leading to higher borrowing costs for the government.

Monetary policy also plays a crucial role in how much it costs governments to borrow money from the market. Central bank lending rates which were near zero in many countries before the pandemic have risen sharply in the aftermath of the pandemic. This makes it more expensive for governments to borrow money and could be one reason why the Centre is keen to bring down its fiscal deficit.

Why does the fiscal deficit matter?

The fiscal deficit matters for several reasons. For one, there is a strong direct relationship between the government's fiscal deficit and inflation in the country. When a country's government runs a persistently high fiscal deficit, this can eventually lead to higher inflation as the government will be forced to use fresh money issued by the central bank to fund its fiscal deficit. The fiscal deficit recently reached a high of 9.17% of GDP during the pandemic and has since improved significantly and is projected to drop to 5.8% now.

The fiscal deficit also signals to the market the degree of fiscal discipline maintained by the government. A lower fiscal deficit may thus help improve the ratings assigned to the Indian government's bonds. When the government is able to fund more of its spending through tax revenues and borrow less, this gives more confidence to lenders and drives down the government's borrowing cost.

A high fiscal deficit can also adversely affect the ability of the government to manage its overall public debt. In December, the International Monetary Fund warned that India's public debt could rise to more than 100% of GDP in the medium term due to risks although the Centre disagreed with the assessment. It is also worth noting that the Centre has been keen on tapping the international bond market. A lower fiscal deficit may help the government to more easily sell its bonds overseas and access cheaper credit.

What lies ahead?

The Centre plans to bring down its fiscal deficit in 2024-25 to 5.1% of GDP despite having plans to boost capital expenditure and to spend on other programmes. So, most of the revenue to fund such spending will have to come from tax collections. The Centre expects tax collections to rise by 11.5% in 2024-25. It has also projected a cut in expenditure on fertilizer subsidy, from ₹1.88 lakh crore in 2023-24 to ₹1.64 lakh crore in 2024-25. The amount spent on food subsidy is also projected to drop from ₹2.12 lakh crore in 2023-24, to ₹2.05 lakh crore in 2024-25. Trying to balance the budget primarily through raising tax rates to increase tax collections, however, could come at the cost of economic growth since taxes can act as a dampener on economic activity. There is no guarantee, however, that the government will be able to meet its fiscal deficit target, which is seen as ambitious by many, as its projections may turn out to be wrong.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Hindu

5. RBI action against Paytm: probable causes, effects, and what happens to your money

Why in news?

In a huge blow to Paytm Payments Bank, the Reserve Bank of India (RBI) barred it from offering all its core services—including accounts and wallets—from March, effectively crippling the company's business. While the action is technically not a cancellation of Paytm's license, it practically constricts the company's operations to a great extent.

Given the significant customer base of the Paytm—once the poster boy of India's fintech revolution—the RBI action could impact a large number of customers. To be sure, the central bank has allowed withdrawal or utilisation of balance amounts by customers "without any restrictions, up to their available balance".

Paytm Payments Bank has so far not commented on the RBI order.

What does the RBI direction say?

The central bank has barred Paytm Payments Bank from offering practically all of its key services—accepting deposits or top-ups in any customer account, prepaid instruments, wallets, FASTags, National Common Mobility Card (NCMC), etc. after February 29 in the wake of "persistent non-compliances and material supervisory concerns".

What likely led to the RBI action against Paytm?

Paytm Payments Bank has been facing RBI scrutiny since 2018. While the central bank did not specify the exact reasons for the latest action against Paytm, sources in the know said it could be due to the RBI's concerns on KYC compliance and IT-related issues. The central bank is against allowing any institution or banking entity to expose depositors' money to such risks.

It is learnt that Paytm Payments Bank and its parent One97 Communications had also come under RBI scrutiny for purported lack of firewalls within the group and data access to China-based entities that were indirect shareholders in the payments bank through their stake in the parent company. The failure to address these concerns at multiple levels over an extended period led to the latest action by the RBI, it is learnt.

Although Antfin, an affiliate of Chinese conglomerate Alibaba, has been reducing its stake in One97 Communications, it still is a shareholder in the company. As of December 31, Antfin held 9.89 per cent stake in the company, as per stock exchange data. Given the frosty relationship between India and China over the past few years, Chinese investments in Indian companies have attracted intense scrutiny by Indian regulators.

RBI's earlier actions against Paytm

In October 2023, the RBI had slapped a fine of Rs 5.39 crore on Paytm Payments Bank due to deficiencies in regulatory compliance.

Prior to this, the central bank had made certain observations in 2018 about the processes the company followed to acquire new users, especially on KYC norms. The RBI also had concerns over the close relations between Paytm Payments Bank and its parent One97 Communications. Payments banks are required to maintain an arm's length distance from promoter group entities. Paytm parent firm One97 Communications held 49% stake in Paytm Payments Bank while 51% was held by Paytm founder Vijay Shekhar Sharma.

There were also allegations that the payments bank had failed to meet the Rs 100-crore net worth criteria and also exceeded the Rs 1-lakh deposit limit allowed per account for payments banks at the time.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Indian Express

6. Interim Budget 2024: 6 key takeaways

A regular Budget outlines the country's economic and financial trajectory for the entire financial year. The interim Budget, on the other hand, gives an outline of the same, only for the transition period till the new government comes to power after the elections. The finance minister said the regular Budget would be scheduled for July after the elections.

Interim Budget 2024 Key Takeaways:

1. Muted expectations from nominal GDP growth

Nominal GDP is the fundamental variable in any Budget. The real GDP growth that is commonly talked about is derived from nominal GDP growth after removing the effect of inflation. So, if nominal GDP growth in a particular year is 12% and inflation is 4%, then the real GDP growth will be 8%.

For the coming financial year (2024-25), the government expects the nominal GDP to grow by 10.5%. According to the latest Budget documents, the government projects India's nominal GDP to be Rs 3,27,71,808 crore, assuming 10.5 % growth over the estimated nominal GDP of Rs 2,96,57,745 crore in the current financial year (2023-24).

2. Significant reduction in fiscal deficit

Fiscal deficit essentially shows the amount of money that the government borrows from the market. It does so to bridge the gap between its expenses and income. Fiscal Deficit is the most watched variable because if a government borrows more, it leaves a smaller pool of money for the private sector to borrow from. That, in turn, leads to higher interest rates, which, further drags down economic activity.

In the run-up to the Budget, analysts expected the government to bring down the fiscal deficit to 5.9% of the GDP. The FM did slightly better by announcing that the fiscal deficit has been brought down to 5.8% level. Further, the FM announced similarly ambitious targets for the FY25 — at 5.1% of GDP— and FY26 — at 4.5% of GDP.

3. Capital expenditure target not met

The cornerstone of last year's Budget presentation was the spike in capital expenditure by the government. The government received a lot of praise for raising capex target to Rs 10 lakh crore. But the data for Revised Estimates shows that the capex was not met; it stands at Rs 9.5 lakh crore. This explains some part of the reduction in fiscal deficit.

4. Cuts in health and education spending

Health and education budget allocations are typically much lower than what India needs but the revised estimates show that even those targets have not been met in the current financial year.

The government was supposed to spend Rs 1,16,417 crore on education but ended up spending Rs 1,08,878 crore.

Similarly on health, it budgeted an expenditure for Rs 88,956 crore but actually spent only Rs 79,221 crore.

5. Cuts in core schemes for the marginalised sections

Similar cuts can be seen in the allocation for the core schemes for marginalised sections such as SCs, STs, and minorities.

For instance, the Revised Estimates (RE) for the Umbrella Scheme for Development of Schedule Castes are Rs 6,780 crore against the Budget Estimates (BE) of Rs 9,409 crore.

For STs, the RE is Rs 3,286 crore against a BE of Rs 4,295 crore.

For minorities, the fall has been the sharpest. From a BE of Rs 610 crore in FY24 to an RE of Rs 555 crore.

For the Umbrella Programme for Development of Other Vulnerable Groups, the RE is Rs 1,918 crore, down from a BE of Rs 2,194 crore.

6. Income tax is now the biggest income generator for the government

Most government financial resources come from borrowings. But the second biggest contributor — or the top income generator — is the revenues from income tax. The Budget documents suggest that income tax revenues will account for 19% of all government resources in FY25. Corporate tax will account for 17%, GST for 18% and borrowings for 28%.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Indian Express

7. Interim budget mentions blue economy 2.0: What this means

Why in news?

The Interim Budget presented by Finance Minister Nirmala Sitharaman stressed on environment-friendly development through the promotion of 'blue economy'.

"For promoting climate resilient activities for blue economy 2.0, a scheme for restoration and adaptation measures, and coastal aquaculture and mariculture with integrated and multi-sectoral approach will be launched," Sitharaman said in her speech.

What is blue economy?

While the term blue economy can simply refer to economic activities related to the sea and the coasts, it is generally understood to have an element of sustainability in it. Thus, while the European Commission defines it as "all economic activities related to oceans, seas and coasts.

It covers a wide range of interlinked established and emerging sectors"; the World Bank says blue economy is the "sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem."

For a country like India, with a long coastline, diversity in terms of fish and other ocean produce, and multiple tourism opportunities, blue economy is highly significant.

What does the Interim Budget propose to do about blue economy?

As Sitharaman said, "a scheme for restoration and adaptation measures, and coastal aquaculture and mariculture with integrated and multi-sectoral approach will be launched."

Restoration and adaptation will ensure the health of the oceans is not harmed while carrying out economic activities. While aquaculture is a broad term that refers to the farming of aquatic plants and animals, mariculture refers to rearing and harvesting marine creatures in salt water.

The Finance minister also announced the setting up of five integrated aquaparks, and said the Pradhan Mantri Matsya Sampada Yojana (PMMSY) would be stepped up to "enhance aquaculture productivity from the existing three to five tonnes per hectare; double exports to Rs 1 lakh crore; and generate 55 lakh employment opportunities in the near future."

Relevance: GS Prelims & Mains Paper III; Economy

Source: The Indian Express

8. Multidimensional poverty: meaning, numbers

Why in news?

In her Interim Budget speech, Finance Minister Nirmala Sitharaman said 25 crore Indians had been pulled out of poverty over the past decade. "With the pursuit of 'Sabka ka Saath' in these 10 years, the Government has assisted 25 crore people to get freedom from multidimensional poverty," she said.

What is the basis for this assessment?

This number appeared in a discussion paper, Multidimensional Poverty in India Since 2005-06, published by NITI Aayog on Jan 15.

Escaped Multidimensional Poverty (2013-14-2022-23)

Estimated in lakh

Bihar	377.09
Madhya Pradesh	230.00
Maharashtra	159.07
Odisha	102.78
Rajasthan	187.12
Uttar Pradesh	593.69
West Bengal	172.18
INDIA	2,482.16

Multidimensional poverty in India was found to decline from 29.17% in 2013-14 to 11.28% in 2022-23 with about 24.82 crore people escaping poverty during this period. At the States' level, Uttar Pradesh topped the list with 5.94 crore people escaping poverty followed by Bihar at 3.77 crore and Madhya Pradesh at 2.30 crore.

What is the Multidimensional Poverty Index (MPI)?

Traditionally, poverty is calculated based either on income levels or, if income data are not available, on expenditure levels. The so-called "poverty lines" are actually expenditure levels that are considered minimum enough for someone to be called poor.

The MPI approaches poverty differently. Globally, the MPI uses 10 indicators covering three main areas: (i) health, (ii) education, and (iii) standard of living. These three dimensions have one-third weight each in the final index.

The health dimension includes nutrition and child & adolescent mortality indicators. The education dimension includes years of schooling and school attendance indicators. The

standard of living dimension includes six household-specific indicators: housing, household assets, type of cooking fuel, access to sanitation, drinking water, and electricity.

The Indian MPI has two additional indicators: maternal health (under the health dimension) and bank accounts (under the standard of living dimension). This has been done, according to the NITI Aayog, to align the MPI with India's national priorities.

How were the data for 2013-14 and 2022-23 arrived at?

Typically, the health metrics depend on data from the different rounds of the National Family Health Survey (NFHS). The NFHS is conducted every five years; the last round refers to the 2019-21 period.

How then were the MPI for 2012-13 and 2022-23 calculated?

According to the paper, this required interpolation of estimates for the year 2013-14, and extrapolation for the year 2022-23.

"A better understanding of the impact of various initiatives launched during the previous decade on poverty and deprivation can be obtained by comparing the estimates of poverty and deprivation in year 2013-14 with year 2022-23 even though the actual estimates for 2015-16 and 2019-21 clearly point to acceleration in rate of reduction in MPI after 2015-16 compared to 2005-06 to 2015-16," it states.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express and PIB

9. What the white paper on economy says — and doesn't

Why in news?

Finance Minister Nirmala Sitharaman presented a "white paper" on the Indian economy in Parliament recently. The document, which has been prepared by the Ministry of Finance, essentially compares the 10-year record of economic governance under the Congress-led UPA governments (between 2004-05 and 2013-14) with the 10-year record of the BJP-led NDA governments (between 2014-15 and 2023-24).

What is a white paper, and is this one?

A white paper typically provides information about a specific issue. A government may present a white paper — say, on black money — to make people aware of the nature and scope of the problem and the possible ways to resolve it.

In that sense, what was presented in Parliament is not exactly a white paper, because it is a comparison between the record of two governments on a variety of economic parameters. A comprehensive review of the state of the Indian economy as things stood in 2014, when the incumbent government first took charge, would have been a white paper on the economy.

UPA AND NDA YEARS: WHAT SOME CRUCIAL NUMBERS SAY



The white paper was presented in Parliament by Finance Minister Nirmala Sitharaman. PT/F/te

Financial Year	Nominal GDP growth rate (%)	Real GDP growth rate (%)	Fiscal Deficit*	Financial Year	Nominal GDP growth rate (%)	Real GDP growth rate (%)	Fiscal Deficit*
2004-05	14.10	7.92	3.95	2014-15	10.99	7.41	4.10
2005-06	13.99	7.92	4.03	2015-16	10.46	8	3.87
2006-07	17.14	8.06	3.35	2016-17	11.76	8.26	3.48
2007-08	15.14	7.66	2.59	2017-18	11.03	6.8	3.46
2008-09	12.56	3.09	6.11	2018-19	10.59	6.45	3.44
2009-10	15.46	7.86	6.57	2019-20	6.37	3.87	4.64
2010-11	19.92	8.5	4.89	2020-21	-1.36	-5.83	9.17
2011-12	14.43	5.24	5.91	2021-22	18.36	9.05	6.75
2012-13	13.82	5.46	4.93	2022-23	16.06	7.24	6.38
2013-14	12.97	6.39	4.48	2023-24	8.87	7.32	5.85
AVERAGE OF UPA YEARS				AVERAGE OF NDA YEARS			
2004-2014	14.95	6.80	4.7	2014-2024	10.31	5.9	5.1

Source: MoSPI and CMI, *(as a % of Nominal GDP)

What does it say?

The 58-page white paper has three main parts. Part 1 discusses the macroeconomic situation during the 10 years of UPA rule. Part 2 provides the "current status of the various corruption scams of the UPA government". Part 3 shows how the NDA "turned the economy around". Here are some of the most important claims in the white paper.

*The UPA Government inherited a healthy economy ready for more reforms, but made it non-performing in 10 years.

*UPA abandoned economic reforms.

*In a quest to maintain high economic growth by any means after the Global Financial Crisis of 2008, UPA severely undermined the macroeconomic foundations. For instance, it underscores high inflation, high fiscal deficit (or the money borrowed to meet expenses), and high proportion of bad loans in the banking system that dragged down economic activity.

Analysis

Analysing the performance of any economy over two decades, even when they are aligned back to back, is a daunting task. This is so because a variety of factors affect not just the economy but also how we measure it.

For instance, a very big reason why domestic inflation was very high during the last couple of UPA years and immediately subsided during the first two of NDA is the cost of crude oil, which ranged between \$111 and \$105 a barrel between FY12 and FY14, and then fell to \$84 in FY15 and to \$46 in FY16.

Indeed, on aggregate, data shows that India registered better GDP growth as well as lower fiscal deficits during the UPA time.

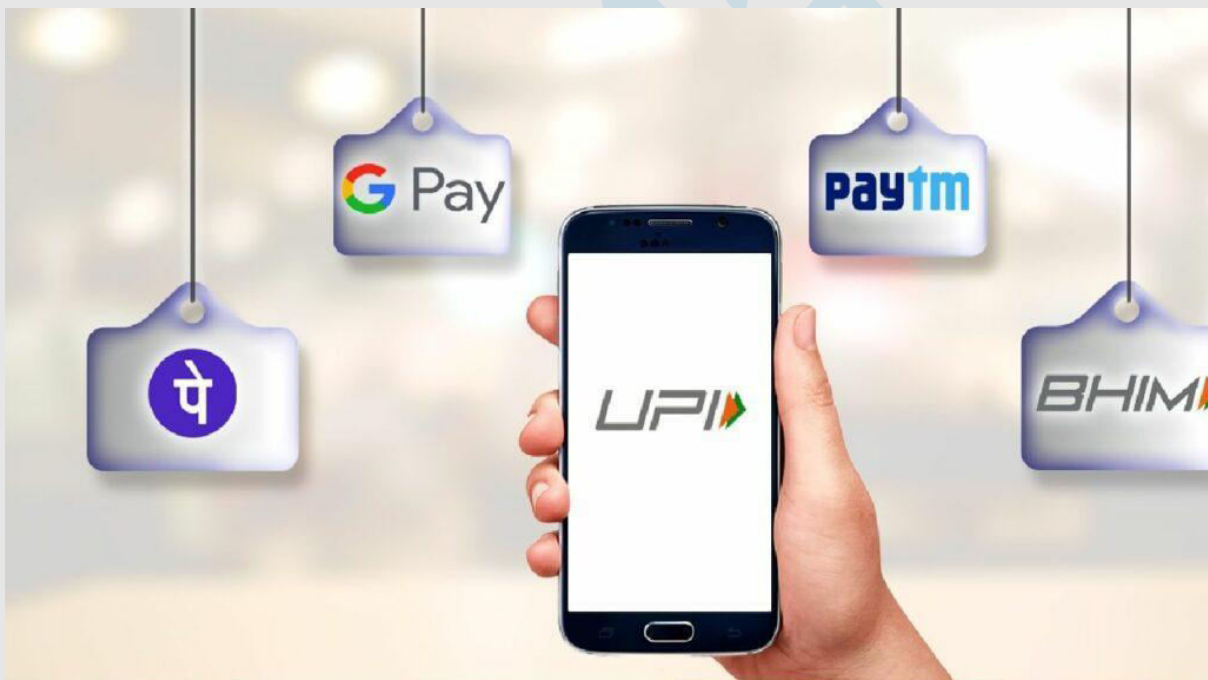
The NDA government has several genuine achievements to its credit — such as the GST and IBC — but the white paper ignores all that is amiss with the economy. For instance, it does not even contain the word “unemployment”. This was when the government’s own Periodic Labour Force Survey showed that unemployment had reached a 45-year high in 2017-18.

Similarly, it makes no mention of the fact that there has been no formal measure of poverty since 2011. Or that this government has failed to conduct the decadal Census — the first such miss since 1881. Also, a white paper on the Indian economy over two decades does not have a single chart on GDP growth over this period.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

10. What were the concerns listed by the Parliamentary Standing Committee on Communications and Information Technology on the rise of digital payments in India? Why did the National Payments Corporation of India issue a 30% volume cap on transactions facilitated using UPI?



Why in news?

In its report presented to Parliament recently, the Standing Committee on Communications and Information Technology has raised concerns about the dominance of fintech apps owned by foreign entities in the Indian ecosystem and recommended that local players be promoted. It mentioned that the Unified Payments Interface (UPI) commanded a 73.5% share of the total digital payments in terms of volume in FY 2022-23. However, its share in terms of value was only 6.67% in the same period.

What does the report infer about the existing ecosystem?

The Committee in its report emphasised that digital payment apps must be effectively regulated as the use of digital platforms to make payments in India is on the rise. It noted that

it will be more 'feasible' for regulatory bodies such as the Reserve Bank of India (RBI) and the National Payments Corporation of India (NPCI) to control local apps, as compared with foreign apps, which operate in multiple jurisdictions.

The Committee observed that fintech companies, apps and platforms that are owned by foreign entities, such as Walmart-backed PhonePe and Google Pay, dominate the Indian fintech sector. PhonePe commands the leading market share in volume terms, followed by Google Pay, at 46.91% and 36.39% respectively. This is for the period between October to November 2023. On the other hand, NPCI's BHIM UPI's market share (in terms of volume) stood at a mere 0.22%. NPCI's data for December last year show that a total of 5,642.66 million transactions were initiated by customers using PhonePe, while another 4,375 million used Google Pay and only about 24.30 million used BHIM.

30% volume cap

The Committee's recommendations are also largely in tune with the NPCI issuing a 30% volume cap on transactions facilitated using UPI, back in November 2020. That is, the total number of transactions initiated by any third-party app (like PhonePe and Amazon Pay) individually, could not exceed 30% of the overall transactions made using the interfaces cumulatively over three preceding months. Apps exceeding the specified cap were given two years to comply with the directive in a phased manner.

What are the concerns about fraud?

While examining the different modes used by scamsters to dupe people and park illegal money, the Committee observed that fintech companies were also being used for money laundering. It was apprised of one such example — an Abu Dhabi-based app called Pyppl. The app was being administered by Chinese investment scamsters, it noted. This made it difficult for Indian law agencies to track the trail of money collected through scams on the platform. The fraud to sales ratio, which represents the total number of fraudulent transactions in comparison to the total number of transactions in a financial year, has largely remained around 0.0015%. The trend is notwithstanding the rise in volume of the payment mode in the last five years. In the ongoing financial year (till September 2023) the figure stood at 0.0016%. The percentage of users affected by UPI frauds stood at 0.0189%.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Indian Express

11. Union Cabinet approves 100% FDI in space sector

Why in news?

Union Cabinet took a series of key decisions, which included the approval for amendments to the existing Foreign Direct Investment (FDI) policy on space sector. The satellites sub-sector has been divided into three different activities with defined limits for foreign investment in each such sector.

Three different set of activities

1. The amended policy extends the facility of up to 74% FDI under the automatic route for satellite manufacturing and operation, satellite data products and ground/user segment. Beyond 74%, these activities are under government route.
2. Up to 49% FDI under the automatic route will be allowed for launch vehicles and associated systems or subsystems, and creation of spaceports for launching and receiving spacecraft. Beyond 49%, these activities will be under government route.
3. Moreover, 100% FDI under the automatic route would be permitted for manufacturing of components and systems/sub-systems for satellites, ground segment and user segment.

Existing Policy

As per the existing FDI policy, foreign investment is allowed in establishment and operation of satellites via government-approval route only.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Hindu

12. Tatas, Tower apply to set up chip foundries in India

Why in news?

After initial hopes of finally securing a viable bid to set up a semiconductor fabrication facility in India tapered off owing to numerous challenges, a fresh wave of proposals have rekindled hopes yet again. Minister of State for Electronics and IT Rajeev Chandrasekhar recently confirmed that the Tata Group and Israeli chip company Tower Semiconductor have applied to set up foundries in the country.

If the proposals are cleared by the government's India Semiconductor Mission (ISM), it could pave the way for the country to finally have a fabrication plant after decades of failed attempts. Aside from boosting domestic job prospects, it will also offer India leverage in the chip wars by increasing its say in the geopolitics of technology that has so far been shaped by China and the United States.

India is competing with some of its key allies – the US and Europe – to attract chipmakers. It is offering a 50% capital expenditure subsidy to successful applicants at the central level under its \$10 billion incentive scheme, with state governments sweetening the deal further at their own end.

What are the proposals currently on the table?

India's chip incentive scheme broadly covers three aspects of the ecosystem – full-blown foundries that can manufacture chips; packaging plants called ATMP facilities; and assembly and testing projects called OSAT plants. So far, US-based Micron Technology has cleared its proposal to set up a \$2.75 billion ATMP plant, with the facility coming up in Gujarat.

In the foundry space, Chandrasekhar said the Tata Group and Tower Semiconductor have sent two separate proposals.

The Tata Group is understood to be partnering with Taiwan based United Microelectronics Corporation (UMC) or the Powerchip Semiconductor Manufacturing Corporation (PSMC).

In the OSAT space, CG Power and Industrial Solutions (Crompton Greaves) has said it has entered into a joint venture (JV) agreement with Renesas Electronics America and Thailand-based Stars Microelectronics to set up a semiconductor assembly and testing plant in India. Kaynes Technology has also sent a proposal to set up an OSAT plant.

The Tata Group is understood to have also applied for an ATMP plant. Apart from that, HCL is learnt to have partnered with Foxconn in its application for setting up a similar plant.

What had happened to the earlier fab proposals?

A joint venture between Foxconn, best known as the manufacturer of iPhones, and Vedanta to set up a \$19.5 billion chip plant came to an abrupt halt last year. Foxconn announced it was pulling out of the joint venture with Vedanta. While government sources maintain the two could apply separately, there has been no movement so far.

Tower had earlier applied to the scheme to set up a \$3 billion plant in Karnataka in partnership with international consortium ISMC. The plan, however, got stuck due to the company's then impending merger with Intel. Last August, Intel cancelled its plan to acquire Tower Semiconductor for \$5.4 billion due to regulatory issues.

The planned merger between Intel and Tower, announced in February 2022, passed an antitrust review in the United States and several other geographies. But it ran into a lengthy delay in China, where regulators review mergers of companies that earn a certain amount of revenue in the country.

There was a third fab proposal by Singapore-based IGSS Venture, but it was not found up to the mark by the advisory committee of the government.

Why is India focusing on semiconductor manufacturing?

Prime Minister Narendra Modi has made chip manufacturing a top priority for India's economic strategy as he wants to "usher in a new era in electronics manufacturing" by luring global companies.

It is, therefore, clear that building semiconductors domestically is crucial for the government's vision to develop a domestic electronics supply chain and eventually reduce its imports from foreign countries, especially China – which despite its own challenges remains to be the number one destination for such manufacturing.

It is a pressing time for India to venture into electronics manufacturing, with chips being an important part of the puzzle – all electronics items have semiconductor chips in them, and as more companies try to diversify their bases from China, India has an opportunity to emerge as a reliable destination.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Indian Express

13. What is the new FPI fraud SEBI has warned investors against

Why in news?

The markets regulator Securities and Exchange Board of India (SEBI) has warned individuals against fraudulent trading platforms falsely claiming or suggesting affiliation with its registered Foreign Portfolio Investors (FPIs).

These platforms are misleading individuals by claiming to offer them trading opportunities through FPI or Foreign Institutional Investor (FII) sub-accounts or institutional accounts with special privileges.

What is the modus operandi?

The SEBI said it has received many complaints where fraudsters are enticing victims through online trading courses, seminars, and mentorship programmes in the stock market, leveraging social media platforms like WhatsApp or Telegram, as well as live broadcasts.

These scamsters are posing as employees or affiliates of SEBI-registered FPIs, and coaxing individuals into downloading applications that purportedly allow them to purchase shares, subscribe to IPOs, and enjoy 'institutional account benefits'—all without the need for an official trading or Demat account.

These operations often use mobile numbers registered under false names to orchestrate the fraudulent schemes.

What has SEBI clarified?

The market regulator clarified that the FPI investment route is unavailable to resident Indians, with limited exceptions as outlined in the SEBI (Foreign Portfolio Investors) Regulations, 2019. SEBI has not granted any relaxations to FPIs regarding securities market investments by Indian investors.

What should investors do to stay safe?

SEBI has urged investors to exercise caution and to steer clear of any social media messages, WhatsApp groups, Telegram channels, or apps claiming to facilitate stock market access through FPIs or FIIs registered with SEBI. Such schemes are fraudulent and do not have SEBI's endorsement, the regulator said.

Relevance: GS Prelims; Economics

Source: The Indian Express

14. What is Bitcoin halving?

Why in news?

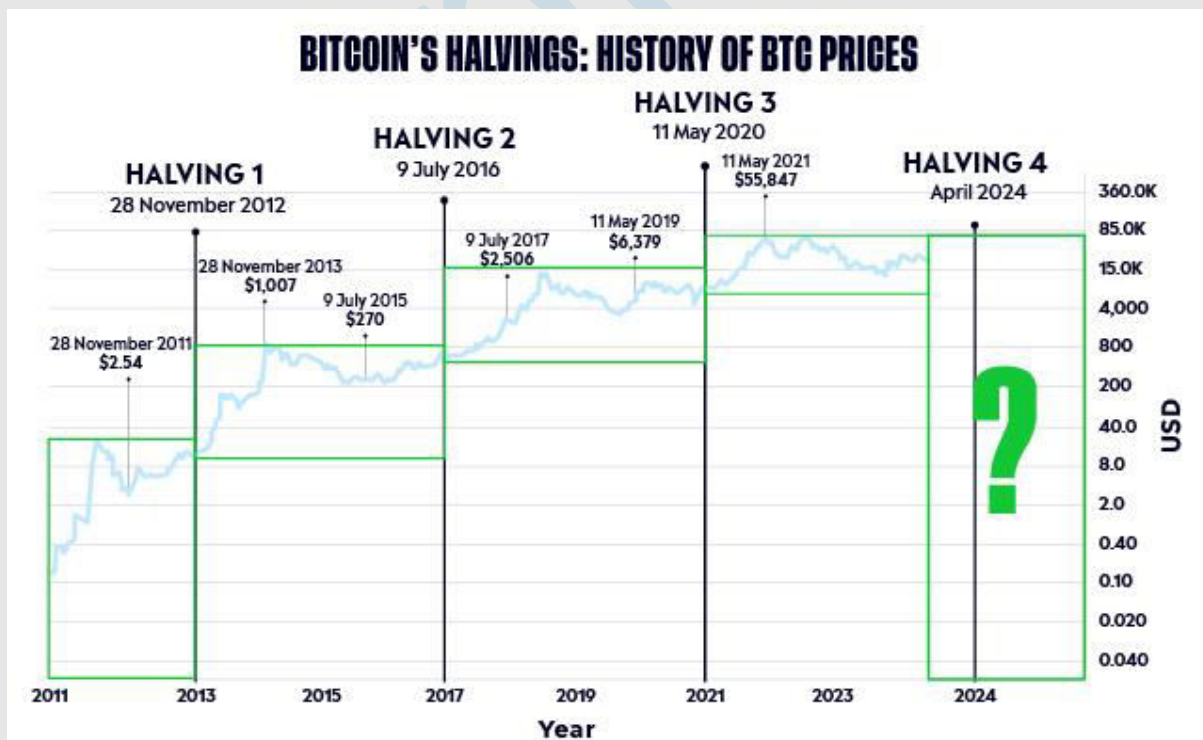
Just as the sporting world eagerly awaits the Olympics every four years, those following cryptocurrency look forward to their own quadrennial event. As athletes train for the 2024 Games in Paris this summer, crypto traders and Bitcoin miners are preparing for what is known as the 'Bitcoin halving'—predicted to happen in April.

What is the Bitcoin halving?

Bitcoin halving refers to the 50% reduction in the reward paid to Bitcoin miners who successfully process other people's cryptocurrency transactions so that they can be added to the public digital ledger known as the blockchain. In order to "grow" Bitcoin's blockchain and keep the ecosystem running, Bitcoin miners rely on advanced computer equipment to solve a complex mathematical puzzle through a process known as 'Proof of work.' This intense activity is the reason Bitcoin transactions result in huge carbon footprints and require vast amount of electricity. No real mining is carried out.

The Bitcoin miners with cutting-edge computer equipment, working on an industrial scale, are most likely to solve the puzzle first and claim their prize, which is currently set at 6.25 Bitcoin (BTC). While the reward amount is set, the true value of this prize fluctuates based on BTC prices in the market, and when the owner chooses to sell.

Think of a group of grocery store cashiers who are in a contest to each bill the same set of items, with the person doing it first (and accurately) getting a prize of ten gold coins at the end. The cashiers can use their favourite tools in order to bill the items and process the payment. While one might prefer to tally up the total with paper and pencil, another might decide to use their smartphone calculator, while someone else buys a state-of-the art computer system attached to a price scanner. The person most likely to win in this case is the cashier with the most advanced equipment, but the others stand a chance of winning as well. This is largely a positive system for everyone: the customers' items are efficiently billed and all the cashiers do their job well because they want to claim the prize.



After four or so years, you return to the grocery store where the cashiers still have this contest, but the prize money has been reduced to five gold coins. Is the prize still worth the effort?

That depends on the price of gold in the market, and the cost of the equipment that the cashiers bought in order to win the gold coins. This is one way to understand Bitcoin halving.

Why does the Bitcoin halving matter to crypto investors?

Bitcoin mining increases the supply of BTC in circulation while Bitcoin halving reduces the rate at which these coins are released, making the asset more scarce. Scarcity is seen as pushing up prices, as is the case with gold. While there can only ever be 21 million BTC in the world, over 19 million have already been “mined” or released. This sounds like the end of the story, but Bitcoin halving means it will take far more time for the remaining coins to be mined. A halving takes place after 2,10,000 blocks are mined, and has happened so far in 2012, 2016, and 2020 — every four years.

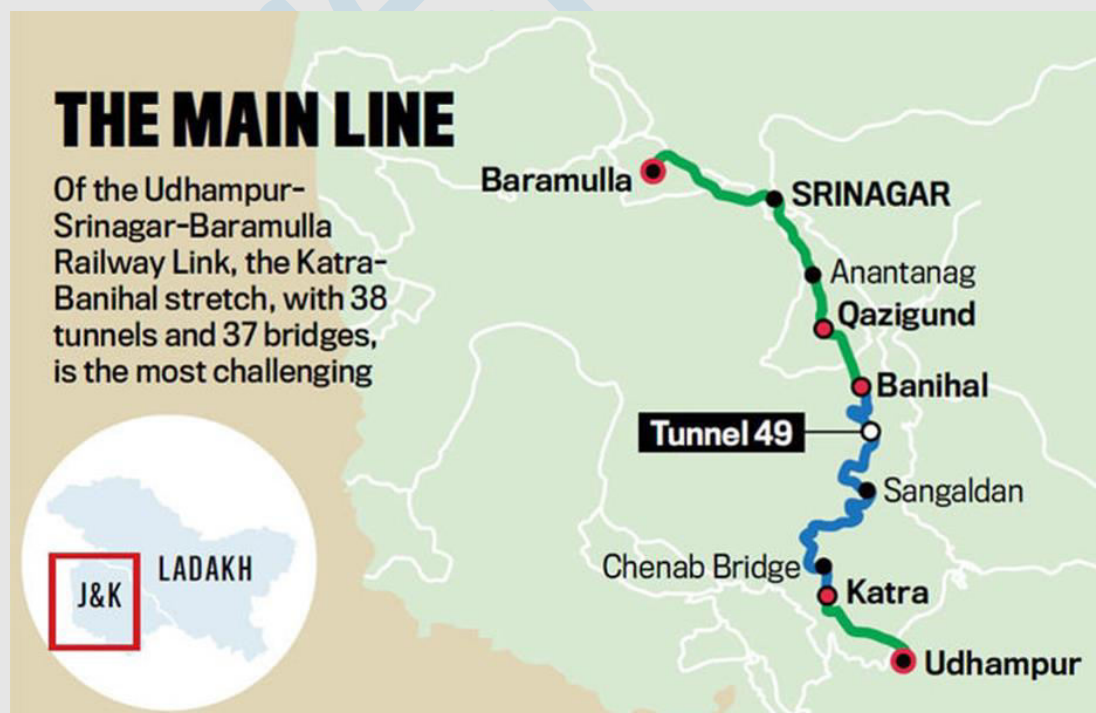
In 2009, a successful Bitcoin miner could claim a prize of 50 BTC. After this year’s halving, they will only get 3.125 BTC. However, keep in mind that Bitcoin prices are far higher now than they were in 2009, so this isn’t necessarily a loss for the miner. As of February 14, the price of 1 BTC was around \$49,528. This means a mining reward on February 14 would be worth around \$3,09,550 (6.25 x price of 1 BTC). Whether this value will rise or fall after the Bitcoin halving depends on the price of Bitcoin.

Both corporate and independent Bitcoin miners are spread across the world, trying to leverage cheap electricity prices in countries like Kazakhstan and Iran to mine as much Bitcoin as they can. China was originally home to many of the world’s crypto miners, but government crackdowns triggered an exodus to other countries.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Indian Express

15. PM Modi flags off railway project in Jammu and Kashmir: Route, challenges, benefits



Why in news?

Prime Minister Narendra Modi recently inaugurated the Banihal-Sangaldan section of the railway line which aims to connect Baramulla in North Kashmir to Udhampur in Jammu. He also flagged off Jammu and Kashmir's first electric train from Sangaldan to Srinagar and Baramulla.

The Banihal-Sangaldan railway line

More than 90 per cent of the 48-km railway line between Banihal to Sangaldan passes through tunnels in the mountainous Ramban district, including the country's longest 12.77-km tunnel (T-50).

Why it is important?

Travel option to Valley when roads not usable: With the train reaching Sangaldan, people now have a way to travel between Jammu and Kashmir even when the National Highway-44 is closed for vehicular traffic between Ramban and Banihal due to landslides. One can travel 30-35 km to Sangaldan by road from Ramban town and then board the train to Kashmir.

Promote tourism and economy: The train route also opens far-off areas of Jammu division for tourists, and thus for more economic activity. Hot water springs are situated nearly 5 km from Sangaldan and the picturesque Gool Valley is nearby. These areas have largely remained unexplored so far for want of better road connectivity.

Valley still away from Indian railways network

It will take a few more months for the Valley's truncated rail line to connect with the Indian Railways network across the country. Of the total 272-km-long Udhampur-Srinagar-Baramulla railway line, nearly 209 km has been commissioned so far. The Valley is likely to be connected with the Indian railways network by May this year.

A stretch of nearly 63 km, on which works are nearing completion, falls in Reasi district. This stretch has the world's highest single arch railway bridge standing at a height of 1178 mts above the Chenab riverbed, surpassing the Eiffel Tower of Paris by 35 meters.

History of railways in Jammu and Kashmir

The first railway line in the former princely state of Jammu and Kashmir was built by the British in 1897 over a distance of 40-45 km between Jammu and Sialkot in the plains.



The Jammu to Sialkot train, the first railway link in the former princely state of Jammu and Kashmir.

Post Independence

After Partition, Sialkot went to Pakistan, and Jammu was disconnected from the rail network of India. Until the inauguration of the Pathankot-Jammu line in 1975, the railway station nearest to Jammu and Kashmir was Pathankot in Punjab.

In 1983, work began on a railway line between Jammu and Udhampur. The 53-km line, estimated to cost Rs 50 crore, was supposed to be completed in five years, but ultimately took 21 years and Rs 515 crore. The project, which was completed in 2004, has 20 major tunnels, the longest of which is 2.5 km long, and 158 bridges, the highest of which is 77 m high.

With work underway on the Jammu-Udhampur line, the Centre in 1994 announced the extension of the line from Udhampur to Srinagar, and then Baramulla. This was the Udhampur-Srinagar-Baramulla Railwayline (USBRL) project, which was approved in March 1995 at an estimated cost of Rs 2,500 crore.

The project got momentum after 2002, when Prime Minister Atal Bihari Vajpayee declared it a national project on account of its being among the most challenging works undertaken by the Indian Railways after Independence. The project cost has now ballooned to more than Rs 35,000 crore.

The line will connect Srinagar and Baramulla in the Valley with the rest of the country by train, and will provide a reliable and cost-effective all-weather alternative to the Jammu-Srinagar national highway that is frequently shut down due to landslides.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Indian Express

16. How much do developed countries spend on research and development? Has the Ministry of Science and Technology consistently under-utilised its budget? How much does the private sector contribute to India's R&D funding?

Why in news?

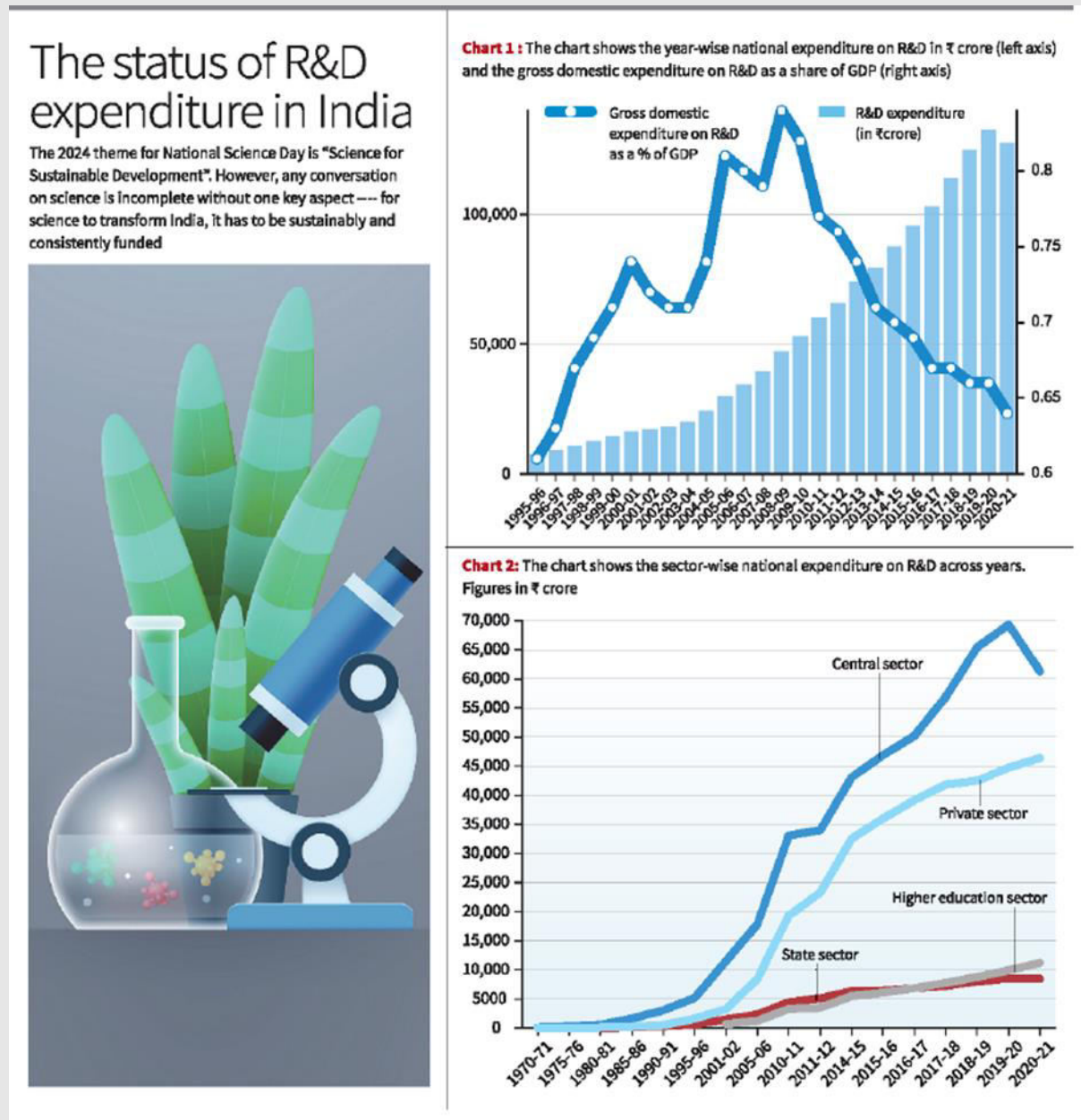
The 2024 theme for National Science Day, which India celebrates every year on February 28, is "Science for Sustainable Development". Science and technological developments are key drivers of India's journey towards becoming a developed country by 2047. Any conversation on science is incomplete without setting one key expectation — for science to transform India, it has to be sustainably and consistently funded.

How much is India spending on research and development?

Funding for fundamental research in India is amongst the world's lowest, particularly for a country with high science and technology ambitions. In the recent past, India's research and development (R&D) expenditure has dropped to the current 0.64% of GDP from 0.8% in 2008-2009 and 0.7% in 2017-2018.

Most developed countries spend between 2% and 4% of their respective GDPs on R&D. In 2021, member-countries of the Organisation for Economic Co-operation and Development

(OECD) on average spent 2.7% of their GDP on R&D. The U.S. and the U.K. have consistently spent more than 2% of their GDPs on R&D for the past decade. Many experts have called for India to spend at least 1%, but ideally 3%, of its GDP every year until 2047 on R&D for science to have a meaningful impact on development.



How can India improve its R&D spending?

Science requires consistent, large-scale investment to bear fruit. For India to reach the 'developed nation' status, it needs to spend more to scale R&D than developed countries spend to maintain that status. This is the foundation of the demand to spend at least 3% of the GDP on R&D annually until 2047.

And beyond the current spending being inadequate, its primary dependence on public money signals an immature financing system and weak domestic market. In 2020-2021, the private sector industry contributed 36.4% whereas the Union government's share was 43.7%. State

governments (6.7%), higher education (8.8%), and the public sector industry (4.4%) were the other major contributors.

In economically developed countries, a major share — 70% on average — of R&D investment comes from the private sector. The hesitancy of private-sector funding may be because of the poor capacity to evaluate R&D in India, ambiguous regulatory roadmaps that can deter investors, lack of clear exit options for investors in sectors such as biotechnology, and fears of intellectual property rights theft.

How is the R&D budget utilised?

While the need for India to at least double its R&D investment has been expressed several times, the question of how effectively the allocated money is spent is explored less often. The Union Ministry of Science and Technology has consistently under-utilised its budget. So, while the calls for increased funding — through both government and private sources — are legitimate, a strengthened budget utilisation is also required to affect science outcomes.

In 2022-2023, the Department of Biotechnology (DBT) used 72% of its estimated budget allocation on centrally sponsored schemes/projects while the Department of Science and Technology (DST) used only 61%. The Department of Scientific and Industrial Research (DSIR), which receives the lowest allocation for centrally sponsored schemes, spent 69% of its allocation.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Hindu

17. India's Position at WTO on Fish Subsidies for Developing Nations



India's Stance on Fisheries Subsidies Negotiation

India, during the 13th WTO Ministerial Conference in Abu Dhabi, has emphasized the necessity for a comprehensive agreement on fisheries subsidies.

India asserts that such an agreement must adhere to the principles of 'common but differentiated responsibilities and respective capabilities' (CBDR-RC) and incorporate special and differential treatment (S&DT).

Rationale Behind Subsidies

India argues that while subsidies to the fisheries sector have historically led to overexploitation, they are crucial for the development and diversification of fisheries sectors in developing countries and small economies.

India highlights the importance of protecting the livelihood and growth of the fishing community in developing countries through appropriate provisions in the agreement.

Joint Call for Support

Fisherfolk from developing nations like India, Indonesia, and Bangladesh have jointly emphasized the need to protect livelihoods in the fisheries subsidies pact.

India voices concerns regarding the impact of negotiations on small-scale, artisanal, and indigenous fishers, especially regarding proposed limits on fishing distances.

India advocates for extending exemptions to small-scale fishers up to 200 nm, which contrasts with the proposed distance of 12 nm or 200 nm in the latest draft of the agreement.

Capturing Non-Specific Fuel Subsidies

India argues for including non-specific fuel subsidies and transfer of fishing rights to corporate fishing under government-to-government payments within the agreement's disciplines.

Discipline of Subsidies by Distant Water Fishing Nations

India also stresses the importance of disciplining subsidies given by Distant Water Fishing Nations for an effective and sustainable fisheries agreement.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Hindu

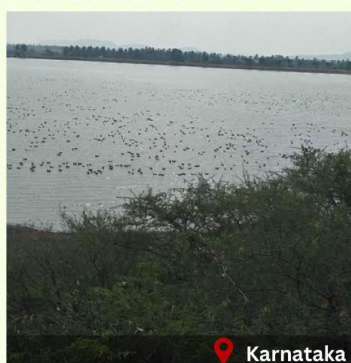
1. India increases its tally of Ramsar sites (Wetlands of International Importance) to 80 by adding Five more wetlands

Why in news?

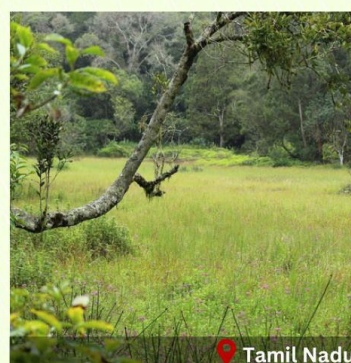
Union Minister for Environment, Forest and Climate Change and Labour and Employment Shri Bhupender Yadav said on the eve of World Wetlands Day 2024, India has increased its tally of Ramsar sites (Wetlands of International Importance) to 80 from existing 75 by designating five more wetlands as Ramsar sites. Shri Yadav said he met Dr Musonda Mumba, the Secretary General of Ramsar Convention who handed over the certificates of the aforesaid five sites.



Karaivetti Bird Sanctuary



Magadi Kere Conservation Reserve



Longwood Shola Reserve Forest



Ankasamudra Bird Conservation Reserve



Aghanashini Estuary

Relevance: GS Prelims; Environment

Source: The Indian Express

2. In Interim Budget 2024, Sitharaman says use of Nano DAP to be expanded: What is this made-in-India fertiliser?

Why in news?

Finance Minister Nirmala Sitharaman, presenting the interim budget announced the expansion of the application of Nano DAP on various crops in all agro climatic zones.

"After the successful adoption of Nano Urea, application of Nano DAP, on various crops, will be expanded in all agro-climatic zones," the finance minister said.

What is Nano DAP — and why does the government want to expand its use?

DAP vs Nano DAP

DAP, or di-ammonium phosphate, is the second most commonly used fertiliser in India after urea. It is high in phosphorus (P) that stimulates root establishment and development — without which plants cannot grow to their normal size, or will take too long to mature. It is thus applied just before, or at the time of sowing.

Home Minister Amit Shah, last April, launched Indian Farmers Fertiliser Cooperative's (IFFCO's) Nano DAP, containing 8% Nitrogen and 16% Phosphorus by volume. Unlike conventional DAP, which comes in granular form, IFFCO's Nano DAP is in liquid form.

IFFCO's website says that this formulation "has [an] advantage in terms of surface area to volume, as its particle size is less than 100 Nanometre (nm)."

This tiny particle size makes Nano DAP more efficient than its conventional counterpart, enabling the fertiliser "to enter easily inside the seed surface or through stomata and other plant openings". Better assimilation of the fertiliser inside the plant system in turn leads to "higher seed vigour, more chlorophyll, photosynthetic efficiency, better quality and increase in crop yields."

Why Nano DAP

In addition to being more efficient than conventional DAP, Nano DAP has a few other benefits. First, it is more pocket-friendly than its conventional counterpart. A 500 ml bottle of Nano DAP, equivalent to a 50-kg bag of conventional DAP, is priced at only Rs 600 (compared to Rs 1,350 for the bag). Since the government provides significant subsidies on DAP, the adoption of a more inexpensive fertiliser will likely be a significant relief to the government's subsidy burden.

Second, for farmers, Nano DAP is also significantly more convenient. Simply put, 500 ml bottles are easier to transport, store, and use than 50kg bags. The fertiliser is sprayed on crops, with a 250-500 ml of DAP, dissolved in water, required per spray, per acre.

Relevance: GS Prelims & Mains Paper III; Environment

Source: The Indian Express

3. India's snow leopard count

Why in news?

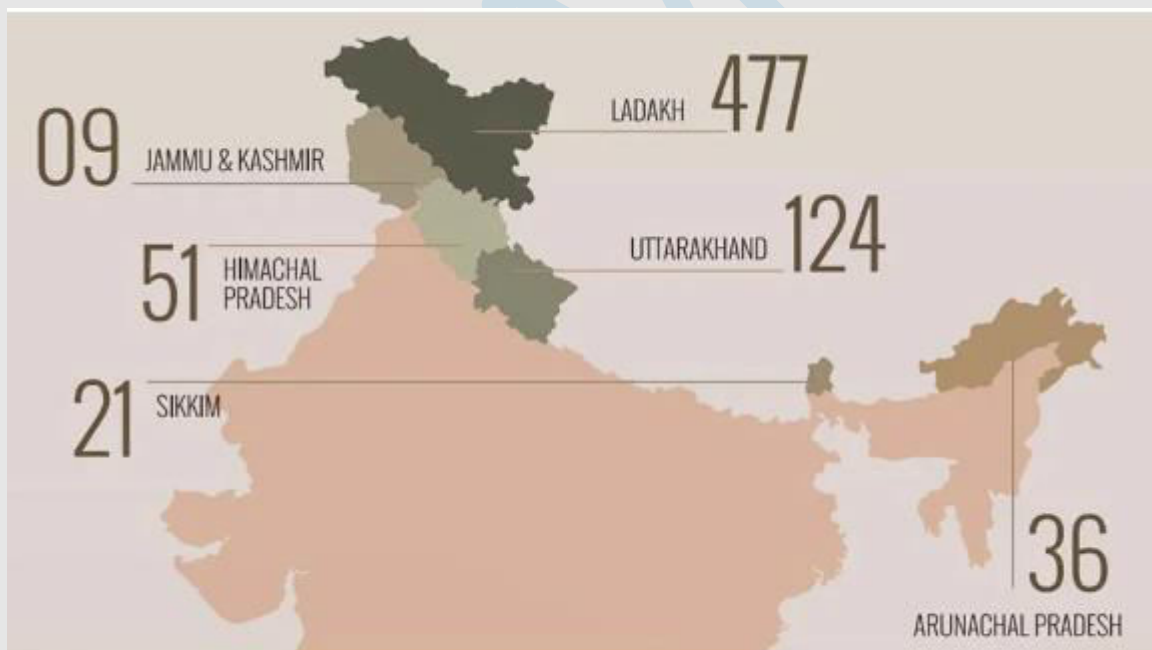
The Snow Leopard Population Assessment in India (SPAI) has estimated a population of 718 in Ladakh, Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh. Carried out between 2019 and 2023, this study is a major leap in our understanding of the keystone species. Snow leopards are believed to occupy around 1 lakh sq km of the higher Himalayan terrains in India.



Need for Assessment

As recently as 2016, the cat's status was unknown in as much as one-third of its range. This went well with the legend of the 'ghost of the mountains' built around the elusive cat's mastery of stealth and camouflage. But for this 'ghost' to have a future — and since the future of most species is increasingly determined by human actions — knowledge of the cat's status across its range was necessary for framing the

right policies.



Where snow leopards were found in India and their numbers. (Via SPAI)

This was also a question of securing our future because the snow leopard's habitat is where all major Himalayan rivers that sustain life across much of India spring to life. Yet, a national effort to count snow leopards — colloquial for 'studying abundance' — across its range remained daunting on multiple counts.

Report Recommendations

The report also mentions the need for establishing a dedicated Snow Leopard Cell at WII under the MoEFCC is proposed, with a primary focus on long-term population monitoring, supported by well-structured study designs and consistent field surveys. Consistent monitoring is essential to ensuring Snow leopards' long-term survival. For the same, states and UTs can consider adopting a periodic population estimation approach (every 4th year) in the Snow leopard range. These regular assessments will offer valuable insights for identifying challenges, addressing threats, and formulating effective conservation strategies.

About SPAI

The Snow Leopard Population Assessment in India (SPAI) Program is the first-ever scientific exercise that reports Snow leopard population of 718 individuals in India.

The Wildlife Institute of India (WII) is the National Coordinator for this exercise that was carried out with support the support of all snow leopard range states and two conservation partners, the Nature Conservation Foundation, Mysuru and WWF-India.

Relevance: GS Prelims & Mains Paper III; Environment

Source: PIB and Indian Express

4. Seven cheetahs born in Kuno: Challenges, survival chances, and the wild-vs-protected debate



Three of the newborn Cheetah cubs

Birth of Cheetah Cubs in Kuno National Park

In January, seven cheetah cubs were born in Kuno National Park, Madhya Pradesh, marking a significant development for Project Cheetah, aimed at reintroducing cheetahs to India.

Life Stages of Cheetah Cubs

Cheetah cubs go through distinct stages in their lives, from birth to independence. Understanding these stages is crucial for their survival and successful reintroduction into the wild.

Wildlife Officials' Protocols for Pregnancy

Wildlife officials in Kuno National Park closely monitor cheetah pregnancies and ensure the well-being of expecting mothers through visual observations and supplementary feeding to maintain optimal health.

Standard Protocol for Cheetah Mother and Cubs

Experts emphasize the importance of allowing cheetah cubs to stay with their mothers to learn crucial survival skills, while also highlighting the necessity of vaccinations and proper nutrition for their development.

Intervention and Management

Officials intervene when necessary, particularly in cases of neglect or harm by the mother, to ensure the survival of the cubs and their successful integration into the cheetah population.

Survival Challenges and Reintroduction Debates

Cheetah cubs face significant survival challenges, and there is ongoing debate regarding the best approach to their reintroduction into the wild, weighing the benefits of protected enclosures versus free-ranging conditions.

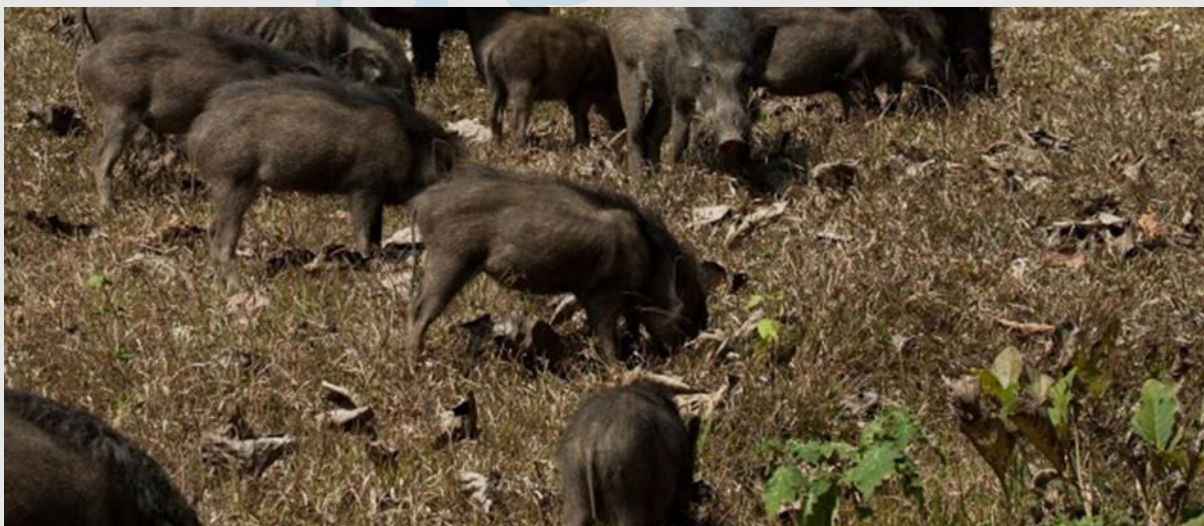
Conclusion

The decision regarding the management and reintroduction of cheetah cubs in Kuno National Park involves careful consideration of various viewpoints and factors to ensure the long-term success of Project Cheetah and the conservation of cheetah populations in India.

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

5. Why does Kerala want the Centre to amend the Wildlife Protection Act?



Kerala wants the Centre to classify wild boar as vermin.

Why in news?

Recently, Kerala Legislative Assembly unanimously passed a resolution urging the Union Government to amend relevant sections of the Wildlife Protection Act of 1972 to address the escalating human-animal conflict in the state.

Demand to amend section on hunting

Section 11 of the 1972 Act regulates hunting of wild animals. As per clause (1)(A) of the section, the Chief Wildlife Warden (CWLW) of a state may — if satisfied that a wild animal specified in Schedule I (mammals) has become dangerous to human life or disabled or diseased beyond recovery — permit hunting or killing of such animal. The section gives powers to the CWLW to order killing of such a wild animal, if it cannot be tranquillised or relocated after capturing. Now, Kerala wants to amend the Section 11 (1) (A) so as to devolve the above-mentioned powers of the CWLW to Chief Conservators of Forests (CCF) instead. Such an amendment, the state feels, would simplify procedures for dealing with wild animals posing a threat to human life, by enabling speedy and timely decisions to be taken at a more localised level. Kerala has five CCFs, each in charge of a different region of the state.

Demand to declare wild boar as vermin

Kerala also wants the Centre to declare wild boar as vermin, as per section 62 of the Wildlife Protection Act. According to this section, the Union Government can notify any wild animal in Schedule II of the Act (which protects it from hunting), as vermin for a period of time in an area/state.

An animal is declared as vermin when it poses threat to life and crops. Once declared as vermin, wild boar would lose its protection from hunting, thus enabling the state and citizens to cull the wild boar population to protect against the menace the species poses to life and livelihood.

An escalating crisis

Kerala has seen a steady rise in human-animal conflict in recent years. Attacks from wild animals not only pose a threat to life, but have also wreaked havoc in the state's agriculture sector. The issue has now come to a head after a radio-collared wild elephant strayed into a village, chased people, and trampled a person to death in Wayanad.

Wild boars, in particular, are notorious for devastating farmland. After the Centre previously rejected demands for declaring the species as vermin, Kerala, in 2022, empowered local self-governing bodies to deploy licenced shooters to kill wild boars that raid crops and foray into human settlements.

However, this step did not help address the wild boar menace for want of licenced shooters in villages, as well as the long-winding process of involving the forest department after every killing. This is why the state is once again pushing wild boar to be declared as vermin, which would allow villagers to deal with the menace themselves.

Relevance: GS Prelims & Mains Paper III; Environment

Source: The Indian Express

6. La Nina impacted air quality in India: what a new study says

Why in news?

Monsoon rainfall over India is known to be strongly influenced by El Nino and La Nina events, the alternating warming and cooling of the eastern Pacific Ocean that impacts weather across

the world. A new study by Indian researchers has now suggested that even air quality in the country could be influenced by the two weather events.

The study, by researchers at the Bengaluru-based National Institute of Advanced Studies and Pune-based Indian Institute of Tropical Meteorology, has argued that the unusual air quality in some Indian cities in the winter of 2022 could be attributed to the record-breaking spell of La Nina prevailing at that time.

This is the first time that air quality in Indian cities has been linked to a La Nina event — and indirectly to climate change, which is making El Nino and La Nina more severe.

What happened

During October to January, northern Indian cities, particularly Delhi, experience very high concentrations of PM2.5. A variety of meteorological factors — temperature, moisture, heaviness in air, wind speed and direction — play a role in trapping pollutants in the lower levels of the atmosphere. These factors are also responsible for transporting pollutants from other regions, particularly those generated by agriculture waste burning in Punjab and Haryana, to Delhi and adjoining areas.

The western and southern parts of the country have always had relatively lower levels of pollution, because of their proximity to oceans.

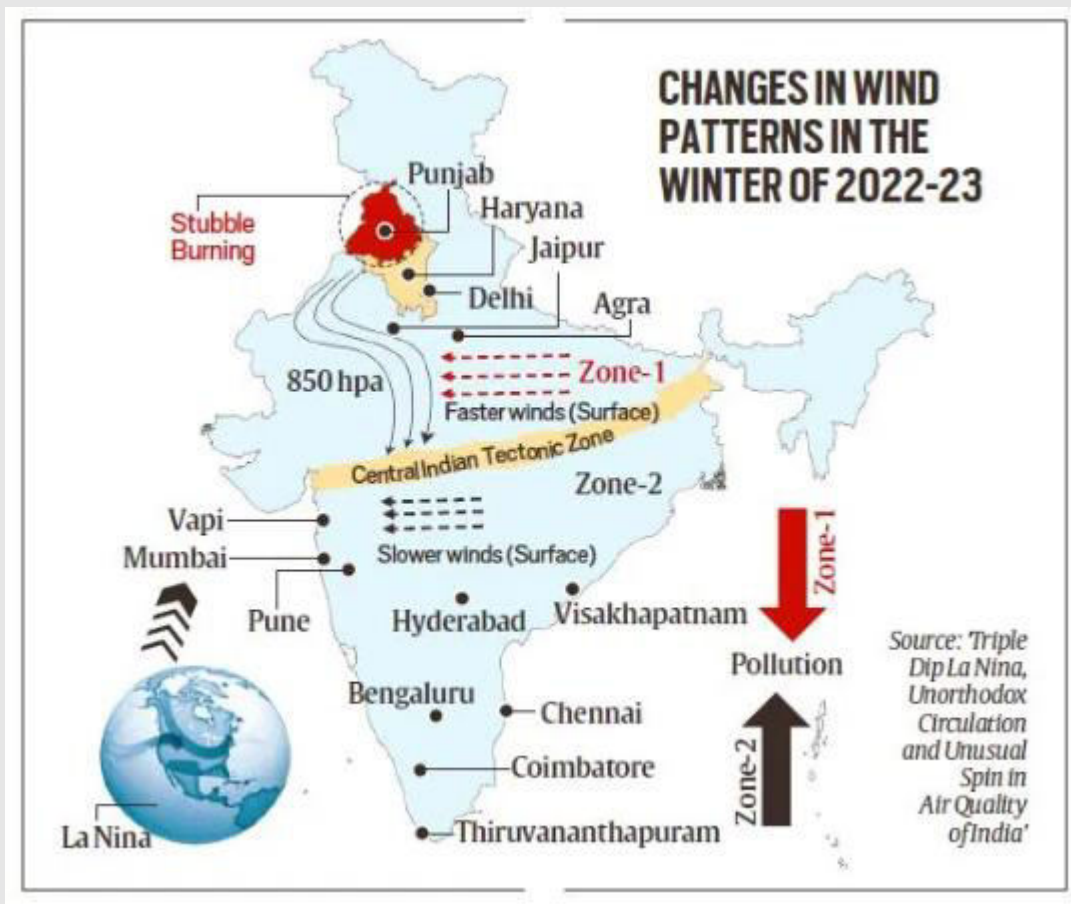
The winter of 2022, however, showed a significant deviation from this normal. Northern Indian cities, including Delhi, were cleaner than usual, while cities in the west and the south, like Mumbai, Bengaluru and Chennai, experienced worse-than-usual air quality.

It was this anomalous behaviour that the researchers had set out to study when they found themselves led to the possible effects of La Nina.

Wind direction

The most crucial factor in explaining the anomaly of winter 2022 was a change in the normal wind direction. During this time, wind usually blows in the northwesterly direction: for example, from Punjab towards Delhi and further into the Gangetic plains. This is one of the main reasons why agricultural waste pollutants in Punjab and Haryana flow into Delhi.

In the winter of 2022, however, the wind circulation was in the north-south direction. The pollutants being carried from Punjab and Haryana bypassed Delhi and surrounding areas and flew over Rajasthan and Gujarat to southern regions (see map).



There was no change in the local sources of emissions in Delhi and Mumbai. But the additional pollutant load from the northern states, which usually lands in Delhi and surrounding areas, moved in a different trajectory and reached peninsular India, some landing in Mumbai as well. The local circulation of wind near Mumbai also had an anomalous behaviour that year. Wind currents alternate between blowing from the land to the sea every few days. When blowing from the land towards the sea, the winds carry pollutants out of the city. In 2022, however, instead of changing direction every four to five days, the winds persisted in one direction for more than a week or 10 days, leading to greater accumulation of pollutants in Mumbai.

La Nina and climate change

According to experts, the wind behaviour in both cases had something to do with the extended La Nina which, by the winter of 2022, had been persisting for an unusually long three years.

The experts used the global air circulation data as a result of La Nina in our computer models, they found the emergence of wind patterns over the Indian region that were very similar to the observed changes. When they ran the models with data from previous years, when a strong La Nina was not present, these anomalous wind patterns disappeared.

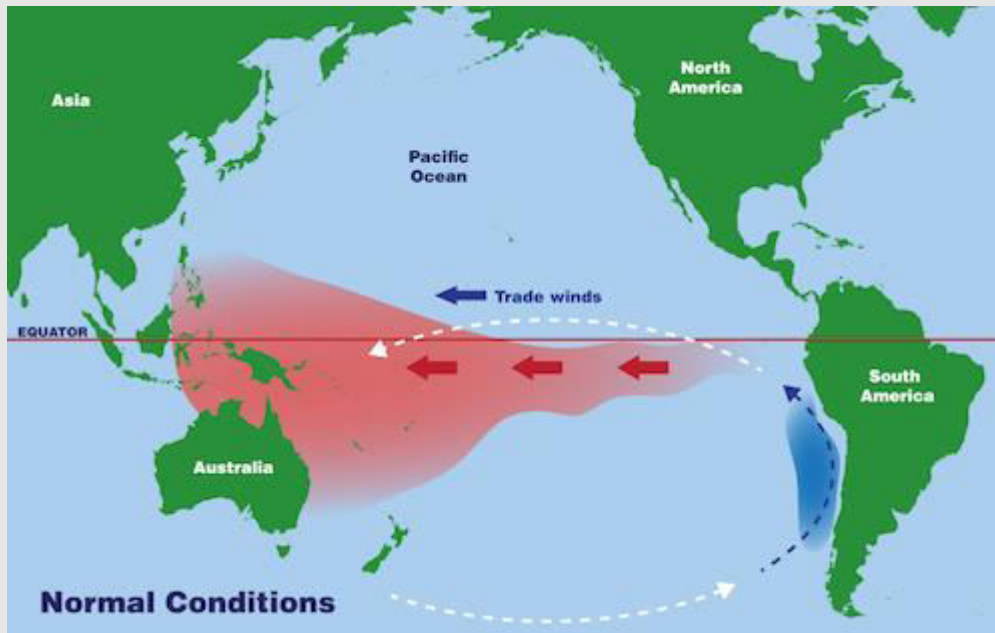
The experts further said it was not yet entirely clear whether El Nino would produce an opposite effect for air quality over India.

The study did add that changes in wind patterns were not the only reasons for the unusual trends in air quality that year. It mentioned local meteorological conditions, unrelated to La

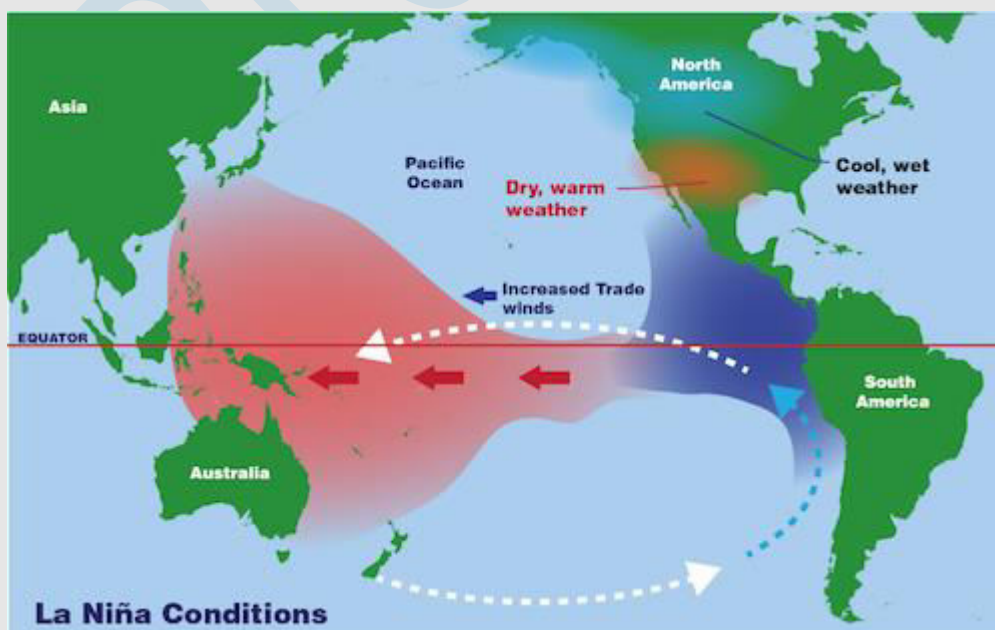
Nina, that could also have resulted in the reduction of pollutant concentrations over northern India.

What is La Nina?

La Niña (the opposite weather phenomena of El Niño) is a weather pattern that can occur in the Pacific Ocean every few years. In a normal year, winds along the equator push warm water westward. Warm water at the surface of the ocean blows from South America to Indonesia. As the warm water moves west, cold water from the deep rises up to the surface. This cold water ends up on the coast of South America.



In the winter of a La Niña year, these winds are much stronger than usual. This makes the water in the Pacific Ocean near the equator a few degrees colder than it usually is. Even this small change in the ocean's temperature can affect weather all over the world.



Rain clouds normally form over warm ocean water. La Niña blows all of this warm water to the western Pacific. This means that places like Indonesia and Australia can get much more rain than usual. However, the cold water in the eastern Pacific causes less rain clouds to form there. So, places like the southwestern United States can be much drier than usual.

Relevance: GS Prelims & Mains Paper III; Environment

Source: The Indian Express

7. Use dictionary meaning of 'forest', Supreme Court tells Central govt.

Verdict on woods

Some of the observations made by the SC over the pleas challenging the 2023 amendments to the Forest (Conservation) Act, 1980



- The “all-encompassing” dictionary meaning will continue to hold field until the States and Union Territories prepare a consolidated record of forest lands

- Environment Ministry should issue a circular in this regard to the States and Union Territories

- Establishment of “zoos or safaris” must have the final approval of the top court

What the Supreme Court said?

The Supreme Court recently, in a significant order, directed that the expression ‘forest’ will continue to have a “broad and all-encompassing” meaning for the time being, and include 1.97 lakh square km of undeclared forest lands.

A three-judge Bench headed by Chief Justice of India D.Y. Chandrachud passed the order on petitions challenging the amendments introduced in 2023 to the Forest (Conservation) Act, 1980. The 1980 statute was enacted to check further deforestation leading to ecological imbalance.

The petitions had argued that Section 1A introduced through the amended Act had “circumscribed or substantially diluted” the definition of forest to two categories — declared forests and lands recorded as forests in ‘government records’ after 1980.

‘Government records’

The Centre, however, denied any attempt to trim the extent of forest coverage. It pointed to the ‘explanation’ to Section 1A, which expanded the term ‘government records’ contained in

the provision to include lands recognised as forest by any State or Union Territory, local body, council or recognised communities.

However, the court directed the government to revert to the "dictionary meaning" of 'forest' as upheld by it in a 1996 decision in the T.N. Godavarman Thirumulpad case.

Dictionary meaning

The Court said that the adoption of this dictionary meaning to forests was made to align with the intent of the Forest Conservation Act, 1980. It is clarified that the expression 'forest' will cover but not be confined to lands recorded as forests in the government records.

The Bench noted that the dictionary meaning would continue to hold field till the States and Union Territories prepare a "consolidated record" of all the lands recorded as 'forest' in government records.

The court directed the Union government to require States and Union Territories, within two weeks, to forward the "comprehensive records" of forest lands their respective expert committees had identified in pursuance of the top court's orders in the Godavarman Thirumulpad case.

The States and Union Territories have to forward the records by March 31 The Environment Ministry has to publish these records on its website by April 15.

Approval for zoos

The Bench further directed that the establishment of "zoos or safaris" by any government or authority should not be consented to without the final approval of the top court. The court listed the case again in July 2024.

Relevance: GS Prelims & Mains Paper III; Environment

Source: The Hindu

8. SC directs govts to follow 'broad' definition of forests: How they are defined, what law says on conservation

Why in news?

The Supreme Court has directed governments to follow the "broad and all-encompassing" definition of forest as laid down in its 1996 judgment in the T N Godavarman case until a consolidated record of all kinds of forests across the country is prepared.

A three-judge Bench led by Chief Justice of India (CJI) D Y Chandrachud passed the order recently on petitions that challenged the 2023 amendments to the Forest (Conservation) Act, 1980 (FCA) on the ground that the modifications had "substantially diluted" the definition of forest, and had reduced the ambit of the Act.

Verdict on woods

Some of the observations made by the SC over the pleas challenging the 2023 amendments to the Forest (Conservation) Act, 1980



- The “all-encompassing” dictionary meaning will continue to hold field until the States and Union Territories prepare a consolidated record of forest lands

- Environment Ministry should issue a circular in this regard to the States and Union Territories

- Establishment of “zoos or safaris” must have the final approval of the top court

Why was the Forest (Conservation) Act amended in 2023?

In the Statement of Objects and Reasons for the Forest (Conservation) Amendment Bill, 2023, passed by both Houses in July-August last year, the government said that applicability of the FCA had been widened by the judgment of the Supreme Court in T N Godavarman Thirumalpad v. Union of India (December 12, 1996).

“Subsequent to the said Judgment, the provisions of the Act were applied in... recorded forests which had already been put to various type of non-forestry use, thereby restraining the authorities from undertaking any change in the land use and allowing any development or utility related work,” the Statement of Objects and Reasons said.

Environment Minister Bhupender Yadav told Parliament that the amendments were necessary to remove ambiguities created by the judgment, which had made the FCA applicable to all areas that resembled the dictionary meaning of ‘forest’.

As a remedy, the amendment made the FCA applicable only to notified forests and lands that were identified as ‘forest’ in government records.

How exactly did the Supreme Court define ‘forest’ for the purposes of the Act?

The court ruled that the FCA would apply to all land parcels that were either recorded as ‘forest’, or which resembled the dictionary meaning of forest.

The 1996 judgment passed by Justice J S Verma and Justice B N Kirpal said: “The word ‘forest’ must be understood according to its dictionary meaning. This description covers all statutorily recognised forests, whether designated as reserved, protected or otherwise... The term ‘forest land’ will not only include ‘forests’ as understood in the dictionary sense, but also any area recorded as forest in the Government record irrespective of the ownership.”

The CJ-led three-judge Bench reaffirmed this principle recently, saying that the dictionary meaning of forests had been adopted by the court to align with Parliament's intent behind legislating the FCA in 1980.

Who challenged the 2023 amendments to the law, and on what grounds?

The challenge (Ashok Kumar Sharma, IFS (Retd) & Ors v. Union of India & Ors) was filed by a group of retired Indian Forest Service officers and NGOs such as Vanashakti and Goa Foundation.

The petitions echoed some of the concerns raised by the dissenting members of the Joint Parliamentary Committee (JPC) that had examined the amendments. The major apprehension was the potential exclusion of 28% of India's forests that lie outside Recorded Forest Areas from the purview of the FC Act.

The Ministry had assured the JPC that the amended FCA would still apply to all unclassified forests, forests that were "proposed to be notified", land recorded as forest by even local bodies, and forest-like areas identified by the expert committees set up in pursuance of the 1996 SC order. It had reiterated this stand before the SC in the present case.

The petitioners argued that pending finalisation of the consolidated record of forests — required to be completed within one year under the amended 2023 Rules — land parcels that would have been considered forests under the 1996 judgment could now be used for non-forest purposes without requiring any clearance under the FCA.

At this, the SC explicitly asked its 1996 definition to be followed until the consolidated record of forests was finalised.

What happens now?

States and Union Territories have until March 31 to submit comprehensive records of forests identified by the expert committees constituted as per the 1996 judgment. The Ministry will have to publish this data on its website by April 15.

The Supreme Court said that while the expert committees set up under the 2023 Rules should take into account the progress made by the previous expert panels, they are free to expand the protection umbrella to any forest land that is worth protecting. The matter will be heard for final disposal in July.

Relevance: GS Prelims & Mains Paper III; Environment

Source: The Indian Express

9. Why are human-wildlife conflicts escalating in Kerala?

Extent of Human-animal conflict

Forest covers nearly 30% of Kerala's geographical area. For a relatively small State with an average width of just around 70 km and a population of more than 3.46 crore, this means numerous densely populated human settlements are located close to protected forest regions.

Moreover, a large number of agricultural plantations too lie near wildlife habitats. This is especially true in the case of hilly reaches, which includes most of the heavily forested eastern part of the State.

Although this situation makes human-animal conflict inevitable, in recent years, Kerala has seen a sharp increase in the number of such incidents with those living near forest fringes suffering crores of rupees worth of damage to livelihood, mostly due to frequent raids by elephants and wild boars. Over 600 people have lost their lives in Kerala since 2015 in conflict with animals. This has led to a number of protests by affected villagers with some of them even leading to open confrontation between the protesters and the State Forest department officials.

What are the reasons for the increase in human-wildlife conflict?

Experts cite increased area under cultivation around wildlife habitats, changing cropping pattern, significant increase in the population of animals like elephants and tigers due to conservation efforts, and movement of livestock and humans in wildlife habitats during odd hours as the main reasons for the rise in human-wildlife conflict incidents. There has also been a substantial increase in the population of prolific breeders like wild boars and peacocks.

However, increased number of incidents involving elephants are due to habitat depletion and fragmentation caused by human activities. Moreover, invasive alien species have reduced the availability of food and water. Monoculture of species such as eucalyptus and acacia has also adversely affected plant biodiversity.

What are the proposed solutions and why are they not effective?

Elephant-proof trenches and solar power fences are widely used in Kerala, and they are considered largely effective, provided they are properly maintained. However, there are several regions where these mechanisms have not been installed. These fences are also often broken by people living nearby to let their cattle into the forests for grazing, and elephants too destroy the fences using their legs and tusks. In a ₹620-crore masterplan to address the issue, the Forest department recommends hanging power fences that will be out of reach of elephants.

Moreover, as part of the State government's new eco-restoration policy, the Forest department is aiming to plant suitable indigenous plants (wild mango, wild gooseberry, and wild jackfruit) in the forest to ensure wild animals' food security and dissuade them from entering agricultural lands. Such measures need to be supplemented by creating early warning systems that can track the movement of elephants and other dangerous animals using drones and watchers, so that people can avoid going to locations where they have been spotted. However, warning mechanisms are not widely installed in Kerala.

However, the above measures are not effective against wild boars. Although the Centre is yet to accept Kerala's request to declare wild boars as vermin, the State government recently empowered local bodies to cull wild boars that pose a threat to agriculture crops or human life. The other options include capturing and neutering the boars, or relocating them to forests where there are predators like tigers and leopards.

How is human-animal conflict connected to the ESZ norm?

Although Eco Sensitive Zone (ESZ) norm has caused a storm in Kerala with the legislative assembly unanimously passing a resolution on July 7 urging the Centre to exempt the State from it, setting up an ESZ has been suggested by conservationists, retired Forest department officials and scientists as a way to reduce human-wildlife conflicts. However, in a State that is densely populated with severe land scarcity and a significant number of people living close to wildlife habitats, this would be difficult to implement.

Relevance: GS Prelims & Mains Paper III; Environment

Source: The Hindu

1. Why is the GSLV rocket nicknamed 'naughty boy'?



Why in News?

The Indian Space Research Organisation's meteorological satellite, INSAT-3DS, was successfully placed into its intended orbit by Geosynchronous Launch Vehicle F14 (GSLV-F14) recently.

The mission was crucial for the GSLV rocket nicknamed 'naughty boy' due to its inconsistent record.

Why is the GSLV rocket called 'naughty boy'?

The GSLV gained the nickname naughty boy as at least four out of 15 previous launches with the rocket have been unsuccessful. In comparison, only

three of the 60 missions so far by ISRO's workhorse PSLV (Polar Satellite Launch Vehicle), and none of the seven by its successor LVM-3, have failed.

So what has been the problem with the GSLV?

It has to do with the cryogenic stage of the rocket. Unlike its predecessors, GSLV uses cryogenic engines — they consist of liquid hydrogen and liquid oxygen — that provide far greater thrust than the engines used in the older launch vehicles.

Take the example of the August 2021 failure of the GSLV-F10. About five minutes into the launch, the flight of the rocket, which was carrying an earth observation satellite EOS-03, deviated from its scheduled trajectory. The first and second stages of the GSLV functioned normally and detached. But the upper stage, powered by a cryogenic engine fuelled by liquid hydrogen and liquid oxygen at very low temperatures, failed to ignite. The rocket lost the power to carry on and its remains, along with that of the satellite, most likely fell off somewhere in the Andaman Sea.

A similar issue had led to the failure of GSLV-D3 as well in April 2010. That was the first flight of GSLV with an indigenous cryogenic engine modelled on the Russian design, very similar to the one flown in August 2021. The cryogenic stage had failed to ignite on that occasion as well.

Eight months later, the next GSLV flight, this time being powered by a Russian cryogenic engine, the last one of the seven that Russia had supplied as part of a deal in the 1990s, also failed. A failure analysis had found malfunctioning in the electronics of the cryogenic engine.

2. OpenAI launches Sora: How AI can create videos from a text prompt



Why in news?

OpenAI, the creator of the revolutionary chatbot ChatGPT, has unveiled a new generative artificial intelligence (GenAI) model that can convert a text prompt into video.

The model, called Sora, can generate videos up to a minute long while maintaining visual quality and adherence to the user's prompt.

However, OpenAI has cautioned that the model is far from being perfect and may still struggle with more complex prompts. Before launching Sora to the general public, OpenAI will begin its outreach programme with security experts and policymakers to try and ensure that the system does not generate misinformation, and hateful content among other things.

Why could Sora be a big deal?

While generation of images and textual responses to prompts on GenAI platforms have become significantly better in the last few years, text-to-video was an area that had largely lagged, owing to its added complexity of analysing moving objects in a three-dimensional space.

While videos are also a series of images and could, therefore, be processed using some of the same parameters as text-to-image generators, they also have their unique set of challenges.

Other companies too have ventured into the text-to-video space. Google's Lumiere, which was announced last month, can create five-second videos on a given prompt, both text- and

image-based. Other companies like Runway and Pika have also shown impressive text-to-video models of their own.

Is Sora available for use by everybody?

Not yet. The company has said that it will take some “safety steps” ahead of making Sora available in OpenAI’s products, and will work with red teamers—domain experts in areas like misinformation, hateful content, and bias—who will be “adversarially” testing the model.

The company is also granting access to a number of visual artists, designers, and filmmakers to gain feedback on how to advance the model to be most helpful for creative professionals.

Relevance: GS Prelims; Science & Technology

Source: The Indian Express

3. The blurring lines between makers of GenAI software, hardware

Chat with RTX

Nvidia Corporation, the undisputed king of advanced chips that are now driving artificial intelligence (AI) applications, is releasing a new tool that lets owners of its latest series graphic cards run an AI-powered chatbot offline on a Windows PC.



The tool, called ‘Chat with RTX’, will allow users to customise a generative AI (GenAI) model on the lines of OpenAI’s ChatGPT or Google’s Bard by linking it to files, documents, and notes that they can then query.

Nvidia’s chatbot push comes at a time when OpenAI CEO Sam Altman is seeking trillions of dollars in investments to revamp the global semiconductor industry, The Wall Street Journal reported last week. Altman, who is behind the startup that launched ChatGPT, the fastest-growing consumer software application in history, has repeatedly voiced concern over the

supply-and-demand problem with AI chips which, he has said, is limiting the growth of OpenAI.

Nvidia's advantage

The gen AI boom has been the major reason for the soaring demand for specialised chips of the kind that Nvidia makes. Graphics processing units (GPUs) — the advanced chips that were earlier targeted at gaming applications but which are now driving AI applications — have the computing power and operational efficiency to run the calculations that allow companies working on large language models (LLMs) such as ChatGPT or Bard to chomp down on massive volumes of data.

Nvidia Corp has seen its valuation surge since the LLM boom, and is now swamped with orders that it is struggling to deliver. The pioneering graphics chipmaker is already one of the world's most valuable companies, riding on its dominance in the gaming sector and now, the AI space and the potential that generative AI has to reshape the technology sector.

Analysts say Nvidia is ahead in the race for AI chips because of its proprietary software that makes it easier to leverage all of the GPU hardware features for AI applications. It also has the systems to back the processors up, and the software that runs all of it, making it a full stack solutions company.

Nvidia also offers an application programme interface (API) — which is a set of instructions that enable different applications to communicate with each other — called CUDA, which allows the creation of parallel programmes using GPUs, and are deployed in supercomputing sites around the world.

Relevance: GS Prelims; Science & Technology

Source: The Indian Express

4. Claude, the AI chatbot from Anthropic

Why in news?

While OpenAI's offering ChatGPT has captured the attention of the world with its human-like responses and plethora of use cases, several other AI-powered chatbots too have been making waves. One such chatbot that has been gaining traction over time for its distinctive features and capabilities is Claude 2.

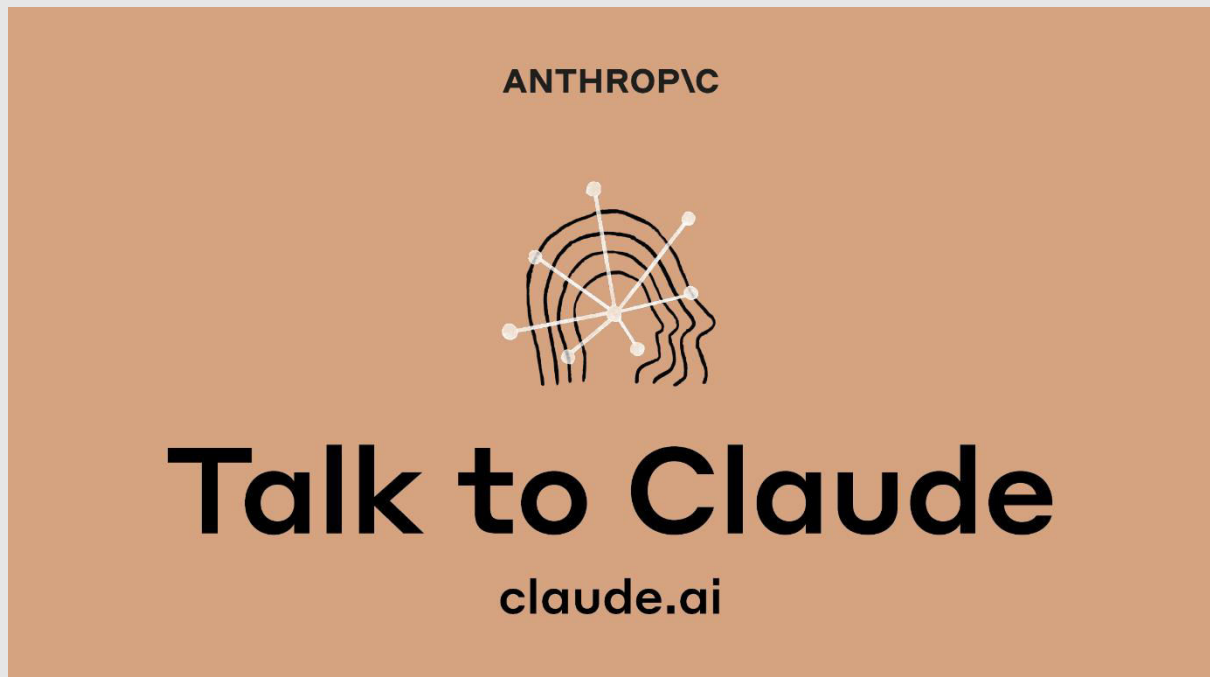
Who has developed Claude?

Claude is a group of large language models (LLMs) developed by Anthropic, a San Francisco-based artificial intelligence (AI) startup founded by Italian American siblings Dario Amodei and Daniela Amodei, both of whom were formerly with OpenAI.

The chatbot is capable of handling text, voice messages, and documents. Reviews have shown that the chatbot is capable of generating faster, contextual responses compared to its peers.

When was Claude launched?

The Amodei siblings set up their company, Anthropic, 2021, along with five other co-founders, all of whom also worked previously at OpenAI.



In March 2023, Anthropic launched Claude V1, showcasing some impressive abilities in terms of maths, reasoning, and coding capabilities. Subsequently, the company launched Claude Instant, Claude V2, and Claude V2.1.

Relevance: GS Prelims; Science & Technology

Source: The Indian Express

5. Test tube rhinos

Why in news?

The death of the last male in 2018 made the extinction of the northern white rhino an inevitability. But already in 2015, a group of 20 scientists from five continents had launched an audacious and expensive project to rebuild the subspecies through in vitro fertilisation (IVF).

Last week, the scientists announced the first-ever rhino pregnancy achieved by transferring a lab-made rhino embryo into a surrogate mother. It took 13 attempts for the breakthrough with a southern white rhino, a closely-related subspecies that branched away from the northern whites about a million years ago.



The last two northern white rhinos, Najin and Fatu, live in the Ol Pejeta Conservancy in Kenya.

The international consortium of scientists, named BioRescue, is confident that the success can be replicated with 30 embryos of the northern white stored in liquid nitrogen. However, rebuilding a species is easier said than done.

Is it worth the money?

The Biorescue consortium, which is led by the Leibniz Institute for Zoo and Wildlife Research (Leibniz-IZW), is funded by the German government and several other public and private donors. Millions of dollars have been spent on the project that aims to make “the seemingly impossible a reality”.

Questions have been asked on whether the project takes focus and resources away from other endangered species that could still be saved. Some critics have also questioned the purpose of rebuilding a northern white population without addressing the threats to its natural habitat, which may jeopardise its future in the wild all over again.

A victim of organised hunting for its horns, the northern white was officially declared extinct in the wild in 2008. In 2015, when Biosecure was launched, only three individuals survived in a Kenyan conservancy. The effort to rebuild the species was inspired by an obligation to try and undo the damage caused by the greed of humans.

Relevance: GS Prelims; Environment

Source: The Indian Express

6. The importance of keeping personally identifiable information safe

Why in news?

Recently, the Ministry of Corporate Affairs fixed a critical vulnerability in its online portal months after a cybersecurity researcher reported it to the Computer Emergency Response Team of India (CERT-In). The vulnerability reportedly exposed personal details — like Aadhaar, PAN, voter identity, passport, date of birth, contact number and address — of more than 98 lakh directors of Indian companies. The vulnerability also exposed the personal data of top industrialists, celebrities, and sports personalities in the country.

What is Personally Identifiable Information?

Personally Identifiable Information (PII) is any data or information maintained by an organisation or agency that can potentially be used to identify a specific individual. This could include information such as Aadhaar, PAN, voter identity, passport, date of birth, contact number, communication address, and biometric information. The constituents of PII vary depending on an individual's home country. However, non-PII in tandem with additional information can be used to identify an individual. Non-PII information includes photographic images (especially of the face or other identifying characteristics), place of birth, religion, geographic indicators, employment information, educational qualifications, and medical records.

All this information can be used to identify individuals accurately. And while access to one set of PII may be enough to compromise online security, access to multiple databases can be used to identify and target individuals.



What is the difference between sensitive and non-sensitive PII?

Non-sensitive PII is publicly available information and can be stored and transmitted unencrypted. This includes information such as zip code, race, gender, and religion. They cannot be used to accurately identify an individual.

Sensitive PII, when exposed, can be used to identify individuals and potentially cause harm. Some of the most important components that constitute sensitive PII are stored by employers, government organisations, banks, and other digital accounts used by individuals.

What are the risks of PII exposure?

Cyberattacks and weaknesses in digital infrastructure can lead to the exposure of citizens' PII. Threat actors can gain access to exposed PII and misuse it to launch targeted attacks on individuals. These attacks could range from phishing attacks with messages curated with PII

information, to fraudulently opening bank accounts, and siphoning funds from accounts allotted to beneficiaries of government welfare programmes.

Threat actors may also use such information to obtain cellular connections, credit cards, and compromise the security of an individual's digital accounts. Threat actors are also known to sell exposed PII information on the dark web.

What are the recent events where PII was compromised?

In 2023, reports emerged that a bot on Telegram was returning the personal data of Indian citizens who registered with the COVID-19 vaccine intelligence network (CoWIN) portal for vaccination purposes. A similar data breach was reported when an American cybersecurity company said that the PII of 815 million Indian citizens, including Aadhaar numbers and passport details, were being sold on the dark web. At the time, a cybersecurity company, Resecurity, said it contacted multiple victims who verified the validity of their data. The government of India denied allegations of a biometric data leak, as well as a breach in the CoWIN portal. It did, however, launch an investigation into the allegations that led to the arrest of a man in Bihar, along with a juvenile in June 2023. A data breach was also reported in the RailYatri platform in January 2023.

Additionally, 67% of Indian government and essential services organisations experienced over a 50% increase in disruptive cyberattacks, a report from Resecurity said. Furthermore, a survey of 200 IT decision-makers noted that 45% of Indian businesses experienced more than a 50% increase in cyberattacks.

How can one protect PII?

Individuals may not be able to prevent leaks in databases of government organisations or service providers. However, they can take steps to ensure that their PII is not readily available to threat actors.

Look for HTTPS in URLs when visiting unknown websites. The "S" stands for secure and is used by legitimate websites to secure collected information from unsecured connections. Some browsers may also use a lock symbol in the URL bar to signify that a website is secure.

Use a VPN when accessing sensitive information using public networks. A VPN helps protect PII and other vital data by securing your online connection from prying eyes on public networks.

Keep a tab on your PII like Aadhaar, passport, PAN, Voter ID, and other important proofs of identity. Avoid sharing or accessing images or details of identity documents through unknown devices.

In case you do access them at a photocopy shop or devices owned by others, make sure to delete the documents even from recycle bins to ensure they are not misused. Avoid sharing personal information on social media platforms.

In case your PII is leaked, be on the lookout for phishing attacks, that may use leaked information to convince you they are legitimate.

Keep a tab on your bank account transactions, credit cards, and credit score; a hit in the score could mean your PII has been misused to procure credit cards in your name.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: The Hindu

7. Why India wants to develop high-altitude pseudo-satellite vehicles, powered by the Sun

Why in news?

Last week, the Bengaluru-based National Aerospace Laboratories (NAL) successfully flew a prototype of a new-generation unmanned aerial vehicle (UAV) that is being seen as a huge technology breakthrough. It was no ordinary UAV. This one can fly at great heights, about 20 km from ground, runs entirely on solar power, and can remain in the air for months on end. Such UAVs belong to a class of flying objects called HAPS, or high-altitude pseudo-satellite vehicles, or HALE, that is high-altitude long-endurance vehicles.

The primary utility of HAPS vehicles is in the field of surveillance and monitoring, but there are other situations, like disaster management, wherein it can be very useful.



HAPS technology is still under development. Several countries, and companies, have developed and flown such vehicles with encouraging success, but none has mastered the technology yet. The world record for a vehicle of this class is held by the Airbus-manufactured Zephyr, which flew continuously for 64 days in August 2022 before crashing.

The prototype tested by NAL last week spent eight and a half hours in the air. Next month, NAL, a unit of the Council of Scientific and Industrial Research (CSIR), plans to keep it in flight for at least 24 hours. The full-scale machine that NAL is trying to build, by 2027, would be aiming to remain in the air for 90 days at a stretch.

What is the need for such UAVs?

The kind of jobs that HAPS are meant to do are currently done by UAVs and satellites, but both have certain limitations. The normal UAVs, or drones as they are commonly called, are mostly battery-powered and cannot remain in the air beyond a few hours. Continuous monitoring is not something these can do very effectively. In addition, they fly at relatively low levels, because of which their vision is restricted to small areas.

Satellites can observe much larger areas, but the ones in low-earth orbits are continuously moving with respect to Earth. They cannot be constantly keeping an eye on the target area. Geostationary satellites, located at a height of about 36,000 km above the ground, can keep a constant gaze over one area. But these are fairly expensive, and once deployed, cannot be repurposed or reoriented.

HAPS are meant to overcome all these shortcomings, and do more.

Engineering challenges of HAPS

But developing an autonomous flying machine fuelled entirely by solar power and capable of remaining in the air for months faces major technological hurdles. That is the reason why, despite decades of work, a full-fledged HAPS vehicle has still eluded engineers. It is only now, with advanced technologies in solar cells, batteries and composite materials, that this vehicle looks possible in the near future.

The primary challenge is to generate enough solar power to keep the aircraft flying, the payloads operating, and the batteries charging. The batteries need to be enough to continue the operations through the night. Then there are design-related challenges. The aircraft needs to be extremely lightweight to minimise the power requirement, but it also has to be stable.

This is one of the reasons why this aircraft is meant to fly in the stratosphere. The region between 17 and 23 km above the earth's surface is climatologically conducive for their flight. The wind speed is very low and ideal for light-weight aircraft to remain stable. It helps that this height, much above the region in which civilian aircraft fly, is favourable for observation and surveillance activities.

But temperatures at that height can drop to -50 degree Celsius or lower. Electronics need to be kept warmer, and that is an additional burden on power resources. Also, air density is just about 7 per cent of what it is at sea level. That creates acute complications for the aircraft, for example in producing lift and thrust.

Because of limitations of space and weight, solar cells and batteries need to have very high efficiencies.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: The Hindu

8. Google introduces Gemma open source AI models



Gemma comes from the Latin word for 'gem'. (Google)

Why in news?

After OpenAI's text-to-video model Sora dominated news feeds last week, Google has now introduced Gemma, its latest open artificial intelligence (AI) offering.

Google has, in the past few months, introduced its Gemini models — large and mid-sized models meant for complex tasks. The newly unveiled Gemma, however, is a lightweight, smaller model aimed at helping developers worldwide build AI responsibly, in compliance with Google's AI principles

What is Google's Gemma?

Gemma is a family of lightweight state-of-the-art open models that has been built using the same research and technology used in Gemini models by Google DeepMind, and other teams across Google. Google said that its name is derived from the Latin word 'gemma,' which translates to precious stone.

Gemma is being offered in two model sizes, Gemma 2B and Gemma 7B, which have been released with pre-trained and instruction-tuned variants. Along with Gemma, Google has also released a new Responsible Generative AI toolkit that provides guidance and essential tools for creating safer AI applications with Gemma.

Relevance: GS Prelims; Science & Technology
Source: Indian Express

9. BharatGPT group unveils 'Hanooman'

Why in news?

The BharatGPT group — led by IIT Bombay along with seven other elite Indian engineering institutes — announced that it would launch its first ChatGPT-like service next month. Backed by Reliance Industries Ltd and the Department of Science and Technology, the group built the 'Hanooman' series of Indic language models in collaboration with Seetha Mahalaxmi Healthcare (SML).

What is Hanooman?

Essentially, Hanooman is a series of large language models (LLMs) that can respond in 11 Indian languages like Hindi, Tamil, and Marathi, with plans to expand to more than 20 languages.

Hanooman has been designed to work in four fields, including health care, governance, financial services, and education.

Notably, the series isn't just a chatbot. It is a multimodal AI tool, which can generate text, speech, videos and more in multiple Indian languages, according to BharatGPT. One of the first customised versions is VizzhyGPT, an AI model fine-tuned for healthcare using reams of medical data.

What are LLMs?

Large language models use deep learning techniques to process large amounts of text. They work by processing vast amounts of text, understanding the structure and meaning, and learning from it. LLMs are 'trained' to identify meanings and relationships between words. The greater the amount of training data a model is fed, the smarter it gets at understanding and producing text.

The training data is usually large datasets, such as Wikipedia, OpenWebText, and the Common Crawl Corpus. These contain large amounts of text data, which the models use to understand and generate natural language.

Relevance: GS Prelims; Science & Technology
Source: The Indian Express

10. First moon-landing by private company: What it means for lunar exploration

Why in news?

Fifty-two years after the last successful Apollo mission, a US made spacecraft landed on the Moon recently, which also marks the arrival of private space companies on the lunar surface.

Odysseus, a spacecraft built by Intuitive Machines, a ten-year-old company based in Houston, used a Falcon 9 rocket of SpaceX to take off from Earth on February 15 and reach moon on February 23. The spacecraft carried six NASA payloads to the Moon. The lander module of Odysseus, called Nova-C, has become the second one, after Chandrayaan-3 last year, to land in the Moon's south pole region.

New Beginnings

The landing of Odysseus marks a new beginning in the exploration of the Moon aimed at creating infrastructure and technology ecosystem capable of supporting long-term human presence. This is very different from the moon landings of the 1960s and 1970s by the US and the then Soviet Union, including the human landings by Apollo Missions. Those were landmark scientific events in themselves, but could not be immediately built upon, in the form of exploitation of lunar resources for example, because the associated technologies were yet to be developed.

To put it in perspective, the first moon landing, by Luna 9 of the Soviet Union, happened in 1966 just nine years after the beginning of the space age in 1957 with the launch of Sputnik 1 that was the first spacecraft to reach an orbit around the Earth. The first human landing on the Moon, through the Apollo 11 mission, took place just 12 years after the dawn of space age. The technology ecosystem that could utilise these historic successes for a longer-term exploration and resource utilisation had not been built.

Relevance: GS Prelims; Science & Technology

Source: Indian Express

11. RBI to NPCI: Consider Paytm's request for TPAP. What is it, how will it benefit users?

Why in news?

The Reserve Bank of India (RBI) has asked the National Payment Council of India (NPCI) to examine the request of One97 Communications' (OCL), which owns Paytm, to become a Third-Party Application Provider (TPAP) for continued Unified Payments Interface operation of the Paytm application.

A TPAP approval is mandatory to provide UPI-based payment transactions to customers. Currently, all UPI transactions on the Paytm app are being routed through Paytm Payments Bank (PPBL), an associate company of OCL, which is registered as TPAP.

As the RBI has asked the PPBL to shut its operations by March 15, 2024, there will be no TPAP registration for the Paytm app to be able to provide UPI payment services.

What is a TPAP?

A Third-Party Application Provider is an entity that provides the UPI compliant app(s) to the end-user customers to facilitate UPI-based payment transactions. These applications could be mobile wallets, merchant apps, or any other platform that utilises UPI for payments.

NPCI, the umbrella organisation for operating retail payments and settlement systems in India, owns and operates the UPI platform.

TPAPs leverage the UPI infrastructure provided by NPCI and work with payment service providers (PSPs) and banks to facilitate transactions. They are responsible for ensuring that their applications adhere to security standards and compliance guidelines set by NPCI.

What has RBI said?

Last month, the RBI barred Paytm Payments Bank from accepting deposits or top-ups in any customer account, prepaid instruments, wallets, FASTags and NCMC card after February 29, 2024, in the wake of persistent non-compliances. The deadline was later extended by 15 more days to March 15.

As the Paytm Payments Bank cannot accept further credits into its customer accounts and wallets after March 15, the RBI, on February 23, announced some steps to ensure seamless digital payments by UPI customers using '@paytm' handle operated by the PPBL.

It directed NPCI to examine the request of OCL to become a TPAP for the UPI channel for continued UPI operation of the Paytm app.

What happens if OCL gets TPAP approval?

For Paytm, TPAP approval from NPCI is a must to continue to provide UPI-based payment transactions facility to customers.

The RBI said in case NPCI grants TPAP status to OCL, '@paytm' handles will have to be migrated in a seamless manner from Paytm Payments Bank to a set of newly identified banks to avoid any disruption.

OCL will not be allowed to add new users until all the existing users are migrated satisfactorily to a new handle, the regulator said.

How many TPAPs are there?

Currently, there are 22 NPCI-approved 3rd party Unified Payments Interface (UPI) apps that can be used to send and receive money from other UPI users by using UPI IDs. They include Amazon Pay, Google Pay, Groww, Jupiter Money, Mobikwik, Phonepe, Samsung Pay, TataNeu and Whatsapp.

Relevance: GS Prelims; Science & Technology

Source: The Indian Express

12. Why was the Surrogacy (Regulation) Rules, 2022 challenged? What does the new amendment stipulate? Why were the modifications deemed necessary by the Supreme Court? Can single unmarried women also avail of the same relief?

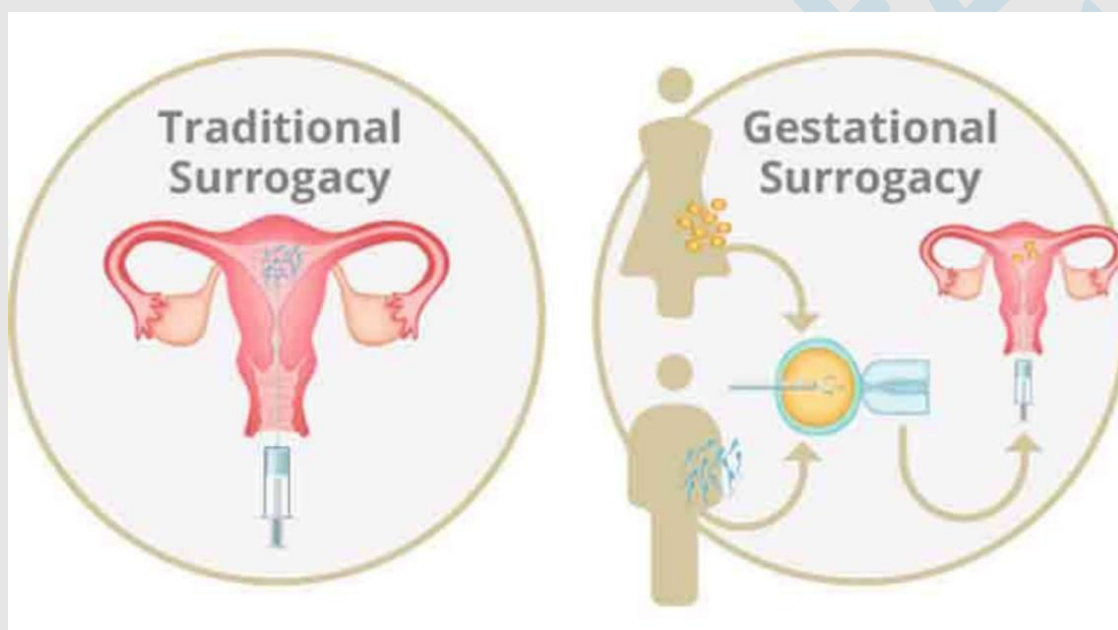
Why in news?

The Union government recently modified the Surrogacy (Regulation) Rules, 2022, to permit married couples to use donor eggs or donor sperm for surrogacy — a move that provided a big relief to those with medical complications. This revoked a previous amendment made in March 2023 that banned the use of such donor gametes.

The modification in the surrogacy rules came more than a month after Additional Solicitor General Aishwarya Bhati apprised the Supreme Court that the government was considering changes in the amendment brought in last year to allow married couples to use donor gametes for surrogacy in case they suffered from medical ailments that made it difficult to conceive.

What does the new amendment state?

On March 14 2023, Form 2 (Consent of the Surrogate Mother and Agreement for Surrogacy) of the Surrogacy Rules read with Rule 7 was amended to stipulate that donor eggs could not be used for gestational surrogacy of an intending couple. This has now been amended by a notification of the Ministry of Health and Family Welfare allowing married couples to use a donor gamete on the condition that a District Magistrate Board certifies that either the husband or the wife suffers from a medical condition.



However, the notification outlines that the child to be born through surrogacy must have at least one gamete from the intending parents. This implies that a married couple where both partners are unable to use their gametes due to an existing medical condition cannot opt for surrogacy.

What did the Supreme Court say?

Last year, the 2023 amendment was challenged before the Supreme Court by a woman suffering from the Mayer-Rokitansky-Kuster-Hauser (MRKH) Syndrome. Medical board records reflected she was unable to produce her eggs due to absent ovaries or a uterus. The petition contended that the amendment violated a woman's right to parenthood and contradicted Sections 2(r) and 4 of the Surrogacy Act, 2021 (2021 Act) which recognised the situation when a medical condition would require a couple to opt for gestational surrogacy to become parents.

Staying the operation of the law, a bench of Justices B.V. Nagarathna and Ujjal Bhuyan highlighted that it prevents intending couples from achieving parenthood through surrogacy which is prima facie contrary to the objective of the parent law — the 2021 Act.

Last month, the Centre informed a bench of Justices B.V. Nagarathna and Sanjay Karol that following its observations, the amendment barring married couples from availing donor gametes was under active reconsideration.

Can single women avail of the same?

The regulatory change is however not applicable for single women as it specifies that a widow or a divorcee undergoing surrogacy must use self-eggs and donor sperm. This comes even after questions are being raised in Indian courts over the exclusion of single women from using surrogacy to have children and the resultant discrimination. A petition has been filed in the Delhi High Court by a 44-year-old unmarried woman challenging provisions of the 2021 Act on the ground that the restrictions are violative of her fundamental rights under Articles 14 (right to equality) and 21 (right to life) of the Constitution. Questioning the association of marital status with the eligibility for surrogacy, the petitioner has pointed out that at her age, the use of donor eggs is recommended by medical practitioners. To be genetically connected, the petitioner's brother has consented to donate his male gametes, the court was told. Experts have also criticised the restrictions on access to surrogacy by single persons, live-in couples, and LGBTQ couples.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: The Hindu

13. Google DeepMind's Genie, an AI model that creates virtual worlds from image prompts

Why in news?

The biggest draw of video games is the escapism or the fantasy of a world far removed from our immediate reality. Now, imagine if you get the ability to create your own world. Well, researchers at Google DeepMind have come up with something that will enable you to create your own fictional world, similar to the outlandish landscapes seen in high-octane games.

Google DeepMind has just introduced Genie, a new model that can generate interactive video games from just a text or image prompt. That too without any prior training on game mechanics (which are essentially rules, elements, and processes that make up a game).

What is Genie?

According to the official Google DeepMind blog post, Genie is a foundation world model that is trained on videos sourced from the Internet. The model can "generate an endless variety of playable (action-controllable) worlds from synthetic images, photographs, and even sketches."



The research paper 'Genie: Generative Interactive Environments' states that Genie is the first generative interactive environment that has been trained in an unsupervised manner from unlabelled internet videos.

What does Genie do?

We have seen numerous generative AI models that produce creative content with language, images and even videos. Genie is a breakthrough as it makes playable environments from a single image prompt.

Why is it important?

The standout aspect of Genie is its ability to learn and reproduce controls for in-game characters exclusively from internet videos. This is noteworthy because internet videos do not have labels about the action that is performed in the video, or even which part of the image should be controlled.

According to Google DeepMind, the most distinct aspect of this model is that it allows you to create an entire new interactive environment from a single image. This opens up many possibilities, especially new ways to create and step into virtual worlds. To demonstrate this, the researchers created an in image using text-to-image model Imagen 2 and then used it as a prompt to create virtual worlds. The same can be done with sketches.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: The Indian Express

14. PM Modi announces 4 astronauts for Gaganyaan



Prime Minister Narendra Modi hands over wings to astronauts-designate Shubanshu Shukla, Prashanth Balakrishnan Nair, Angad Prathap and Ajit Krishnan who have been selected to be the astronauts on India's first crewed mission to space 'Gaganyaan Mission', at the Vikram Sarabhai Space Centre (VSSC), in Thiruvananthapuram

Why in news?

Group Captain Prasanth Balakrishnan Nair, Group Captain Ajit Krishnan, Group Captain Angad Pratap, and Wing Commander Shubhanshu Shukla are India's astronauts-designate for Gaganyaan, India's first crewed space mission, announced by PM Modi.

All four Indian Air Force officers have had extensive experience as test pilots and are currently in training for the mission. Modi, who bestowed them with the prestigious astronaut wings, described them as "four forces" who represent the aspirations and optimism of 1.4 billion Indians.

Where was announcement made?

The announcement was made at the Vikram Sarabhai Space Centre in Thumba, Kerala, days after the Indian Space Research Organisation (ISRO) said it had successfully tested the human readiness of the cryogenic engine that will be used on the Gaganyaan mission vehicles.

First Test flight

The first mission flight, Gaganyaan-1, an unmanned test flight to check technology readiness, is expected by the end of 2024. The manned mission, which will take a three-member crew into a low earth orbit of 400 km altitude and return to Earth after three days, will follow.

In 1984, Wing Commander Rakesh Sharma became the first Indian in space when he flew to the Salyut 7 space station on a Soviet spacecraft. In 2006, India started work on an orbital vehicle mission that was later named Gaganyaan. As the astronauts-designate are named, here's where the various aspects of the mission stand.

Human rating of launch vehicle

ISRO will use its LVM3 rocket for all of Gaganyaan missions. LVM3, earlier called GSLV-MkIII, is the Indian space agency's most powerful launch vehicle that has flown seven times without failure. The rocket consists of liquid stage, solid stage, and cryogenic stage. ISRO has reconfigured all components of LVM3 to meet human rating requirements.

On February 14, final tests on the cryogenic engine, known as CE20, were performed. The engine successfully passed the test and was certified for missions that would transport humans to space.

The Vikas engine to be used in the liquid stage, and the solid booster, which is part of the solid stage, have already qualified for the missions.

The special flight engine, which ignites as the rocket lifts off, has completed acceptance tests. These tests certify/ qualify the test performance of the hardware according to the mission requirement. The technology or development is then applied in the final mission.

Crew module and escape system

Preparations for the human space flight includes development of life support systems to provide an Earth-like environment for the crew in space, provisions for emergency escape, and evolving crew management aspects for training, recovery, and rehabilitation of the crew.

Precursor missions such as Gaganyaan-1 will demonstrate the levels of technology preparedness before the manned mission. The unmanned mission will carry an unpressurised crew module — the capsule in which the astronauts will be seated during the human flight — to space and back.

The Gaganyaan-1 mission's crew module will not have the Environment Control and Life Support System, which ensures an Earth-like environment inside the module. ISRO is currently developing and testing the various components of the system at its labs.

Gaganyaan-1 will mainly test the safe re-entry of the crew module and proper orientation of the module when it splashes down in the sea.

A second unmanned flight is planned with a pressurised crew module, in which the complete life support system will be tested. This flight will carry the robot Vyommित्रा which will record all parameters to study the impact of the flight on humans.

In October last year, ISRO successfully conducted the first test of a basic crew module and crew escape system (CES). The CES is a part of the module that ensures "the crew is taken to a safe distance in case of any emergency either at launch pad or during ascent phase," according to ISRO.

The test also demonstrated the success of the deployment of drogue chutes at the desired angle. Drogue chutes play an essential role in stabilising the crew module and reducing its velocity to a safe level during re-entry. They bring the crew module from a height of 17 km and speed of 150 metres/ second to 2.5 km from the sea surface and a speed of 63 metres/ sec.

ISRO has also been experimenting with a crew module uprighting system, which ensures that the module remains upright after splashdown in the sea.

Training of the astronauts

The four astronauts completed their generic training at Russia's Yuri Gagarin Cosmonaut Training Centre between February 2020 and March 2021. ISRO signed a Memorandum of Understanding with Glavkosmos, a subsidiary of the Russian space agency Roscosmos, for the training in June 2019.

The astronauts are currently training at ISRO's astronaut training facility in Bengaluru. One of the four astronauts is expected to be trained by the American space agency NASA. Bill Nelson, administrator of NASA, had made this announcement during a visit to New Delhi in 2023. This astronaut would likely be chosen from among the four who are preparing for the Gaganyaan mission.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: The Indian Express

15. Creating India's genetic map: Genome India project

Why in news?

The government's Genome India initiative recently announced successful sequencing of 10,000 whole genomes of healthy persons from across the country, creating a genetic map of the population. Researchers from 20 science institutes across the country helped in collecting the blood samples, sequencing the genome, developing a methodology, and storing the data.

With each sequence requiring 80 Gb storage space, the huge dataset of 8 petabytes will be stored at the Indian Biological Data Centre in Faridabad. This dataset will be made available to researchers as "digital public good." The data can be utilised to develop new diagnostics, targeted therapies, identify new rare diseases, and cure existing ones.

What is the project?

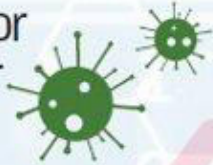
The Genome India project was approved by the government in 2020 with the aim of creating a comprehensive catalogue of genetic variations found in the Indian population. A map of genetic diversity is essential for understanding the history of our evolution, discovering the genetic basis for various diseases, and creating therapies of the future. This cannot be done using data available in existing international databases, as Indian genomes are likely to be different from that of other populations.

Our population of 1.4 billion consists of more than 4,600 distinct groups. With endogamy — marrying within the same community — common in India, the various groups have maintained their distinct genetic makeup. This can help compare and contrast the impact of genetic variations on physical health.

Road to Future

Aim of Genome Mapping Project

Developing therapies for diseases such as cancer and other rare ones



Predictive diagnosis and precision medicine



22
Partner organisations to be roped in

Dept of Bio-technology has initiated the project

10,000
Number of Indians whose genomic data will be catalogued in phase 1

What is a genome, how is it sequenced?

The human genome is essentially a biological instruction manual that we inherit from our parents. It is a tome written with just four letters, A,C,G, and T — the four bases that come together to create everyone's unique genetic makeup. There are around 3 billion pairs of bases in the complete human genome. This contains all the information needed to create your physical form and maintain it throughout life. From your height, colour of the eyes, the genetic diseases you get or those you are at a higher risk for, everything is determined by the genetic makeup.

How does studying the genetic makeup of the country help?

1. One, it can help identify the genetic basis or genetic risk factors for various diseases. For example, a mutation, MYBPC3, which leads to cardiac arrest at a young age. It is found in 4.5% of the Indian population but is rare globally. Another mutation called LAMB3 causes a lethal skin condition. It is found in nearly 4% of the population, but it is not seen in global databases.
2. Two, it can help in targeted treatments, especially for rare diseases that usually arise from genetic anomalies.

Take for example the under-development mRNA vaccine to prevent relapse of pancreatic cancer, which is based on a genetic mutation that allowed a small group of pancreatic cancer patients beat the odds. The mutation allowed their immune system to identify the cancer cells and attack them.

3. It can also help in identifying resistance-indicating variants — for example, genes that might make certain medicines or anaesthetics ineffective in certain populations. An example from India is a set of a Vaishya community from South India, who lack the gene for properly processing common anaesthetics. For this group, use of such anaesthetics can result in death.

How long did the project take?

The first whole human genome was sequenced with the collaboration of an international team. It took 13 years and \$3 billion, and was completed in 2003. India announced its first complete human genome in 2009. The technology has come a long way. Now, it takes only about five days to sequence an entire human genome and perform all the quality checks. In fact, we were able to sequence the entire 10,000 genomes in a matter of three to four months.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: The Indian Express

1. CBSE's open book exam plan

Why in news?

The Central Board of Secondary Education (CBSE) has proposed a pilot study to check the feasibility of open book exams for Classes 9 to 12.

The pilot will be held in select schools in November-December for subjects like English, Mathematics and Science for Classes 9 and 10, and English, Mathematics and Biology for Classes 11 and 12. The CBSE has proposed this form of assessment based on the National Curriculum Framework (NCF) released last year.

Through this pilot, the Board aims to study the time taken by students to complete such tests and gather feedback from teachers and students. The pilot test will be designed and developed by June, for which the CBSE has sought Delhi University's help.

What is an open book exam?

In an open book exam (OBE), students are allowed to refer to their books and notes to answer questions.

OBEs can be either of a restricted type or a free type. In a restricted open book assessment, only the study material approved by the exam-conducting authority is allowed during the exam. In a free type, students can bring any material they find relevant.

Unlike a closed book exam, the test questions in OBEs are structured in a way that students have to apply concepts, instead of just copying information from the available material. They aim to test whether a student understands the big picture and can apply analytical skills on the concepts learnt.

Is this a new concept for Indian students?

Contrary to popular assumption, open-book exams are not a new idea. In 2014, CBSE had introduced an Open Text Based Assessment (OTBA) to relieve the students from the burden of mugging up, and acquiring skills of information processing.

Back then, OTBA was introduced in Class 9 for Hindi, English, Mathematics, Science and Social Science, and final examination of Class 11 in subjects such as Economics, Biology and Geography. Students were allowed to refer to learning material provided to them four months ahead of the exam.

The Board, however, discontinued the practice in the 2017-18 academic year, because of its inability to cultivate "critical abilities" among students.

In higher education, OBEs are fairly common. In 2019, the All-India Council for Technical Education (AICTE) allowed open book exams in engineering colleges based on the recommendation of an advisory body.

During the pandemic, several Central universities like Delhi University, Jamia Millia Islamia, Jawaharlal Nehru University and Aligarh Muslim University conducted an open book test to assess students. IIT Delhi, IIT Indore and IIT Bombay also conducted online OBEs.

More recently, Kerala's higher education exam reforms commission recommended the open book format, but only for internal or practical examinations.

Are open book exams easier?

Contrary to popular opinion, open book assessments are not easier than the traditional form of examination. They are designed to test learning beyond facts and definitions.

For teachers too, setting up questions for an open book exam can be a challenge, as, unlike a traditional exam, the questions cannot be direct.

Why has CBSE proposed the open book exam now?

The CBSE's proposal falls in line with the larger reforms planned in the school education system. While there is no mention of the open book examination per se in the National Education Policy 2020, one of the primary reforms it suggests is transition from rote memorisation to competency-based learning. For instance, a student should be able to not just learn the concept of photosynthesis but also demonstrate the process and the impact of sunlight on plants through a practical project.

Similarly, the National Curriculum Framework for School Education also highlights the need to reform the current assessment process, which is at its best "focused on measuring rote learning" and at its worst "creates fear". The National Curriculum Framework suggests assessments that can accommodate different learning styles of students, provide constructive feedback, and support learning outcomes.

Relevance: GS Prelims & Mains Paper I; Indian Society

Source: The Indian Express

1. Rohan Bopanna's Australian Open win

Why in news?

Rohan Bopanna scripted history in Melbourne, as he clinched the Australian Open men's doubles title with partner Matthew Ebden at the Rod Laver Arena. The Indo-Aussie pair defeated Italy's Simone Bolelli and Andrea Vavassori 7-6(0) 7-5 in the final.



Rohan Bopanna of India and Matthew Ebden of Australia

The victory saw Bopanna, at the age of 43 years and 329 days, becoming the oldest man to ever win a Grand Slam title in the Open era. Bopanna also joined an elite list of Indians who have triumphed at the Australian Open.

Here is the list:

1. Leander Paes and Martina Navratilova (USA) in mixed doubles (2003)
2. Mahesh Bhupathi and Martina Hingis (Switzerland) in mixed doubles (2006)
3. Mahesh Bhupathi and Sania Mirza in mixed doubles (2009)
4. Leander Paes and Cara Black (Zimbabwe) in mixed doubles (2010)
5. Leander Paes and Radek Stepanek (Czech Republic) in men's doubles (2012)
6. Leander Paes and Martina Hingis (Switzerland) in mixed doubles (2015)
7. Sania Mirza and Martina Hingis (Switzerland) in women's doubles (2016)
8. Rohan Bopanna and Matthew Ebden (Australia) in men's doubles (2024)

This is also Bopanna's second Grand Slam title after the French Open mixed doubles title in 2018. The Indian has also become the World No. 1 in men's doubles. Bopanna was also honoured with the Padma Shri by the Indian government while he was playing in the tournament in Melbourne.

Relevance: GS Prelims; Miscellaneous

Source: Hindustan Times

2. Indians win big at Grammys

About Grammy Awards

The Grammy Awards (stylized as GRAMMY), or simply known as the Grammys, are awards presented by the Recording Academy of the United States to recognize outstanding achievements in the music industry. They are regarded by many as the most prestigious and significant awards in the music industry worldwide. They were originally called the Gramophone Awards, as the trophy depicts a gilded gramophone.

The Grammys are the first of the Big Three networks' major music awards held annually, and are considered one of the four major annual American entertainment awards with the Academy Awards (for films), the Emmy Awards (for television), and the Tony Awards (for theater). The first Grammy Awards ceremony was held on May 4, 1959, to honor the musical accomplishments of performers for the year 1958.

Categories of awards

The "General Field" are four awards which are not restricted by music genre.

1. The Album of the Year award is presented to the performer, featured artists, songwriter(s), and/or production team of a full album if other than the performer.
2. The Record of the Year award is presented to the performer and/or production team of a single song if other than the performer.
3. The Song of the Year award is presented to the songwriter(s) of a single song.
4. The Best New Artist award is presented to a promising breakthrough performer (or performers) who in the eligibility year releases the first recording that establishes their public identity (which is not necessarily their first proper release).

As of 2024, an additional two awards were added to the "General Field".

The Producer of the Year, Non-Classical award is presented to a producer for a body of work released during the eligibility period. It was first presented in 1974 and was not previously part of any specific field.

The Songwriter of the Year, Non-Classical award is presented to an individual who works primarily as a songwriter for a body of work released during the eligibility period. It was first presented in 2023 and was not previously part of any specific field.

Other awards are given for performance and production in specific genres and for other contributions such as artwork and video. Special awards are also given for longer-lasting contributions to the music industry.

Five Indian musicians won the 2024 Grammy awards

While Mr. Hussain was India's big winner with three Grammys, Mr. Chaurasia picked up two awards. Singer Shankar Mahadevan, violinist Ganesh Rajagopalan and percussionist Selvaganesh Vinayakram, Mr. Hussain's collaborators in the fusion group Shakti, won one Grammy each.

Best Global Music Album

Shakti won the 2024 Grammy Award for best global music album for *This Moment*. The album features the four Indians as well as its founding member, legendary British guitarist John McLaughlin. *This Moment*, which released to critical acclaim in June 2023, is the group's first studio album in more than 45 years.

Besides his award for *Shakti*, Mr. Hussain won two other awards — the best global music performance for *Pashto* and best contemporary instrumental album for *As We Speak*.



Shankar Mahadevan, Ganesh Rajagopalan, Ustad Zakir Hussain and V. Selvaganesh of *Shakti* pose with the award during the Grammy Awards in Los Angeles

Global Music Category

The best global music performance category had eight nominees, including *Abundance In Millets*, a song by Falu and featuring Prime Minister Narendra Modi, *Shadow Forces* by Arooj Aftab, Vijay Iyer, and Shahzad Ismaily, and *Alone* by Burna Boy.

Mr. Rakesh Chaurasia, nephew of legendary flautist Hariprasad Chaurasia, bagged two Grammys as part of the ensemble of American banjo player Béla Fleck and American bassist Edgar Meyer for *Pashto* and *As We Speak*.

Relevance: GS Prelims

Source: The Hindu

3. IIT Madras Zanzibar: what does it mean to be an IIT outside India?

Why in news?



IIT Madras (IITM) Zanzibar, which was inaugurated last year, became part of household conversation after Amitabh Bachchan asked a participant in the game show Kaun Banega Crorepati where the first overseas campus of an IIT was located. What does it mean to be an IIT outside India?

History and context



The IITs were conceived and established as contributors to the human resource development of the nation. This is iterated in the “Indian” foundation of their name, the Indian institutes of Technology, and a sign in the main building of IIT Kharagpur that reads “Dedicated to the Service of the Nation” underscores this national imperative.

So, if IITs are territorial national expressions of postcolonial

science, how do we reconcile the reality of the first offshore campus in Zanzibar?

Western and Indian

The Zanzibar campus of IIT Madras continues to be Indian, not African or Tanzanian. (Zanzibar is a Tanzanian archipelago in the Indian Ocean off the East African mainland.)

The first overseas campus is a declaration of aspiration by both IIT Madras and India as a nation to shoulder responsibility and share its success story.

On the day of the inauguration, November 6, 2023, Zanzibar’s President Hussein Mwinyi described the campus as the high point of his term in office, and hoped that IITM Zanzibar would be a driver of economic change that would help the island achieve sustainable development goals. He also said he expected the IITM campus to complement the nation’s vision 2050 that requires skilled labour to transform the economy, and invited students from the entire region to utilise the opportunity presented by IITM.

Relevance: GS Prelims;

Source: The Indian Express

4. PM Modi to inaugurate BAPS temple in UAE

Why in News?

During his two-day visit to UAE, Prime Minister Narendra Modi will inaugurate the BAPS Swaminarayan temple in Abu Dhabi, the first Hindu temple in the Gulf nation.



The inauguration of the 108-ft high temple marks a significant moment for the Hindu community in UAE, as well as for the two countries' bilateral ties.

What is BAPS?

The temple has been built by the Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS), a denomination of the Swaminarayan Sampradaya, a Vaishnav sect of Hinduism.

BAPS has a network of around 1,550 temples across the world, including the Akshardham temples in New Delhi and Gandhinagar, and Swaminarayan temples in London, Houston, Chicago, Atlanta, Toronto, Los Angeles, and Nairobi.

It also runs 3,850 centres and 17,000 weekly assemblies globally.

How did the demand for such a temple come up? Does Abu Dhabi have a big Swaminarayan community?

A BAPS spokesperson said Pramukh Swami Maharaj, the tenth spiritual guru and head of the sect, on April 5, 1997 had envisioned a Hindu temple in the desert sands of Abu Dhabi which could bring countries, communities and cultures together.

The Indian diaspora is almost 3.3-million strong in UAE, a huge percentage of the country's population. Of these, some 150 to 200 families are BAPS Swaminarayan devotees.

What are the features of the temple?

The Abu Dhabi temple is a traditional stone Hindu temple with seven shikhars. Built in the traditional Nagar style, the temple's front panel depicts universal values, stories of harmony from different cultures, Hindu spiritual leaders and avatars.

Spread over 27 acres, the temple complex is on 13.5 acres, with a parking area of 13.5 acres that can accommodate around 1,400 cars and 50 buses. The 13.5 acres of land was gifted by Sheikh Mohammed Bin Zayed Al Nahyan, the President of the UAE in 2019.

The height of the temple is 108 ft, length 262 ft and width 180 ft. While the external facade uses pink sandstone from Rajasthan, the interior uses Italian marbles. A total of 20,000 tonnes of stones and marble was shipped in 700 containers for the temple. More than Rs 700 crore was spent on the temple's construction.

The temple has two central domes, Dome of Harmony and Dome of Peace, emphasising human coexistence through the carvings of earth, water, fire, air, and plants.

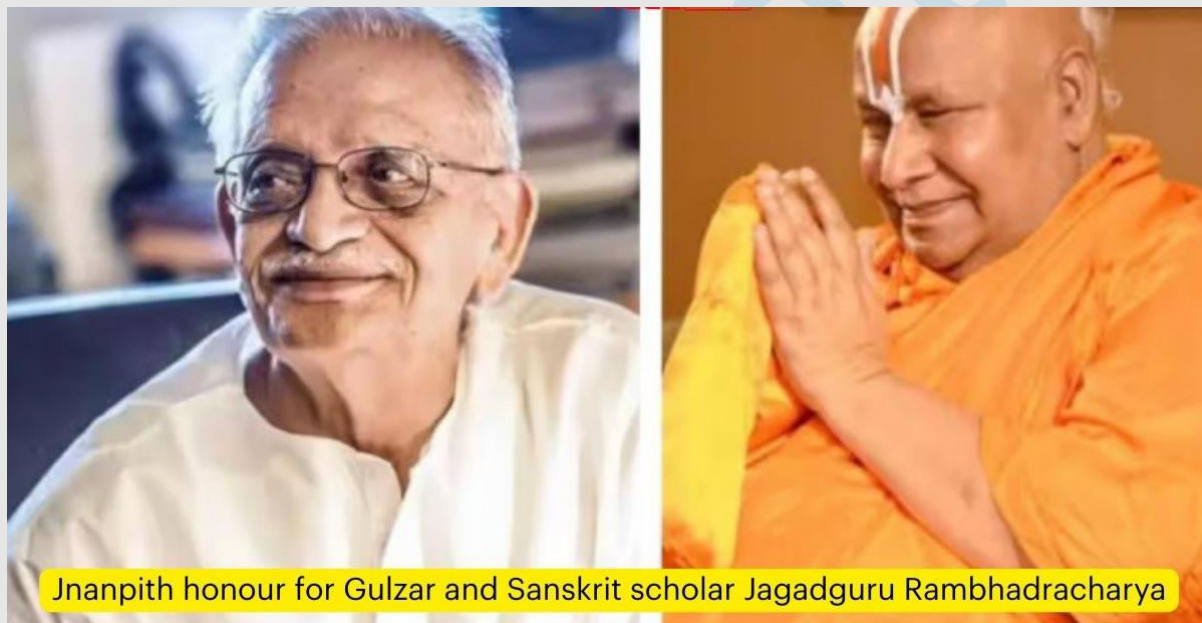
A Wall of Harmony, one of the largest 3D-printed walls in the UAE, features a video showcasing key milestones of the temple's construction. The word 'harmony' has been written in 30 different ancient and modern languages.

The seven shikhars (spires) are representative of the seven Emirates of the UAE. Other amenities include an assembly hall with a capacity of 3,000 people, a community centre, exhibitions, classrooms, and a majlis venue.

Relevance: GS Prelims

Source: The Indian Express

5. Jnanpith for Gulzar, Sanskrit scholar Rambhadracharya



Why in news?

Celebrated Urdu poet Gulzar and Sanskrit scholar Jagadguru Rambhadracharya have been selected for the 58th Jnanpith Award, considered by many to be the country's highest literary honour.

Achievements of Gulzar

Sampooran Singh Kalra, popularly known as Gulzar, is considered one of the finest Urdu poets of his generation. He is also known for his work in Hindi cinema.

Gulzar, born in 1934, received the Sahitya Akademi Award for Urdu in 2002, the Dadasaheb Phalke Award in 2013, and the Padma Bhushan in 2004. He has also won five National Film Awards.

He penned the lyrics for the song Jai Ho from the film Slumdog Millionaire that received an Oscar in 2009 and a Grammy in 2010.

He is known for his work in Maachhis, Omkara, Dil Se, Guru, and Aandhi. Gulzar has also directed classics such as Koshish, Parichay, Mausam, and Ijaazat, as well as the television serial Mirza Ghalib.

Achievements of Rambhadracharya

Rambhadracharya, a polyglot who speaks 22 languages, is one of the four Jagadguru Ramanandacharyas of the Ramananda sect and has been holding this position since 1982. A poet and writer in several languages, he received the Padma Vibhushan in 2015.

Rambhadracharya is a renowned Hindu spiritual leader, educator and writer of more than 240 books and texts, including four epics. He is the founder and head of Tulsi Peeth at Chitrakoot in Madhya Pradesh.

About Jnanpith Award

The Jnanpith Award is presented by the Bharatiya Jnanpith, which was established in 1944.

The award carries a cash component of ₹11 lakh, a statue of Vagdevi, and a citation. It is the second time that the award is being given for Sanskrit and the fifth time for Urdu.

Relevance: GS Prelims;

Source: The Indian Express

6. SIGNATURE BRIDGE IN GUJARAT

Why in news?

Recently, Prime Minister Narendra Modi inaugurated the Sudarshan Setu, India's longest cable-stayed bridge, in the Gulf of Kutch. Also known as Signature Bridge, it will link mainland Gujarat with Bet Dwarka island off the Okha coast in Devbhumi Dwarka. Gujarat's first sea link Signature Bridge is technically a sea link, a first for Gujarat.

It connects the Okha town of Devbhumi Dwarka district of mainland Gujarat to Bet Dwarka, an island around 3 km off Okha. Its total length is 4,772m, including a 900-m-long cable-stayed section. The four-lane bridge, constructed for Rs 978 crore, was funded by the Union government.



Sudarshan Setu, also known as the Signature Bridge, is roughly 4.7 km long

Connecting Bet Dwarka

After the Union Territory of Diu, located at Una coast in Gir Somnath, Bet Dwarka is the second largest island off the Gujarat coast. While Diu's geographical area is around 40 sq km, Bet Dwarka is spread over 36 sq km.

Bet Dwarka island is part of Okha municipality and has a population of around 10,000. At present, the only means of transport between Bet Dwarka and mainland Gujarat is the ferry boat service running from Dwarka to Okha, the nearest point of the mainland. The Signature Bridge will provide all-weather road connectivity to the island.

Religious tourism hub

A major pilgrimage and religious tourism spot, Shree Dwarkadhish Mukhya Mandir, a shrine of Lord Krishna, is located at Bet Dwarka.

The island also has dozens of other Hindu temples, a gurudwara and some mosques. Thousands of pilgrims, mostly Hindus, visit Bet Dwarka for darshan at the Lord Krishna temple. Though some agriculture does happen, fishing is the main source of livelihood on the island, besides tourism activities.

Unique features

The bridge is supported by 32 piers, which support seven cable-stayed spans of 900 m length. This is called the navigation section, which will allow the movement of fishing boats to and from the harbour called Dalda Bandar. Besides its 27 m wide carriageway, the bridge has walkways on either side with its pillars decorated with verses of the Bhagavad Gita and images of Krishna. Solar panels form the roof of these walkways.

Relevance: GS Prelims;

Source: The Hindu

Practice Questions

1. The United States Secretary of State Lloyd Austin announced 'Operation Prosperity Guardian'. What is the objective of this initiative?
 - (a) Facilitate development in Africa
 - (b) Mitigate Climate Change impacts
 - (c) Promote Gender Equality
 - (d) Facilitate Maritime Security
2. Which of the following statements is correct about Unlawful Activities (Prevention) Act (UAPA)?
 - (a) Only Organisations can be designated as terrorist organisations under the act.
 - (b) The act provides the definition of 'terrorist act', but does not define 'terrorist'.
 - (c) The Organisation once accused as a terrorist organisation can file application to the Central government for removal of such an accusation.
 - (d) Once an organisation is accused of terror crime, it has no power to approach the court.
3. Baloch is a large indigenous community in
 - (a) Bangladesh
 - (b) Nepal
 - (c) Sri Lanka
 - (d) Pakistan
4. What is Cyber kidnapping?
 - (a) Taking control over computer network resources
 - (b) Addiction of public to open widely surfed websites
 - (c) Convincing the internet user to hide
 - (d) Contacting strangers online and then physically kidnap them
5. Consider the following statements about legal aid programmes in India:
 1. The Legal Services Authorities Act was enacted to give a statutory base to legal aid programmes.
 2. In India, Industrial workers and EWS are eligible to receive free legal aid.
 3. Legal Services Authorities at National and State level have statutory status in India.How many of the above statements are incorrect?
 - (a) Only One
 - (b) Only Two
 - (c) All Three
 - (d) None
6. Consider the following statements about Political system of Bangladesh:
 1. Bangladesh has unicameral legislature.
 2. The elections are held in Bangladesh after every 6 years.
 3. Like India, Prime Minister is the head of the government.How many of the above statements are Correct?
 - (a) Only One

- (b) Only Two
- (c) All Three
- (d) None

7. Consider the following statements:

1. Bangladesh is largest economy in South Asia after India.
2. Bangladesh is the largest trading partner of India in South Asia.
3. Bangladesh has higher density of population than India.

How many of the above statements are Correct?

- (a) Only One
- (b) Only Two
- (c) All Three
- (d) None

8. The budget for the succeeding year (coming year) is based on the

- (a) Provisional estimates of the year preceding than the current year.
- (b) Actual figures of the year preceding than the current year.
- (c) First advance estimates of the current year.
- (d) Provisional estimates of the current year.

9. The 'Artemis Program' is related to

- (a) Moon Exploration
- (b) Prevent Climate Change
- (c) Biodiversity documentation
- (d) Study of Earth's composition

10. Which of the following statements correctly reflects the nature of Lakshadweep society?

- (a) Hindu majority and Patrilineal
- (b) Muslim majority and Matrilineal
- (c) Buddhist majority and Matrilineal
- (d) Christian majority and Patrilineal

11. The proposals for Republic Day tableaux are evaluated by which of the following ministries?

- (a) Ministry of Defence
- (b) Ministry of Home
- (c) Ministry of Social Justice and Empowerment
- (d) Ministry of External Affairs

12. India has decided to join the Square Kilometre Array (SKA) project, an international scientific collaboration working to build the world's largest radio telescope. the SKA Project will be located in

- (a) India and Mexico
- (b) India and France
- (c) Australia and New Zealand
- (d) Australia and South Africa

13. How many of the following statements are correct regarding Climate Change?

1. 2023 has been the warmest year since 1850.
 2. El Nino causes rise in average temperature of earth.
 3. The earth has already breached the Paris agreement temperature thresholds.
- Select the correct answer using the code given below:

- (a) Only One
- (b) Only Two
- (c) All Three
- (d) None

14. How many of the following statements are correct regarding Coal Controller Organisation?

1. It is tasked with collecting and managing coal production data.
 2. It has responsibility of regulating commercial mining.
 3. It has been given target of coal production of 1 billion tonnes with zero imports in 2024.
- Select the correct answer using the code given below:

- (a) Only One
- (b) Only Two
- (c) All Three
- (d) None

15. According to 'The CEC and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023', the appointment of CEC and other Election Commissioners will be done by

- (a) President on advice of Council of Ministers
- (b) President on advice of Prime Minister, Leader of Opposition and CJI
- (c) President on advice of Prime Minister, CJI and Union Cabinet Minister
- (d) President on advice of Prime Minister, Union Cabinet Minister and Leader of Opposition

16. Hydroxychloroquine, a popular drug, is used for cure of

- (a) Malaria
- (b) Diarrhoea
- (c) Digestive Problems
- (d) Covid

17. The Shankaracharyas head the four Hindu Mathas (monasteries). These Mathas are in which of the following places?

1. Dwarka (Gujarat)
2. Badrinath (Uttarakhand)
3. Puri (Odisha)
4. Sringeri (Karnataka)

How many of the above are correct?

- (a) Only One
- (b) Only Two
- (c) Only Three
- (d) All Four

18. Punganur is an indigenous variety of

- (a) Horse

- (b) Cow
- (c) Sheep
- (d) Camel

19. Goldsmith line forms the border between

- (a) Afghanistan and Pakistan
- (b) Iran and Pakistan
- (c) Iran and Iraq
- (d) Armenia and Azerbaijan

20. 19th Summit of the Non-Aligned Movement was held in January 2024 at

- (a) Baku, Azerbaijan
- (b) Colombo, Sri Lanka
- (c) Kampala, Uganda
- (d) Addis Ababa, Ethiopia

21. Ingenuity by NASA, which has been recently in news, is a

- (a) Rover on surface of Mars
- (b) Chopper on surface of Mars
- (c) Orbiter to Mars
- (d) Space observatory on Mars

22. Every year, the popular meeting of business leaders, politicians, economists and so on at global level is held in the month of January at

- (a) Davos
- (b) Geneva
- (c) Amsterdam
- (d) Brussels

23. Consider the following statements about Pradhan Mantri Suryodaya Yojana:

1. Under the scheme, 5 crores households will get rooftop solar power systems.
2. The target year for the scheme is 2025.
3. The scheme was launched on 22nd January, 2024.

How many of the above statements are correct?

- (a) Only One
- (b) Only Two
- (c) All Three
- (d) None

24. Who will be awarded Bharat Ratna in 2024?

- (a) B.P. Mandal
- (b) Prafulla Chandra Ghosh
- (c) Karpoori Thakur
- (d) Jyoti Basu

25. Operation Sarvashakti has been launched to

- (a) Restore normalcy in Manipur

- (b) Reduce dependence on imported coal
- (c) Target terrorists in J&K
- (d) Enhance Solar power

26. Post October 2021 notification, the BSF could exercise its powers within how many kilometres in States of Punjab, Rajasthan, Gujarat, West Bengal and Assam?

- (a) From borders till 15 kms
- (b) From borders till 30 kms
- (c) From borders till 50 kms
- (d) From borders till 80 kms

27. As per recent government notification, Aadhar can be used for how many of the following purposes?

- 1. Proof of identity
 - 2. Proof Citizenship
 - 3. Proof of Date of Birth
- (a) Only One
 - (b) Only Two
 - (c) All Three
 - (d) None

28. Rare Golden tiger has been spotted after 2019, recently at

- (a) Ranthambore, Rajasthan
- (b) Sariska, Rajasthan
- (c) Jim Corbett, Uttarakhand
- (d) Kaziranga, Assam

29. How many of the following disputes can be undertaken by World Court?

- 1. Member State against an individual
 - 2. Individual against Member State
 - 3. Individual against Individual on charges of genocide
 - 4. Member State against Member State
- (a) Only One
 - (b) Only Two
 - (c) Only Three
 - (d) All Four

30. How many of the following rivers are tributaries of Chambal River?

- 1. Banas
 - 2. Kalisindh
 - 3. Parvati
- (a) Only One
 - (b) Only Two
 - (c) All Three
 - (d) None

31. Which of the following statements is correct about UNRWA?

- (a) It is a dedicated agency to carry out welfare of Palestinian refugees.
- (b) It was founded after six-day war of 1967.
- (c) It carries out relief work across the geographies.
- (d) All the statements are correct.

Answer Key

1.(d)	2.(c)	3.(d)	4.(c)	5.(d)
6.(b)	7.(c)	8.(c)	9.(a)	10.(b)
11.(a)	12.(d)	13.(b)	14.(c)	15.(d)
16.(a)	17.(c)	18.(b)	19.(b)	20.(c)
21.(b)	22.(a)	23.(a)	24.(c)	25.(c)
26.(c)	27.(a)	28. (d)	29.(a)	30.(c)
31.(a)				

Explanations

1. (d) The United States Secretary of State Lloyd Austin announced a joint maritime security initiative called Operation Prosperity Guardian on December 19 to aid the safe movement of ships.

2. (c) The organisation or individual accused of terrorism can file application to Central government for removal of such an accusation.

3. (d) The Balochistan region is split among three countries: Iran, Afghanistan and Pakistan.

4. (c) Cyber kidnapping refers to a crime where the ‘kidnappers’ convince their victim to hide, and then contact their loved ones for ransom. The victim is also made to send pictures that make it look like they are being held captive — showing them bound or gagged. These are then shared with the family. Both parties believe their loved ones will be harmed if they don’t do as the kidnappers ask.

5. (d) All the three statements are correct. Thus, none of the Statements is incorrect.

6. (b) Statement 2 is incorrect. Bangladesh’s unicameral Jatiya Sangsad has 350 members of which 300 are elected in national elections held every five years. Fifty seats are reserved for women appointed by the ruling party/ coalition.

Like India, Bangladesh follows a first-past-the-post system. The Prime Minister is the head of the government, and the most powerful person in the country.

Remaining Statements are correct.

7. (c) All the three statements are correct.

8. (c) The crucial significance of the First Advance Estimates (FAEs) is that they are the last GDP data released before the Union Budget for the coming financial year (which is presented on February 1) is finalised. As such, the FAEs constitute the base for the Budget numbers.

9. (a) The Artemis program is a robotic and human Moon exploration program led by the United States' National Aeronautics and Space Administration (NASA) along with six major partner agencies— the European Space Agency (ESA), the German Aerospace Center (DLR), the Japan Aerospace Exploration Agency (JAXA), the Canadian Space Agency (CSA), the Israel Space Agency (ISA), and the Italian Space Agency (ASI). The Artemis program is intended to reestablish a human presence on the Moon for the first time since Apollo 17 in 1972.

10. (b) Though majority of its inhabitants are Muslim, the Islam practised in Lakshadweep is unlike that followed anywhere else in India. What really makes Lakshadweep's Islamic society unique is the tradition of matriliney — where descent and property is traced through the mother's line.

11. (a) According to a Ministry of Defence (MoD) circular dated October 30, 2023, each year, a select number of "State Governments /UT Administrations/ Central/Ministries/Departments" send their tableaux to the Republic Day parade. There is a rigorous application process which begins with interested parties submitting a concept note, along with design blueprints to the MoD.

The tableaux proposals received are evaluated by a committee of experts appointed by the MoD, comprising prominent persons in the field of art, culture, painting, sculpture, music, architecture, choreography, etc.

12. (d) The Square Kilometer Array will not be a single large telescope, but a collection of thousands of dish antennas operating as a single unit. The antennas, about 200 of them in South Africa (Meerkat National Park) and more than 130,000 in Australia (Murchison Radio-astronomy Observatory), are being installed in sparsely populated locations, chosen to ensure they are as far away from human activities as possible.

13. (b) Statements 1 and 2 are correct.

Statement 3 is incorrect. The planet has not breached the 1.5 degree and 2-degree Celsius thresholds set by the 2015 Paris Agreement. Those thresholds refer to long-term warming — which means global temperatures over a period of 20-30 years, on average, must not exceed 1.5 degree or 2 degrees Celsius.

14. (c) All the given statements are correct in context of Coal Controller Organisation.

15. (d) According to 'The CEC and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023', the appointment of CEC and other Election Commissioners will be done by the President on advice of a selection committee consisting of Prime Minister, Union Cabinet Minister and Leader of Opposition.

16. (a) Hydroxychloroquine has been used to treat malaria for decades. It works by reducing pain and inflammation. It is usually consumed for a short period of time, until a person is rid of the disease.

17. (c) The shankaracharyas head the four Hindu mathas (monasteries) — in Dwarka (Gujarat), Joshimath (Uttarakhand), Puri (Odisha), and Sringeri (Karnataka).

18. (b) The Punganur is an indigenous cow breed native to the Chittoor district in the Rayalaseema region of southern Andhra Pradesh. They are a unique dwarf breed, considered the shortest humped cattle in the world. Their small size makes it easy to keep them at home.

19. (b) The 909-km Iran-Pakistan border, known as the Goldsmith Line, stretches from a tripoint with Afghanistan to the northern Arabian Sea.

20. (c) The 19th Summit of the Non-Aligned Movement has held from 15th to 20th January 2024 in the capital of Uganda, Kampala. The 18th Non-Aligned Movement (NAM) Summit was held in 2019 in capital of Azerbaijan, Baku. In the 19th Summit, India was represented by External Affairs Minister S. Jaishankar.

21. (b) The National Aeronautics and Space Administration (NASA) lost contact with its Mars helicopter Ingenuity towards the end of its 72nd flight on the red planet on January 18. The small robotic chopper is the first aircraft in history to make a powered, controlled flight on another planet.

22. (a) World Economic Forum (WEF) is an annual meeting which is held in the month of January in Davos, Switzerland.

23. (a) Statement 1 is incorrect: Prime Minister Narendra Modi announced the 'Pradhan Mantri Suryodaya Yojana', a government scheme under which one crore households will get rooftop solar power systems.

Statement 2 is incorrect. The deadline for the scheme is 2026.

Statement 3 is correct. Thus, Only one statement is correct.

24. (c) The Centre recently announced it would award the Bharat Ratna posthumously to Karpoori Thakur, former chief minister of Bihar. This is the birth centenary year of Thakur, also known as 'Jannayak', or the leader of the people.

25. (c) The Army has launched Operation Sarvashakti in the Rajouri-Poonch sector of Jammu and Kashmir, deploying forces on both sides of the Pir Panjal range to target terrorists who have carried out a series of attacks on troops in the area.

26. (c) Prior to the notification issued in October 2021, the BSF could exercise its powers within 15 kilometres of the border in Punjab, West Bengal and Assam. The Centre expanded this to within 50 kilometres of the border.

27. (a) New Aadhaar cards and PDF versions of the identity document have started including a more explicit disclaimer that they are "a proof of identity, not of citizenship or date of birth",

signalling to government departments and other organisations not to use it for those purposes.

28. (d) A Wildlife photographer snapped the tiger with the golden coat on a safari in Assam's Kaziranga National Park on January 24.

29. (a) Only Member State can file case against another Member State in World Court (International Court of Justice).

30. (c) All the given rivers are tributaries of Chambal River.

31. (a) UNRWA stands for UN Relief and Works Agency for Palestinian Refugees in the Near East. It was founded in 1949 to provide aid to about 700,000 Palestinians who were forced to leave their homes in what is now Israel during the 1948 Arab-Israeli war.

The UN agency operates in Gaza and the Israeli-occupied West Bank, as well as Lebanon, Syria, and Jordan — countries where the refugees took shelter after their expulsion. According to UNRWA's website, it runs education, health, relief and social services, microfinance and emergency assistance programmes inside and outside refugee camps based in the aforementioned areas.

Currently, around 5.9 million Palestine refugees — most of them are descendants of original refugees — access the agency's services.