

News Juice Monthly

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Made from The Hindu,
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Current Affairs

For Prelims and Mains

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1. The tobacco epidemic in India

Tobacco Production and Use impacts

1. Health impacts: Tobacco is the most widely recognised preventable cause of disease and death in the world. It causes a wide range of diseases and affects those consuming it as well as those cultivating it. After China, India has the world's highest number of tobacco consumers — nearly 26 crore, according to an estimate in 2016-2017. Additionally, the health of more than 60 lakh people employed in the tobacco industry is also placed at risk because of the absorption of tobacco through the skin, which can cause various diseases.

2. Depletes Soil Nutrients: Tobacco's deleterious influence extends beyond human health. It is a highly erosive crop that rapidly depletes soil nutrients. This requires more fertilizers to be used which further worsens soil quality.

3. Deforestation: The plant is also a major contributor to deforestation. Up to 5.4 kg of wood is required to process 1 kg of tobacco.

4. Waste Generation: The production and consumption of tobacco generates nearly 1.7 lakh tonnes of waste every year in India.

Therefore, tobacco production and use impose a heavy economic burden on India.

Economic burden

A 2021 study estimated that the country incurred a loss exceeding ₹1.7 lakh crore as a result of tobacco's effects on the health of its consumers in the fiscal year 2017-2018. To compare, the Union Budget allocated for health in the same year was ₹48,000 crore. In addition, cleaning up tobacco waste has been estimated to cost close to ₹6,367 crore a year. These estimates exclude the costs due to soil erosion and deforestation.

The status of tobacco use in India

The Global Adult Tobacco Survey (GATS), the Global Youth Tobacco Survey (GYTS), and India's National Family Health Survey (NFHS) capture the status of tobacco use in India. GYTS assesses tobacco use in students between the ages of 13 and 15 years and GATS and NFHS in people above 15 years of age.

Overall, the results of these surveys have been promising: tobacco use has gone down in the population groups studied by these surveys. An exception to this is tobacco use in women, which went up by 2.1% between 2015-2016 and NFHS 2019-2021.

To go up in smoke

Nearly 26 crore Indians are tobacco consumers, according to an estimate in 2016-2017. While usage and consumption has been going down, effective tobacco control is still a pipe dream

Chart 1: Comparison of monthly consumption of bidi and cigarettes between National Tobacco Control Program (NTCP) districts and non-NTCP districts

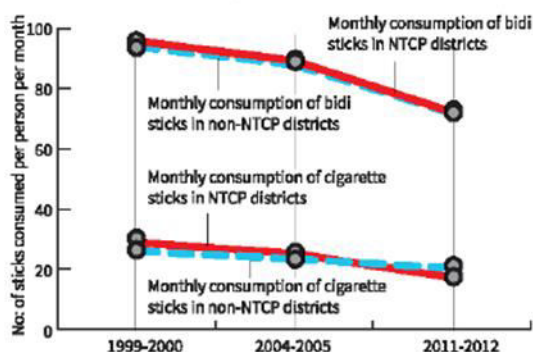


Chart 2: Trends in tobacco usage in different population groups

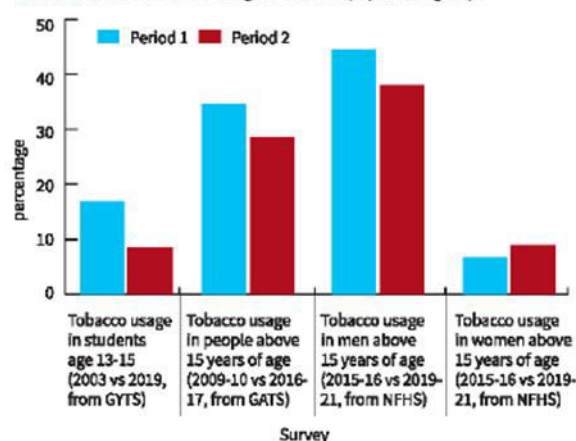
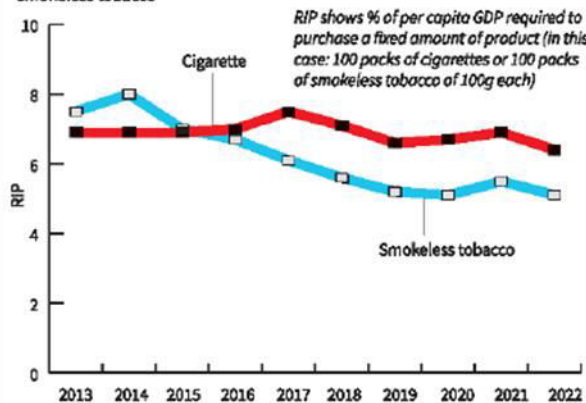


Chart 3: Trends in Relative Income Price (RIP) for cigarettes and smokeless tobacco



Source: Nazar, G.P. et al, 2020 doi:10.1136/tobaccocontrol-2018-054621, Health Taxes in India, The World Bank

Awareness and control programmes

India is one of the 168 signatories of the WHO's Framework Convention on Tobacco Control (FCTC), launched in 2005. It aims to reduce tobacco usage worldwide by helping countries develop demand and supply reduction strategies. A law to govern tobacco sales in India has existed since 1975 and was amended in 2003. The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply, and Distribution) Act (COTPA) 2003 has 33 sections governing the production, advertisement, distribution, and consumption of tobacco.

India also launched the National Tobacco Control Program (NTCP) in 2007. NTCP is designed to improve the implementation of COTPA and FCTC, improve awareness about the harms of tobacco use, and help people quit it. Apart from these interventions, tobacco taxation — a globally accepted method to effectively control tobacco use — is also applied in India.

However, existing measures are poorly implemented. Smokeless tobacco products (SLTs) have predominantly been non-compliant with COTPA packaging guidelines. Smuggled tobacco products — both smoked and smokeless forms — have also been badly regulated. To make

matters worse, the fines for violating COTPA regulations have not been updated since 2003. For instance, a tobacco company is fined a maximum of only ₹5,000 for violating packaging restrictions for the first time.

Further, while the COTPA bans direct advertisements, the position on indirect advertisements is unclear, which has allowed surrogate advertisements: they popularise the brand using a proxy product like elaichi, to promote tobacco manufactured by the same brand. The ICC Men's Cricket World Cup 2023 displayed surrogate advertisements for at least two tobacco brands, which were endorsed by famous cricketers. These advertisements are problematic as they indirectly promote tobacco use.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

2. Behind Opposition postal ballot concern, Election Commission rule change in 2019

Why in News?

Ahead of the counting of votes in the Lok Sabha elections on June 4, the INDIA bloc asked the Election Commission to issue directions to Returning Officers to complete the counting of postal ballots before finalising the EVM counting.

Position upto 2019 elections

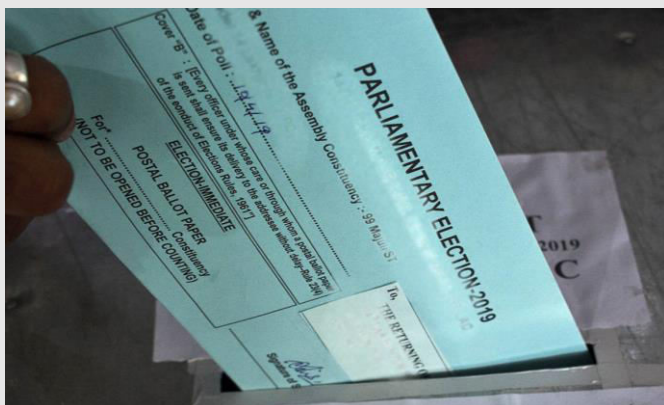
The Opposition's concern stems from a change in the EC's guidelines in 2019 for counting of postal ballots. Till the 2019 LS elections, the counting of postal ballots was taken up first and EVM counting began 30 minutes after that. And all postal ballots had to be counted before the EVM counting could be completed.

"Under no circumstances, should the results of all the rounds of the EVM counting be announced before finalising the postal ballot counting," stated the EC's Handbook for Counting Agents in February 2019. Now, the postal ballot counting starts 30 minutes before the EVM counting, but does not have to be completed before the EVMs.

Position after 2019 elections

After the 2019 elections, the EC decided to tweak the guidelines as the number of postal ballots had gone up, especially after the introduction of the Electronically Transmitted Postal Ballot System (ETPBS), and the mandatory counting of VVPAT slips of five randomly selected polling stations per Assembly constituency or Assembly segment.

In directions to all Chief Electoral Officers on May 18, 2019, the EC withdrew its earlier guideline that the penultimate round of EVM counting should be taken up only after postal ballots counting is complete. Instead, it said, the EVM counting "can go on irrespective of the stage of postal ballot counting". Once the EVM counting is complete, the VVPAT slips can be counted.



It also revised the rule for mandatory re-counting of postal ballots. Earlier, postal ballots were recounted if the margin of victory was less than the total number of postal ballots. Now, the postal ballots that are rejected as invalid during counting would be re-verified if the margin is less than the number of such ballots.

Increasing Postal Ballots

While a total of 22.71 lakh postal ballots were received during the 2019 Lok Sabha elections or 0.37% of the total 60.76 crore valid votes, the number of postal ballots is expected to be higher this time. Apart from service voters like defence forces, who are deployed outside their home states, the EC in October 2019 introduced postal ballots for essential service workers, those above 80 years of age and persons with disabilities. Since then, the age limit has been increased to 85 years for seniors and Covid-19 patients have been included in the list of those eligible for postal ballots.

As the guidelines stand today, as per the 2023 Handbook for Counting Agents, "After 30 minutes of commencement of postal ballot counting, the EVM counting can start and continue irrespective of the stage of postal ballot counting. Once the EVM counting is completed, the VVPAT slip counting can also start."

With the number of postal ballots expected to increase, the Opposition parties have expressed concern over the counting process. In their letter to the EC, they pointed out that the winning margin in the 2020 Bihar elections was 12,700 votes for the state, while the number of postal ballots was 52,000. "In fact, there was a huge outcry in Bihar as it was the first election (which was conducted after the onset of the Covid-19 pandemic) where the postal ballots were counted at the end of the counting of EVM votes," the INDIA parties said.

They asked the EC to withdraw the May 2019 letter and to issue directions in consonance with Rule 54A of the Conduct of Elections Rules, 1961, which says "the returning officer shall first deal with the postal ballot papers..."

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

3. Delhi govt moves Supreme Court: Legal history of Delhi's water dispute with other states

Why in News?

The Delhi government recently approached the Supreme Court seeking urgent directions to Haryana and Himachal Pradesh to release more water into the National Capital Territory (NCT) region. The move has come due to an unprecedented surge in temperatures, leading to the

rising demand for water. This is not the first time that the Delhi government has approached the SC over its water woes.

Why has the Delhi government approached the SC?

Despite taking several measures, the Delhi government has not been able to tackle the water shortage issue. This has precipitated an emergency in the form of a full-fledged water and sanitation crisis and has necessitated an emergent solution, according to the government's petition.



The AAP government has also said that Himachal Pradesh has agreed to share its surplus water with Delhi, but the water will have to be transported through the Wazirabad barrage with the Haryana government's cooperation, which isn't being provided currently.

Adding that the water levels in the Sonia Vihar and Bhagirathi barrages, the other primary sources for Delhi-NCR, are operating at full capacity, the government contended that an increase can only be considered at the Wazirabad barrage. However, despite requests to Haryana to release surplus water, there has been no positive response.

Stating that additional water supply is necessary due to Delhi-NCR's large workforce and migrant population, the government added that it was only seeking relief as a "stop-gap arrangement" until the monsoon season's arrival.

Allocation of Yamuna waters

The order said, "Delhi which is in dire need of water is to be given its allocation of water with immediate effect. We, therefore, direct all the parties to the Memorandum of Understanding to assure that sufficient water, which... is about 2 ½ times of the seasonal allocation, is released from Tajewala Head so that Delhi gets 0.076 BCM [It is this quantity of water, Delhi has to get under the MoU, between March to June.] for its consumption during the period March to June 1995."

Signed by the Chief Ministers of five basin states on May 12, 1994, including Haryana, Delhi, Uttar Pradesh, Rajasthan, and Himachal Pradesh, the memorandum dealt with the allocation of Yamuna water amongst the co-basin states of the Upper Yamuna Basin by the Board under the Department of Water Resources, River Development, and Ganga Rejuvenation, Union Ministry of Jal Shakti. It stated that when the availability of water is less than the assessed quantity, the drinking water allocation of Delhi has to be met first, while the balance will be distributed among the remaining states in proportion to their allocations.

What did the SC rule in 1996?

The matter was earlier taken before Supreme Court in 1995. On February 29, 1996, Supreme Court ruled, "Delhi shall continue to get as much water for domestic use from Haryana through River Yamuna which can be consumed and filled in the two water reservoirs and treatment plants at Wazirabad and Hyderpur. Both the Wazirabad and Hyderpur reservoirs shall remain full to their capacity from the water supplied by Haryana through River Yamuna."

The court also directed Haryana not to obstruct the supply of water to Delhi as directed by it, while adding that its order was independent of the MoU signed between the states.

"We, therefore, close the proceeding by requiring Haryana to make available the aforesaid quantity of water to Delhi throughout the year. Let it be made clear that any violation of this direction would be viewed seriously and the guilty persons would be dealt with appropriately," the court said.

However, in 2021, when the water level in the Wazirabad pond, which supplies water to treatment plants in the city, dipped to 667 feet, the Delhi Jal Board (DJB) filed a petition before the top court alleging willful disobedience of the 1996 ruling by the Haryana government.

What was Delhi's case against Haryana?

In its plea, the DJB said that the Haryana government was stopping the water supply to the national capital and not releasing 120 million gallons of water per day. However, the Haryana government said that the situation in Delhi was caused by "internal mismanagement."

On July 23, 2021, the Supreme Court dismissed the batch of contempt pleas filed by the Delhi Jal Board, seeking action against the Haryana government.

The court said the Delhi government couldn't resort to the same now owing to the large-scale infrastructural developments that have taken place since February 1996. For instance, the court noted that since the 1996 order, three additional water treatment plants have been set up at Bawana, Dwarka, and Okhla.

Dismissing the Delhi government's case, the court said, "The Petitioner has failed to make out any case for contempt against the Respondents. The Petitioner is cautioned to be careful in filing petitions repeatedly for a relief which has been rejected by this Court on earlier occasions."

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

4. Lok Sabha Election Results 2024: Decoding the Verdict

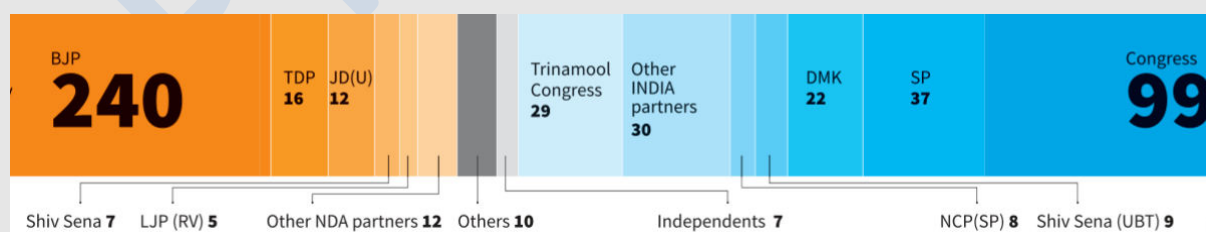
Why in News?

How will the third Narendra Modi government differ from the two previous ones that came to power in 2014 and 2019? The answer will lie in the composition of the Eighteenth Lok Sabha. Here are a few things that will change.

After a decade, back to days of coalitions at the Centre

For the better part of the last 34 years, India has been governed by a coalition of political parties. It is only in the last 10 years that a single political party — the Bharatiya Janata Party (BJP) — led a majority government at the Centre, crossing the halfway mark in the Lok Sabha elections of 2014 and 2019.

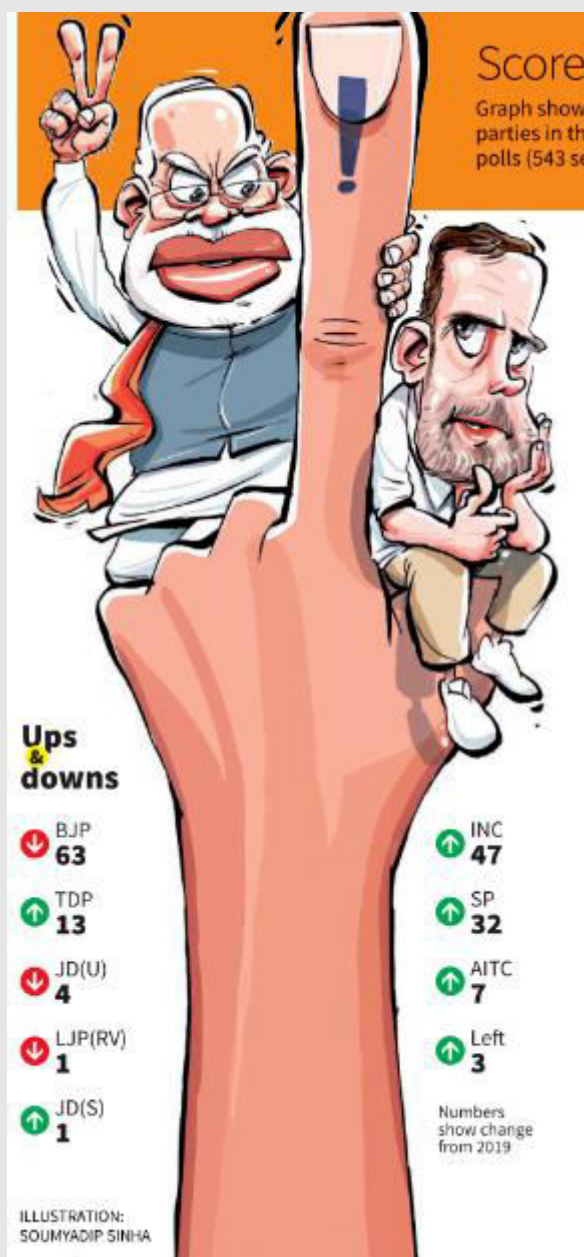
The BJP had won 240 seats, short of the majority mark of 272 by a long way. It will have to depend on its pre-poll allies, the top four being the Telugu Desam Party led by Chandrababu Naidu, the Janata Dal (United) led by Nitish Kumar, Shiv Sena led by Eknath Shinde, and Lok Janshakti Party (Ram Vilas) led by Chirag Paswan.



The TDP had won or was leading at 16 seats, the JD(U) had won 12, the Shiv Sena had won 7, and the LJP (Ram Vilas) had won 5 seats. Together, these parties will bring 40 seats to the NDA. The BJP will need all these seats to comfortably go past the half-way mark of 272.

Role of allies: Then and Now

Shiv Sena and JD(U) were BJP allies earlier too, but with a crucial difference. Their withdrawal of support would not jeopardise the NDA government, given that the BJP on its own had 282 seats in 2014, and an even higher tally of 303 seats in 2019.



So, when Uddhav Thackeray, whose Sena had been a BJP ally with a similar ideology since 1989, and had won 18 seats in the Lok Sabha election of 2019, pulled out of the alliance after the 2019 Assembly polls in Maharashtra, the BJP-led government at the Centre was not affected.

Similarly, the Akali Dal, another long-term BJP ally since 1996, pulling out of the alliance during the farm protests in September 2020 did not matter.

Not anymore. Now, BJP will have to listen to its allies, because they will be key to the stability of the government at the Centre.

Reduced flexibility of BJP

The new and old allies will seek Cabinet berths — maybe important ones, that could impinge on the BJP-led government's flexibility in policy-making.

And the BJP may be required to revisit its coalition dharma. It will have to call periodic meetings of its allies for temperature checks; it will need to get them on board before deciding on hot button issues such as Uniform Civil Code, delimitation of constituencies, judicial reforms, and 'one-nation, one-election'.

In short, the party will have to reset the framework of running a genuine coalition

government, and devise mechanisms to accommodate the sensitivities of other parties with their own ethos and ideologies.

Larger role for India bloc

Not just that. Given the smaller difference in seat tallies in the new Lok Sabha, the rival INDIA bloc will have a better chance at putting the government under pressure should some NDA allies break ranks and cross over.

Both Rahul Gandhi and Congress president Mallikarjun Kharge did not rule out the possibility of approaching the BJP's pre-poll allies for a shot at forming the government.

Rise of regional leaders and increased pressure on BJP

From the North to the South, East to West, regional leaders have re-emerged to exert influence in the national polity. Chandrababu Naidu will get to wield clout as the Chief Minister of Andhra Pradesh, and as a key partner in the BJP-led government at the Centre. Samajwadi Party's Akhilesh Yadav will now be heard loud and clear in not just the Uttar Pradesh Assembly, where his party with 108 seats out of total 403 has a significant presence, but also in Parliament.

The Samajwadi Party (SP) has trumped the BJP in Uttar Pradesh, the state that contributed 72 seats to the party's tally of 282 in 2014. The SP had won 37 seats in the state that contributes the largest number of MPs — 80 — to Lok Sabha.

The BJP had won only 33 seats, its strength almost halved from the 62 of 2019. In fact, the SP will be the third largest party in Parliament after the BJP (240) and the Congress (99).

Mamata Banerjee's Trinamool Congress (29 seats), M K Stalin's Dravida Munnetra Kazhagam (22), the Shiv Sena (Uddhav Balasaheb Thackeray) with its 9 seats, and the NCP (Sharadchandra Pawar) with 7 will lend their voice to regional aspirations, and mount pressure on the Central government by speaking up in Parliament.

The Trinamool's performance in the election, winning 7 seats more than in 2019, could mean that Mamata has managed to stall the BJP's juggernaut in West Bengal, at least for now. And the DMK-led alliance has retained all 39 seats in Tamil Nadu.

The verdict in Maharashtra suggests that the people have stood by Sharad Pawar and Uddhav Thackeray, who suffered BJP-supported splits in their parties. The state goes to Assembly polls later this year in October, and the Maha Vikas Aghadi alliance of the Congress, Sharad Pawar's NCP, and the Uddhav Sena is well placed to make a strong bid for power.

Recalibration of power balance, among BJP-RSS and within BJP

Given that the Lok Sabha elections in 2024 too were centred around Prime Minister Narendra Modi, with a high-decibel 'Modi ki guarantee' campaign, the burden of a lower tally will inevitably fall on him. Leaders will not speak openly against the Prime Minister, and will continue to rally around him, but it is bound to reflect in the party's power structure.

What has not gone unnoticed is the performance of Shivraj Singh Chouhan, who delivered a clear majority for the BJP in the Assembly elections just six months ago, and has now ensured a clean sweep in Madhya Pradesh with all 29 Lok Sabha seats falling into the BJP basket. Chouhan has won his own seat, Vidisha, by a staggering margin of 8.21 lakh votes.

Modi may not only have to accommodate but also actively deploy moderate voices to expand his acceptability in the coalition government and in Parliament, which will represent a wider political spectrum than before.

When the new Cabinet is constituted, Modi may not have the kind of free hand he had in 2014 and 2019. RSS, the ideological parent of the BJP, which works quietly on the ground for the party, may put forward its own suggestions.

The BJP, which has grown in strength over the past decade, did not necessarily consult the RSS on government affairs. BJP-RSS relations during the NDA government under Atal Bihari Vajpayee had been starkly different. The RSS claims that it does not seek power, but it has always influenced the political agenda of the party.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express & the Hindu

5. Two lakh plus NOTA votes in Indore: Why NOTA was introduced, its consequences

Why in News?



The BJP's Shankar Lalwani has won in Indore with a massive 10.09 lakh margin, receiving 12,26,751 votes. His nearest competitor: NOTA, with 2,18,674 votes.

The extraordinary result in Indore is the most votes that the "None Of The Above" (NOTA) option has ever received in any constituency to date. The previous NOTA record-holder was Gopalganj, Bihar, in 2019, when 51,660 voters chose this option.

When and why was the NOTA option introduced?

The Supreme Court directed the Election Commission of India (ECI) to introduce the NOTA option for voters in September 2013, in order to protect the secrecy of voters' choice.

In 2004 the People's Union for Civil Liberties (PUCL) had approached the apex court seeking directions to the ECI for measures to protect the 'right to secrecy' of voters to exercise their franchise. They argued that the Conduct of Elections Rules, 1961 violated the secrecy aspect as the Presiding Officer (from the ECI) maintains a record of voters who choose not to vote along with the signatures or thumb impressions of each voter who exercises this right.

Moreover, with the introduction of EVMs, the court noted that anyone present in the polling booth would know if a voter has decided not to vote, as the machine would not emit any light or sound (as it does when a vote is cast). The court noted that the ECI in 2001 sent a letter to

the Ministry of Law and Justice seeking the introduction of a NOTA option in EVMs and ballot papers to protect voter secrecy as well as allow voters to “express his dissent/disapproval against the contesting candidates and will have the benefit of reducing bogus voting.”

The court accepted this reasoning and the suggestion from the ECI’s letter, stating that political parties would be “forced to accept the will of the people and field candidates who are known for their integrity”, and directed the ECI to install a NOTA button in EVMs.

What happens if NOTA receives the highest number of votes in a constituency?

NOTA has no legal consequence attached to it — even if the highest number of votes in a seat are polled for NOTA, the second most successful candidate wins. This has never happened (in Lok Sabha elections), but the Indore result, as well as other local body elections, show that it remains a distinct possibility.

Currently, the apex court is considering another petition for elections to be considered “null and void” if NOTA receives the highest number of votes in the constituency.

The petition invokes Maharashtra, Haryana, Puducherry, Delhi, and Chandigarh as examples of states and union territories where the State Election Commission passed orders declaring NOTA as a “Fictional Electoral Candidate” in local elections (including elections for panchayats and municipal bodies). If the votes for NOTA exceed the votes received by all other individual candidates, fresh elections will be held in these states and union territories.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

6. With 135 seats in kitty, Naidu set to become A.P. CM for fourth time

Andhra Pradesh

Assembly Constituencies **175**

* Status of Top Five Parties

Parties	Leading/Won
TDP	135
JnP	21
YSRCP	11
BJP	8

Telugu Desam Party (TDP) national president Nara Chandrababu Naidu is all set to become the Chief Minister of Andhra Pradesh for the fourth time after handing a crushing defeat to Y.S. Jagan Mohan Reddy’s YSR Congress Party in the Assembly election, which was held simultaneously with the Lok Sabha election in the State.

The TDP, which is part of the BJP-led National Democratic Alliance (NDA) along with the Jana Sena Party (JSP), secured 135 seats.

Mr. Reddy had stormed to power by securing 151 seats in the 2019 election. The TDP won just 23 seats.

Relevance: GS Prelims

Source: The Hindu

7. BJP breaks Naveen's 24-year grip on Odisha

Odisha	
Assembly Constituencies	147
* Status of Top Five Parties	
Parties	Leading/Won
BJP	78
BJD	51
INC	14
IND	3
CPI(M)	1

In what can be described as a historic upset, the 24-year-long tenure of Chief Minister Naveen Patnaik came to an end, with the aggressive BJP poised to form government in Odisha.

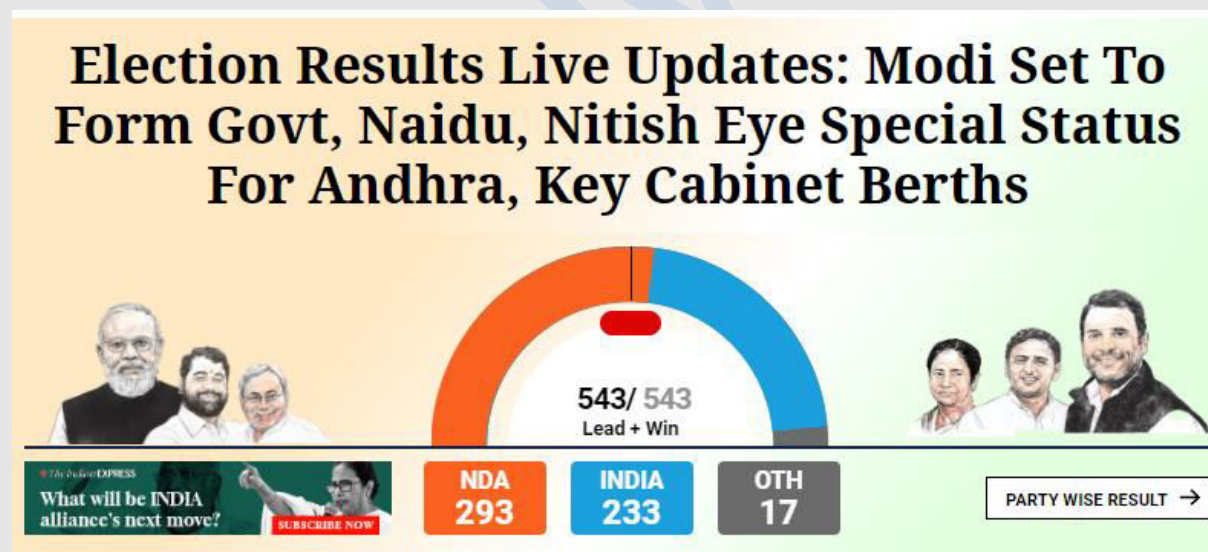
The BJP won 78 seats, while the Biju Janata Dal (BJD) got 51, and the Congress 14. The halfway mark for forming the government is 74 in the 147-member Assembly.

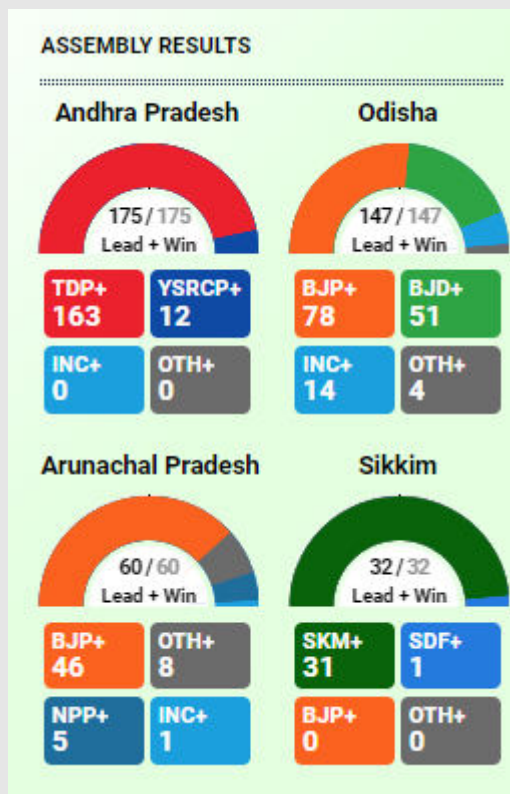
Relevance: GS Prelims

Source: The Hindu

8. Seat Share in Result Lok Sabha and Simultaneous Assembly Elections

Kindly add the below screenshots to Current affairs shared on 5th June.





Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

9. The representation of women in the incoming Lok Sabha, how it compares to previous years

Why in News?

India has elected 74 women MPs to Lok Sabha this year, four fewer than in 2019 and 52 more than in India's first elections in 1952. These 74 women make just 13.63% of the elected strength of the Lower House, much less than the 33% that will be reserved for women after the next delimitation exercise.

Slow change

Over the years, Lok Sabha's gender composition has shown a general trend towards increasing women's representation. But progress has been slow.

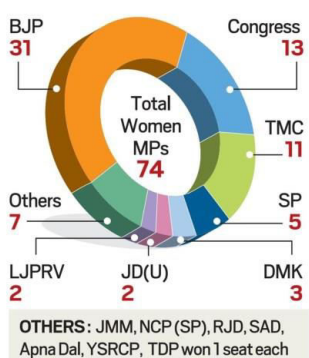
In 1952, women made up just 4.41% of the strength of the Lower House. This number increased to more than 6% in the election held a decade later, but again dipped to below 4% in 1971 (ironically, with Indira Gandhi, India's first and only woman Prime Minister, at the helm). Since then, there has been a slow, but steady rise in women's representation (with a few exceptions), which crossed the 10% mark in 2009, and peaked in 2019 at 14.36%. India still lags behind several countries — 46% of MPs in South Africa, 35% in the UK, and 29% in the US, are women.

CHANGE IN WOMEN'S STRENGTH IN LOK SABHA OVER THE YEARS



Party-wise share

PARTY WISE WOMEN LS MPs



All data courtesy PRS Legislative Research

In 2024, women Lok Sabha MPs come from 14 parties. The BJP leads this list with 31 women MPs, followed by the Congress (13), TMC (11), SP (5), DMK (3), and Chirag Paswan-led LJPRV and JD(U), both with two. Seven parties have one woman MP each. Among the 3 parties with double-digit women MPs in the Lok Sabha, the TMC boasts the highest proportion (37.93%), followed by Congress (13.13%) and BJP (12.92%).

Candidates' composition

Out of the total 8,360 candidates, who stood in the 2024 Lok Sabha elections, just around 10% were women. This number too has increased over time — it stood at 3% in 1957. This is the first time that women candidates' proportion touched 10%. Roughly 16% of BJP's candidates were women, as opposed to 13% of Congress candidates — both higher than the overall average.

Relevance: GS Prelims & Mains Paper II; Governance

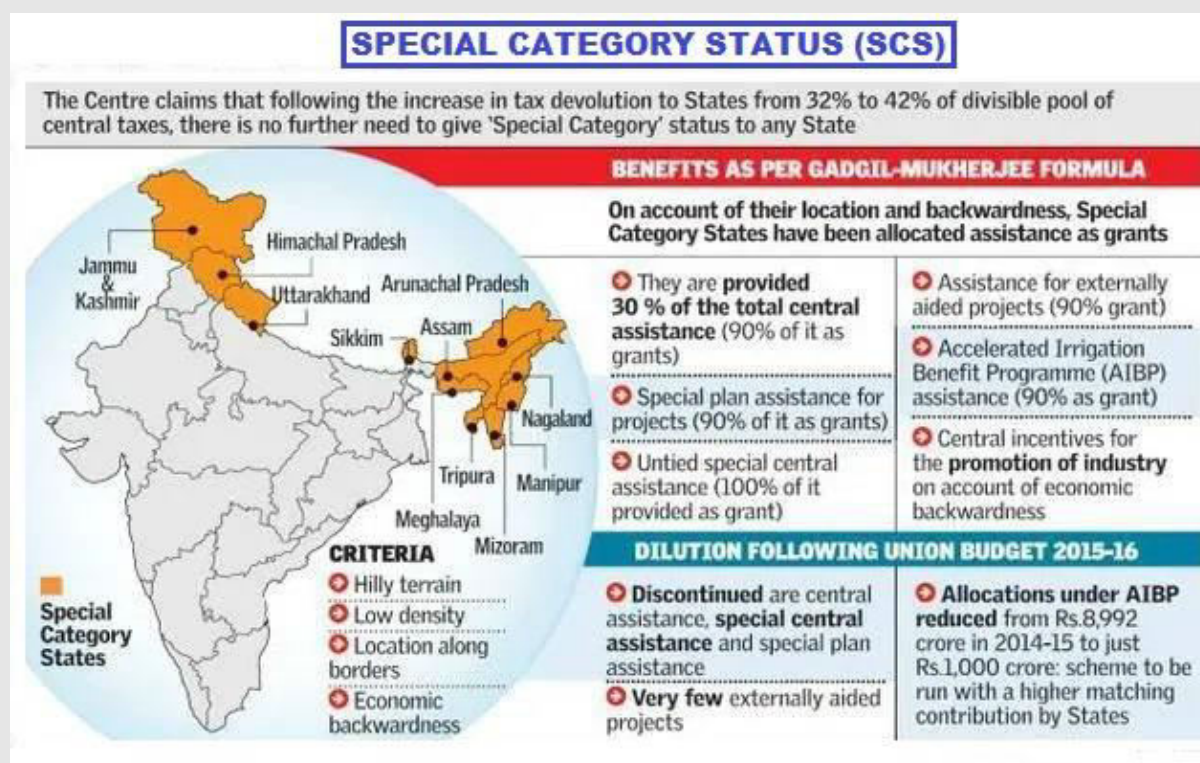
Source: Indian Express

10. Special Category Status for AP: Chandrababu Naidu's big demand and the BJP's compulsions

Why in News?

Telugu Desam Party (TDP) president N Chandrababu Naidu emerged as a key player in national politics after his party won 16 seats in the recent Lok Sabha election. TDP is in alliance with the Jana Sena Party and the BJP in Andhra Pradesh.

Naidu's support is critical for the BJP, which has only 240 seats in Lok Sabha. In return, Naidu is likely to extract several promises and assurances, the most important of which will be the status of a Special Category State for Andhra Pradesh.



What is Special Category Status (SCS)?

In 1969, the Fifth Finance Commission of India introduced the mechanism of SCS to assist certain states in their development and fast-tracking growth if they faced historical economic or geographical disadvantages. Factors such as difficult and hilly terrain, low population density and/ or a sizable tribal population, strategic location along borders, economic and infrastructural backwardness, and non-viable nature of state finances were typically considered to accord SCS.

The system was scrapped on the recommendation of the 14th Finance Commission, which suggested that the resource gap of the states should be filled by increasing the devolution of tax to 42% from the existing 32%.

SCS was accorded to 11 states, including the entire Northeast, and the border hill states of Jammu and Kashmir, Himachal Pradesh, and Uttarakhand. Subsequently, other states too demanded SCS — including Naidu's AP; Bihar, whose Chief Minister Nitish Kumar is another key NDA ally; and Odisha, where the BJP will now form the government.

Why does AP want Special Category Status?

When undivided AP was bifurcated to create Telangana in 2014 through the AP Reorganisation Act, 2014, the UPA government at the Centre had promised to grant SCS to AP to compensate for the loss of revenue, and of Hyderabad, where much of the development was concentrated. After the Narendra Modi government took charge, both Naidu who was CM from 2014 to 2019, and Y S Jagan Mohan Reddy who was CM from 2019 to 2024, repeatedly appealed for SCS, so more funds were made available from the Centre to overcome the “distressing” financial situation of the state.

As per presentations made by the AP government to NITI Aayog, the 14th Finance Commission estimated that the post-devolution revenue deficit for AP for the five-year period 2015-20 would be Rs 22,113 crore, but in reality, this figure stood at Rs 66,362 crore. The debt of the residuary state, which was Rs 97,000 crore at the time of bifurcation, reached Rs 2,58,928 crore by 2018-19, and is more than Rs 3.5 lakh crore now.

AP argues that the undivided state was bifurcated in an unjust and inequitable manner — the successor state inherited nearly 59% of the population, debt, and liabilities of the original state, but only 47% of its revenues. For example, of the Rs 57,000 crore of software exports from AP for the year 2013-14, Hyderabad city — with Telangana after the bifurcation — alone accounted for Rs 56,500 crore.

Today's AP is essentially an agrarian state, with low economic buoyancy, leading to huge revenue disabilities. This is evident from the fact that the per capita revenue of Telangana for 2015-16 was Rs 14,411, while it was only Rs 8,397 for AP.

According to the AP government, the UPA had assured the nation, and especially the people of AP, that it would be granted SCS for a five-year period as a precondition to bifurcation, and that the residuary state would be adequately compensated through a number of development interventions, investments, and direct financial assistance.

And what would SCS mean for AP?

SCS would mean higher grants-in-aid to the state government from the Centre. To illustrate, per capita grants to Special Category States is Rs 5,573 crore per year, whereas AP receives only Rs 3,428 crore.

SCS states enjoy special industrial incentives such as Income-tax exemptions, custom duty waivers, reduced excise duty, corporate tax exemption for a certain period, concessions and exemptions relating to GST, and lower state and central taxes.

In SCS states, the Centre funds central schemes up to 90%, compared to 70% in non-SCS states.

Governments of AP have argued that such special incentives are vital for the rapid industrialisation of the primarily agrarian state, and would lead to improved employment opportunities for the youth and overall development of the state.

Granting SCS would encourage investments in specialty hospitals, five-star hotels, manufacturing industries, high-value service industries such as IT, and premier institutions of higher education and research, AP has argued.

Relevance: GS Prelims & Mains Paper II; Governance

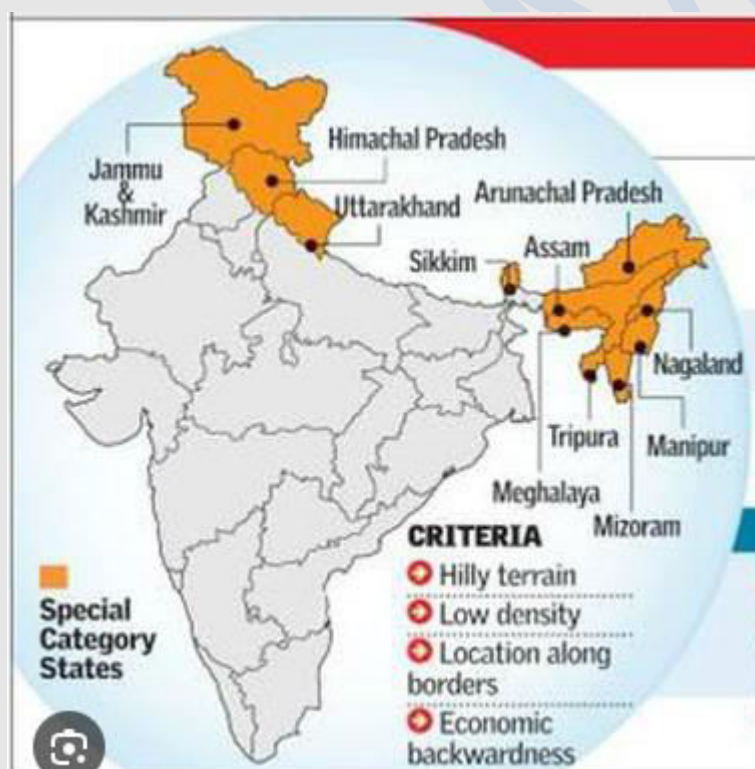
Source: Indian Express

11. Bihar's call for special category status

Why in News?

Bihar Chief Minister Nitish Kumar has reiterated the State's long-standing demand to be granted the special category status by the Centre, a move that would increase the amount of tax revenues that the State gets from the Centre.

The demand for special category status right now is significant because Prime Minister Narendra Modi's Bharatiya Janata Party (BJP) depends on support from Mr. Kumar's Janata Dal (United), which has 12 seats in the new Lok Sabha, to hold on to power at the Centre. Notably, the Bihar Cabinet had passed a resolution late last year demanding special category status to the State.



What is the special category status?

The special category status was introduced in 1969 based on the recommendations of the Fifth Finance Commission. The intent was to help States that are disadvantaged in terms of their geographic, social or economic status to improve their position on par with other, more developed Indian States.

Criteria such as having a hilly terrain and a sizable tribal population can entitle a State to be granted the special category status. A State that is granted the special category status would be able to claim more funds from

the Centre than otherwise and can also enjoy various tax-related concessions.

For example, a State with special category status would receive 90% of funds from the Centre when it comes to schemes sponsored by the Union government, as against other States which receive only around 60% to 80% of funds from the Centre.

Initially, Jammu & Kashmir, Assam and Nagaland were granted the special category status to aid their economic development. Subsequently, eight other States including Himachal Pradesh and Uttarakhand were granted the special status. Thus, 11 out of 28 States, or more than a third of Indian States, already enjoy the special category status.

Why is Bihar demanding the special category status?

Bihar's politicians, including its current Chief Minister, have for a long time demanded special category status for the State pointing to its economic backwardness. Bihar's per capita income of around ₹60,000 per year is among the lowest in the country and the State lags behind the national average in several human development indicators as well.

Bihar has also noted that the State's fiscal situation has been adversely affected by the bifurcation of the State that caused industries to move to Jharkhand, lack of sufficient water resources for irrigation, and frequent natural disasters.

The most recent Bihar caste-based survey of 2022 indicates that nearly a third of the State's people live under the poverty line.

Unwillingness of Centre

Union governments headed by both the BJP and the Congress, however, have been unwilling to grant any special status to Bihar and several other States due to the increased burden it would put on the Centre's finances.

Particularly, it has been noted that there is now greater devolution of taxes to the States from 32% of the total divisible pool to 42% based on the recommendation of the Fourteenth Finance Commission. Hence, the demand for special category status from Bihar is simply seen as a ploy by State governments to demand even more funds from the Centre.

The Centre may also fear that granting the special category status to certain States will encourage others to demand the same from the Centre. It should also be noted that political considerations play a large role in the granting of special status to States. States with better political bargaining power with the Centre may manage to receive more funds either through a special status or by other means.

Further, there is the risk that political parties vying for power at the Centre may compete to either gain or stay in power by promising to grant special status to certain States.

The Congress party, for instance, in its 2024 election manifesto promised to grant the special category status to Bihar if it comes to power. Such competitive populism can lead to a worsening of the Centre's finances.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

12. Amritpal, Engineer Rashid win from jail: What happens next

Why in News?

Results of the Lok Sabha polls have thrown up two unusual winners — Waris Punjab De chief Amritpal Singh from Punjab's Khadoor Sahib, and Engineer Rashid from Jammu and Kashmir's Baramulla — both of whom are currently in prison on serious charges that are being probed by the National Investigation Agency.



Serious charges

Amritpal Singh has been in jail in Dibrugarh, Assam under the National Security Act (NSA) since March 2023. The NSA is a preventive detention law which allows the government to detain individuals for up to 12 months without pressing formal charges.

Rashid is currently in Delhi's Tihar jail facing charges under the stringent Unlawful Activities Prevention Act (UAPA) in an alleged terror-funding case. A former MLA, he contested in the election on a Awami Ittehad Party ticket.

Taking oath

The duo's election victory means that they now have a constitutional mandate as parliamentarians, despite being in prison.

Taking oath is the first step in fulfilling their role as parliamentarians. Although this is not explicitly spelt out in the Constitution, there have been past instances in which jailed lawmakers are granted temporary parole to take oath.

In March, Aam Aadmi Party leader Sanjay Singh, who was then imprisoned in Tihar on money laundering charges, was granted permission by a court to take oath as Rajya Sabha MP for a second term. A trial court directed the jail superintendent to ensure that he is taken to Parliament with adequate security, and brought back to the jail.

Duties as a lawmaker

Being allowed to take oath is not the same as being released on bail. It is akin to a special parole for a day.

The jailed lawmaker has to then write to the Speaker that she will not be able to attend the proceedings. This is important since Article 101(4) of the Constitution states that if an MP is absent for over 60 days from all the meetings without permission, then her seat would be declared vacant.

For attending a Parliament session or to cast a vote in the Parliament, the lawmaker will have to move court for permission.

However, only a conviction and a sentence of two or more years will lead to disqualification from Parliament.

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

13. Andhra Pradesh vs Telangana: Unresolved issues between the states that went to court

Why in News?

A decade on, several issues relating to the Andhra Pradesh Reorganisation Act, 2014 (APRA) remain pending between the two successor states, and Telangana Chief Minister Revanth Reddy has said he hopes they are resolved soon.

The creation of the new states was followed by division and apportionment of the assets of undivided Andhra Pradesh. Courts were required to adjudicate several disputes that arose; a few of the major legal disputes are as follows.

The states are embroiled in some other disputes as well, including over competing claims on pending power generation dues, division of the AP State Financial Corporation's assets, and over the sharing of Krishna and Godavari waters.



Ninth and Tenth Schedules of AP Reorganisation Act

In December 2022, Andhra Pradesh approached the Supreme Court claiming that the division of assets contained in the Ninth and Tenth Schedules of the APRA had not commenced even though the Act clearly apportioned them between the two “successor states”.

According to the petition, the Act lists 245 institutions or assets (142 in Schedule IX, 91 in Schedule X, and 12 unmentioned in the Act) owned by the erstwhile State of Andhra Pradesh, valued at “about Rs 1,42,601 crores” and that 91% of these assets are located in Hyderabad “clearly to the benefit of Telangana”.

As of June 2, 2024, Hyderabad is the capital city of Telangana alone, and no longer the shared capital of both states. Andhra Pradesh is in the “disadvantageous position of having to start from scratch”.

These institutions, says the petition, “perform a range of basic and essential functions”, including agriculture, dairy development, education, medical services, minority and backward class development, etc. None of these assets have been apportioned between the successor states, it says.

According to Andhra Pradesh, Telangana’s inaction “has led to a multitude of issues adversely affecting and violating the fundamental and other constitutional rights” of the people residing in the state.

Andhra Pradesh has asked the Supreme Court to direct Telangana to start handing over assets specified in the Ninth and Tenth Schedules of the APRA under the supervision of a neutral arbitrator or a retired judge of the Supreme Court.

In December 2023, the case was listed for a final hearing in March 2024 by Justices Sanjiv Khanna and S V N Bhatti. However, the case was not taken up, and remains pending.

Andhra Pradesh State Council of Higher Education (APSCHE)

In 2016, the Supreme Court decided on a dispute where Telangana claimed ownership of all funds and assets of the Andhra Pradesh State Council of Higher Education (APSCHE).

The state of Telangana argued that the APRA does not contain any provisions for the apportionment of institutions under the Tenth Schedule (such as the APSCHE). As a result, since the assets of the APSCHE were located in Hyderabad, the state of Andhra Pradesh had no right to them.

The Supreme Court rejected this argument and invoked Section 47 of the APRA which states that the apportionment of assets can be subject to adjustment "as may be necessary to secure just, reasonable and equitable apportionment of the assets and liabilities amongst the successor States".

It directed that APSCHE assets should be divided between the two states based on the population ratio.

Andhra Pradesh Dairy Development Co-operative Federation Limited (APDDCF)

In 2016 the Telangana government transferred the assets of the Dairy Development Board in Hyderabad to the Telangana State Dairy Development Cooperative Federation (TSDDCF) from the APDDCF.

The APDDCF challenged this Government Order at the Telangana High Court, arguing that as a Ninth Schedule institution, its assets had to be fairly apportioned in the manner provided by the APRA. The TSDDCF, however, claimed that the APDDCF headquarters were located in Telangana, and its assets belonged to the state in which it was located.

In 2021, the High Court held that the APDDCF's assets should be divided between it and TSDDCF in the ratio of 58.31:41.68 after a complete valuation of the assets by the Comptroller and Auditor-General of India (CAG).

Both states have filed petitions challenging this judgment at the Supreme Court. The matter was last heard by Justice Sanjay Karol in October 2023.

Andhra Pradesh Mineral Development Corporation (APMDC)

The APMDC and the newly established TSMDC arrived at a plan to divide the assets of the APMDC (of the undivided state), another Ninth Schedule institution, in March 2018 based on the population ratio of 58.31:41.68.

The Andhra Pradesh government approved this plan in 2019, but the Telangana government took no action on the proposal. In 2020, the Andhra government approached the Telangana

High Court arguing that the Telangana state's inaction in implementing the proposal was arbitrary and illegal.

The court called the Telangana government's conduct "baffling" and "inexplicable", and ordered it to begin distributing the assets in terms of the proposal agreed to in 2018.

But the TSMDC and the State of Telangana challenged this decision before the Supreme Court in 2021. The matter was last heard by a three-judge Bench led by Chief Justice of India D Y Chandrachud in February 2024.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

14. Why is there a controversy around NEET this year

Why in News?

Recently, the National Testing Agency (NTA) published the results of the National Eligibility-cum-Entrance Test, Undergraduate (NEET UG), the competitive examination for admission to medical, dental, and AYUSH courses in government and private colleges.

The results drew immediate attention for the extraordinarily large number of candidates who got the perfect score of 720/720, and for the reason that some candidates got 718 or 719 — marks that others claimed were impossible to get in the scheme of the exam.

At least two petitions have been filed in two High Courts against the results. On June 1, a petition was filed in the Supreme Court asking that the examination be held again on the ground that the question paper had been leaked. Last month, hearing another, similar petition, the Supreme Court had declined to stay the publication of the results.

Around 2.4 million candidates took the entrance examination held on May 5 in 571 cities, 14 of which were outside India. According to the latest available data, there are a total of 1,08,940 MBBS seats in more than 700 medical colleges across the country.

Why has NEET UG 2024 been so controversial? The NTA issued a press release clarifying some of the concerns that have been raised around the examination.

The case of 67 toppers

A total 67 examinees maxed the paper, achieving All India Rank 1. There were two toppers last year, and one, three, one, and one in 2022, 2021, 2020, and 2019 respectively.

44 of the 67 toppers got the answer to a basic physics question wrong but were still given "grace marks" because an older version of the NCERT's Class 12 textbook had a mistake.

A provisional answer key released by NTA on May 29 picked the correct answer out of the choices given to the candidates, but more than 13,000 candidates challenged the key on the ground that the textbook contained information that pointed to a different answer.

An NTA official told that it had been decided to not penalise these students "since we strongly recommend all aspirants study only from NCERT textbooks for their NEET preparation".



In its press release, NTA said that the number of candidates who appeared in the 2024 exam was almost 3 lakh more than the 2023 number, and "the increase in candidates naturally led to an increase in high scorers due to a larger pool of candidates". A record 23.81 lakh students registered for NEET UG this year, significantly higher than the 20.87 lakh registrations last year, which could have contributed to the higher cutoff.

Also, according to the NTA official, the 2024 NEET was "comparatively easier" than previous years.

The 'odd' case of 718, 719

It was argued that after the maximum marks of 720, the next highest score possible was 716, and that marks of 718 and 719 did not make sense. The NTA explained in its press release that some candidates, including six of the toppers, had got "compensatory marks for loss of time". Students from a few centres in Bahadurgarh (Haryana), Delhi, and Chhattisgarh, complained that they did not get the allotted time to complete their tests, and writ petitions were filed before the High Courts of Punjab & Haryana, Delhi, and Chhattisgarh.

According to the NTA release, a "Grievance Redressal Committee consisting of eminent experts from the field of examination and academia" looked into these grievances "on the basis of factual reports of the functionaries and CCTV footages from concerned exam Centres".

Thereafter, "the loss of examination time was ascertained and such candidates were compensated with marks based on their answering efficiency and time lost, as per the mechanism/ formula established by the Hon'ble Apex Court, vide its judgment dated 13.06.2018".

According to the release, "1,563 candidates were compensated...and the revised marks of such candidates vary from – 20 to 720... Amongst these, the score of two candidates also happens to be 718 and 719 marks respectively due to compensatory marks."

'Paper leak', wrong paper

There were allegations that the question paper had been leaked in Patna. The Economic Offences Unit of Bihar Police said it had seized "admit cards, post-dated cheques, and

certificates" from "members of the organised gang arrested in this case". However, while a "thorough" investigation is ongoing, the Special Investigation Team has said that the evidence collected so far is not enough to confirm a paper leak.

The NTA has "categorically denied any case of paper leak". It has said that cases have been registered against "impersonators", and "NTA has been extending support" to investigators.

NTA has, however, confirmed that in Sawai Madhopur (Rajasthan), some Hindi-medium students were mistakenly given English-medium question papers, and the examinees had responded by walking out of the examination hall taking the question paper with them.

According to the NTA, the question paper was posted on the Internet around 4 pm, but by that time the exam, which had started at 2 pm, was well underway at all other centres.

Early declaration of results

Questions have been raised over the publication of the results 10 days ahead of the scheduled date of June 14.

However, according to the NTA, the results of all its examinations are "declared at the earliest on the completion of the necessary checks in the result processing post the Answer Key challenge period", and "the Result of NEET (UG) 2024 has been processed as per the established procedure".

The NTA has pointed out that it "managed to declare the Results of about 23 lakh candidates within 30 days", and "the Result of JEE (Main) 2024 Session-1 was declared in 11 days and of Session-2 (combined with Session – 1) was declared in 15 days".

About National Testing Agency

National Testing Agency (NTA) is an autonomous agency under the Department of Higher Education of the Ministry of Education of India. It has been approved by the Union Council of Ministers and established in November 2017 to conduct entrance examinations admissions and recruitment. NTA is responsible for conducting numerous national level exams for admission and fellowship in higher educational institutions related to engineering, medical, management and pharmacy.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

15. Charts that explain the new Lok Sabha's average age, profession, education levels and more

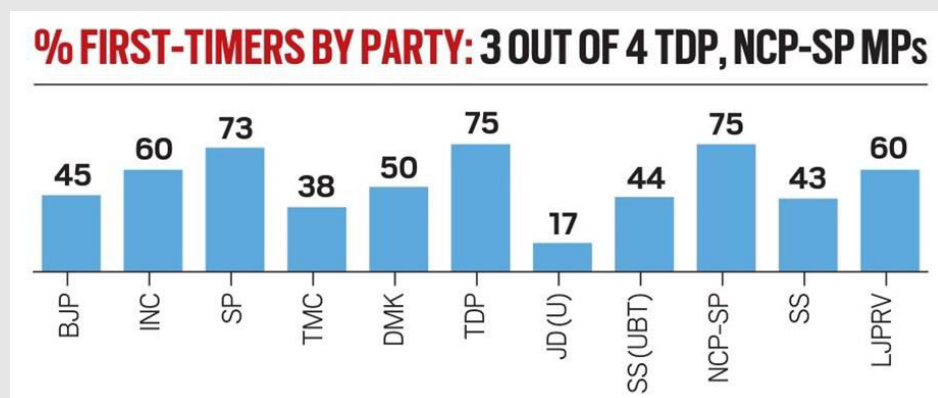
Why in News?

The BJP-led National Development Alliance (NDA) emerged victorious in the 2024 Lok Sabha elections, with 293 MPs elected. The opposition Indian National Developmental Inclusive

Alliance (INDIA) also performed better than what various exit polls had predicted, with its 232 MPs set to become a part of the incoming 18th Lok Sabha.

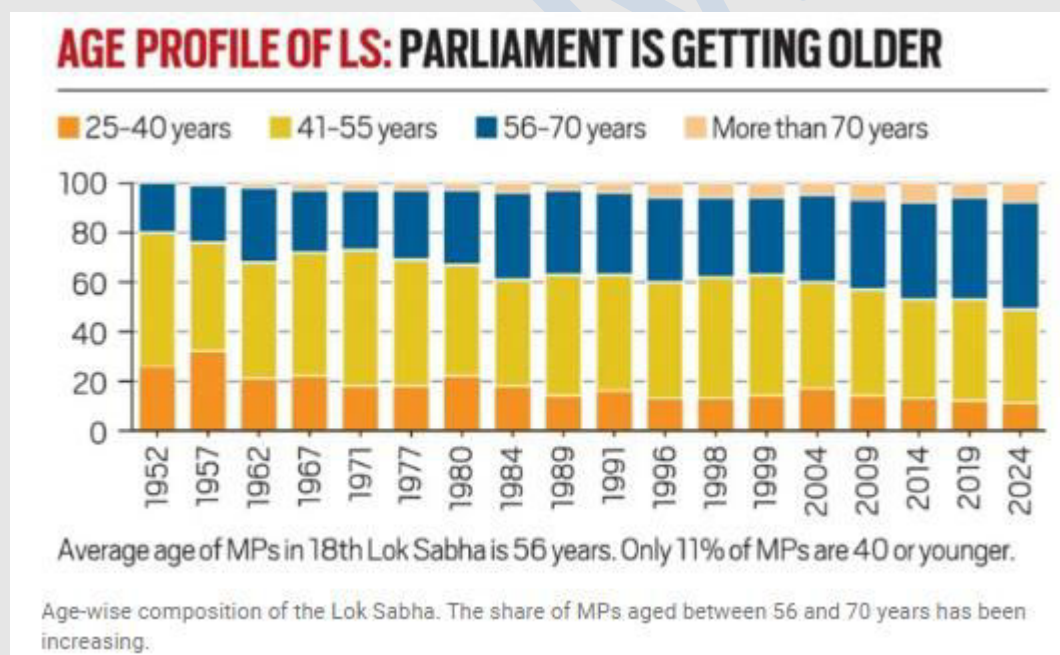
Let's have a look at the composition of 18th Lok Sabha.

1. Which parties have the most first-time MPs?



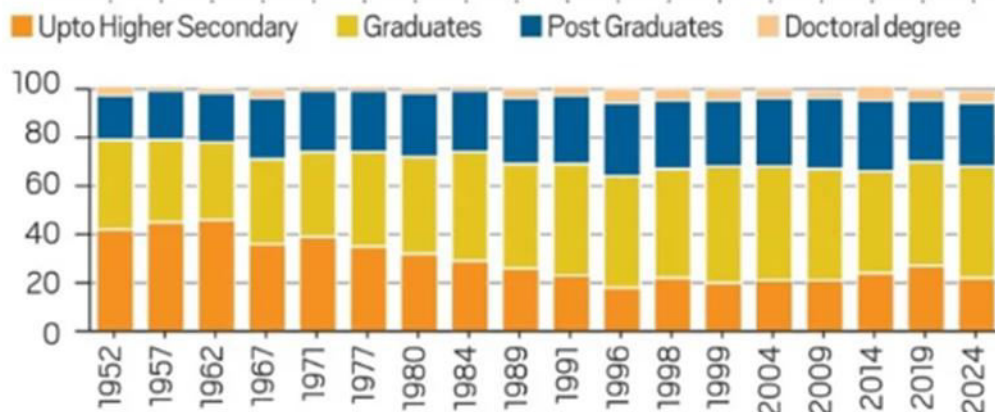
Party-wise first-time MPs (in terms of percentage).

2. What is the age profile of the 18th Lok Sabha?



3. What is the educational level of the new Lok Sabha MPs?

EDUCATION PROFILE: ALMOST 80% MPs ARE GRADUATES

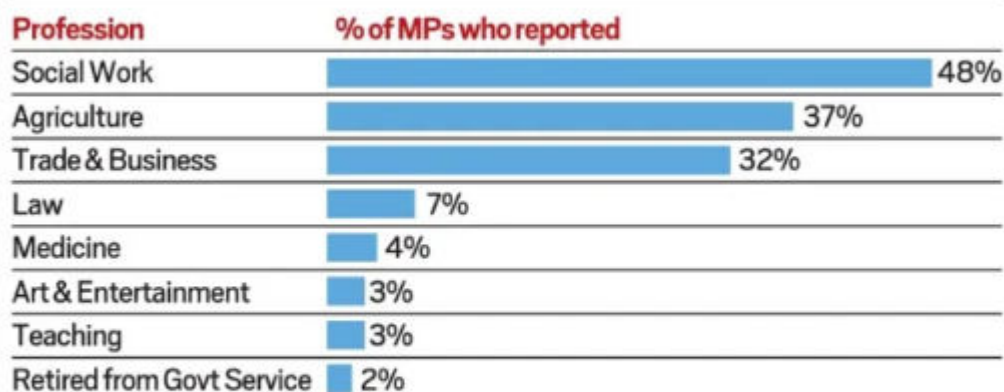


5% of MPs in 18th Lok Sabha have doctoral degrees. Among them are three women MPs.

Education profile of the Lok Sabha.

4. What professions are the MPs engaged in?

PROFESSIONS: FARMERS & SOCIAL WORKERS DOMINATE



Candidates can report more than 1 profession in their affidavit

7% of MPs in 18th Lok Sabha are lawyers, 4% are medical practitioners.

Profession-wise composition of the Lok Sabha.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

16. Agnipath scheme, and the opposition to it

Why in News?

The Bharatiya Janata Party-led government's ambitious Agnipath scheme has faced opposition, from political parties and Armed Forces veterans alike, since it was announced in June 2022.

In fact, a key plank in INDIA bloc's campaign in states like Punjab, Haryana, Himachal Pradesh, Uttar Pradesh, Bihar and Rajasthan — where the Armed Forces are a sought after employer — was the opposition to this scheme for military recruitment. And the BJP's performance in these states indicates that the pitch had some resonance on the ground.

Now, with the BJP short of a majority on its own in the Lok Sabha, crucial alliance partners — Nitish Kumar's Janata Dal (United) and Chirag Paswan's Lok Janshakti Party — too have called for a review of the contentious scheme.

What is the Agnipath scheme?

Agnipath was aimed at recruiting personnel below officer ranks — soldiers, airmen, and sailors who are not commissioned officers — to the Indian Armed Forces for a period of four years. At the end of this tenure, upto 25% of these recruits, the so called 'Agniveers', can join the services on a permanent commission (another 15 years), subject to merit and organisational requirements.

Aspirants between the ages of 17.5 years and 23 years are eligible to apply (the upper age limit was increased from 21), and the recruitment standards remain the same as with regular service, prior to Agnipath. At present, all sailors, airmen, and soldiers, except the technical cadre of the medical branch, are recruited to the services under the scheme, which has also opened doors for the recruitment of women to the IAF and the Navy.

The scheme was announced in June 2022, after military recruitment was paused for two years due to the Covid-19 pandemic.

How are Agniveers compensated?

Agniveers draw a basic salary of Rs 30,000-Rs 40,000 per month, and are entitled to other risk and hardship allowances.

They contribute 30% of their monthly emoluments to the Seva Nidhi fund, which the government matches. At the end of their service, they receive approximately Rs 11.71 lakhs (with interest) as a lump sum severance package from this fund, which is exempt from income tax.

If they die on duty, their family receives a lump sum of Rs 1 crore (including the Seva Nidhi package), and full pay for the period which the soldier could not serve. In case of disability, an Agniveer can receive upto Rs 44 lakh as compensation, depending on the percentage of disability suffered which is attributed to, or aggravated by military service. On completion of Service, they are given certificate and credits for higher education.

How is Agnipath different from regular military service?

Unlike soldiers in regular service, Agniveers do not draw pensions post-retirement. Only the 25% of Agniveers who get absorbed into the forces after four years will receive pensionary benefits, although the initial four years of service will not be considered for these.

This is the biggest change that Agnipath has brought in. Not only does the scheme will help reduce the Armed Forces' permanent force levels, this in turn will considerably cut the defence pension bill, which has been a major concern for governments for many years.

An advertisement for the Agnipath Scheme. It features a soldier in camouflage gear and a helmet, holding a rifle, standing on a green military truck. The background is a blue sky with a white cloud. The text 'AGNIPATH SCHEME' is written in large, bold, white letters. Below it, in blue text, is 'AN OPPORTUNITY FOR YOUTH TO JOIN ARMED FORCES & SERVE NATION'. A blue box contains the text 'FINANCIAL PACKAGE'. Below this, there are two main sections: 'Seva Nidhi' and 'On Completion of Tenure', each with bullet points detailing the financial benefits and outcomes of the scheme. In the top left corner, there are logos for PIB (Press Information Bureau) and the 75th anniversary of India's independence (75 Azadi Ka Amrit Mahotsav).

**AGNIPATH
SCHEME**

**AN OPPORTUNITY FOR
YOUTH TO JOIN ARMED
FORCES & SERVE NATION**

FINANCIAL PACKAGE

- » **Seva Nidhi**
 - › **30%** of monthly emoluments to be contributed by individuals
 - › Equal amount matched & contributed by Government.
 - › Corpus of **Rs 10.04 Lakhs plus** accrued interest, exempted from Income Tax, after four years
- » **On Completion of Tenure**
 - › All candidates entitled 'Seva Nidhi' on completion of four years
 - › Skill Gained Certificate and credits for higher education

Why was Agnipath introduced?

Apart from the unsaid intention of reducing the Armed Forces' wage and pension bill, the government has argued that the scheme will ensure the forces' "youthful profile". At the time the scheme was brought in, the average age in the Armed Forces was 32 years, which Agnipath will bring down to 26 years, if implemented.

Moreover, the government has argued that after the completion of their service, Agniveers would contribute to the civil society "through their education, skill, discipline and other qualities". "This will also lead to availability of a higher-skilled workforce to the economy which will be helpful in productivity gain and overall GDP growth.

Why has Agnipath seen such strong opposition?

Critics say that the scheme creates a "lesser" cadre of soldiers, who work on the same tasks as those with full commission, but with lesser pay, benefits, and prospects.

On the ground, this disparity has caused significant disaffection among those who see military recruitment as a path to economic stability and upward mobility. Multiple parties, including the Congress, AAP, RJD, and Samajwadi Party have called for the scheme to be scrapped.

Is the government willing to roll back the scheme?

Recently, the government has indicated that it is willing to alter the scheme if required, but without compromising on the Armed Forces' youthful profile. The Forces too are carrying out an internal assessment on the impact of the scheme, based on which they will make recommendations to the government on possible changes.

All three services are learnt to have submitted their observations to the Department of Military Affairs.

How many Agniveers have been recruited so far?

In the Army, two batches of 40,000 Agniveers have completed training and are under posting. The third batch of 20,000 began training in November 2023. In the Navy, three batches of 7,385 Agniveers have completed training. In the IAF, 4,955 Agniveers have completed training.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

17. What are Cabinet committees, and why is the CCS the most important of them all?

Why in News?

What are the CCS, and other important committees of the Cabinet, including the CCEA (Cabinet committee on economic affairs) and CCPA (Cabinet committee on political affairs)? What is the composition of the Cabinet committees — and their role and functioning in the government apparatus?

What are the various Cabinet committees?

Once the Union Cabinet is sworn in and ministerial portfolios are allocated, the next step would be the formation of the high-profile Cabinet committees. The Prime Minister sets up these committees with selected members of the Cabinet and assigns specific functions to these committees. The Prime Minister may change the numbers of committees, and modify the functions assigned to them.

The membership of each committee varies from three to eight. Usually, only Cabinet ministers are members of these committees. However, it is not unheard of for non-Cabinet ministers to be members or special invitees to committees. If the Prime Minister himself is a member of any such committee, he acts as the head of that committee.



The committees resolve issues and formulate proposals for the consideration of the Cabinet and take decisions on matters assigned to them. The Cabinet is empowered to review such decisions.

There are eight Cabinet committees at present — the Appointments Committee of the Cabinet, Cabinet Committee on Economic Affairs, Cabinet Committee on Political Affairs, Cabinet Committee on Investment and Growth, Cabinet Committee on Security, Cabinet Committee on

Parliamentary Affairs, Cabinet Committee on Employment & Skill Development, and Cabinet Committee on Accommodation.

The committees on investment and employment were innovations introduced by the Modi government in 2019. All committees except the Cabinet Committee on Accommodation and Cabinet Committee on Parliamentary Affairs are headed by the PM.

Why is CCS so important?

With the Prime Minister helming it, the CCS has the ministers for Finance, Defence, Home Affairs and External Affairs as its members. It is responsible for debates, discussions and appointments of/ in the national security bodies. Major decisions with respect to the significant appointments, issues of national security, defence expenditure of India are taken by CCS.

Besides dealing with defence related issues, the CCS also brainstorms on issues relating to law and order and internal security, and policy matters concerning foreign affairs on security-related issues. It also considers matters relating to atomic energy.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

18. What happens at a swearing-in ceremony and what oaths have to be taken?

Why in News?

Prime Minister-designate Narendra Modi was appointed to the post at a swearing-in ceremony. Also called the oath-taking ceremony, the formal event signifies a person assuming control of a post.



What is a swearing-in ceremony?

It is the formal taking of office, where the person set to occupy the office swears to be loyal to the Constitution and to discharge their duties faithfully.

At different levels of government, the oath is administered by different people. For CMs and ministers at the state level, the Governor administers the oath. For the Prime Minister and the Union Cabinet, the President discharges the function. The oath of office to the President is administered by the Chief Justice of India.

Those taking the oath can either swear in the name of God, or simply “solemnly affirm” (more on this later). The ceremony also underlines the layers which make up India’s political power structure, and affirms the supremacy of the Constitution in our polity.

And what exactly do they swear to?

The words of the oath of allegiance for each post are given in the Constitution of India. The President’s oath of office, in Article 60 of the Constitution, says, “I, A. B., do swear in the name of God/solemnly affirm that I will faithfully execute the office of President (or discharge the functions of the President) of India and will to the best of my ability preserve, protect and defend the Constitution and the law and that I will devote myself to the service and well-being of the people of India.”

The Third Schedule of the Constitution details the oaths for other offices. Holders of these offices also take an oath of secrecy.

Form of oath of secrecy for a Minister for the Union:— “I, A.B., do swear in the name of God/solemnly affirm that I will not directly or indirectly communicate or reveal to any person or persons any matter which shall be brought under my consideration or shall become known to me as a Minister for the Union except as may be required for the due discharge of my duties as such Minister,” the Schedule reads.

There are a few variations to these words in the oaths for post-holders at the state level.

Are variations of oaths allowed?

As earlier reported, constitutional experts and those familiar with procedures and rules of swearing-in ceremonies say that Article 164 makes it clear that the text of the oath has to be read out exactly as it is.

In 2019, Maharashtra Chief Minister Uddhav Thackeray invoked Chattrapati Shivaji and “my parents” before reading out the oath, while his minister Eknath Shinde named Bal Thackeray. While BJP leader Devendra Fadnavis objected and said these acts violated the oath itself, several experts disagreed with that argument.

Former Maharashtra Advocate General Shreehari Aney said: “It is the content of the oath that is important. That should be as per the format laid down in the Constitution. Addition something before or after the oath is not unlawful as long as the substance of the oath is unaltered.”

Similarly, in the Karnataka cabinet’s swearing-in ceremony in 2023, Yamakanmardi MLA Satish Jarkiholi took oath in the name of Buddha and Basavanna, while Chamrajpet MLA Zameer Ahmed Khan took oath in the name of Allah and his mother.

But if a person wanders from the text, it is the responsibility of the person administering the oath — in this instance the Governor — to interrupt and ask the person being sworn in to read it out correctly.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

19. Rajan panel report on NEET, and why TN opposes the exam

Why in News?

Amid the uproar over the recent NEET-UG results that were declared, Tamil Nadu Chief Minister M K Stalin said that his government was the “first to foresee the hazards of NEET”, and “undertook a large-scale campaign against it”.

The results, published 10 days ahead of the scheduled date, have been questioned for several reasons: the unusually large number of candidates — 67, compared to at most, three in the previous five years — who secured the top rank with the maximum possible score; ‘grace marks’ being awarded to some 1,500 candidates for “loss of time”; and 44 of the toppers getting grace marks for getting an answer wrong only because a version of a Class 12 NCERT textbook had an inaccuracy.

The National Testing Agency (NTA, which conducts NEET-UG) and the Education Ministry have set up a committee to review the results of those who got grace marks. Congress leaders have asked for a probe supervised by the Supreme Court, and Maharashtra’s Medical Education Minister has asked for the results to be cancelled. Some candidates have moved High Courts.

What Stalin said

In a post on X (formerly Twitter), Stalin said: “After coming to power [in 2021], we constituted a High-Level Committee headed by Justice A K Rajan to study the impact of the NEET-based admission process. The Committee’s report, based on extensive data analysis and inputs from

students, parents, and the public, has been published and shared with various State Governments to expose NEET's anti-poor and anti-social justice nature."



What Committee found

NEET is the all-India competitive examination held for admission to medical, dental, and AYUSH courses in government and private colleges across India. This year, almost 24 lakh candidates appeared for a little more than 1 lakh MBBS seats in 700-plus medical colleges.

The Rajan Committee found that after NEET was introduced in 2017-18, fewer students from rural areas, those studying in the Tamil medium, those from families with lower incomes, and those from Tamil Nadu state board schools, secured admission in medical colleges in the state.

* While English-medium students secured more seats even in the pre-NEET period, their share rose further post-NEET, while that of Tamil-medium students became smaller.

* In the pre-NEET period from 2010-11 to 2016-17, students from rural areas secured 61.5% seats on average in government medical colleges. In 2020-21, this figure had fallen to 49.91%.

* The share of students from higher-income families increased in the post-NEET period, while that of students from poorer families decreased.

* Post NEET, CBSE students came to have an advantage over Tamil Nadu state board students.

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* The report said that "the argument that the NEET mark, as opposed to HSC (higher secondary certificate of the state board) mark tests the standard of the student and signifies merit is a

baseless argument". It noted that in the pre-NEET period, the average HSC score of students who were admitted to MBBS programmes was 98.16%, compared to 89.05% post-NEET.

* On the impact of coaching centres on admissions, the report said that 99% of students who secured admissions in 2019-20 received training before NEET.

Panel's recommendations

Concluding that NEET has "undermined the diverse societal representation in MBBS and higher medical studies" and favoured affluent sections of society, the Committee asked the state to take immediate steps to eliminate NEET from the admission process.

It recommended that HSC scores, "normalised" to ensure equality across boards, should be used as the admission criteria. It also said that "socio-economic and other demographic adversities" that may result in poor performance in the higher secondary examination may be identified, and "re-profiling of scores" should be done using the framework of an "adversity score".

Following the report

In his X post, Stalin wrote: "Based on the recommendations in the report, a Bill seeking exemption from NEET was unanimously passed by the Tamil Nadu Legislative Assembly. It is now awaiting Presidential assent, after an inordinate delay from the Tamil Nadu Governor's side."

The Tamil Nadu Admission to Under Graduate Medical Degree Courses Bill was passed by the Assembly in 2021, returned by the Governor in 2022, and passed again by the Assembly the same year. It provides for admissions to undergraduate medical, dental and homeopathy courses on the basis of Class 12 marks.

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

20. Why Kesarapalli IT Park — not Amaravati — will host Chandrababu Naidu's swearing-in ceremony

Why in News?

Andhra Pradesh Chief Minister-designate N Chandrababu Naidu is set to be sworn in. With Hyderabad no longer the capital of Andhra Pradesh — the Andhra Pradesh Reorganisation Act, 2014 stated that the city will be the "common capital" of AP and Telangana for a period "not exceeding ten years" — the swearing-in ceremony was initially scheduled to take place in Amravati, the new state capital.

But it will now be held near the Kesarapalli IT Park at Gannavaram in Krishna District.

Why Kesarapalli IT Park?

Inaugurated by former Andhra Chief Minister Y S Rajasekhara Reddy in 2006, the Kesarapalli IT Park is built with the intention of turning Vijayawada into an IT hub.



The reasons for the shift appear to be purely logistical. Multiple leaders including Prime Minister Narendra Modi and representatives from the central government, the BJP, and other political parties are expected to be present at the ceremony. The IT Park is located close to the Vijayawada International Airport (less than 1.5 kilometers) and is less than 20 kilometers from Vijayawada city.

In addition, the IT Park ground where the swearing-in is set to take place has a seating capacity of 50,000 people, covering around 18-20 acres of land, which may prove necessary.

On the other hand, Amaravati is nearly 35 kilometers from the Vijayawada airport which raises a host of logistical concerns considering the political stature of those expected to attend. If

the swearing-in was to be held in Amaravati, at least six helipads would have to be built, to facilitate movement from the airport to Amravati. Moreover, Amravati has seen little development in the past five years.

Why is Amravati 'not ready'?

Naidu himself laid the city's foundation stone in 2015. Spread over 217 sq km of land, the Amaravati city was the TDP chief's pet project, given Andhra Pradesh lost Hyderabad — a city which Naidu helped develop into one of India's major IT hubs — to Telangana in the bifurcation.

But after Y S Jaganmohan Reddy's YSR Congress party secured a landslide victory in the 2019 state assembly elections, it saw little progress. Instead of doubling down on Amravati's development, Jagan came up with a three-capital formula — Visakhapatnam would be the "executive capital", Amaravati would be the "legislative capital", and Kurnool would be the "judicial capital".

Jagan's freeze on the development of Amravati was devastating for farmers, who had handed over their land on being promised prime real estate in the new city, as well as developers connected to Naidu, who were looking to make a quick buck.

Over the past five years, property prices in Amravati tanked to as low as Rs 3,500 per square yard. Naidu's return to power, however, promises better times for the city. The prices now are estimated to be Rs 45,000 per sq yard.

In March 2022, the AP High Court directed the then YSRCP government that Amaravati should be developed as the state capital. The Jagan government subsequently challenged this order in the Supreme Court, where the matter is pending.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

21. Why UGC has allowed admissions twice a year, what could happen now

Why in News?

The University Grants Commission (UGC) has allowed universities to admit students twice a year — in July/ August and January/ February. The UGC has said biannual admissions will give universities the flexibility to take a decision on their admission cycles based on infrastructure and faculty available. It is not mandatory for universities to adopt the new system.

Existing process, change



Students are now admitted once a year, in a single academic session that begins in July/ August. The UGC's decision will allow universities to admit students in two cycles, in July/ August and then in January/February, to undergraduate, postgraduate and PhD programmes.

The new system could allow universities to reflect the admission cycles in some

countries that admit students twice a year, and where the courses that are available in these different admission cycles may also vary. Universities in the United States, for instance, have 'intakes' in the fall (session that begins in August/ September) and in the spring (session that begins in January).

Reason and beneficiaries

The UGC has already attempted the biannual admission process for open and distance learning, and online programmes, and found that "permitting a second academic session in a year has helped nearly half a million students join their degree programmes without waiting for one full academic year".

This could benefit students who may have missed admissions in the July/ August session on account of health issues, delays in board exam results, or personal reasons. With admissions opening twice a year, they need not wait for an entire year before they can apply again.

The universities abroad follow a biannual admission system, and this system in Indian institutions "can enhance their international collaborations and student exchanges".

This system could also help increase the 'gross enrollment ratio' (GER). For higher education, GER is the ratio of students enrolled to the population of the age group eligible for higher education.

What next for institutions

The decision to open admissions twice a year lies with the universities — their academic and executive councils will have to take the call. It will be up to the universities to work out what programmes they might open up for biannual admissions. The availability of infrastructure and faculty will be crucial in deciding to admit students in two admission cycles.

Moreover, there is also the question of admissions that are based on entrance exams. It could be "beneficial to students" if they are also conducted twice a year.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

22. Science is now too vast to be administered by one Minister

Introduction

The portfolios of many of the newly sworn-in Ministers of the 18th Lok Sabha signal no significant changes from what they held in the previous regime. The Bharatiya Janata Party continues to retain the 'major' portfolios, from Home to Telecommunications, with the rest distributed among its coalition allies.

Multiple portfolio to single minister

The 18th Lok Sabha also includes five Ministers of State with independent charge. One of them is Jitendra Singh, whose portfolio spans the Departments of Space (DoS) and Atomic Energy (DAE), the Ministries of Earth Sciences (MoES), Science and Technology (MST), and Personnel, Public Grievances and Pensions.

- **Jitendra Singh**- Minister of State (Independent Charge) of the Ministry of Science and Technology; Minister of State (Independent Charge) of the Ministry of Earth Sciences; Minister of State in the Prime Minister's Office; Minister of State in the Ministry of Personnel, Public Grievances and Pensions; Minister of State in the Department of Atomic Energy; and Minister of State in the Department of Space

Challenges

Each of these ministries or departments by itself is a handful these days. The DoS is grappling with the entry of private sector players in the national space programme as well as managing the development of the maiden human spaceflight mission and new launch vehicles.

The MoES is involved in missions to explore the seabed for mineral resources — an enterprise just beginning to feature in multilateral fora — as well as climate adaptation and mitigation.

The MST oversees India's three foremost research departments at a time when the world is haring to test artificial intelligence, build quantum computers, develop and deploy multi-omics approaches in sectors from agriculture to medicine, and invent advanced energy storage solutions.

The DAE has announced plans to rapidly advance nuclear power, which includes starting phase two of its reactors programme and commissioning one facility every year. Just the sheer amount of technical divergence in the offing here, and their evolving interactions with society at large, merits more than a shared Minister of State.

The fields these bodies oversee also suffer many persistent problems. To pick a few: the timelines of fellowship and grant disbursements for young researchers are often farcical; facilities that can support interdisciplinary research are largely localised and inimical to collaboration;

cutting-edge research is hamstrung by vacillating regulations; intellectual property rights protection is less than airtight, and translational research is bare and restricted to some sectors. Importantly, the gross domestic expenditure on research and development as a fraction of GDP has been declining since 2008-09. While demands for more money should be preceded by capacity building that can productively absorb these funds, the growth of that capacity has been in fits and starts.

Recommendation

Among other things, India sorely needs a separate Minister, ideally of Cabinet rank, for each of its major nodal research bodies to escape their long-standing rut, and have their needs met and problems solved in meaningful fashion during the bumpy rule of a coalition government.

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

23. Bypassing statute of limitation, stay on sedition law: Why UAPA has been invoked against Arundhati Roy



UAPA will be invoked against Arundhati Roy and Sheikh Showkat Hussain for speeches made in Delhi in 2010.

Why in News?

The invocation of stringent UAPA charges, 14 years after an FIR was first registered against author-activist Arundhati Roy and Dr Sheikh Showkat Hussain, former professor at the Central University of Kashmir, for allegedly “delivering provocative speeches in public,” allows the state to bypass the statute of limitation.

In October last year, the Delhi Lt Governor had in the same case granted sanction to prosecute Roy and Hussain under IPC sections 153A, 153B and 505. These provisions, the trifecta often invoked to deal with hate speech cases, all carry a maximum sentence of up to three years.

However, under Section 468 of the Code of Criminal Procedure, courts are barred from taking cognizance of offences which are brought after an undue delay or after the lapse of the period of limitation.

Period of Limitation

The period of limitation, if the offence is punishable with imprisonment for a term exceeding one year but not exceeding three years, is three years under the statute. This means, the state could not have brought a case against Roy and Hussain for promoting enmity between different groups on grounds of religion, race, place of birth, residence, language, etc., and doing acts prejudicial to maintenance of harmony (Section 153A); making imputations, assertions prejudicial to national-integration (Section 153B); or for making statements conducing to public mischief (Section 505).

The FIR, filed in 2010, also carried IPC Section 124A which penalises sedition. While the sedition charge could have removed the limitation bar under Section 468 CrPC, the Supreme Court in May 2022 stayed the operation of the provision, underlining its overbroad definition and rampant misuse.

With the stay on sedition law, invocation of UAPA charges against Roy and Hussain is crucial to ensuring a court accepts the case.

Case under UAPA

Section 13 of the UAPA deals with punishment for unlawful activities for advocating, abetting or inciting any unlawful activity and is punishable with imprisonment up to seven years. The UAPA also grants the state more powers than it has in ordinary criminal law – from relaxing timelines for the state to file chargesheets and its stringent conditions for bail.

Crucially, the definition of “unlawful activity” includes phrases used in the sedition provision. Unlawful activity under the UAPA is defined to include an act which causes “disaffection against India” among others.

Sedition and its interpretation

IPC Section 124A also criminalises an act to “excite disaffection towards the Government established by law in India.”

In the 1962 landmark ruling in *Kedar Nath Singh v State of Bihar* which issued guidelines on invoking sedition law, the Supreme Court said “it is only when the words, written or spoken, etc. which have the pernicious tendency or intention of creating public disorder or disturbance of law and order that the law steps in to prevent such activities in the interest of public order.”

“A citizen has a right to say or write whatever he likes about the Government, or its measures, by way of criticism or comment, so long as he does not incite people to violence against the Government established by law or with the intention of creating public disorder,” the Court had said.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

24. Why the Centre has extended the Digital Health Incentive Scheme

Introduction

The central government has given a year-long extension to the Digital Health Incentive Scheme (DHIS) meant for digitising patients' health records and linking them with the Ayushman Bharat Digital Health Account (ABHA ID). The scheme, which was launched on January 1, 2023, will now remain in effect till June 30, 2025. The Centre has also sought details from states and union territories on the utilisation of funds received through the scheme.

Under the scheme, government and private hospitals, clinics, nursing homes, diagnostic labs, and pharmacies are paid Rs 20 for each additional record they digitise, over and above the threshold of 100 transactions a month. The scheme is applicable to both public and private hospitals and digital solution companies (DSCs) creating digital health records. Under it, each facility or digital solution company can earn incentives up to Rs 4 crores.

Why has the scheme been extended?

The scheme was launched by the National Health Authority (NHA) on January 1, 2023 to promote digital health transactions and to provide a boost to the healthcare providers for adopting digital health.

Subsequently, the NHA has come up with some relaxations like reduced transaction limits in the existing scheme in April 2023. It is meant to incentivise providers of digital health solutions such as hospital's health management information system (HMIS) and laboratory management information system (LMIS) to make available the right software at an affordable cost.

national health authority

ayushman bharat Digital Mission

To promote the adoption of
Ayushman Bharat Digital Mission

**NHA to incentivize the stakeholders
of the digital health ecosystem**

to boost digital health transactions

Incentives for

- HMIS/ LMIS solution providers
- Labs
- Hospitals
- Pharmacies
- Insurance Companies

DIGITAL HEALTH INCENTIVE SCHEME

₹

abdm.gov.in/DHIS 14477

For more details scan

QR code

What impact will it have on hospitals?

The scheme helps reimburse hospitals their expenditure on digitising their facility. This expenditure was often reported as a significant bottleneck for hospitals to move to digital health.

Hospitals and clinics have to install computers and laptops, purchase an internet connection, and software (HMIS/LMIS) to go digital. A behaviour change component is also involved in moving from physical mode of working to digital. The scheme is on the lines of the incentives given for promotion of UPI.

How can it be beneficial for the patients?

DHIS equips the care providers to become digital, thereby enabling better healthcare services and more convenience for patients. By enabling digital transactions – the patient's waiting time gets reduced. Patients will be able to scan a QR code and avail quick OPD registrations. They can also securely view, access, and share their health records with the care providers.

Without the scheme, hospitals are likely to recover the digitisation costs from the patients. With digital records being maintained, patients are less likely to get same tests done repeatedly due to loss of records, especially in cases of migrant workers and patients travelling from one state to another.

What is an ABHA ID and what is its purpose?

ABHA ID is a unique identity for people — just like an Aadhaar ID — that allows one to store and share their medical records digitally. So far, around 64 crore ABHA IDs have been created, according to the NHA.

Once the ID is created – whenever a patient avails a healthcare service at centres linked to the digital framework – all their records are linked to it. This ID can then be used to securely store, access, and share the healthcare records, such as doctor's prescriptions, diagnostic test results.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

25. Why NTA withdrew 'grace marks' awarded to 1,563 NEET candidates

Why in News?

The National Testing Agency (NTA) will re-conduct the National Eligibility cum Entrance Test for undergraduate medical studies (or NEET UG) for 1,563 candidates on June 23.

These candidates who were awarded 'grace marks' due to the loss of exam time now have two options before them: either to accept the NEET-UG score that they were originally awarded (without grace marks) or to re-appear for the exam on June 23.



Why were grace marks awarded in the first place?

After the exam on May 5, many candidates filed writ petitions before the High Courts of Punjab & Haryana, Delhi, and Chhattisgarh, alleging that they were not given enough time to complete. Exams started late in select centres — two in Chhattisgarh, and one each in Meghalaya, Surat, Haryana's Bahadurgarh, and Chandigarh.

A Grievance Redressal Committee (GRC) set up by the NTA to look into these allegations found merit in the students' grievances, and suggested that affected candidates be compensated for the time lost. They advised that the same normalisation formula be adopted which had been approved by the Supreme Court in relation to the CLAT examination in 2018, where something similar had occurred.

Based on this, the NTA awarded grace marks to 1,563 candidates. Six of them, however, ended up getting a perfect 720/720 due to this, making them NEET-UG All-India toppers. After the results were announced, several students and other stakeholders approached the NTA and the Supreme Court, alleging that this was not a fair way to deal with the situation.

On June 8, the Ministry of Education (MoE) and the NTA set up a high-powered committee (HPC) to review the results of the 1,563 candidates in question.

What did the HPC recommend?

The HPC, which was asked to submit appropriate recommendations within seven days, comprised the four senior experts.

After holding meetings, the panel suggested that the normalised scores of all 1,563 candidates be cancelled and withdrawn. It said that the impacted students should be informed of their actual scores (without grace marks) through their registered email IDs, and also be given the opportunity to appear for a re-examination. Those who do not wish to appear for this retest, should be awarded their actual marks in the test conducted on May 5. Those who do appear for the retest would have their previous score invalidated. The NTA accepted these suggestions.

What was the HPC's rationale behind these recommendations?

The HPC concluded that the GRC had failed to consider a few points while adopting the normalisation formula of the CLAT 2018 Supreme Court verdict.

In its report submitted to the NTA, the HPC states that the GRC did not consider the fact that unlike computer-based tests, OMR-based exams such as NEET-UG do not have an automated system for time assessment (i.e. the timestamp of an examinee's activities during the exam).

The NTA had determined the time lost by candidates (due to delays on the part of the NTA's invigilators and staff) based on reports from exam invigilators, staff, observers, and the examination of CCTV footage. This, the committee felt, did not provide a level playing field in terms of determining the time lost across six centers.

Moreover, the HPC noticed that the GRC's recommended formula to compensate candidates for the time lost did not take into account that the compensation only had to be done for unattempted questions. This led to a "skewed situation" in which many candidates ended up scoring very high marks.

Thus, the HPC concluded that the "most appropriate, fair and reasonable solution to the issue would be to subject 1563 candidates to a retest at the earliest possible."

What happens now?

The NTA will now conduct a retest for these 1,563 candidates, and any other student for whom the directions of re-examination have been/ will be passed by Courts in individual cases filed. Official communication will be shared with the affected students via their registered email addresses, and fresh admit cards will soon be issued. Results for the retest will be announced on or before June 30.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

26. Red Fort case: What are the standards for awarding death sentence, the President's 'mercy' power

Why in News?

President Droupadi Murmu has rejected a mercy petition filed by Pakistani national Mohammed Arif who was sentenced to death for the December 22, 2000 terrorist attack at the Red Fort in which three people including two Army jawans were killed.

The President's decision, made on May 27, came after Arif failed to obtain relief from the Delhi High Court and Supreme Court in his appeals against a trial court order of October 2005. He can challenge the President's decision and prolong the proceedings further.

What standard do courts apply in death sentence cases?

In 1980, the Supreme Court (Bachan Singh v. State of Punjab) upheld the constitutionality of the death penalty, but established important guardrails. "Judges", the court said, "should never be bloodthirsty", and the death penalty should not be awarded "save in the rarest of rare cases when the alternative option is unquestionably foreclosed", and all possible mitigating circumstances have been considered. The court has reaffirmed the "rarest of rare" standard in several decisions since then.

The Report of the 262nd Law Commission published in 2015 recommended the “absolute abolition” of the death penalty “for all crimes other than terrorism related offences and waging war”.

On the President’s power to “grant pardons, etc., and to suspend, remit or commute sentences in certain cases” (Article 72 of the Constitution), the Law Commission Report said these ‘mercy powers’ provided additional protection against possible miscarriage of justice and, “therefore, cases found unfit for mercy merit capital punishment.”

What happened during the attack at the Red Fort? How was Arif arrested?

Late evening on December 22, 2000, two Lashkar-e-Tayyeba terrorists sneaked into the Red Fort and opened fire, killing two jawans of the Army’s Rajputana Rifles regiment and a civilian security guard before escaping.



President Murmu Rejects Mercy Plea of Lashkar Terrorist Convicted for 2000 Red Fort Attack

Mohammed Arif of the Lashkar-e-Taiba was sentenced to death in 2005 for his role in the attack, which killed three security personnel. The Delhi HC and the SC have since upheld his sentence.

Investigators made a breakthrough after assault rifles were found abandoned outside the Red Fort, and four detonators with tags which said in Urdu: “Khabardar. Grenade firing ke liye taiyyar hai. Safety pin sirf hamle ke waqt nikalein,”.

A polythene bag containing cash and a slip with a mobile phone number on it was also found, which led Delhi Police to Arif alias Ashfaq. He was arrested on December 26, along with his wife Rehmana Yusuf Farooqi.

Arif directed police to one Abu Shyamal alias Faizal, who was killed in an encounter

at his hideout in Batla House, Okhla. Another alleged militant identified as Abu Sufian was killed in an encounter in Srinagar.

Delhi Police filed a chargesheet against Arif and 21 others on February 20, 2001, and a supplementary chargesheet on March 25 that year. The trial of 11 accused began on September 11, 2001. Over the next three years, the prosecution examined 235 witnesses, and the trial court reserved judgment on October 14, 2005. On October 31, the court found seven of the accused guilty, and sentenced Arif to death.

How did Arif’s appeals process progress?

In 2007, the Delhi High Court confirmed the trial court’s decision to sentence Arif to death. Arif then appealed to the Supreme Court. On August 10, 2011, a Bench of Justices V S Sirpurkar and T S Thakur rejected the appeal, calling the attack an “undeclared war by some foreign mercenaries”.

Providing a historical overview of Red Fort to highlight its significance as a national monument, the Bench stated that “even without any reference to any other case law”, the case satisfies the standard of the “rarest of rare”.

Arif continued to file petitions at the Supreme Court against the death sentence. The first review petition was rejected in August 2012, and the following curative petition — where the apex court can only interfere if there is an obvious error in its decision — was rejected in January 2014.

That same year, Arif filed another writ petition, arguing that cases arising out of a death sentence should be heard by a Bench of three judges or more, and that his 2012 review petition should be heard afresh. A five-judge Constitution Bench in September 2014 agreed with his arguments, and held that “at least three judicially trained minds need to apply their minds at the final stage of the journey of a convict on death row”.

The case was then placed before a three-judge Bench led by former Chief Justice of India U U Lalit. On November 3, 2022, nearly 22 years after the attack, the Bench rejected Arif’s plea, finding that “there was a direct attack on the unity, integrity and sovereignty of India.”

The court set aside findings based on call data records, but held that “other circumstances on record do clearly spell out and prove beyond any doubt the involvement of the review petitioner in the crime...”.

President Murmu received Arif’s mercy petition on May 15, 2024.

What can happen here onward?

Arif has the option of challenging the President’s rejection of his mercy petition. At a procedural level, the apex court has held that the President’s power must be exercised based on the aid and advice of the Council of Ministers, and can be challenged on multiple grounds — including that relevant material was not considered, the power was exercised based on political considerations, or that there was no application of mind.

The top court has also commuted the death sentence in cases of inordinate delay in deciding mercy petitions, such as in the case of Shatrugan Chauhan v. State of U.P. (2014).

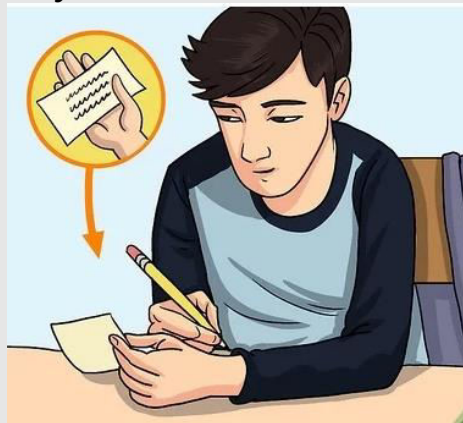
The court also commuted the sentence of one Gurmeet Singh after he spent 27 years in custody (and 21 years on death row). The court found that there was an inordinate delay in deciding his mercy petition, which was disposed of in March 2013 more than seven years after the Supreme Court first upheld the death sentence.

In April 2023, the Supreme Court declined to interfere with an order of the Bombay High Court, which commuted the death sentence awarded to a woman and her sister on grounds of inordinate delay in deciding the mercy petitions of the accused.

Arif has spent over 23 years in custody, and close to 19 years under a death sentence.

27. Act that punishes organised cheating in government exams comes into effect

Why in News?



The Public Examinations (Prevention of Unfair Means) Bill, 2024 that has provision for up to five years' imprisonment and a fine of up to ₹1 crore for malpractices and organised cheating in government recruitment exams was notified by the Union government to come into effect from June 21.

The University Grants Commission-National Eligibility Test 2024 (UGC-NET) examination that was cancelled recently on grounds of being compromised and is being investigated by the Central Bureau of Investigation.

List of offences

1. The Act mentions punishments for "leakage of question paper or answer key", "directly or indirectly assisting the candidate in any manner unauthorisedly in the public examination" and "tampering with the computer network or a computer resource or a computer system" as offences done by a person, group of persons or institutions.
2. Besides these, "creation of fake website to cheat or for monetary gain", "conduct of fake examination, issuance of fake admit cards or offer letters to cheat or for monetary gain" and "manipulation in seating arrangements, allocation of dates and shifts for the candidates to facilitate adopting unfair means in examinations" are also among the offences punishable under the law.

Punishment

Any person or persons resorting to unfair means and offences under this Act shall be punished with imprisonment for a term not less than three years but which may extend to five years and with fine up to ₹10 lakh.

Service provider

A service provider, engaged by the public examination authority for conduct of examinations, shall also be liable to be punished with imposition of a fine up to ₹1 crore "and proportionate cost of examination shall also be recovered" from it, according to the Act.

Such service providers shall also be barred from being assigned with any responsibility for the conduct of any public examination for a period of four years.

The Act defines service provider as any agency, organisation, body, association of persons, business entity, company, partnership or single proprietorship firm, including its associates, sub-contractors and provider of support of any computer resource or any material, by whatever name it may be called, "which is engaged by the public examination authority for conduct of public examination".

Relevance: GS Prelims & Mains Paper II; Governance

Source: The Hindu

28. Post Office Act, 2023 comes into force

Introduction

The Post Office Act came into force on June 18. The Act came in to "consolidate and amend the law relating to Post Office in India," which today provides many services beyond simply mail delivery, the primary concern of the older Indian Post Office Act of 1898.

The Post Office network today has become a vehicle for delivery of different citizen-centric services, which necessitated the repeal enactment of a new law, the Act states.



Post officers can "intercept" any item

Repealing the 125-year-old Indian Post Office Act of 1898, the Act contains provisions that allow the Centre to intercept, open, or detain any item, and deliver it to customs authorities.

Notably, Section 9 of the Act allows the Centre to, by notification, empower any officer to "intercept, open or detain any item" in the interest of state security, friendly relations with foreign states, public order, emergency, public safety, or contravention of other laws. This provision also allows post officers to hand over postal items to customs authorities if they are suspected to contain any prohibited item, or if such items are liable to duty. This is similar to Sections 19, 25, and 26 of the 1898 Act.

Section 19(1) disallowed persons from sending by post "any explosive, dangerous, filthy, noxious or deleterious substance, any sharp instrument not properly protected, or any living creature which is either noxious or likely to injure postal articles" or postal service officers in the course of transmission.

Furthermore, the power to intercept any prohibited or restricted articles during transmission by post, or any postal article for public good during emergency or in the interest of public safety could also be exercised by the government and its officials under Sections 25 and 26 of the 1898 Act.

The Law Commission in 1968, while examining the 1898 Act, observed that the term emergency is not explicitly defined, thereby allowing significant discretion while intercepting goods.

The Post Office exempt from liability

Besides this, Section 10 exempts the Post Office and its officer from "any liability by reason of any loss, mis-delivery, delay, or damage in course of any service provided by the Post Office," except such liability as may be prescribed. The 1898 Act too exempted the government from liability for any lapses in postal service, except where such liability was undertaken expressly.

Moreover, the Act removes all penalties and offences under the 1898 Act. For example, offences committed by post office officials such as misconduct, fraud, and theft, among others, have been deleted entirely. At the same time, if anyone refuses or neglects to pay the charges for availing a service provided by the Post Office, such amount shall be recoverable "as if it were an arrear of land revenue due" from them.

Removes Centre's exclusivity

The Act has removed Section 4 of the 1898 Act, which allowed the Centre the exclusive privilege of conveying by post, from one place to another, all letters.

Effectively, this exclusivity was already lost by the 1980s, with the rise of private courier services. Since neither the Post Office Act of 1898 nor the Indian Post Office Rules, 1933 had defined the term "letter" anywhere, courier services bypassed the 1898 law by simply calling their couriers "documents" and "parcels", rather than "letters."

The Act, for the first time, regulates private courier services by bringing it under its ambit. While the government acknowledges its lack of exclusivity, it has also widened the ambit of the law in order to intercept and detain any postal article, as opposed to just letters.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

29. Verification of EVM Burnt memory

Why in News?

In a first, 11 candidates in the recently-concluded 2024 Lok Sabha and State Assembly elections have applied for verification of the burnt memory of the Ballot Units and Control Units of electronic voting machines (EVMs), and of Voter Verified Paper Audit Trail (VVPAT) units.

The remedy of verification was made available to losing candidates by the Supreme Court this April. The candidates would have to bear expenses of the verification process, but they would be refunded if any tampering was found.



Burnt memory of EVMs and VVPAT units

The "burnt memory" of EVMs (Electronic Voting Machines) and VVPATs (Voter Verified Paper Audit Trails) refers to the non-volatile memory in these devices where data is stored permanently, even when the device is powered off.

This memory contains critical information such as:

- a. EVMs: Votes cast during the election, the configuration of the machine, and other operational details.
- b. VVPATs: Printed records of the votes cast, which serve as a verifiable paper trail for the electronic votes.

The process aims to verify the integrity and accuracy of the election results recorded in the EVMs and VVPATs.

April 2024 order of the Supreme Court

The Supreme court in its 2024 order held

1. Rejected the plea for 100% verification of VVPAT slips

On April 26, 2024, the Supreme Court upheld the EVM-VVPAT system and rejected a plea to return to ballot papers and for 100% counting of VVPAT slips.

2. Verification of the burnt memories of EVMs and VVPATs

The court directed the Election Commission of India (ECI) to allow verification of EVM and VVPAT burnt memories.

This verification can be requested by second- and third-placed candidates. It applies to up to 5% of machines in an Assembly constituency or Lok Sabha segment.

The burnt memory/microcontroller in 5% of the EVMs, including the control unit, ballot unit, and VVPAT, should be checked for tampering by engineers from the EVM manufacturers upon written request by the second- or third-placed candidates.

Candidates must identify the EVMs by polling station or serial number and can be present during the verification.

3. Cost of the process

Requests for verification must be made within seven days of the result declaration. The candidates must bear the verification costs, which will be refunded if tampering is found.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

30. The Telecommunications Act, 2023: Ushering in new era of connectivity

Why in News?

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



The Telecommunications Act, 2023, was passed by the Parliament in December 2023, received the assent of the President of India on 24.12.2023 and was published in the official Gazette on 24.12.2023.

The salient features of the sections that have been brought into force

with effect from 26.06.2024:

1. RoW framework: Right of Way provides for effective RoW framework, both on public and private property. The definition of public entities has been broadened to include government agencies, local bodies and PPP projects like airports, seaports, and highways.

Public entities shall be obligated to provide right of way except in special circumstances. The fee for right of way would be subject to a ceiling. The Act provides complete framework for RoW in respect of private property based on mutual agreement.

The Act also provides that the RoW to be granted shall be non-discriminatory and as far as practicable on a non-exclusive basis. It also provides that telecommunication infrastructure shall be distinct from the property it is installed on. This will help reduce the disputes when property is sold or leased.

2. Common ducts: In line with PM Gati Shakti vision, the law provides for Central Government to establish common ducts and cable corridors.

3. Telecommunication standards: Telecom is a global industry. To ensure national security and promote India's technology developers, the Act lays down powers to set standards and conformity assessment measures for telecommunication services, telecommunication networks, telecommunication security, etc.

4. National Security and Public safety: The Act provides strong provisions to take necessary measures for national security and public safety.

5. Inclusive service delivery, Innovation and technology development: The Act expands the scope of Universal Service Obligation Fund to include supporting universal services in underserved rural, remote, and urban areas; supporting research and development of telecommunication services, technologies, products and pilot projects. The Act also provides legal framework for Regulatory Sandbox to facilitate innovation, and deployment of new technology.

6. Protection of users: Telecommunication is a powerful tool for empowerment of masses. However, it can be misused to cause harm to users. The Act provides measures for protection of users from unsolicited commercial communication and create a grievance redressal mechanism.

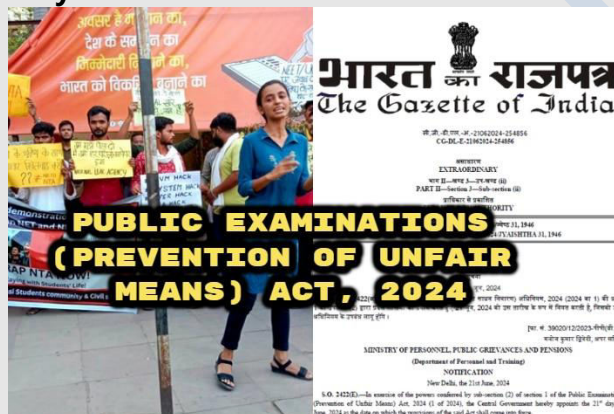
7. Digital by design: The Act provides that the implementation shall be digital by design bringing online dispute resolution and other framework.

Relevance: GS Prelims & Mains Paper II; Governance

Source: PIB

31. How Public Examinations Act can deal with cheating

Why in News?



The Centre notified the Rules required to operationalise The Public Examinations (Prevention of Unfair Means) Act, 2024, the anti-cheating law passed by Parliament in February. The law itself came into force on June 21, after it was notified in the official gazette.

The Rules notified by the Ministry of Personnel, Public Grievances and Pensions, provide a framework of actions to prevent

the use of unfair means in public examinations, including appointing Centre Coordinators, venue in-charges, and Regional Officers.

The government is under great pressure from the opposition and protesting students across the country after being forced to postpone the UGC-NET, CSIR UGC NET, and NEET PG competitive exams. The CBI is investigating NEET UG after investigators in Bihar found evidence of a paper leak.

What the Rules say

COMPUTER-BASED TEST: The Rules lay down full parameters of Computer Based Tests (CBT) — from the registration of candidates, allocation of centres, and issue of admit cards to the

opening and distribution of question papers, evaluation of answers, and the final recommendations.

The central government's National Recruitment Agency shall prepare the norms, standards, and guidelines for CBTs in consultation with stakeholders. Once finalised, these norms will be notified by the Centre.

The notified norms, standards, and guidelines shall cover both physical and digital infrastructure and activities, including the standard operating procedure (SOP) for registration of public examination centres; space requirements at CBT centres and layout of seating; specifications and layout of computer nodes, server and network infrastructure, and the electronic platform; candidate check in, biometric registration, security and screening; setting and loading of question papers; invigilation; and all post-examination activities.

CENTRE COORDINATOR: The Rules provide for the appointment of a Centre Coordinator for Public Examinations, who may be "serving or retired employees of the Central Government, State Government, Public Sector Undertakings, Public Sector Banks, Government Universities, autonomous bodies and other Government Organisations".

According to the Rules, the Centre Coordinator shall be the representative of the public examination authority for coordination of activities of the various service providers and the examination authority, and for overseeing the compliance of all norms, standards, and guidelines for the exam.

Public examination

Which exams are covered by the law?

Section 2(k) of The Public Examinations (Prevention of Unfair Means) Act, 2024 defines a "public examination" as "any examination conducted by the public examination authority" listed in the Schedule of the Act, or any "such other authority as may be notified by the Central Government".

The Schedule lists five public examination authorities: (i) Union Public Service Commission (UPSC) (ii) Staff Selection Commission (SSC) (iii) the Railway Recruitment Boards (RRBs), (iv) Institute of Banking Personnel Selection (IBPS) (v) National Testing Agency (NTA).

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" 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.

Use of unfair means

What constitutes the use of unfair means for the purposes of the Act?

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

These actions 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.

The Rules notified provide a detailed framework and format for reporting incidents of use of unfair means.

Rationale for the law

The ongoing controversy over alleged paper leaks would appear to provide an obvious justification for such an Act, and future incidents of the use of unfair means in examinations will be prosecuted under the provisions of the law.

There have been a very large number of cases of question paper leaks in recruitment exams across the country in recent years.

Relevance: GS Prelims & Mains Paper II; Governance

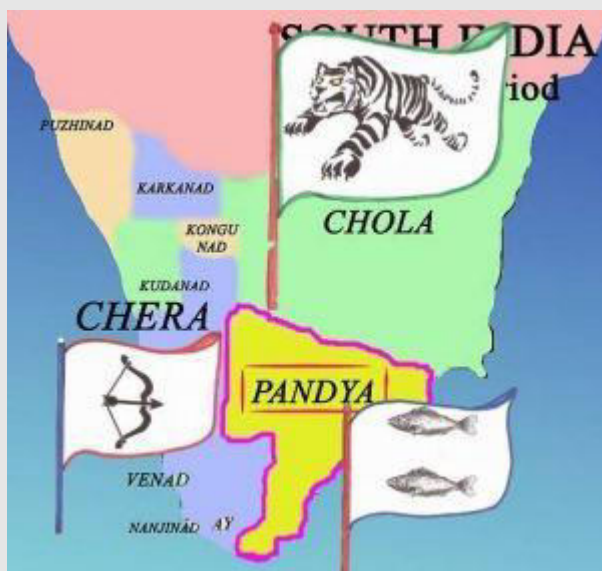
Source: Indian Express

32. Behind Kerala Assembly's demand to rename state as Keralam

Why in News?

Kerala Assembly unanimously passed a resolution urging the Centre to rename the state as "Keralam" in the Constitution. This is the second time in the past year that such a resolution has been passed. The resolution was moved by Kerala Chief Minister Pinarayi Vijayan.

Why Keralam



Kerala is the English word for the Malyali Keralam. There are several theories regarding its etymological roots. The earliest mention of the word can be found in Emperor Ashoka's Rock Edict II, dated to 257 BCE. The edict as translated mentions: "Everywhere in the dominions of King Priyadarsin, Beloved of the gods, as well as those of his frontier sovereigns, such as the Chodas [Cholas], Pandyas, Satiyaputra, Ketalaputra [Keralaputra]..."

Keralaputra, literally "son of Kerala" in Sanskrit, refers to the dynasty of the Cheras, one of the three main kingdoms of southern

India. The word 'keram' is Canarese (or Kannada) for 'cheram', which is used to refer to the coastal land between Gokarna (in Karnataka) and Kanyakumari (Tamil Nadu, India's southern tip). The origin of the term could possibly be from 'cher', which means to join in Old Tamil.

Story of statehood

The demand for a united Malayalam-speaking state first gathered momentum in the 1920s, and aimed to integrate the princely states of Travancore and Cochin, and the Malabar district of the Madras Presidency.

After independence, on July 1, 1949 the two Malayalam-speaking princely states were integrated to form the state of Travancore-Cochin. The state of Kerala was finally created after the State Reorganisation Commission's recommendation creating states on linguistic-bases. The state of Kerala came into being on November 1, 1956.

Relevance: GS Prelims; Governance

Source: Indian Express

33. What is Enemy Agents Ordinance, tough law applicable in Jammu and Kashmir?

Why in News?



Jammu and Kashmir Director General of Police (DGP) recently said those found assisting militants in J&K should be tried by investigating agencies under the Enemy Agents Ordinance, 2005. The law is more stringent than the Unlawful Activities (Prevention) Act (UAPA) and

has the punishment of either a life term or a death sentence.

"The fighters can't be brought under the realm of investigation, they should be shot dead. Those who support them, if we are talking of investigation there, I've said somewhere that they will be treated as enemy agents," DGP Swain said.

What is the Enemy Agents Ordinance?

The J&K Enemy Agents Ordinance was first issued in 1917 by the then Dogra Maharaja of J&K. It is referred to as an 'ordinance' since laws made during the Dogra rule were called ordinances. According to the ordinance, "whosoever is an enemy agent or, with an intent to aid the enemy, conspires with any other person to any act which is designed or likely to give assistance to the enemy or to impede the military or air operations of Indian forces or to endanger life or is guilty of incendiaryism shall be punishable with death or rigorous imprisonment for life or with rigorous imprisonment for a term which may extend to 10 years and shall also be liable to fine".

Post independence

After Partition in 1947, the ordinance was incorporated as a law in the erstwhile state and was also amended.

In 2019, when Article 370 of the Constitution was repealed, J&K's legal framework also underwent several changes. The Jammu and Kashmir Reorganisation Act was passed, which listed out state laws that were to continue while several others were repealed and replaced with Indian laws.

While the security laws such as Enemy Agents Ordinance and Public Safety Act remained; the Ranbir Penal Code was replaced with the Indian Penal Code. Other laws including The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 or Forest Act, and The Scheduled Caste and the Scheduled Tribes (Prevention of Atrocities) Act, 1989 were extended to J&K as well.

How are trials conducted under the ordinance?

The trial under the Enemy Agents Ordinance is conducted by a special judge who is appointed by the "government in consultation with the High Court". Under the ordinance, the accused cannot engage a lawyer to defend herself unless permitted by the court.

There is no provision for appeal against the verdict, and the decision of the special judge can only be reviewed "by a person chosen by the Government from the judges of the High Court and the decision of that person shall be final".

The ordinance also bars any disclosure or publication of the case tried under it. "Any person who, without the previous authorisation of the Government, discloses or publishes any information with respect to any proceedings or with respects to any person proceeded against under this Ordinance, shall be punishable with imprisonment for a term which may extend to two years, or with fine, or with both".

Has anyone been tried under this ordinance?

There are scores of Kashmiris who are or have been tried and sentenced under the Enemy Agents Ordinance. Jammu Kashmir Liberation Front founder Maqbool Bhat, who was hanged in Tihar Jail in 1984, was charged under the ordinance.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

34. Parts of new Telecom Act came into force: What to expect

Why in News?

Multiple sections of the Telecommunications Act, 2023 came into effect, giving way to what is the first piece of the larger technology legislative puzzle to fall into place. This is among the three key laws the Centre wants to put together as a comprehensive legal framework for the country's burgeoning tech sector.

The law, which has been criticised for its ambiguity on whether internet-based services fall under its ambit, also attempts to bring in a slew of structural changes to current regulatory mechanisms in the sector. These range from simplification of the licensing regime, clarity on spectrum assignment, and a stringent requirement of user verification, among other things.

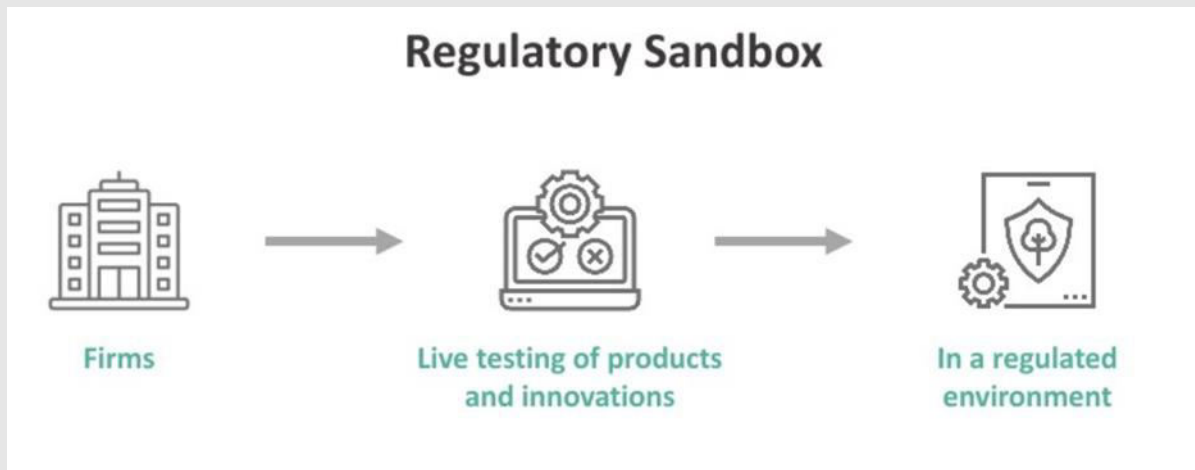
What's coming into force, what's not

Sections 1, 2, 10 to 30, 42 to 44, 46, 47, 50 to 58, 61 and 62 of the Act has come into effect. These sections include the entire chapter on right of way reforms (they bring in a state government-led dispute resolution structure, where state bureaucracy can decide right of way issues that are related to permits for telecom network roll out), standards, public safety, national security and protection of telecommunication networks, Digital Bharat Nidhi (a replacement of the erstwhile Universal Service Obligation Fund), innovation and technology development, protection of users, offences and certain miscellaneous sections.

Some of these provisions (for instance, the right of way reforms), however, need further rules to be made completely operational. These rules are yet to be released by the Department of Telecommunications (DoT). Other provisions, like the suspension and interception of telecommunication services, which go into effect under the Act, have been in place under the older laws as well.

Sandboxes for innovation

Creating sandboxes for innovation — meaning building a controlled environment in which organisations can test and experiment with new technologies and ideas without the risk of failure — is a new provision which will come into force.



The Act envisions the creation of a live testing environment where new products, services, processes and business models may be deployed, on a limited set of users, for a specified period of time, with certain relaxations.

Reforms yet to come into force

Crucially, some of the big ticket reforms that the Telecom Act wished to achieve, including the introduction of an authorisation regime, mandatory biometric verification of users, amendments to the Telecom Regulatory Authority of India Act, 1997, and allowing administrative allocation of spectrum for satellite communications (in place of allocation of spectrum by way of auction), are yet to come into effect.

Some of the provisions – such as suspension and interception of messages – that came into force were already in force through extant laws such as the Indian Telegraph Act. Others related to duties of users, criminalisation of certain acts such as tampering with telecom identifiers, and creation of regulatory sandboxes are new.

Relevance: GS Prelims & Mains Paper II; Governance

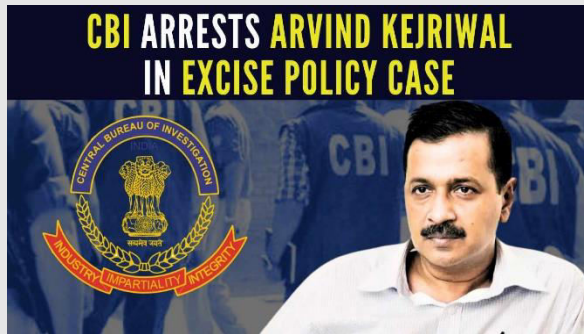
Source: Indian Express

35. Why has CBI arrested Kejriwal, and how is its case different from the ED's?

Why in News?

Ahead of the Supreme Court hearing on granting bail to Delhi Chief Minister Arvind Kejriwal on money laundering charges linked to the alleged excise policy scam, a Delhi court granted the Central Bureau of Investigation (CBI) a 3-day custody of Kejriwal.

The CBI, earlier in the day, formally arrested Kejriwal and sought custody in the corruption case.



How is the investigation of the CBI different from that of the Enforcement Directorate (ED)?

While the Enforcement Directorate (ED) case investigates the alleged money trail, the CBI case will have to prove corruption and bribe-taking by public servants.

The ED arrested Kejriwal in March on money laundering charges. This was the only charge against Kejriwal — the generation of alleged tainted funds and its use. Section 3 of the Prevention of Money Laundering Act (PMLA), which criminalises money laundering, lists concealment, possession, acquisition, use, projecting as untainted property, or claiming as untainted property as crimes.

The CBI had registered a case of corruption under the Prevention of Corruption Act (PC Act) back in 2022, but it did not name Kejriwal as an accused. In fact, this March, when the ED took Kejriwal into custody, Additional Solicitor General S V Raju had told the Delhi court that “one need not be an accused in the predicate offence to be an accused under PMLA.”

Essentially, the ED’s argument was that money laundering was a standalone offence that did not depend on the existence of a predicate offence.

In April, the CBI called Kejriwal for questioning. Kejriwal has so far not been named as an accused in the corruption case.

So why has Kejriwal been arrested now?

While the CBI always had the option of arresting Kejriwal, it would first need to gather some plausible evidence linking Kejriwal directly to the alleged scam.

This direct link is suspect in the ED’s case as well. The ED has made a case alleging vicarious liability, both Chief Minister of Delhi and as convenor of the Aam Admi Party, to link Kejriwal to the alleged tainted funds.

However, this cannot be an option in the corruption case. Additionally, since the bar for granting bail under the PMLA is high, leading the prosecution effort with the ED case allows for prolonged custody of the accused.

How do courts grant bail in corruption cases?

An accused can move for anticipatory bail in a corruption case. The grant of bail in non-bailable offences is subject to judicial discretion.

Unlike the PMLA, which is an alternative criminal law framework to deal with the offence of money laundering, the PC Act itself does not impose stringent qualifications for bail.

Under the PC Act, an accused moves court for regular bail under the Code of Criminal Procedure. However, as per an amendment introduced in 2014, no accused shall be released on bail under the PC Act unless an opportunity is provided to the public prosecutor to oppose the bail application.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express

1. Seven countries whose leaders attended Modi's swearing today

Why in News?

Narendra Modi has been sworn in as the Prime Minister of India for a third time. A number of dignitaries were present for the functions, including the leaders of seven countries with whom India shares a close relationship.



1. Bangladesh, Prime Minister Sheikh Hasina

Export-import: \$11.1 Billion - \$1.8 Billion

India and Bangladesh have deep historical ties rooted in India's role in Bangladesh's liberation. Today, they share a robust trade relationship, which amounted to \$12.9 Billion in the 2023-24 financial year, with India exporting machinery and textile, while Bangladesh exports garments and fish. The country has consistently been among the top five to ten export destinations for India. Culturally, too, Bangladesh and India share close bonds with frequent cultural exchanges and educational collaborations taking place.

Bangladesh, specifically Sheikh Hasina's dispensation, has been crucial for India's national security by clamping down on militants and separatist groups who used to seek shelter there.

Currently, India and Bangladesh are still working towards improving connectivity, and a comprehensive water-sharing agreement.

2. Sri Lanka, President Ranil Wickremesinghe

Export-import: \$4.1 Billion - \$1.4 Billion

Ties between the people of India and Sri Lanka can be traced back to ancient times. In 2023-24, their bilateral trade was valued at \$5.5 billion, with significant Indian exports of petroleum and automobiles.

Both India and Sri Lanka share deep religious and cultural ties, especially between the minority Sri Lankan Tamils and the Tamils of India. Future discussions between the two countries are expected to focus on enhancing maritime security cooperation, settle maritime disputes, and strengthen economic cooperation.

3. Nepal, Prime Minister Pushpa Kamal Dahal alias 'Prachanda'

Export-import \$7 Billion - \$0.9 Billion

India and Nepal share an open-border relationship, reflecting their deep historical and cultural ties. In 2023-24, bilateral trade amounted to \$7.9 Billion, dominated by Indian exports of petroleum products and machinery. The two countries also share deep cultural and religious ties, with a thriving tourism industry (especially religious tourism) between the two countries. Energy and water-sharing disputes have in the past been a sticking point.

4. Maldives, President Mohammad Muizzu

Export-import: \$0.9 Billion - \$0.09 Billion

Over the years, India and the Maldives have maintained close ties. Most notably, India helped prevent a coup in Maldives in 1988. The Indian Armed Forces continued to have a modest presence in the archipelago, until President Muizzu came in on an "India Out" platform. Relationships have since soured, but Muizzu's presence in New Delhi indicates a possible thaw. In 2023-24, trade between the two nations felt just sort of \$1 billion, primarily involving marine products and construction materials. Many students from Maldives come to India for further studies. Apart from improving strained ties, upcoming discussions will likely be centred around issues such as climate change and sustainable development.

5. Seychelles, Vice President Ahmed Afif

Export-import: \$76 million-\$9 million

India and Seychelles share a strategic relationship, particularly in maritime security and environmental cooperation. Located north of Madagascar, Seychelles is among the most strategically important archipelagos in the Indian Ocean. Trade between the two countries was valued at \$85 million in 2023-24, with a focus on fisheries and tourism.

Both nations have, in the past, engaged in joint heritage conservation projects. Future dialogues will aim to bolster environmental protection agreements, crucial for addressing climate change whose impacts will be disastrous for the island country.

6. Bhutan, Prime Minister Tshering Tobgay

Export-import: \$964 million- \$339 million

India and Bhutan are, what one can call, all weather friends with significant economic and cultural exchanges. In 2023-24, bilateral trade was \$1.3 billion, with India being a major partner in Bhutan's hydroelectric power sector. Cultural ties are reinforced through educational exchanges and collaborative efforts in preserving Bhutanese heritage. Future discussions will likely focus on expanding economic cooperation through new trade agreements.

7. Mauritius, Prime Minister Pravind Kumar Jugnauth

Export-import: \$778 million-\$74 million

India and Mauritius enjoy close relations, underpinned by strong cultural and economic ties. Bilateral trade in 2023-24 was valued at \$ 852 million, with key exports from Mauritius including textiles and sugar. Culturally, the countries are connected by a significant Indian diaspora in Mauritius, which is celebrated through regular cultural events and exchanges. Future talks will focus on enhancing strategic partnership in sectors like digital technology and the blue economy (economic activity associated with the sea).

Relevance: GS Prelims & Mains Paper II; Bilateral Relations

Source: The Hindu

2. Is a future Palestine state possible?

Why in News?

Hamas's October 7, 2023 attack in Israel and the latter's continuing war on Gaza have brought the Palestine question back to the fore of West Asia. As the war has destroyed much of Gaza and killed 36,000 of its people, the world has also seen more countries voicing strong support for a future Palestine state.

Recently, three European countries, Spain, Ireland and Norway, recognised the Palestine state. Arab countries, including Saudi Arabia and Jordan, say there wouldn't be lasting peace in the region unless the Palestine question is resolved. An internationally recognised solution to the crisis is what's called the two-state solution.

What's the two-state solution?

The short answer is simple: divide historical Palestine, the land between the Jordan River on the east and the Mediterranean Sea in the west, into an Arab state and a Jewish state. But the long answer is complicated. Israel, a Jewish state, was created in Palestine in 1948. But a Palestine state is not yet a reality. Palestinian territories have been under Israeli occupation

since 1967. So, a two-state solution today means the creation of a legitimate, sovereign Palestine state, which enjoys the full rights like any other nation state under the UN Charter.



What are the origins?

The roots of the two-state solution go back to the 1930s when the British ruled over Palestine. In 1936, the British government appointed a commission headed by Lord William Robert Peel (known as the Peel Commission) to investigate the causes of Arab-Jewish clashes in Palestine. A year later, the commission proposed a partition of Palestine into a Jewish and an Arab state. At that time, Jews accounted for some 28% of Palestine's population. According to the Peel Commission proposal, the West Bank, Gaza and Negev desert would make up the Arab state, while much of Palestine's coast and the fertile Galilee region would be part of the Jewish state. Arabs rejected the proposal.

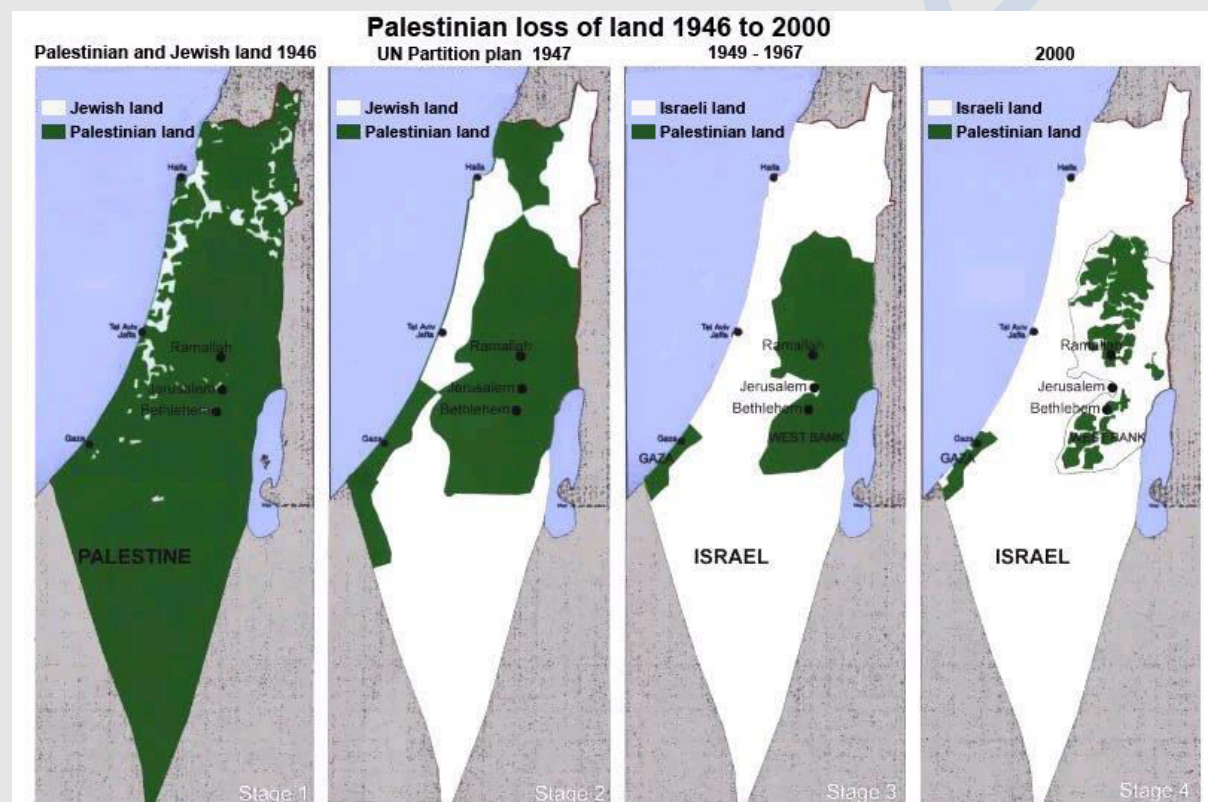
After the Second World War, the UN Special Commission on Palestine (UNSCOP) put forward another partition plan. It proposed that Palestine be divided into three territories — a Jewish state, an Arab state and an international territory (Jerusalem). Jews, who made up roughly 32% of Palestine's population, were to have 56% of the Palestine land as per the UNSCOP plan. The partition plan was adopted in the UN General Assembly (Resolution 181). Arabs rejected the plan (India voted against it), while the Zionist leadership of Israeli settlers in Palestine accepted it. And on May 14, 1948. Zionists unilaterally declared the state of Israel.

This triggered the first Arab-Israeli war. And by the time an armistice agreement was achieved in 1949, Israel had captured some 22% more territories than what the UN had proposed.

How did it get international legitimacy?

In the 1967 Six-Day War, Israel captured the West Bank and East Jerusalem from Jordan, the Gaza Strip and the Sinai Peninsula from Egypt and the Golan Heights from Syria (Israel continues to control all territories except the Sinai which it returned to Egypt after the 1978 Camp David Accords). Palestine nationalism emerged stronger in the 1960s, under the leadership of the Palestine Liberation Organization (PLO).

The PLO initially demanded the “liberation” of the whole of Palestine, but later recognised the two-state solution based on the 1967 border. Israel initially rejected any Palestinian claim to the land and continued to term the PLO as a “terrorist” organisation. But in the Camp David Accords, which followed the 1973 Yom Kippur War in which Egypt and Syria surprised Israel with an attack, it agreed to the Framework for Peace in the Middle East agreement.



As part of the Framework, Israel agreed to establish an autonomous self-governing Palestinian authority in the West Bank and Gaza Strip and implement the UN Resolution 242, which has demanded Israel pull back from all the territories it captured in 1967. The Framework laid the foundation for the Oslo Accords, which, signed in 1993 and 1995, formalised the two-state solution. As part of the Oslo process, a Palestinian National Authority, a self-governing body, was formed in the West Bank and Gaza and the PLO was internationally recognised as a representative body of the Palestinians. The promise of Oslo was the creation of a sovereign Palestinian state which would live next to the Israeli state in peace. However, this promise has never been materialised.

What are the hurdles to achieving the two-state solution?

The first setback for the Oslo process was the assassination of Yitzhak Rabin, the Israeli Prime Minister who signed the accords, in November 1995 by a Jewish extremist. Rabin's Labour party was defeated in the subsequent elections and the right-wing Likud, under Benjamin Netanyahu's leadership, came to power. The rise of Hamas, the Islamist militant group that opposed the Oslo Accords saying the PLO made huge concessions to the Israelis, also contributed to the derailment of the peace process. After the collapse of the Oslo process in the 1990s, there were multiple diplomatic efforts to revive the two-state plan, but none of these made progress towards achieving the goal.

Multiple reasons could be identified for this failure. But there are specific structural factors that make the two-state solution unachievable, at least for now. One is the boundary. Israel doesn't have a clearly demarcated border. It is essentially an expansionist state. In 1948, it captured more territories than it was promised by the UN. In 1967, it expanded further by taking the whole of historical Palestine under its control. From the 1970s, Israel has been building illegal Jewish settlements in Palestinian territories. While Palestinians say their future state should be based on the 1967 border, Israel is not willing to make any commitments.

Two, the status of settlers. Roughly 7,00,000 Jewish settlers are now living in the West Bank and East Jerusalem. If Israel is to withdraw to the 1967 border, they will have to pull back the settlers. The settlers are now a powerful political class in Israeli society and no Prime Minister can pull them back without facing political consequences. Three, the status of Jerusalem. Palestinians say East Jerusalem, which hosts Al Aqsa, Islam's third holiest mosque, should be the capital of their future Palestinian state, while Israel says the whole of Jerusalem, which hosts the Western Wall, the holiest place in Judaism, is Israel's "eternal capital". Four, the right of refugees to return to their homes. Some 7,00,000 Palestinians were displaced from their homes in 1948 when the state of Israel was declared. According to international law, they have a right to return to their homes. Israel says it won't allow the Palestinian refugees to return.

While these are the structural factors that make the two-state solution complicated, on the ground, Israel's rightwing leadership shows no willingness to make any concessions. Israel wants to continue the status quo — the status quo of occupation. The Palestinians want to break that status quo.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: The Hindu

3. What the end of African National Congress's dominance means for South Africa

Why in News?

The African National Congress (ANC) has lost its 30-year-old parliamentary majority in South Africa, winning just over 40% of the national vote share in recent polls.

The Democratic Alliance (DA), South Africa's principal opposition party, is in second place with almost 22% of the vote, followed by Jacob Zuma's uMkhonto we Sizwe (MK) party, with almost 15%, and the Marxist-Leninist Economic Freedom Fighters (EFF), with over 9%.



ANC's decline

Three decades ago, the ANC under Nelson Mandela, won South Africa's first 'all-race' election, ushering in a new era for the deeply divided nation. The once-banned party which spearheaded the struggle to end apartheid, won a whopping 62.65% of the national vote in 1994.

Since then, the ANC has enjoyed a stranglehold over South African politics, with its vote share in national elections never dropping below the 50% mark. This is much like the popularity the Indian National Congress enjoyed in the first few decades after Independence. In

recent years, however, the ANC has seen a slow, albeit steady decline.

Coalition complications

This election marks a new low for the ANC, which will have to, for the first time, seek out a coalition partner[s] to form the government and elect its leader as President.

South Africans do not directly vote for the President. Instead, their votes determine the constitution of the National Assembly (NA) by proportional representation. The NA in turn elects the President by a simple majority (201 or more votes in the 400-member NA).

Almost 10% short of the majority, the ANC will have to woo one of the DA, MK Party, or EFF to form the government.

The MK party, founded only in December 2023, has emerged as arguably the biggest winner in the elections. It is led by Jacob Zuma. Zuma, once a stalwart of the anti-apartheid movement, held South Africa's presidency from 2009-18, when he was removed from office on the back of corruption allegations. His populist proposals and rhetoric have nonetheless helped him retain a loyal voter base among poor Black South Africans. During the election campaign, he made bold promises to end unemployment and poverty.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: Indian Express

4. European Parliament elections this week: what happens & how?

Why in News?

Around 373 million citizens across the 27 member states of the European Union are eligible to vote on June 6-9 in elections to the European Parliament, which is the only directly elected body of the EU.



What is the European Parliament?

The European Parliament (EP) represents the citizens of its member states. Its primary functions include negotiating EU laws with the member state governments, which are represented by the European Council.

The EP also approves the EU budget and votes on international agreements and enlargements of the bloc. It also has the power to approve or reject the appointment of the European Commission president — currently Germany's Ursula von der Leyen — and the commissioners.

Unlike national parliaments, the EP does not have the right to propose laws but can only negotiate those proposed by the executive European Commission. The EP comprises 720 Members (MEPs) elected every five years. The MEPs then elect their president for a term of two and a half years.

Who can vote in the elections?

In 21 member states, people aged 18 and above can vote. In Belgium, Germany, Austria and Malta, the minimum voting age is 16. In Greece, people who turn 17 during the election year can vote, and in Hungary, married individuals can vote regardless of age.

Citizens living in another EU country can choose to vote for candidates either from their country of origin or from their country of residence.

How is voting done?

In some member states, voters can only choose closed lists that do not allow change of order for preferred candidates, while in others they can select individual candidates in a preferential system.

Who can run?

All candidates must be EU citizens. Voters may choose from individual candidates or political parties' delegates, depending on the country. Once elected, politicians from each nation will flow into the European groups that form the Parliament, based on political orientations.

Elected individuals cannot hold functions in national governments or other political bodies such as the EU Commission.

Relevance: GS Prelims & Mains Paper II; International Organisations

Source: Indian Express

5. Claudia Sheinbaum Pardo makes history as Mexico's first woman President

First women President

Claudia Sheinbaum will become the first woman President in Mexico's 200-year history. She is a climate scientist and former Mexico City Mayor.

Ms. Sheinbaum, the favoured successor of outgoing President Andrés Manuel López Obrador, vowed to continue in the direction set by the populist leftist leader.



Election Results

The National Electoral Institute's president said Ms. Sheinbaum had between 58.3% and 60.7% of the vote, while opposition candidate Xóchitl Gálvez had between 26.6% and 28.6% and Jorge Álvarez Máynez had between 9.9% and 10.8% of the vote. Ms. Sheinbaum's Morena party was also projected to hold its majorities in both chambers of Congress.

Six-year term

Ms. Sheinbaum will also be the first person from a Jewish background to lead the overwhelmingly Catholic country. She will start her six-year term October 1. Mexico's

Constitution does not allow re-election.

Leftist

The Leftist has said she believes the government has a strong role to play in addressing economic inequality and providing a sturdy social safety net, much like her political mentor.

Mr. López Obrador's anointed successor, the 61-year-old Ms. Sheinbaum consistently led in the polls despite a spirited challenge from Ms. Gálvez. This was the first time in Mexico that the two main opponents were women.

Relevance: GS Prelims; International Relations

Source: The Hindu

6. India attends Indo-Pacific Economic Framework for Prosperity (IPEF) Ministerial meeting in Singapore

Why in News?

Indian delegation led by Secretary, Department of Commerce participated in the Indo-Pacific Economic Framework for Prosperity (IPEF) Ministerial meeting held in Singapore on 6 June 2024.

The IPEF Ministerial Statement of 14 November 2023 declared substantial conclusion of negotiations for Clean Economy, Fair Economy, and the overarching Agreement on the Indo-Pacific Economic Framework for Prosperity. Pursuant to this, the IPEF partners completed legal review of the text for these agreements and domestic approval processes.



IPEF Clean Economy Agreement

Agreement on Clean Economy intends to accelerate efforts of IPEF partners towards energy security and transition, climate resilience and adaptation. This agreement will facilitate investments, concessional financing, joint collaborative projects, workforce development

and Technical Assistance and Capacity Building for industries, in particular MSMEs, to further integrate the Indian companies in the value chains, particularly in the Indo-Pacific region. These cooperative activities will be undertaken through joint collaborative actions such as Cooperative Work Programmes and the IPEF Catalytic Capital Fund.

Cooperative Work Programme (CWP)

The IPEF partners welcomed the continued efforts to build and sustain longer-term cooperation among various groupings of interested partners on a range of climate solutions through the CWP mechanism, in furtherance of the overarching goals of the IPEF Clean Economy Agreement.

IPEF Catalytic Capital Fund

The IPEF partners applauded the operational launch of the IPEF Catalytic Capital Fund, which supports the expansion of the pipeline of quality clean economy infrastructure projects in the IPEF emerging and upper-middle income economies under the IPEF Clean Economy Agreement.

The Fund's founding supporters – Australia, Japan, Korea, and the United States – have made significant progress in their respective domestic processes to provide US \$33 million of initial grant funding to catalyze up to US \$3.3 billion in private investment.

Investor Forum

A business delegation led by Invest India also participated in the Forum. The investor Forum provided a unique opportunity for project proponents and startup community to interact and network with more than 100 top global investors.

IPEF Fair Economy Agreement

Agreement on Fair Economy intends to create a more transparent and predictable business environment which can spur greater trade and investment in the markets of member countries; promote level playing field for businesses and workers in the economies of the IPEF partners.

The IPEF Upskilling Initiative

The IPEF partners welcomed the substantial progress on the IPEF Upskilling Initiative, which was launched in September 2022 to support sustainable and inclusive economic growth and development by providing primarily women and girls in IPEF emerging and middle-income partner countries with access to digital skills training. Under the initiative, 14 participating U.S. companies and the Asia Foundation provided 10.9 million upskilling opportunities in IPEF partners, primarily for women and girls, in the last 2 years of which India received 4 million of these opportunities.

Next Steps

Ministerial meeting also decided to encourage holding of first meeting of the three Supply Chain institutional committees virtually in July 2024 and in-person in Washington DC in later half of 2024. It was also decided to hold next ministerial meeting virtually in September 2024 and work towards holding the first meeting of IPEF Council and the Joint Commission in 2025.

About IPEF

IPEF was launched on 23 May 2022 at Tokyo, Japan, comprising of 14 countries – Australia, Brunei, Fiji, India, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, Vietnam and USA. The IPEF seeks to strengthen economic engagement and cooperation among partner countries with the goal of advancing growth, economic stability and prosperity in the region.

The framework is structured around four pillars relating to Trade (Pillar I); Supply Chain Resilience (Pillar II); Clean Economy (Pillar III); and Fair Economy (Pillar IV). India had joined Pillars II to IV of IPEF while it has maintained an observer status in Pillar-I.

Relevance: GS Prelims & Mains Paper II; International Organisations

Source: PIB

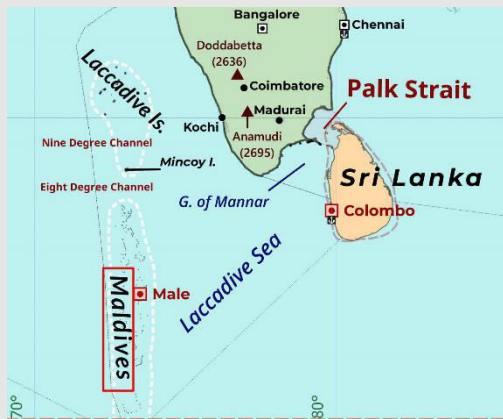
7. Significance of Maldives' pro-China President Muizzu's New Delhi visit

Why in News?

The President of Maldives, Mohamed Muizzu, was one of seven leaders from India's neighbourhood who attended Prime Minister Narendra Modi's 3.0 swearing-in at Rashtrapati Bhavan. Muizzu's presence was significant, given the way he has positioned himself politically vis à vis India, and the crucial strategic aspect to the India-Maldives relationship.

The 'India Out' candidate

Muizzu came to power on November 17 last year on an 'India Out' plank. The India Out campaign had begun in 2020 as the Maldives opposition's protest against then President Ibrahim Solih's policies that were perceived to be friendly towards New Delhi, but had soon turned into a movement against India's alleged military presence in the archipelago, which both the Solih government and India denied.



During his presidential campaign, Muizzu repeatedly vowed to send back “foreign soldiers”. Within hours of being sworn in, he demanded the withdrawal of all Indian military personnel from Maldives.

Consequently, the final batch of Indian soldiers — who were stationed in the Maldives to operate and maintain two helicopters and three Dornier aircraft India had previously gifted to the country — were replaced by civilians in May.

Muizzu’s pro-China tilt

Like his mentor, former President Abdulla Yameen Abdul Gayoom, under whose rule (2013-18) the India-Maldives relationship deteriorated severely, Muizzu has openly aligned his country with China, India’s geopolitical rival in the Indian Ocean.

In January, Muizzu broke with a Maldivian tradition to choose Beijing over New Delhi for his first foreign visit as President. He met President Xi Jinping, and signed 20 agreements covering areas ranging from tourism to social housing and e-commerce.

In March, Maldives signed an agreement with Beijing to obtain free “non-lethal” military equipment and training from China — the first ever military deal between the two countries.

The Chinese influence in the Maldives has increased steadily over the past couple of decades. The island nation is part of China’s Belt and Road Initiative, which has led to an influx of Chinese money and a strengthening of the relationship between the two countries — at the expense of India.

Muizzu’s presidency and the anti-India sentiment fanned by sections of the Maldivian political class is a culmination of this process.

A historical relationship

For India, the Maldives is a crucial ally, important to secure its maritime periphery and to keep an eye on the larger Indian Ocean region where China is making aggressive moves. The archipelago lies barely 70 nautical miles (130 km) from Lakshadweep’s Minicoy Island, and some 300 nautical miles (560 km) from India’s west coast. Several important commercial sea lanes run through the islands.

Regardless of Muizzu’s pro-China, anti-India posturing, the Maldives cannot simply “let go” of India. It is heavily dependent on Indian imports in almost all important sectors, from food to life-saving medicines, and aircraft used in search and rescue missions.

India has rushed to the Maldives’ aid in many crises — from being the first to send in help after the 2004 tsunami to airlifting drinking water to the country after a desalination plant

broke down in 2014. During the Covid-19 pandemic, India sent medicines, masks, gloves, PPE kits, vaccines, and other aid.

The Indian Army played a crucial role in thwarting an attempted coup in Malé (Capital of Maldives) in 1988.

Chance of a fresh start

At a time when relations between India and the Maldives are at a low, Muizzu's visit sends an encouraging signal. Some groundwork for a reset in the relationship has been done over the past couple of months.

In April, India approved the highest-ever export quotas for essential commodities — eggs, potatoes, onions, sugar, rice, wheat flour and pulses, river sand and stone aggregates — to Maldives for 2024.

In, Maldives Foreign Minister Moosa Zameer met External Affairs Minister S Jaishankar in New Delhi — the first high-level visit since Muizzu came to power. The two leaders had "extensive discussions" on "bilateral relationship" and "regional security issues".

Relevance: GS Prelims & Mains Paper II; Bilateral Relations

Source: Indian Express

8. Antarctic Parliament Meeting highlights

Why in News?

Last month, India hosted the 46th Antarctic Treaty Consultative Meeting (ATCM) in Kochi.

What were the highlights of the Kochi meet?

Some of the major highlights of this year's Antarctic Parliament were: the push for an 'all inclusive' governance; the first-ever introduction to the tourism framework and the initiation of its drafting; and the announcement of the Maitri-II research station.



1. Tourism: On matters of tourism, India had first raised concerns at the New Delhi ATCM meet way back in 2007. Operated mostly by private tour operators of select countries, Antarctica has been seeing an exponential rise in the number of visitors, and outside researchers coming there in recent years. Estimates suggest that in 2023, there were

one lakh visitors to Antarctica.

Experts working in the polar sciences argued that the impact of tourism on Antarctica is not fully understood, yet. All Antarctica Treaty Parties in attendance in Kochi agreed upon the need for having a framework for tourism.

2. Maitri -II: In Kochi, India announced a successor to its 35-year-old Maitri research base. The decision was welcomed positively. Now, India will get onto the drawing board and chalk out its architectural and environmental plans before the union government. Once ready, the environment report of Maitri-II will be tabled before and seek clearance from the Committee on Environment Protection. India is expected to get Maitri-II operational in the early 2030s.

3. Attendees: At Kochi, the Kingdom of Saudi Arabia became the latest entrant to the club of Antarctic Treaty Parties at the recently concluded meet.

Attended by more than 400 members representing 56 countries, the ATCM-46 in Kochi also saw discussions on sea ice change, protecting the emperor penguin, enhancing environmental impact assessment of major activities and developing an international framework for environmental monitoring in Antarctica.

What was India's message?

As followers of Vasudhaiva Kutumbakam, India informed the Antarctic Parliament that it chooses to adopt an 'all inclusive' approach with nations, who wish to work towards preserving Antarctica and its resources. India underscored the need for opening the Antarctic Treaty to more nations and together, shoulder responsibilities for governance, research, and framing laws and policies.

India's message was strong and clear: geopolitics from the mainland must not be a deterrent when it came to the issue of governance of Antarctica. India reminded the Consultative Parties (those with authority to vote and take decisions) at Kochi that the treaty cannot remain as an 'exclusive club' of select nations. Canada and Belarus have been working towards becoming Consultative Parties in the Treaty but they are yet to succeed.

Why is Antarctica important?

1. It is the world's fifth largest continent spanning 14 million sq km area. Nearly 98% of Antarctica is covered in thick ice sheets which hold about 75% of the earth's freshwater reserves. This white continent is unique for its wildlife and pristine environment.

2. Located close to the South Pole, Antarctica experiences extreme cold, dry and windy conditions.

More importantly, under the global warming scenario, it is three poles of the Earth: the north, the south and the Himalayas, that are facing the maximum brunt. At the Kochi meet, more areas of Antarctica were earmarked as 'protected'.

3. The fastened rates of permafrost thawing are also a worry at these poles. Permafrost is the rock and soil layers frozen beneath the active ice sheet. Rising temperatures have accelerated the thawing of this permafrost, which in turn exposes and causes the organic matter, like plants, to decompose. This further leads to the release of carbon dioxide and methane into the atmosphere, adding to global climate change.

More geographical areas of the Antarctic have been 'protected' as areas previously studied by early Antarctic expeditions have been rendered unsafe due to thawing permafrost. In this year's meeting, 17 revised and new management plans for the Antarctic Specially Protected Areas were adopted.

4. Another risk over Antarctica due to growing tourism and increased human presence, in general, is that of the Highly Pathogenic Avian Influenza (HPAI). The Kochi deliberations focused on the newest scientific findings that the air and atmosphere over Antarctica were polluted and carried the potential risk of HPAI affecting the indigenous living creatures. The meeting underlined prescribing standard biosecurity guidelines for HPAI to eliminate and mitigate the risk to humans, as well as spreading the disease in Antarctica through human activities.

Relevance: GS Prelims & Mains Paper II; International Organisations

Source: Indian Express

9. What is holding up the Teesta treaty?

Why in News?

During the recent state visit of Sheikh Hasina, Prime Minister of Bangladesh, to India, Prime Minister Narendra Modi on June 22 said: "A technical team will soon visit Bangladesh to discuss conservation and management of the Teesta River in Bangladesh." The remark triggered fresh speculation about the Teesta water sharing treaty with Bangladesh, a key bilateral agreement that has been pending between the two countries for over a decade.

What is India's stand?

After Mr. Modi's comment, Foreign Secretary Vinay Kwatra told the media that the discussion "between the two leaders was less about water sharing per se, and more about the management of the water flows within Teesta". West Bengal Chief Minister Mamata Banerjee took issue with the Centre's stand. On June 24, she wrote a letter to Mr. Modi conveying her strong reservation that no discussion on the sharing of Teesta waters should be taken up with Bangladesh without the involvement of the State.

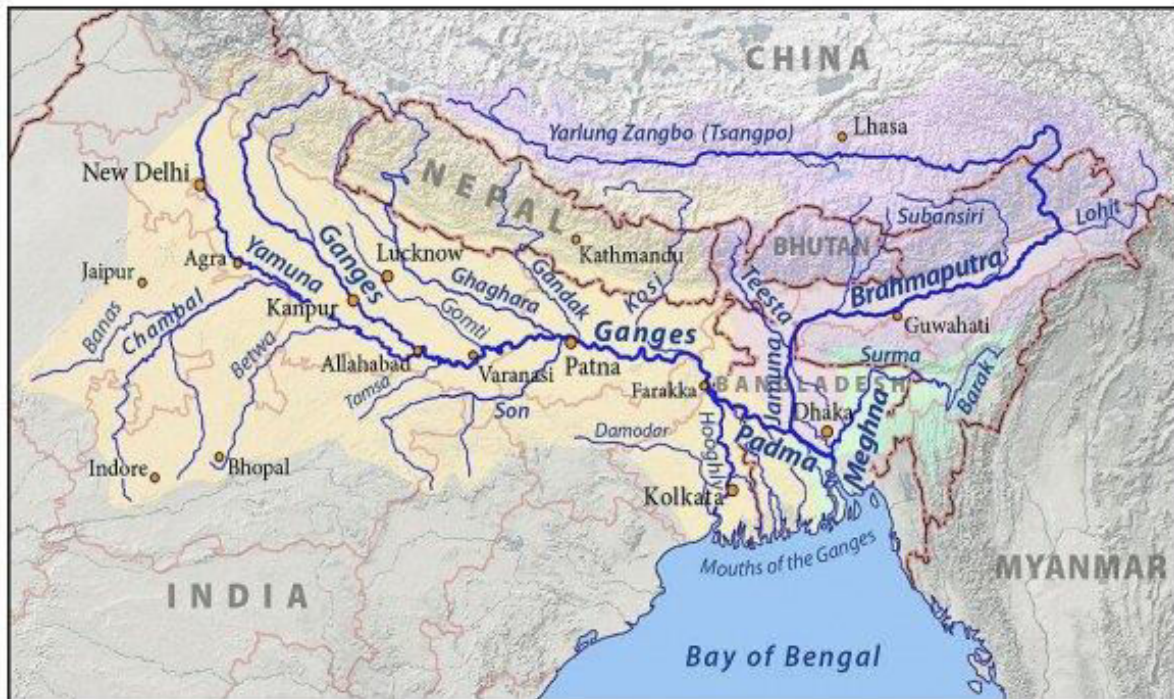
Why is Bengal upset?

Ms. Banerjee pointed out that if Teesta's water is shared with Bangladesh, lakhs of people in north Bengal will get severely impacted. This is not the first time she has voiced her opposition to the proposed water sharing agreement of India with Bangladesh. In July 2019, the Trinamool Congress chairperson admitted that Bangladesh is hurt because the Teesta waters could not be shared and added, "If I had the ability, I would have definitely shared Teesta waters with them." In 2017, the Chief Minister had also referred to an alternative proposal of sharing waters of the Torsa, Manshai, Sankosh and Dhansai rivers but not Teesta.

In all, 54 rivers flow between India and Bangladesh and sharing of river waters has been a key bilateral issue. India and Bangladesh agreed on the sharing of waters of the Ganga in 1996

after the construction of the Farakka Barrage and by the 2010s the issue of sharing of the Teesta came up for negotiation. In 2011, during the United Progressive Alliance-II government, India and Bangladesh were close to signing an agreement on the Teesta but Ms. Banerjee walked out of the deal, and since then, the agreement has been pending.

The Ganges-Brahmaputra Basin



What is the proposal?

In 2011, when the proposal for sharing Teesta water was drawn up, it was said India would get 42.5% and Bangladesh 37.5% of the river water from December to March.

A tributary of the Brahmaputra, the Teesta river originates from the Tso Lhamo Lake at an elevation of about 5,280 metres in north Sikkim. The river travels for about 150 km in Sikkim and 123 km in West Bengal, before entering Bangladesh from Mekhligunj in Cooch Behar district; it flows another 140 km in Bangladesh and joins the Bay of Bengal. Teesta is Bangladesh's fourth largest trans-boundary river and its floodplain covers an area of 2,750 square kilometres in Bangladesh. But 83% of the river's catchment area lies in India and the remaining 17% is in Bangladesh, supporting 8.5% of its population and 14% of its crop production.

What are the political considerations?

While the Awami League government in Bangladesh is facing questions from the Opposition about the delay in inking an agreement on the Teesta, the dams for hydro-electric power generation in Sikkim and the Teesta Barrage Project at Gazoldoba in West Bengal is making the flow of the river erratic in Bangladesh, leading to either floods or scarcity of water. The visit of a technical team from India to discuss conservation of the Teesta in Bangladesh also comes

amid the backdrop of China proposing major dredging work on the river and building reservoirs and embankments in 2020. The Bangladesh government has put the proposal on hold for the past four years.

Soon after returning to Bangladesh, Prime Minister Hasina announced that her country would accept India's proposal to develop the Teesta River basin. Ms. Banerjee raised questions about the health of the Teesta river after the construction of a series of hydropower projects in Sikkim, deforestation in upper catchment areas and impact of climate change. She expressed surprise that no concrete steps have been taken by the Ministry of Jal Shakti to restore the river to its original form and health on the Indian side when a bilateral cooperation between India and Bangladesh for restoration of Teesta in Bangladesh is being proposed.

Environmental activists have also been raising questions on the ecological impact of hydro-electric projects on the river. In October 2023, a glacial lake outburst triggered floods in the Teesta basin that claimed hundred lives and destroyed the Teesta III hydroelectric dam.

Sharing of waters of transboundary rivers have been mandated by international laws including The Helsinki Rules on the Uses of the Waters of International Rivers in 1966. Article 253 of the Indian Constitution gives powers to the government to enter any transboundary river water-related treaty with a riparian state.

Why is Bengal talking about Ganga treaty?

The Ganga water sharing treaty with Bangladesh completes 30 years in 2026 and a renewal of the agreement is on the cards. The Trinamool Congress chairperson has pointed out that water sharing with Bangladesh has changed the Ganga's morphology and affected lakhs of people in West Bengal owing to river erosion.

"Lakhs of people have been displaced from their habitation rendering them homeless and also leading to their loss of livelihood. The reduced silt load in Hooghly has impeded the nourishment of the Sundarban delta," she wrote in the letter to the Prime Minister.

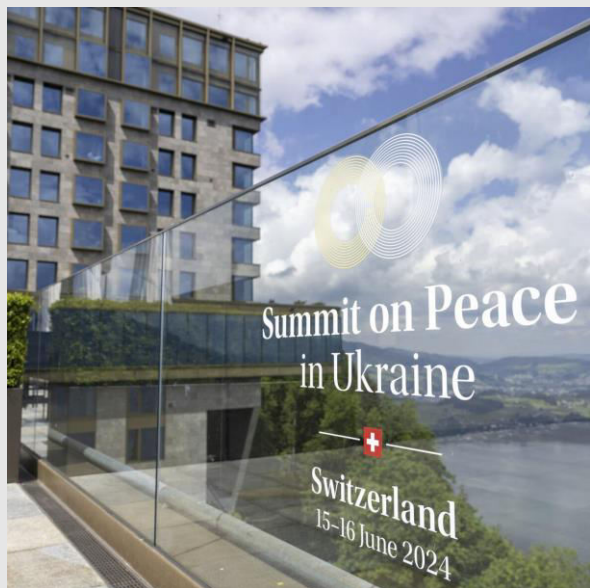
Relevance: GS Prelims & Mains Paper II; Bilateral Relations

Source: The Hindu

10. Ukraine peace summit Outcome

About Peace Summit

The two-day Summit on Peace in Ukraine at the Bürgenstock resort in Switzerland ended with participants hoping for an end to the war between Russia and Ukraine. Eighty countries and four organisations of the 100 attending delegations supported the final joint communiqué that emerged out of the Path To Peace Summit looking at ways to end the Russia-Ukraine war raging on since February 2022.



Outcome

Switzerland was able to bring together more than 90 countries, at least 56 were represented by leaders, and the final joint communiqué was signed by about 82 countries and organisations, with the exception of a few including India. The document made a strong call for an end to the “ongoing war of the Russian Federation against Ukraine” and a pitch for sovereignty, territorial integrity and adherence to international law.

It cited three areas of broad understanding: nuclear safety, food security and the exchange of all prisoners of war, displaced

and detained Ukrainians.

Russia’s absence

The elephant in the room though remained Russia’s absence with Mr. Putin not invited by host Switzerland, leading to questions about the effectiveness of the Path to Peace Summit. It is important to note that Switzerland, unlike China, India or the United States, is also a signatory to the Rome Statute and upholds decisions of the International Criminal Court in the Hague, which has indicted Mr. Putin for alleged war crimes.

Mr. Putin’s presence on Swiss soil could have paved the path for his arrest. But the conference did recognise the need to get Moscow to the dialogue table to end the war.

China’s stance

Many leaders are also worried about China aligning with Russia and staying out of the Swiss summit instead of pulling its leverage on Kremlin to end the conflict.

India’s stance

Only proposals acceptable to both Russia and Ukraine can lead to peace, said India as New Delhi decided to disassociate itself from the final document issued at the conclusion of a Peace Summit in Switzerland.

India was among at least seven countries that refused to endorse the “Joint Communiqué on a Peace Framework” released in Burgenstock, the venue of the two-day summit.

Saudi Arabia, South Africa, Thailand, Indonesia, Mexico and the UAE were among the countries that refused to sign the communiqué. Brazil maintained an observer status, and China declined the invitation to participate.

Rationale behind India’s Stance

Switzerland, Ukraine and other western countries had made a special attempt to win India's favour for the conference, including a last minute appeal by Mr. Zelenskyy when he met PM Modi at the G-7 outreach summit in Italy. As a close partner of Russia, a key Global South player, and a country that has kept a balance in the conflict, India's presence would have been a major win for the organisers.

However, while New Delhi sent the NSA and Deputy NSA to two preparatory conferences in Jeddah and Davos, the Indian delegation here was led by the Secretary (West) in the External Affairs Ministry. India has consistently abstained from every resolution at the UN, Security Council, IAEA, Human Rights Council and other multilateral fora that seeks to criticise Russia for its invasion of Ukraine.

While India may share concerns over much of the text released at the conference, it could not have gone ahead with its overtly anti-Russian slant. In its presence, however, New Delhi showed that it is willing to be part of the process, especially if it leads to a more inclusive future conference, with Russia and Ukraine at the table. As a result, India's decision to attend the conference, but not endorse its outcome, was probably a foregone conclusion.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: The Hindu

11. India needs to close the gender gap

Global Gender Gap Report

The Global Gender Gap Report is published by the World Economic Forum. Now, the report covers 146 major and emerging economies. The Global Gender Gap Index is an index designed to measure gender equality. The report examines four overall areas of inequality between men and women, namely

1. Economic participation and opportunity—assessed through outcomes on salaries, participation levels and access to high-skilled employment
2. Educational attainment—assessed through outcomes on access to basic and higher-level education
3. Political empowerment—assessed through outcomes on representation in decision-making structures
4. Health and survival—assessed through outcomes on life expectancy and sex ratio.

Findings of the Report

Gender parity may be climbing upwards worldwide with the global gender gap standing at 68.5% closed in 2024, but the glacial pace of change — it was 68.4% in 2023 — is a grim statistic.

At this rate, it will take 134 years to reach full parity, the Global Gender Gap report released by the World Economic Forum (WEF) last week pointed out, “roughly five generations beyond the 2030 Sustainable Development Goal (SDG) target”.

Rankings

Iceland maintains its number 1 rank (93.5%), and is also the only economy to have closed over 90% of its gender gap.

Southern Asia			
Economy	Rank		Score
	Regional	Global	
 Bangladesh	1	99	0.689
 Nepal	2	117	0.664
 Sri Lanka	3	122	0.653
 Bhutan	4	124	0.651
 India	5	129	0.641
 Maldives	6	132	0.633
 Pakistan	7	145	0.570

India has slipped two places to 129 out of 146 countries. Last year, it was ranked 127, after having jumped eight places from 135 in 2022.

India has closed 64.1% of its gender gap in 2024, the report noted, leaving policy-makers with a huge window of opportunity to do better. The “slight regression,” according to the report, is mainly due to “small declines” in the spheres of education and political empowerment.

Relevance: GS Prelims & Mains Paper II; International Organisations

Source: The Hindu

12. Nik Gupta extradited to US: His alleged involvement in Pannun ‘assassination’ attempt, chronology of events

Introduction

Nikhil 'Nik' Gupta, an Indian national who is accused by the United States of being involved in a murder-for-hire plot against Sikh separatist Gurbatwant Singh Pannun, was extradited from the Czech Republic to the US on June 14.

Case against Gupta

Gupta, 52, was arrested in Prague last year at the request of the US government on charges of being involved in a plot to assassinate Pannun in New York. Pannun holds dual American and Canadian citizenship, and heads the pro-Khalistan organisation Sikhs for Justice, which has been banned in India.



US Federal prosecutors alleged that Gupta hired a hitman to kill Pannun, making a \$15,000 advance payment in May-June 2023. These allegations were made in an indictment filed by the Department of Justice (DoJ) in New York's Southern District, unsealed in November last year.

Response of Indian Government

The Ministry of External Affairs (MEA), however, dismissed the report. India has publicly said that a high-level inquiry is looking into the evidence shared by the US in the matter. Gupta, through his attorney, has denied the accusations against him, claiming that he has been "unfairly charged".

Allegations by Canadian Prime Minister

These allegations came just months after Canadian Prime Minister Justin Trudeau had, in September 2023, accused "agents of the Indian government" of being involved in the fatal shooting of Khalistani separatist Hardeep Singh Nijjar on Canadian soil June 18. Nijjar, a Canadian citizen, like Pannun had been a vocal critic of the Indian government.

The MEA, however, rejected Trudeau's allegations, calling them "absurd". Trudeau's claims adversely impacted India's bilateral relationship with Canada.

Gupta's arrest and extradition

On June 30 last year, as Gupta travelled from India to the Czech Republic, he was arrested by Czech law enforcement authorities at the request of the US, pursuant to the bilateral extradition treaty between the two countries.

On June 3, the Minister of Justice of the Czech Republic authorised the extradition of Nikhil Gupta to the US. The extradition was carried out on Friday, June 14, 2024, at Prague-Ruzyně Airport.

What next

As per reports, Gupta is currently lodged at the federal Metropolitan Detention Centre in Brooklyn. He will face trial in the US.

Relevance: GS Prelims & Mains Paper II; International Relations

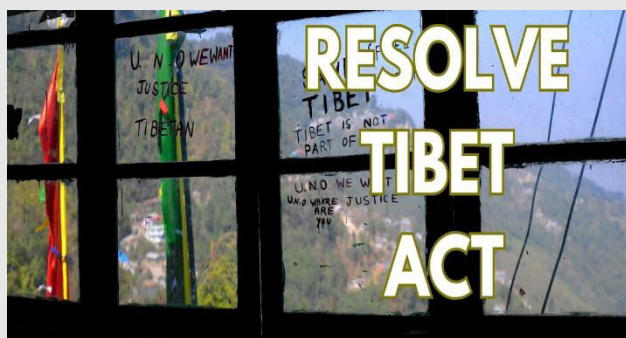
Source: Indian Express

13. What is the Resolve Tibet Act?

Introduction

The United States Congress passed the Promoting a Resolution to Tibet-China Dispute Act, better known as the Resolve Tibet Act. The legislation now awaits assent from President Joe Biden following which it will be ratified into law.

This act is the third notable piece of legislation that the US has taken regarding Tibet, following the Tibetan Policy Act or TPA (2002), and the Tibetan Policy & Support Act or the TPSA (2020). What are the provisions of the Resolve Tibet Act? How is it different from the previous laws passed by Congress?



Key provisions

The Resolve Tibet Act authorises the use of funds to counter Chinese disinformation about Tibet "including disinformation about the history of Tibet, the Tibetan people, and Tibetan institutions, including that of the Dalai Lama."

The act also challenges the Chinese contention that Tibet has been a part of China since ancient times. It urges China to engage in meaningful and direct dialogue with the Dalai Lama or his representatives, as well as democratically elected leaders of the Tibetan community "without preconditions, to seek a settlement that resolves differences."

Underlining the right of the Tibetan people to self-determination and human rights, the act makes a note of China's duty as a signatory of two covenants — the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights — that advocate the same.

The Resolve Tibet Act seeks to recognise and address the multi-faceted socio-cultural identity of the Tibetan people, in particular their "distinct historical, cultural, religious, and linguistic identity." Finally, it amends the TPA to define the exact geographical areas part of the Tibetan Autonomous Region.

Different from previous legislation

The Resolve Tibet Act is a bold successor to the two acts which preceded it.

Comparison with Tibetan Policy Act

The TPA, the first of its kind explicitly concerning Tibet, took a cautious stance in defining American policy on Tibet. While it flagged the ill-treatment of Tibetans, unlike the 2024 act, it recognised China's claim that Tibet was an integral part of China.

The 2002 act encouraged the Chinese government to pursue dialogue with the Dalai Lama as a "constructive partner," but reiterated lack of intent in pursuing sovereignty or independence for Tibet, stressing instead on his desire for greater autonomy for Tibetans in China.

The TPA even clarified that the US government did not maintain any official relations with the Tibetan government-in-exile, led until 2011 by the Dalai Lama himself, and would only meet him in his capacity as a spiritual leader, and Nobel Laureate.

Tibetan Policy & Support Act

The TPSA of 2020 pushed for constructive dialogue between the PRC and the Dalai Lama or his representatives, or democratically elected leaders of Tibet resulting in a "negotiated agreement", encouraging international support towards the same. The Resolve Tibet Act underlines the need for such talks to be pursued without "preconditions" on the terms to seek a settlement that resolves differences.

The TPSA also stated that the matter of succession of the Dalai Lama was not of China's concern and would best be left to Tibetan Buddhists.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: Indian Express

14. Why the Russia-North Korea pact is a big deal

Introduction

Russia President Vladimir Putin's recent Pyongyang visit culminated with a landmark pact between Russia and North Korea for "immediate military assistance if either faces armed aggression".



Russia-North Korea Relations

After World War II, the erstwhile Soviet Union wanted the installation of a communist regime in Korea, and offered significant military assistance to North Korea founder Kim Il Sung during the Korean War. After hostilities ended, the USSR, along with China, provided significant military and other aid to the communist North.

The two nations solidified their alliance in 1961, with the signing of the Russo-North Korea Treaty of Friendship, Cooperation and Mutual Assistance, which like the latest pact contained

a mutual defence agreement. After the dissolution of the Soviet Union in 1991, this treaty was voided and relations temporarily deteriorated.

Since the early 2000s, however, Putin-ruled Russia has gotten closer to the Kim-family ruled North Korea regime. That being said, Russia still did not back North Korea's nuclear ambitions, and for a time, even supported sanctions against the country aimed at curbing Pyongyang's nuclear capabilities.

Things changed for good in 2022, as Russia invaded Ukraine and Putin found himself increasingly isolated, internationally. Today, the world is as divided as it has been since the end of the Cold War, Russia and North Korea stand together against the Western liberal order, based on highly pragmatic considerations.

What the pact says

The pact between Russia and North Korea talks about cooperation on a wide range of issues, including mutual military support, and unspecified technological assistance. Crucial is the mutual defence provisions.

"In case any one of the two sides is put in a state of war by an armed invasion from an individual state or several states, the other side shall provide military and other assistance with all means in its possession without delay.

The provision of technological assistance is likely to be crucial. Currently, North Korea is believed to possess nuclear weapons but lacks critical missile guidance systems, cutting-edge warhead design, and re-entry vehicle technology, precluding its development of advanced, long-range nuclear weapons.

Strategic implications

1. For South Korea and Japan, this treaty is likely to be perceived as a direct security threat. Both countries have long been concerned about North Korea's nuclear program, and military strength. The Russian security umbrella will only add to these concerns.

This is likely to push both countries to strengthen their defences and rethink their security policies. Japan has already moved away from its long-standing pacifist foreign policy, and is in the process of building its military might. South Korea convened an emergency meeting of its national security council in response, and said it will now consider sending arms to Ukraine, something which it had thus far resisted.

2. Both South Korea and Japan are likely going to further cement their alliance with the United States, in response. The United States has already reaffirmed its commitment to its allies.

NATO chief Jens Stoltenberg too has expressed deep concern about the pact, highlighting the risks to global security and the potential for increased nuclear proliferation.

3. The Russia-North Korea pact could also encourage similar partnerships, elsewhere, most notably with Iran. For the West, these will continue to pose a major threat.

4. China, a traditional ally to North Korea, is likely to be conflicted about the development. While the treaty strengthens the anti-West bulwark in Asia, China would be wary of Russia's growing military collaboration with North Korea, which could undermine its near-exclusive geopolitical influence over Pyongyang. It would also be concerned about a greater Western footprint in Asia, as a result of this development.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: Indian Express

15. Nimisha Priya case: What is 'blood money' in Islamic law?

Why in News?

The Centre has approved transfer of funds for preliminary discussions regarding the release of Nimisha Priya from a Yemeni prison. A sum of \$40,000 will be transferred to persons concerned via the Indian Embassy in Sana'a.

Priya, who hails from Palakkad, Kerala was found guilty of murdering a Yemeni citizen in 2017. She was apprehended while trying to flee the country and sentenced to death in 2018.

Currently, Priya's mother is in Yemen, trying to waive her death penalty by paying "blood money" to the murdered man's family. What is blood money?



Diyya in Islamic law

According to Islamic law, victims of crimes have a say in how criminals are to be punished. In case of murder, this principle applies to the families of victims. Although murder is punished

via the death penalty, the victim's family (specifically, heirs) may choose to "forgive" the murderer in exchange for monetary compensation.

This is the principle of diyya, or, as it is commonly referred to as, "blood money". It can be traced to the Holy Quran.

"O believers! The law of retaliation is set for you in cases of murder — a free man for a free man, a slave for a slave, and a female for a female. But if the offender is pardoned by the victim's guardian, then 'blood money' should be decided fairly and payment should be made courteously. This is a concession and a mercy from your Lord." [2:178]

Rationale

Scholars believe that the idea behind this is to encourage the virtue of forgiveness, while also providing reparative justice to the victims' family. The scriptures do not set any specific amount as compensation, with the sum generally arrived at via negotiation between the murderer's family/representatives and the victim's family. Some Islamic countries, however, have set minimum compensation amounts.

The \$40,000 payment being made now is to get negotiations started. Eventually, Priya's family will likely have to pay close to \$300,000-\$400,000 to waive the death penalty. The 'Save Nimisha Priya International Action Council', formed in 2020, is in the process of raising required funds.

The Nimisha Priya case

After becoming a qualified nurse, Priya moved to Yemen in 2008. In 2011, she married Tomy Thomas in Kerala, with whom she returned to Yemen. She worked as a nurse, while he worked as an electrician. Both, however, dreamt of starting their own clinic. But as per Yemeni law, this required them to partner with a local.

This is where Talal Abdo Mahdi comes into the picture. A regular at the clinic where Priya worked as a nurse, the couple approached Mahdi for help. Mahdi even came to Kerala in 2015, to attend the baptism of Priya's daughter. While Priya returned to Yemen, the civil war prevented her husband and daughter from doing so. They remain in Kerala.

In Yemen, Mahdi decided to take advantage of Priya. He opened a new clinic but refused to share his income with her. He also allegedly forged documents to show her as his wife.

According to Priya's family, what followed was a cycle of physical and sexual abuse. Priya was unable to leave because Mahdi had taken all her travel documents and passports. He also did not allow her to speak to her family in Kerala.

One fine day, Priya, with the help of fellow nurse Hannan, tried to allegedly sedate Mahdi, in order to obtain her papers. But an overdose led to his death. Panicking, the duo decided to chop Mahdi's body up, and dump it in a water tank. Both were eventually arrested.

Relevance: GS Prelims & Mains Paper II; NRIs

Source: Indian Express

16. G-7 meet in 2024

Introduction



Leaders of the Group of Seven, the U.S., Canada, Germany, France, Japan, the U.K. and Italy, met in Italy's Apulia region from June 13-15, along with the European Union leadership, for a summit to discuss a host of issues. India has been invited to the outreach 11 times, with Prime Minister Narendra Modi attending it for the fifth time.

What was the G-7 summit hoping to achieve?

Bridging differences between the "West and the Rest", finding new ways to fund support for the Ukraine war, investing in Africa and grappling with migration, climate change and artificial intelligence challenges, were all on the agenda for G-7 leaders.

They agreed to make \$50 billion more available for Ukraine, carving it out from frozen sovereign wealth funds of Russia, held a special "Energy for Growth in Africa" summit to spur investments in clean energy, attacked China for coercive trade practices, and met with leaders of 10 countries, including India, and multilateral organisations, as part of the "G-7 Outreach", to discuss the concerns of the Global South.

How important is India to the G-7 process?

India has been an important part of the G-7 process for several years now, coming to the grouping's attention in the 2000s for its steady growth figures during the global financial collapse. India is not only a key member of the Global South, and has hosted the "Voice of Global South" conference since 2023, it is also a member of the G-20 troika, along with Brazil and South Africa. Besides, Prime Minister Modi is a central figure at such outreaches, though India is not a member of the G-7.

Other countries whose leaders attended the outreach were Algeria, Argentina, Brazil, Jordan, Kenya, Mauritania, Tunisia, Türkiye and the United Arab Emirates, along with heads of the African Development Bank, the International Monetary Fund, the Organisation of Economic Co-operation and Development (OECD), the United Nations and the World Bank.

Relevance: GS Prelims & Mains Paper II; International Organisations

Source: The Hindu

17. Project Nimbus and its opposition

Why in News?



Over the past week, more than 1,200 self-identified STEM students and workers have signed a pledge to not take jobs or internships at Google or Amazon. Their reason: the companies' involvement in Project Nimbus, a \$1.2 billion project which provides cloud computing infrastructure to the Israeli government.

This is not the first time that the tech giants have been called to end their association with Project Nimbus. Amidst Israel's destruction of Gaza, and continuing discrimination against Palestinians in the West Bank, this demand has gained further momentum.

What is Project Nimbus?

The Israeli government describes Project Nimbus as a "multi-year project, intended to give a comprehensive, in-depth response to the provision of public cloud services for government ministries, auxiliary units and related bodies."

It says that there is "great value in having a public cloud service within the borders of the State of Israel. This service will operate in a configuration that will preserve the sovereignty of information and prevent leakage of sensitive information outside the borders of the country". Google and Amazon jointly won the bid for Israel's Project Nimbus in April 2021. Google says that the agreement will "deliver cloud services to all government entities from across the state, including ministries, authorities, and government-owned companies."

How exactly does Project Nimbus allegedly harm Palestinians?

Critics of Project Nimbus say that it enables Israeli surveillance on Palestinians, and occupation of their land. An investigation by The Intercept in 2022 found that Google was "offering advanced artificial intelligence and machine-learning capabilities to the Israeli government" through Project Nimbus.

The investigation reviewed training documents and videos obtained through a publicly accessible educational portal intended for Nimbus users to claim that "Google is providing the Israeli government with the full suite of machine-learning and AI tools available through Google Cloud Platform". The new cloud, the investigation revealed, could give "Israel capabilities for facial detection, automated image categorisation, object tracking, and even sentiment analysis that claims to assess the emotional content of pictures, speech, and writing".

Relevance: GS Prelims; International Issues

Source: Indian Express

18. ICC convicts Mali insurgency chief of war crimes

Introduction

The International Criminal Court (ICC) issued a guilty verdict in the case of an al-Qaeda-linked jihadist accused of war crimes and crimes against humanity during an alleged reign of terror in Mali.

Al Hassan Ag Abdoul Aziz Ag Mohamed Ag Mahmoud will be sentenced at a later date, but the crimes he is convicted of could amount to life imprisonment. The charges brought against him included torture, rape and sexual slavery, as well as destroying religious and historic buildings.

The crimes are believed to have taken place when al-Qaeda-linked insurgents, a group known as Ansar Dine, took over the Malian ancient city of Timbuktu in early 2012 for almost a year.

What was Al Hassan accused of?

Prosecutors accused Al Hassan of personally overseeing amputations and floggings while he served as police chief during Ansar Dine's reign over Timbuktu. Citizens of the historic city, once dubbed the "Pearl of the Desert," are said to have lived in fear of "despicable" violence. Other charges brought against Al Hassan included overseeing cutting peoples' hands off.

Al Hassan was accused of particularly targeting women. Many were forced into marriage. Confined against their will and repeatedly raped by members of the armed group. Al Hassan was involved in organizing such marriages. Prosecutors also accused Al Hassan of flogging women accused of adultery.

Mali under Islamist insurgents

Militants from al-Qaeda in the Islamic Maghreb and Ansar Dine exploited northern Mali's 2012 ethnic Tuareg uprising, seizing control of Malian cities including Timbuktu.

They were driven out by a 2013 French-led military operation. However, the dent of their rule lasted much longer.

Residents remain haunted by the fear and violence they experienced. Insurgents also destroyed some of Timbuktu's iconic shrines, which they deemed idolatrous.

Mali has remained embroiled in an Islamist insurgency, alongside its neighbors Burkina Faso and Niger, for over a decade. The three West African countries have recently come under the rule of military juntas following coups.



Al Hassan's case echoed that of Ahmad Al Faqi Al Mahdi, another Ansar Dine member the ICC sentenced to nine years in prison in 2016 for destroying religious sanctuaries in Timbuktu, inscribed on UNESCO's World Heritage list. The sentence was reduced to two years on appeal in 2021.

Relevance: GS Prelims; International Issues

Source: Indian Express

19. WikiLeaks' Julian Assange set to walk free: What is the deal he made with the US govt?

Introduction

After years of legal battles and tensions with the governments of multiple countries, WikiLeaks founder and Australian citizen Julian Assange left a UK prison following a London High Court bail order.



His website WikiLeaks, which made public several classified United States government documents over the years, said in a post on X: "JULIAN ASSANGE IS FREE".

Some of the disclosures on WikiLeaks led Assange to be charged with treason by the US government. He is now expected to make a deal with

them, appear before a US court, and plead guilty to one charge in exchange for the long-running case against him to be brought to an end.

What is Assange's deal with the US?

Over the years, the US government has made several attempts to have Assange face trial on its soil over charges of espionage. Assange, who has been living in confinement in the UK in recent years, has appealed against this at various levels of British courts.

In a major relief to Assange last month, the High Court in London allowed him to appeal against his extradition to the US. His lawyers have reportedly been negotiating with the US Department of Justice since then. The Australian government has also reached out to the US government.

Now, he has agreed to a deal where he will plead guilty to a "single felony count of illegally obtaining and disclosing national security material in exchange for his release from a British prison".

Further, "Top officials at the Justice Department accepted an agreement with no additional prison time because Mr. Assange had already served longer than most people charged with a similar offense — in this case, over five years in prison in Britain."

Assange will be tried in a US court on the island of Saipan. Saipan is located in the western Pacific Ocean and is the capital of the Northern Mariana Islands (NMI), a US commonwealth. Assange has opposed extradition to the US mainland.

Who is Julian Assange and what is WikiLeaks?

Assange, 52, is Australian. Early on in his life, he displayed an interest in computer hacking. These skills were put to use in a website called WikiLeaks, which he founded in 2006. It describes itself as a media organisation that publishes confidential government and corporate documents to maintain transparency.

Assange shot to global prominence within a few years of the website's launch. Some of its most notable "leaks" were documents from the US government, saying the US military had killed hundreds of civilians in unreported incidents during the wars it fought in Afghanistan and Iraq.

One video showed a US Apache helicopter firing at suspected insurgents in Iraq. It ended up killing a dozen people, including two staffers from the news agency Reuters, and showed the US military crew laughing at the casualties.

In 2010, the same year as the military leaks, WikiLeaks publicly released over 250,000 classified cables from US embassies to prominent media outlets, such as The Guardian and The New York Times.

What was the US government's response?

In 2019, the US government indicted Assange on 18 charges for violating the Espionage Act and the Computer Fraud and Abuse Act. It alleged that WikiLeaks obtained its information illegally and sharing it endangered the lives of its officials in foreign countries.

He was also alleged to have “conspired” with US Army intelligence analyst Chelsea Manning. According to an Associated Press report, Manning was posted in Iraq and helped leak some documents to WikiLeaks. She was sentenced to 35 years in jail following a court martial, but the term was commuted and she was released in 2017.

Since the indictments, attempts have been made to extradite Assange for facing trial in the US.

What has happened to Assange since the leaks were made?

Around the time of the US military leaks, Assange was in Sweden. Here, two women associated with WikiLeaks accused him of sexual assault and molestation. He denied the charges and claimed they were part of American attempts for extradition. In a bid to escape them, he fled to London.

Swedish police then issued an international arrest warrant against him. Assange surrendered to police in the UK and was detained, but later granted bail. However, a district court ruled for his extradition to Sweden.

Fearing arrest, Assange entered the Embassy of Ecuador in 2012 to seek asylum, which was granted by the South American country’s ruling leftist government. For the next few years, Assange stayed there in a house arrest-like situation and attempted to appeal against the Sweden case.

Over time, he began having run-ins with the Ecuador government, leading to his expulsion from the embassy and revocation of his asylum in 2019. This led to dramatic scenes, with the London police sweeping in to arrest Assange for “failing to surrender to the court” over a warrant issued in 2012.

By late 2019, the Swedish cases against him had been dropped due to multiple factors, including the evidence being dated. However, Assange now had the US case to worry about.

How has the US attempted to extradite Assange earlier?

Assange was sentenced to 50 weeks in prison for his actions in the UK. He was lodged in a high-security prison near London from 2019 onwards. The US also indicted him the same year and began extradition proceedings with the UK government.

A long legal battle thus began, with Assange appealing against the extradition and the US government countering him. The main issue was whether Assange would be treated humanely and receive a fair trial upon reaching the US if extradited.

Assange’s lawyers said he needed protection under the First Amendment of the US Constitution, which safeguards free speech, because WikiLeaks and its releases constituted journalistic work. They feared that he may be awarded the death penalty.

The US government argued that Assange's actions "went way beyond those of a journalist gathering information, amounting to an attempt to solicit, steal and indiscriminately publish classified government documents."

Britain's Supreme Court refused to allow him to appeal against his extradition in 2022. This led the British government to order the extradition. However, Assange appealed against it. A High Court judge then ruled in the US government's favour, leading to a 'final bid' from Assange's lawyers.

This was eventually accepted last month, laying the ground for the current deal.

Relevance: GS Prelims & Mains Paper II; International Issues

Source: Indian Express

1. What is the National Health Claim Exchange?

Why in News?

The Health Ministry along with the Insurance Regulatory and Development Authority of India (IRDAI) are working on measures aimed at allowing patients to access quality healthcare swiftly and with reduced out-of-pocket expenditure.

The Ministry and IRDAI are launching the National Health Claim Exchange (NHCX), a digital platform which will bring together insurance companies, healthcare sector service providers and government insurance scheme administrators.



How is the NHCX expected to work?

The NHCX will serve as a gateway for exchanging claims-related information among various stakeholders in the healthcare and health insurance ecosystem. The integration with NHCX is expected to enable seamless interoperability of health claims processing, enhancing efficiency and transparency in the insurance industry,

benefiting policyholders and patients, said the Health Ministry.

What about cashless claims?

A timeline has been fixed for insurance claims of cashless claims. The insurance authority has said that all cashless claims have to be processed within three hours of the receipt of discharge authorisation from the hospital. The insurance regulator has set the insurance provider a deadline of July 31 to put systems and processes in place to ensure the smooth facilitation of this latest directive.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Hindu

2. What grade of coal does India produce? Why does it need imported coal? What is the status of the country's transition away from the fossil fuel?

Why in News?

A recent report by the Organized Crime and Corruption Reporting Project, a venture backed by billionaire hedge fund manager and philanthropist, George Soros, furnished new documents to allege that in 2014, the Adani Group claimed 'low grade' coal, imported from Indonesia, to be 'high-quality' coal, inflated its value and sold it to Tamil Nadu's power generation company, TANGEDCO (Tamil Nadu Generation and Distribution Company).

What is 'high grade' and 'low grade' coal?

The Gross Calorific Value (GCV), or the amount of heat or energy that can be generated from burning the coal, determines the gradation of coal. Coal being a fossil fuel is a mixture of carbon, ash, moisture and a host of other impurities. The higher the available carbon in a unit of coal, the greater is its quality or 'grade.' There are 17 grades of coal by this metric from grade 1, or top quality coal, with a kilo of it yielding higher than 7,000 kcal, and the lowest producing anywhere between 2,200-2,500 kcal, as per a classification by the Coal Ministry.

Grade of coal	Gross calorific Value per kilo calories/ per kilogram			Run of Mine Coal price (in Rs.)	Cost of heat (FOB) (Rs./Gcal)
	min	max	mean		
G1	7000		7000	3542	506
G2	6700	7000	6850	3393	495.33
G3	6400	6700	6550	3244	495.27
G4	6100	6400	6250	3032	485.12
G5	5800	6100	5950	2886	485.04
G6	5500	5800	5650	2360	417.70
G7	5200	5500	5350	1840	343.93
G8	4900	5200	5050	1700	336.63
G9	4600	4900	4750	1500	315.79
G10	4300	4600	4450	1400	314.61
G11	4000	4300	4150	1130	272.29
G12	3700	4000	3850	910	236.36
G13	3400	3700	3550	690	194.37
G14	3100	3400	3250	610	187.69
G15	2800	3100	2950	510	172.88
G16	2500	2800	2650	474	178.87
G17	2200	2500	2350	420	178.72

Table 1: Cost of coal (Rs./Gcal) as per Coal India prices

What are the characteristics of Indian coal?

Indian coal has historically been evaluated as being high in ash content and low in calorific value compared to imported coal. The average GCV of domestic thermal coal ranges from 3,500-4,000 kcal/kg compared to imported thermal coals of +6,000 kcal/kg of GCV.

Also the average ash content of Indian coals is more than 40% compared to imported coal which has less than 10% ash content. The consequence of this is that high-ash coal when burnt results in higher particulate matter, nitrogen and sulphur dioxide. Given this, the government, since 1954, has controlled the price of coal in a way that power companies were disincentivised to use high-grade coking coal for power generation.

Thus in the pursuit of balancing India's needs for coal production, power plants and pollution, the government has recommended the use of imported coal with lower ash and moisture content. The Central Electricity Authority (CEA) in 2012 recommended, and which still stands, that about 10-15% blending of imported coal can usually be safely used in Indian power boilers, which are designed for low quality Indian coal.

What is clean coal?

Broadly, we get clean coal when the carbon content has been increased by reducing its ash content. Coal plants have 'washing plants' on site which can process the coal in ways that reduce ash and moisture content. They employ huge blowers or a 'bath' to remove fine, coarse ash. However, deploying such equipment is expensive and adds to the cost of power.

The other method to clean coal — again requiring significant investment — is coal gasification. Here, the need to directly burn coal is bypassed by converting it into gas. By relying on an integrated gasification combined cycle (IGCC) system, steam and hot pressurised air or oxygen combine with coal in a reaction that forces carbon molecules apart. The resulting syngas, a mixture of carbon monoxide, hydrogen, CO₂ and water vapour, is then cleaned and burned in a gas turbine to make electricity. Since IGCC power plants create two forms of energy (steam

from the gasification process apart from syngas as fuel), they increase efficiency of the coal used.

What is the future of coal in India?

Official data says that India in 2023-24 produced 997 million tonnes of coal, an 11% growth over the previous year. Most of this was produced by the state-owned Coal India Ltd and its subsidiaries.

Despite stated commitments to transition India's electricity sector away from fossil fuel, coal is the mainstay of India's energy economy. Change, however, is in the air as for the first time this year, renewable energy accounted for 71.5% of the record 13.6 GW power generation capacity added by India in the first quarter of this year, while coal's share (including lignite) of total power capacity dropped below 50% for the first time since the 1960s.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Hindu

3. Sticky inflation: Why is RBI refusing to cut interest rates?

Why in News?

Recently, the Reserve Bank of India (RBI) unveiled its latest bi-monthly monetary policy review and, for the eighth time in a row, decided that it would not change the benchmark policy rate, also called the repo rate.

The repo rate is the interest rate at which the RBI lends money to commercial banks. When RBI wants to incentivise economic activity in the broader economy, it reduces the repo rate, which makes it cheaper for banks to borrow from it and lend onwards to customers. When it wants to disincentivise economic activity, it raises the repo rate, which makes it costly for everyone in the economy to borrow money.

Movements in the repo rate thus have a significant impact on the EMIs you pay for your car, home, or business loan.

What is the goal of RBI's monetary policy?

The RBI has two goals.

1. Price Stability: The primary goal is to maintain price stability in the economy. Simply put, the RBI aims to ensure that prices do not fluctuate beyond a reasonable degree. This fluctuation is measured by the retail inflation rate — the rate of price rise that is faced by the average individual consumer.

By law, the RBI is required to target an inflation rate of 4%, which means that the general price level should go up by 4% from one year to another. Research suggests that this is the sweet

spot where producers have an incentive to produce (and earn more) without being a huge disincentive for consumers (for whom inflation reduces purchasing power).

2. Economic Growth: The secondary goal for RBI is to promote economic growth. When economic activity needs a boost — like when the economy needed to recover from the shock of the Covid pandemic — the RBI cuts the repo rate to make it easy for consumers and producers alike to borrow money and spend. When inflation shoots significantly above the 4% mark — as in the wake of the Russia-Ukraine war — the RBI raises the repo rate to reduce the demand for credit-fuelled consumption. Higher repo rates also imply it pays more to keep money in the bank instead of spending it.

Why is the RBI not cutting interest rates?

Currently, the retail inflation rate has been coming down closer to the 4% mark. In fact, it has stayed within the so-called “comfort zone” of the RBI — anywhere between 2% and 6% — since September 2023 and yet, the RBI has not changed the repo rate since February 2023.

The repo rate was raised sharply between May 2022 and February 2023 but it has stayed stagnant at the 6.5% level since then. Why?

There are Two broad reasons for it.

✦ One, despite keeping the repo rate consistently high, the retail inflation has not dropped to touch the 4% mark since January 2021. Although it has declined, the rate of its decline has been very gradual. In fact, the RBI has expressed its concern over the stickiness of inflation. In the first four months of 2024, the inflation rate has been 5.10%, 5.09%, 4.85%, and 4.83%, respectively.

✦ Two, as explained earlier, the RBI typically cuts the repo rate when it finds that economic activity needs a boost. However, India's gross domestic product (GDP) growth rate has been surprisingly strong over the past year in particular. The RBI upped the GDP forecast for the current financial year from 7% to 7.2%. This would be the fourth consecutive year of more than 7% GDP growth rate by India. Under the circumstances, it is unlikely that repo rates are holding back India's economic growth.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

4. Strategic imperative and environment concern in Great Nicobar project

About Great Nicobar

Great Nicobar is the southernmost and largest of the Nicobar Islands, a sparsely inhabited 910-sq-km patch of mainly tropical rainforest in southeastern Bay of Bengal. Indira Point on the island, India's southernmost point, is only 90 nautical miles (less than 170 km) from Sabang at the northern tip of Sumatra, the largest island of the Indonesian archipelago.

Great Nicobar has two national parks, a biosphere reserve, small populations of the Shompen and Nicobarese tribal peoples, and a few thousand non-tribal settlers.

The Andaman and Nicobar Islands are a cluster of 836 islands, split into two groups — the Andaman Islands to the north and the Nicobar Islands to the south — by the 150-km wide Ten Degree Channel.

So why does India want to develop Great Nicobar, and why has the proposed three-phase, 30-year project faced sustained criticism from conservationists, wildlife biologists, naturalists, and some local tribal councils?

The infra project

The mega infrastructure project — which is being implemented by the Andaman and Nicobar Islands Integrated Development Corporation (ANIIDCO) — is proposed to include an International Container Transshipment Terminal (ICTT), a greenfield international airport with a peak hour capacity to handle 4,000 passengers, a township, and a gas and solar based power plant spread across 16,610 hectares.

The project for the “holistic development” of Great Nicobar Island was implemented after a report by NITI Aayog. A pre-feasibility report flagged the opportunity to leverage the strategic location of the island, which is roughly equidistant from Colombo in Sri Lanka to the southwest and Port Klang (Malaysia) and Singapore to the southeast.

It is close to the Malacca Strait, the main waterway that connects the Indian Ocean to the Pacific, and the ICTT is expected to “allow Great Nicobar to participate in the regional and global maritime economy by becoming a major player in cargo transshipment”. A proposed “greenfield city” will tap into both the maritime and tourism potential of the island.

The site for the proposed ICTT and power plant is Galathea Bay on the southeastern corner of Great Nicobar Island, where there is no human habitation. The project was granted in-principle forest clearance and environmental clearance in October 2022. A detailed project report (DPR) has been prepared, and the union government is likely to invite bids for the initial phase of construction of the terminal in the coming months.

Strategic importance

The Bay of Bengal and Indian Ocean region are of vital strategic and security interest to India as the Chinese People’s Liberation Army Navy seeks to expand its footprint across the region. India is wary of a build-up of Chinese maritime forces at the Indo-Pacific choke points of especially Malacca, Sunda, and Lombok. China’s attempts to expand its footprint in the region includes building a military facility at Coco Islands (Myanmar) lying just 55 km to the north of the Andaman & Nicobar Islands.



A major military infrastructure upgrade is underway at the Andaman & Nicobar Islands. The upgrade is aimed at facilitating the deployment of additional military forces, larger and more warships, aircraft, missile batteries, and troops.

Close surveillance of the entire area around the archipelago, and the building up of a strong military deterrence at Great Nicobar is of vital importance to India's national security.

Environmental concerns

The proposed infra upgrade has been opposed on grounds of the threat it poses to the ecology of the islands. The opposition — by wildlife conservation researchers, anthropologists, scholars, and civil society apart from the Congress — has focused on the potentially devastating impact on the Shompen, a particularly vulnerable tribal group (PVTG) of hunter-gatherers with an estimated population of a few hundred individuals who live in a tribal reserve on the island.

It has been alleged that the project violates the rights of the tribal population, and will impact the island's ecology with the felling of nearly a million trees. It is feared that the port project will destroy coral reefs with spinoff effects on the local marine ecosystem, and pose a threat to the terrestrial Nicobar Megapode bird and leatherback turtles who nest in the Galathea Bay area.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

5. Power markets in India: their working, advantages, and the road ahead

Introduction

To meet peak power demand during the unusually hot summer, the government has allowed the trading of surplus electricity generated from "linkage coal" in the country's power markets. Coal linkages are typically made by the government to thermal units against long-term power purchase agreements (PPAs) with distribution companies (discoms). Power markets offer a flexible, reliable, and transparent alternative to PPAs, enabling generators to respond swiftly to demand fluctuations and sell surplus power at market-determined prices.

Power purchase agreements (PPAs)

To sell their electricity, generation units in India have traditionally used long-term PPAs that typically span 25 years. These agreements commit generators to supply power to buyers, usually public utilities, at fixed rates. PPAs are gradually losing favour due to their inflexibility

in adapting to dynamic market conditions, and their tendency to lock in significant generating capacity.



Power Markets

Power markets, on the other hand, allow generators to respond to short-term demand fluctuations and sell surplus power independently of PPAs at market prices. The flexibility is particularly beneficial for generators of renewable energy, who may produce excess power during the off-peak hours. Instead of

curtailing generation, the surplus can be traded on the market.

Price-based demand response involves multiple parties, and typically results in greater reliability and transparency in trading compared to bilateral contracts. This market-driven approach enables generators to optimise their output and revenue, while helping utilities meet variable power demands more efficiently.

How power markets work

Buyers make bids for the purchase of electricity, and sellers make offers. The market clearing price — the price at which electricity is traded — is determined by the equilibrium of demand bids and supply offers.

Power markets are categorised on the basis of electricity delivery timing and duration of contract. The spot market includes the real-time market (RTM) for near-immediate delivery and the intraday market for same-day trades hours before delivery. Contract markets, on the other hand, facilitate longer-term trades.

The renewable energy certificates (REC) mechanism allows utilities to meet renewable purchase obligations (RPOs) by buying RECs, each representing 1 MWh of renewable electricity. This system benefits states that lack sufficient renewable capacity, and enables them to purchase RECs for green energy generated elsewhere. Utilities that exceed RPO targets can trade extra RECs to allow other utilities to meet their targets.

Power exchanges in India

Power markets are hosted on a power exchange. Exchanges facilitate competitive pricing, improved resource allocation, and greater market liquidity in the power sector. Power exchanges were first introduced in Europe in 1990-91, and they now operate in about 50 countries around the world. The Electricity Act of 2003 established the framework for exchange operations in India, and exchanges commenced in 2008.

The spot market was introduced in 2020, which further enhanced the flexibility and responsiveness of the power trading system.

India has three major power exchanges regulated by the Central Electricity Regulatory Commission (CERC), where generators, utilities, and large consumers trade electricity. The

Indian Energy Exchange Ltd (IEX) dominates with more than 90% market share, followed by Power Exchange India Limited (PXIL) and Hindustan Power Exchange Ltd (HPX).

In FY 2023-24, IEX traded about 110 billion units (BU) of electricity, growing 14% year-on-year. This represents almost 7% of India's total power demand, which reached 1,626 BU in FY24. The government has recently amended various regulations to encourage and incentivise participation in power exchanges, reflecting their growing importance in India's electricity market.

Road ahead for exchanges

Indian regulators are exploring market coupling and capacity markets as the next evolutionary step for the country's power markets.

Market coupling is a process that matches bids from all power exchanges to discover a uniform market clearing price, which also acts as a reliable reference price for policymakers. The concept, first introduced in CERC's Power Market Regulations, 2021, could lead to more efficient price discovery, reduced price disparities across regions, and increased market stability.

Capacity markets, on the other hand, would allow generators to be paid for their available capacity, not just for the electricity they produce. This mechanism is aimed at ensuring long-term grid reliability by incentivising investment in generation capacity, particularly for peaking power plants that may not run frequently but are crucial during high-demand periods.

Only a few countries, including the United Kingdom, parts of Australia, and South Korea, have developed capacity markets. The introduction of these advanced market structures would align India's power markets more closely with mature international markets, potentially attracting more investment and fostering greater competition in the sector.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

6. Indian Government Bonds in JP Morgan index from June 28: how much funds could flow into India?

Why in News?



The inclusion of Indian Government Bonds (IGBs) in JP Morgan's emerging markets bond indices will begin from June 28. The inclusion, which will be spread over 10 months until March 31, 2025, is likely to bring nearly \$20-

25 billion into the country, according to various estimates.

While these higher inflows will help India manage its external finances and boost foreign exchange reserves and the rupee, the Reserve Bank of India (RBI) will have to use the instruments in its armoury to check the resultant inflationary pressures.

What was JP Morgan's announcement?

In September last year, JP Morgan had announced that it would include IGBs to its emerging markets bond index from June 2024. The inclusion of Indian bonds will be staggered into the GBI-EM Global Diversified Index (GBI-EM GD) over 10 months from June 28, 2024, through March 31, 2025, it said.

What would be India's weight in the index?

India is expected to reach the maximum weight of 10 per cent in the GBI-EM Global Diversified Index (GBI-EM GD). A higher weightage will prompt global investors to allocate more funds for investment in Indian debt. Weight of 10 per cent means that 10 per cent of the investment made in JP Morgan index would be routed to IGBs.

What amount of flows can come to India?

According to estimates by some economists, India is likely to receive \$2 billion to \$2.5 billion every month during the 10-month period starting June 28. Overall, it is expected that \$20 billion to \$25 billion of flows would come into India due to the inclusion.

What would be the impact of the bond inclusion?

The move could lead to fresh active flows in the debt market, which remains underpenetrated on external financing.

It will not only result in lower risk premia, but will also help India to finance its fiscal and current account deficit (CAD), as well as enhance the liquidity and ownership base of government securities (G-secs; debt instruments issued by the central government to meet its fiscal needs). It could help lower funding costs slightly, and support further development of domestic capital markets, but direct positive effects on India's credit profile will be marginal in the near term.

Will higher inflows be a concern for RBI?

While higher inflows will boost the rupee, inflation is likely to come under pressure. When the RBI mops up dollars from the market, it will have to release an equivalent amount in rupees, putting pressure on inflation.

RBI Governor Shaktikanta Das has said the central bank has several instruments to manage surges in flows on account of bond inclusion. "We have managed it in the past. We will manage it this time also," Das told reporters earlier this month.

Are Indian government bonds going to be included in any other global index?

After JP Morgan, Bloomberg announced this March that Indian government bonds will be included in the Bloomberg Emerging Market (EM) Local Currency Government Index and related indices from January 31, 2025.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

7. New international airport announced in Tamil Nadu's Hosur

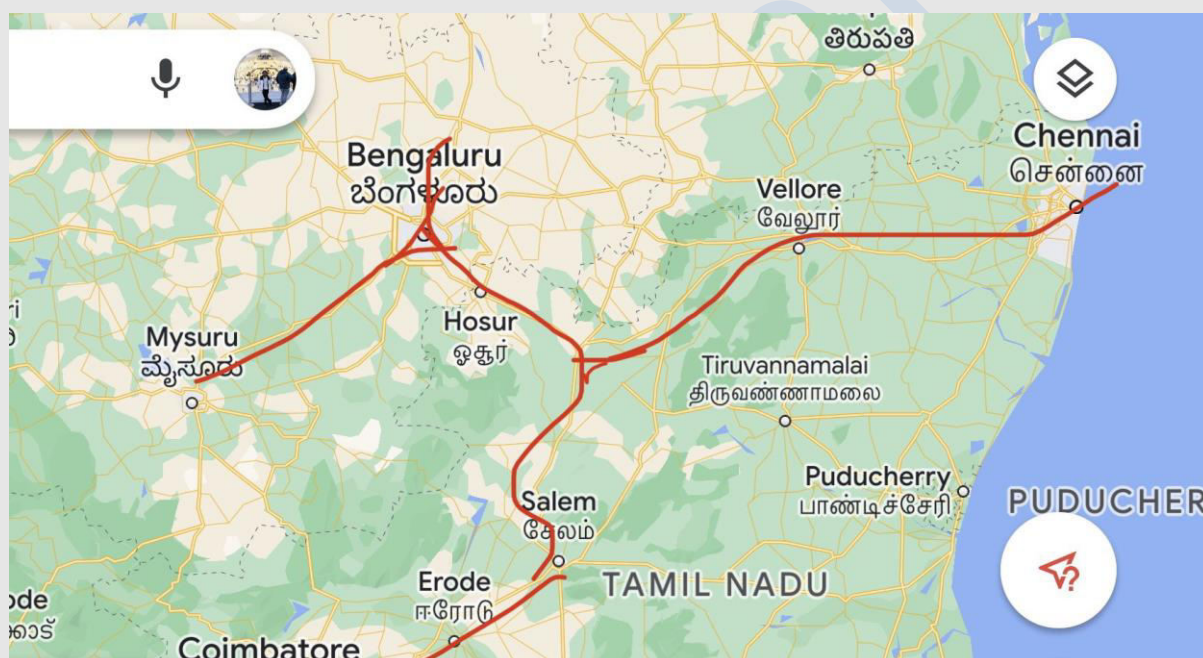
Introduction

The Tamil Nadu government announced the construction of a new airport in Hosur.

The Hosur airport project

The international airport announced by Chief Minister M K Stalin will be built over an area of 2,000 acres, and will be designed to handle 30 million passengers annually.

The ambitious project is part of the Tamil Nadu government's long-term goal of transforming Hosur, which is located just 40 km from Bengaluru — and only 25 km from Bengaluru's Electronic City — into a major centre of economic development with all modern infrastructure.



An existing industrial base

In the early 1970s, Hosur was little more than a brief stopover for buses travelling between Bengaluru and Tamil Nadu. The transformation of the town began after the state government recognised its potential and designated it as an industrial site. The establishment of an industrial estate in Hosur by the State Industries Promotion Corporation of Tamil Nadu (SIPCOT) attracted key players in various sectors. Today, Hosur hosts around 3,000 medium and small-scale enterprises (MSMEs) that feed into several global supply chains.

Robust investments in city

Hosur has seen a surge in investments since 2017, particularly in the electronics sector, which has attracted about Rs 1,000 crore. Its location close to Bengaluru offers logistical advantages, and makes it an attractive destination for investors.

Living in Hosur

The cost of living in Hosur, including essentials and local transport, is less than in Bengaluru. The rental market is also favourable, with 2BHK apartments available in the range of Rs 10,000 to Rs 12,000 per month.

However, the challenges of most Indian urban centres, such as traffic congestion, water scarcity, and absence of urban planning, affect Hosur as well.

Relevance: GS Prelims; Economics

Source: The Hindu

8. Why tariff hikes by Airtel, Jio, Vi were inevitable

Why in News?

All three of India's leading telecom operators, Reliance Jio, Bharti Airtel and Vodafone Idea (Vi) have announced tariff hikes within hours of each other, as the companies search for a path of monetising 5G services and improving the financial health of the sector.

Jio has raised tariffs by 12-25 per cent, with the steepest hike coming in some of its more premium plans. The most active plan — 28 days validity with 1.5 GB of data per day — saw the sharpest hike of 25 per cent. Airtel has increased prices by 11-21 per cent. Vi has raised prices by 10-20 per cent.



What's behind the price rise: the ARPU target

Bharti Airtel has maintained that the mobile Average Revenue per User (ARPU) needs to be upwards of INR 300, to enable a financially healthy business model for telcos in India.

In 2016, when Jio announced the launch of its 4G services – first for free for at least a year and then at much cheaper rates than its competitors – it disrupted India's telecom sector. It led to India having the cheapest data rates of anywhere in the world, and resulted in a boom in the number of people accessing online services. However, for a while now, the industry has been calling for a gradual increase in prices which would help their financial health.

As per an analyst note by Bernstein, there was an anticipation that the telcos will raise prices post the general elections. It said that for Airtel, its ARPU should stabilise to Rs 280 by FY26 and at Rs 300 by FY27.

The beginning of 5G monetisation

With the addition of 5G services to their kitty, for which all the three major telcos spent top dollar, there was also a question on when telecom companies will make a move towards

monetising their 5G services, which for a while were being offered at similar prices with no separate pricing. It appears that time has now come.

Because of low profitability, the recently concluded spectrum auctions saw a muted response by telcos, fetching just over Rs 11,340 crore to the exchequer — a mere 12 per cent of the government's reserve price of Rs 96,238 crore. However, in 2022, the companies had spent upwards of Rs 1.5 lakh crore to acquire 5G spectrum.

Relevance: GS Prelims & Mains Paper III; Economics

Source: Indian Express

9. What was the tussle over Covaxin IPR? What are the rules for patenting the intellectual property rights of a vaccine? Why was the ICMR not included?

Why in News?

The maker of the indigenous coronavirus vaccine, Covaxin, Bharat Biotech International Limited (BBIL), has admitted to an "inadvertent error" in patent filings to protect the vaccine's Intellectual Property Rights (IPR). One of India's leading biotechnology companies, it had failed to include scientists from the Indian Council of Medical Research (ICMR) as co-inventors in the Covaxin patent filings.



What kind of rights govern vaccine patents?

India's patent laws govern both product and process patents. Product patents grant an inventor a monopoly over, say, a drug. Process patents bar competitors from making a similar drug using the same sequence of steps.

Process of Covaxin development

Bharat Biotech said it had patented the process, namely of making a batch of vaccines from the virus strains that were provided by the ICMR-NIV (National Institute of Virology). This is the lab that has expertise in extracting viruses from blood samples, identifying its characteristics, conducting various tests to gauge its infectiousness and qualify it in comparison to related strains. However, preparing a vaccine out of this at an industrial scale is beyond the capabilities of a lab and requires a different order of facilities that only established vaccine manufacturers have.

Covaxin is an inactivated version of COVID-causing coronavirus; once injected into the body it coaxes it into producing antibodies that can potentially protect against severe disease from a coronavirus infection. To do this effectively, an 'adjuvant' is added which increases the vaccine's potency. Vaccine makers may have their own ways of bringing all of these steps together and, given the competitive nature of the field, strive to ward off competitors from imitating these processes to gain a temporary monopoly in the market and rake profits.

To be sure, while companies are free to file for a product or process patent in as many countries as they can afford, a patent is only granted after regulatory authorities grant them one or are convinced that this process is indeed novel or inventive. BBIL, as far as is publicly known, hasn't yet been granted these patents.

What were the roles of BBIL and ICMR?

BBIL had collaborated with the ICMR-NIV for all the steps in developing a vaccine. The two organisations had signed an agreement that spelt out each entity's responsibilities. As ICMR is a public entity and because of the scale of the COVID crisis, there were Right To Information requests to make this agreement public. However, it was only in July 2021, that parts of the agreement were made public in Rajya Sabha.

Beyond transferring the strains and making vaccines, the agreement said, ICMR would also test these vaccines on animals — rodents to monkeys — and then on people to establish that the vaccine worked as intended. The ICMR also funded these clinical trials — ₹35 crore — and incurred costs in developing Covaxin. In return it was to get 5% of royalties that BBIL earned from the sale of Covaxin. Since the announcement of the BBIL and ICMR collaboration, it was generally accepted that both entities would contribute to the vaccine and would therefore hold "joint intellectual property rights," as was stated in Parliament.

However, BBIL made a distinction between the rights governing the making of the vaccine and the rights over the data generated from clinical trials. The ICMR hadn't invested in the actual making of the vaccine and so wasn't included in patent applications. However, a day after the matter became public, BBIL said it had made a mistake, and that it would be making amends by filing fresh applications that listed ICMR personnel as inventors. It is unclear what prompted this.

Why does being cited as an inventor matter?

IPR is a vast, complex domain and spans the minutest parts of the product invention process. As the development of pharmaceutical products involves a wide range of expertise, it is hard for single firms or entities to develop everything in-house.

Just like the BBIL-ICMR collaboration, companies may enter into several licensing agreements — BBIL for instance had a technology licensing agreement with Virovax for the adjuvant — with other companies. If a single product thus involves multiple entities and collaborators, being listed as an inventor has a bearing on the sharing of intellectual property rights, royalties and even determining how a product can be used. There is no field of human activity that is untouched by disputes over IPR. In patent filings, not listing out all the inventors — in the U.S especially — could even lead to patent applications being rejected.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Hindu

1. Highway to 'climate hell': What breaching the 1.5 degree Celsius warming threshold could mean

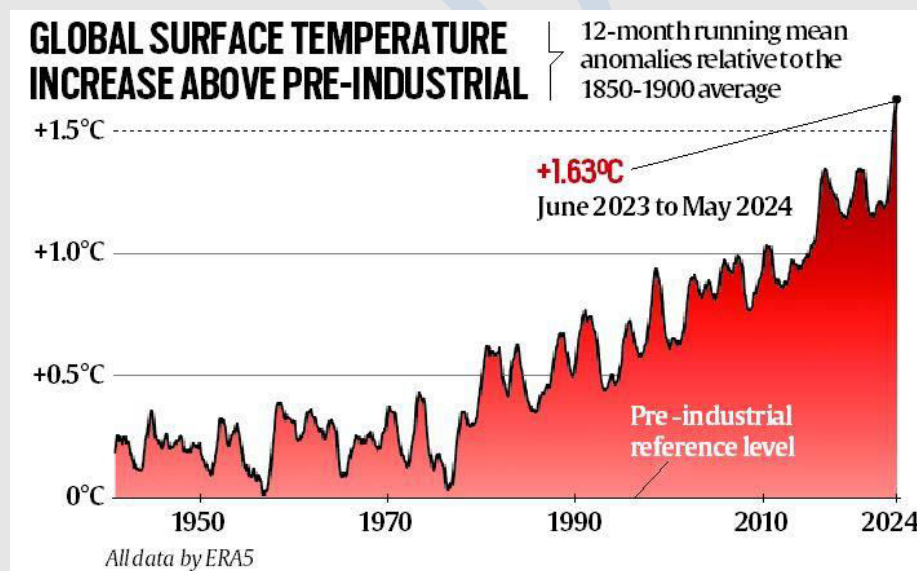
Why in News?

This May was the warmest May ever. In fact, each of the last 12 months have set a new warming record for that particular month, Europe's Copernicus Climate Change Service (C3S) said last week.

The average global temperature last month was 1.5 degree Celsius above the estimated May average for the 1850-1900 pre-industrial reference period. For the 12-month period (June 2023 – May 2024), the average temperature stood at 1.63 degree Celsius above the 1850-1900 average.

The World Meteorological Organization (WMO), in a separate report published on June 6, said there is now an 80% chance that at least one calendar year between 2024 and 2028 would see its average temperature exceed 1.5 degree Celsius above the pre-industrial levels — for the first time in history. Just a year ago, the WMO had predicted a 66% chance of the same.

Scary as these facts are, they do not imply that the world is about to breach the commonly talked about 1.5 degree Celsius temperature threshold. That threshold refers to a warming over a longer period, with usually a two or three decade average taken into consideration.



What is the 1.5 degree Celsius threshold?

In 2015, 195 countries signed the Paris Agreement, which pledged to limit global temperatures to "well below" 2 degree Celsius above pre-industrial levels by the end of the century. It also said countries would aim to curb warming within the safer 1.5 degree Celsius limit.

While the Agreement did not mention a particular pre-industrial period, climate scientists generally consider 1850 to 1900 as a baseline, since it is the earliest period with reliable, near-global measurements. Some anthropogenic global warming had already taken place at that time — the Industrial Revolution began in England in the mid-1700s. Nonetheless, a reliable baseline is crucial to measure the rising temperatures today.

Why 1.5 degree Celsius?

The safer 1.5 degree Celsius limit was chosen based on a fact-finding report, which found that breaching the threshold could lead to “some regions and vulnerable ecosystems” facing high risks, over an extended, decades-long period.

The 1.5 degree Celsius was set as a “defence line”, to ensure that the world avoids the disastrous and irreversible adverse effects of climate change which would begin to unfold once the average temperature increases by 2 degree Celsius above the pre-industrial levels. For some regions, even a smaller spike will be catastrophic.

What happens when threshold is breached?

The 1.5 degree Celsius threshold is not a light switch which, if turned on, would trigger a climate apocalypse. It is just that once this threshold is breached for a long period of time, the impact of climate change such as sea level rise, intense floods and droughts, and wildfires will significantly increase and accelerate.

The world is already witnessing these consequences, to some extent. For instance, the severe heatwave over North and Central India in late May, which saw temperatures nearing 50 degree Celsius in Delhi and Rajasthan, was nearly 1.5 degree Celsius warmer than past heatwaves. The heatwave reportedly caused hundreds of deaths, and can be attributed to rising global temperatures.

In April, the US National Oceanic and Atmospheric Administration (NOAA) said the fourth global mass coral bleaching event has been triggered by extraordinarily high ocean temperatures. This could harm ocean life, and the lives of millions of people who rely on reefs for food, jobs, and coastal defence.

Last year, a report found that five major climate tipping points are already at risk of being crossed due to warming. Climate tipping points are critical thresholds beyond which a natural system can tip into an entirely different state. They cause irreversible damage to the planet, including more warming.

Scientists have identified a number of these tipping points across Earth, which fall into three broad categories: cryosphere (for example, melting of the Greenland ice sheet), ocean-atmosphere (change in water temperature), and biosphere (death of coral reefs), according to a report by the European Space Agency (ESA).

How can the world stay within the threshold?

2023 was the warmest calendar year ever recorded. The WMO reported that the average global temperature reached 1.45 degree Celsius above the pre-industrial levels. But the unusually high temperatures were also partly due to the onset of El Niño, an abnormal warming of surface waters in the equatorial Pacific Ocean. This weather pattern is known to lead to record-breaking surface and ocean temperatures in some parts of the world.

El Niño has now peaked and is likely to transition towards the cooler La Niña in the following months. Nonetheless, the world is most likely to temporarily breach the 1.5 degree Celsius limit in the next five years. Each year between 2024 and 2028 is predicted to be between 1.1 degree Celsius and 1.9 degree Celsius higher than the pre-industrial average, the recent WMO report found.

The only certain way of remaining under the threshold is to immediately, and radically, curb the emissions of heat-trapping greenhouse gases (GHG). To do this, the world needs to stop burning fossil fuels like coal, oil and gas, which release GHGs into the atmosphere. So far, countries have failed to make a significant dent in this regard.

In 2023, the levels of GHGs in the atmosphere reached historic highs. Carbon dioxide, which is the most abundant anthropogenically produced GHG, rose in 2023 by the third-highest amount in 65 years of recordkeeping, according to NOAA.

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

2. What is New Collective Quantified Goal?

Why in News?

A climate meeting in Bonn, Germany, has failed to make much headway on the crucial issue of defining a new climate finance goal. By the end of 2024, countries have to finalise a new sum of money — above the existing figure of \$100 billion per year — that the developed world must mobilise for the developing countries to help them fight climate change.

The Bonn talks, an annual fixture in June, were expected to give at least some indicative numbers. They could have been worked upon before COP29 — scheduled to take place in Baku, Azerbaijan, in November — where they have to be finalised. But this did not happen.

Search for a new New Collective Quantified Goal (NCQG)

Money is central to climate action. It is needed not just for facilitating mitigation or adaptation works — mundane tasks of collecting and reporting climate data, mandatory under the 2015 Paris Agreement, also require substantial sums of money, especially in developing and poor countries, where there is a large capacity gap for this kind of work.



Considerations for a New Collective Quantified Goal

Under the international climate architecture set by the UN Framework Convention on Climate Change (UNFCCC), rich and developed countries are obliged to provide money to developing countries to fight climate change. This is because the rich and developed countries are primarily responsible for causing climate change.

In 2009, the developed countries promised to mobilise \$100 billion every year from 2020 towards this purpose. A report by the Organisation for Economic Cooperation and Development (OECD), a grouping of rich countries, two weeks ago claimed that this \$100 billion target had been met for the first time in 2022.

However, developing countries contest these claims, citing double-counting and innovative accounting, and have often blamed the developed world for not keeping its promise on climate finance.

The 2015 Paris Agreement says that developed countries must periodically increase this sum after 2025, considering the rapidly growing requirements for climate finance. The increased target, or the New Collective Quantified Goal (NCQG), for the post-2025 period, is to be finalised this year.

Requirements of funds

It is widely acknowledged that developing countries now need trillions of dollars, not billions, annually. A UNFCCC assessment last year said these countries needed about \$6 trillion between now and 2030 just to implement their promised climate actions. Only for their adaptation needs, some of which are part of their climate actions, developing countries require between \$215 billion and \$387 billion annually, it said. The assessment also said the global transition to clean energy (not just in developing countries) needed investments of about \$4.3 trillion every year till 2030, and about \$5 trillion annually after that till 2050 to reach a global net zero status.

These are assessments of a few specific needs. The overall requirement for climate finance is much greater.

Demand by Developing Nations

A few months back, India formally proposed that developed countries should commit themselves to providing at least \$1 trillion every year after 2025. The Arab countries have said this figure should be at least \$1.1 trillion. African countries have demanded \$1.3 trillion.

The developed countries have not made any offer publicly. They have just acknowledged that the new amount has to be higher than \$100 billion per year.

Debate over contribution

According to the UNFCCC and Paris Agreement, only the countries listed in Annexure 2 of UNFCCC — 25 of them and the European Economic Community — are responsible for providing climate finance to developing countries. The listed countries, however, have been trying to shift the responsibility to others as well. They argue that many other countries are now economically better off than in the early 1990s when the list was made. They also argue that the requirements are too huge for the original group of listed countries to meet. China, the world's second-largest economy, oil-rich Gulf countries, and others like South Korea are not part of Annexure 2. In Bonn, China said it was playing its part in the global fight against climate change, but had "no intention" of taking additional responsibility.

All eyes on Baku

NCQG is the biggest thing on the climate change agenda this year. An agreement on this has to happen at COP29. The \$100 billion figure was not a negotiated outcome. The offer was made in a statement by then US Secretary of State Hillary Clinton at COP15 in Copenhagen. It was later agreed upon by all the other Annexure 2 countries.

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

3. Why has New Zealand removed the 'burp tax' on livestock?

Introduction

Earlier this week, New Zealand's centre-right government announced scrapping the 'burp tax' — a scheme to tax greenhouse gas emissions from livestock.

The burp tax was introduced in October 2022 under the leadership of then Prime Minister Jacinda Adern, whose Labour Party lost last year's elections, making way for the currently ruling coalition led by the National Party.

Why was the 'burp tax' introduced in New Zealand?

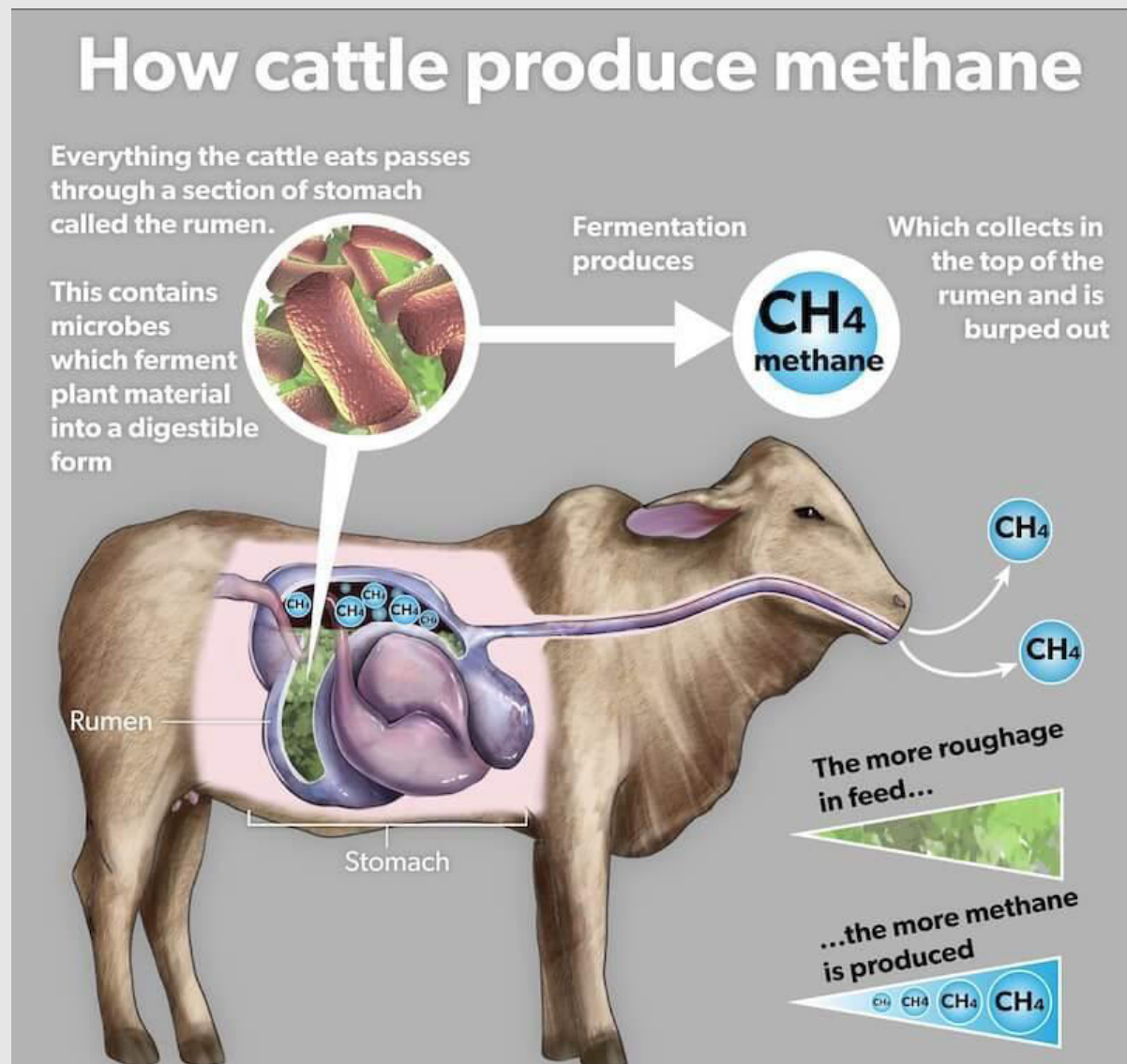
The primary aim of the scheme was to curtail methane emissions from Ruminants. they are hoofed grazing or browsing herbivores that chew cud. Ruminants such as cows, sheep, goats, and buffaloes have a special type of digestive system that allows them to break down and digest food that non-ruminant species would be unable to digest.

Stomachs of ruminant animals have four compartments, one of which, the rumen, helps them to store partially digested food and let it ferment. This partially digested and fermented food is regurgitated by the animals who chew through it again and finish the digestive process.

However, as grass and other vegetation ferments in the rumen, it generates methane, a potent greenhouse gas, which is one of the main drivers of climate change. Methane is responsible for 30% of the warming since preindustrial times, second only to carbon dioxide. Ruminant animals such as cows and sheep release this gas mainly through burping.

Given the very large numbers of cattle and sheep on farms in dairy-producing countries, these emissions add up to a significant volume. For instance, in New Zealand, there are around 10 million cattle and 25 million sheep, which are the source of nearly half of the country's greenhouse gas emissions.

Therefore, the previous government decided to impose a tax on livestock.



Why has the tax been removed?

The introduction of the burp tax sparked protests by farmers across the country. The farmers argued that the scheme coupled with other agriculture emission regulations would severely impact their livelihood. The then Labour Party-led government, however, did not budge.

The new centre-right coalition in power currently has decided to scrap the tax, saying it would explore other ways of reducing methane emissions.

4. Why direct seeding of rice (DSR) is yet to pick up in Punjab

Why in News?

The Punjab government has been actively promoting the direct seeding of rice (DSR), or 'tar-wattar' technique. This can reduce water use by 15% to 20% (the traditional puddling method requires 3,600 to 4,125 litres of water to grow a single kilo of rice). Moreover, DSR requires less labour and matures 7 to 10 days faster, giving farmers more time to manage paddy straw.

Despite these benefits, and government incentives (Rs 1,500 per acre, this year), this technique is yet to see widespread adoption in Punjab. Last year, only 1.73 lakh acres of the 79 lakh acres under paddy cultivation in Punjab saw the use of this technique. Even the government's target of bringing 7 lakh acres under DSR this year represents less than 10% of Punjab's total rice acreage.

Here is what might be holding the DSR technique back.

How DSR works

Traditionally, paddy farmers prepare nurseries where seeds are first sown. After 25-35 days, the young seedlings are uprooted and replanted, in the flooded main field. While this method is labour and water-intensive, it is known to maximise yields and maintain better crop health.



DSR, as the name suggests, requires no nursery preparation or transplantation. Paddy seeds are directly sown, roughly 20-30 days prior to when they would have been transplanted. The field is irrigated and laser leveled prior to the seeding process which is carried out using a seed drill or lucky seeder. Seed treatment is crucial, with seeds soaked in a fungicide solution for eight hours, then dried for half a day before sowing.

The first round of irrigation is carried out 21 days after sowing, followed by 14-17 more rounds at 7-10 day intervals, depending on soil type and the quality of the monsoon. The final irrigation takes place 10 days before harvest. The traditional method requires 25-27 irrigations in total.

Two requirements

Experts emphasise that soil suitability is crucial for the successful implementation of DSR.

There are two factors here.

1. Soil Texture: First is the texture of the soil. Farmers should avoid DSR in light-textured soils — it is more suitable for heavy or medium-to-heavy-textured soils. This is primarily because

light-textured soils do not retain water well. Heavy-textured soils contain more clay and less sand, whereas light-textured soils have less clay and more sand.

In fact, it has been seen that in the race to avail the government incentives, some farmers use DSR in unsuitable soils, leading to the need for irrigation every second or third day. This completely counteracts the water-saving benefits of DSR, and in fact, ends up guzzling down more water.

2. Iron content: The iron content of the soil also determines the suitability of DSR. Soil with severe iron deficiency, and weed problems must not be cultivated using this technique.

In fact, experts say that in several places, even medium-textured soils are unsuitable simply due to their lack of iron. This is likely to be more of a problem in fields previously cultivated with crops such as cotton, maize, and sugarcane.

Experts recommend that soils with plant-available iron are ideal for DSR. In case iron supplements are being used, farmers should apply ferric iron, which is green-coloured and not oxidised, rather than oxidised iron, which is brown in colour.

Lack of iron content can severely impact yields and lead to major financial losses for farmers. Sometimes, farmers might even have to transplant the crop anyway, after a month or so, leading to DSR losing its labour-saving benefits.

Path forward for DSR

A basic lack of awareness and understanding is holding DSR back. After using the method on unsuitable soil, farmers do not get the expected yields. They then developed apprehensions regarding DSR and reverted to their traditional puddling method. Crucially, negative feedback spreads quickly by word of mouth, further dissuading other farmers for whom DSR might have been ideal.

Experts say that comprehensively educating farmers is key to enable the adoption of a new technique, and departure from age-old, tried and tested methods. They suggest that extensive training and a ready helpline be provided, to handhold the farmers through the whole process, from pre-sowing to harvesting. This can instill confidence among farmers regarding DSR's efficacy.

Additionally, if farmers incur losses during the initial years of adoption, adequate compensation should also be provided, so as to not disincentivise them from trying again.

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

5. What is SWM cess and why is it levied on waste generators?


Why in News?

The Bruhat Bengaluru Mahanagara Palike (BBMP) has proposed a Solid Waste Management (SWM) Cess of ₹100 per month for each household. While the proposal has sparked debate and criticism among residents and stakeholders, it is important to understand the rationale behind SWM cess, its intended use, and the broader context of solid waste management challenges faced by Urban Local Bodies (ULBs) in India.

CESS TO DOUBLE BBMP'S INCOME FROM SWM

- The BBMP plans to introduce 15 per cent of the property tax payable as SWM cess and earn an additional income of around ₹450 crore.

- Currently the agency says it is spending over ₹500 crore on solid waste management



- The proposed hike in SWM cess will be placed before the BBMP council meeting this week for approval.

Urban Local Bodies (ULBs) levy user fees or SWM cess as per the provisions of Solid Waste Management Rules, 2016. According to these guidelines, ULBs must collect user fees/cess for SWM services provisions provided. ULBs typically charge about ₹30-50 per month as SWM cess, which is collected along with property tax. ULBs are now considering revising these rates and imposing higher charges on bulk waste generators to meet a portion of the costs incurred in providing SWM services.

What are the costs?

Offering SWM services is complex and resource-intensive. ULBs typically deploy about 80% of their manpower and up to 50% of their annual budgets to provide SWM services to city residents.

In a city like Bangalore, an urban resident generates about 0.6 kg of waste per day, totalling

0.2 tonnes per person per year. Overall, Bangalore generates about 5,000 tonnes of solid waste per day. Managing this volume of waste requires around 5,000 door-to-door waste collection vehicles, 600 compactors, and about 20,000 Paurakarmikas.

SWM services comprise four components: collection, transportation, processing and disposal. ULBs package collection and transportation together, and processing and disposal together. Collection and transportation are resource and labour-intensive and come up to 85-90% of the SWM budget, whereas only about 10-15% is spent on processing and disposal of waste.

What are the challenges?

Solid waste generated in Indian cities consists of about 55-60% wet biodegradable material and 40-45% non-biodegradable material. The portion of recyclable material in the dry waste is minimal, only about 1-2%, with the rest being mostly non-recyclable and non-biodegradable waste.

Although 55% of the wet waste can be converted into organic compost or biogas, the yield is as low as 10-12%, making both composting and biogas generation from solid waste financially unviable. Typically, operational revenue from waste processing facilities covers only about 35-40% of operational expenses, with the rest subsidised by the ULB.

Apart from financial challenges, ULBs face other challenges associated with SWM services, such as extra work of clearing open points and drains, preventing open littering, seasonal changes in waste generation, and sweeping operations.

Additionally, the disposal of non-compostable and non-recyclable dry waste, such as single-use plastic, textile waste and inert materials, is expensive since the material needs to be shipped to cement factories or waste-to-energy projects located about 400-500 km from cities.

Large cities like Bangalore spend about 15% of their budget—about ₹1,643 crore out of ₹11,163 crore — whereas the revenue from SWM services is almost negligible at ₹20 lakh per year. Smaller cities tend to spend up to 50% of their budget but also end up with almost negligible revenue. Hence, ULBs charge SWM cess to cover a portion of the costs.

What is the solution?

Although collection and transportation of waste generate no revenue, several strategies can reduce overall expenditure on SWM and lower user charges.

These are segregation of waste at source, reducing single-use plastic, decentralised composting initiatives, Information, Education and Awareness (IEC) to prevent open littering, and asking bulk waste generators to process their own waste.

A balanced approach, combining marginal user charges with efficient operations, could help make our cities cleaner.

Relevance: GS Prelims & Mains Paper III; Environment

Source: The Hindu

6. Who or what is responsible for Hajj deaths in Saudi Arabia?

Why in News?

Arabic-language social media has been flooded this week with shocking images from Saudi Arabia. The pictures and videos show people who were undertaking their once-in-a-lifetime Muslim pilgrimage to Mecca collapsed on the side of the road or slumped in wheelchairs, apparently close to death or dead. They are dressed in traditional pilgrim's white, their faces covered with cloths. In several pictures, corpses appear to have been left where they presumably collapsed.

What started as a rumor on social media was confirmed as the weeklong Hajj pilgrimage ended: Hundreds of pilgrims have died in Saudi Arabia, evidently due to extremely high temperatures and lack of shelter or water.

What led to death?



Temperatures in Mecca, Islam's holiest city, rose to 51.8 degrees Celsius (125 degrees Fahrenheit) during the course of the annual event, which started late last week.

Around 1.8 million Muslims from all over the world had been expected in Saudi Arabia to perform Hajj. One of the world's largest religious gatherings, the Hajj is one of the five pillars of Islam. Every Muslim who is able to is supposed to perform it at least once in their lifetime.

According to AFP news agency, which has been tallying up fatalities via different sources and countries over the past few days, the death toll has topped 1,000.

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

1. Apple Intelligence, the new AI coming to iPhones, iPads, and Macs

Why in News?

At the 2024 recent Apple Worldwide Developers Conference (WWDC), the iPhone maker introduced Apple Intelligence, which is the company's personal intelligence system that brings generative AI to the centre of iPhone, iPad, and Mac experience.

The tech giant has claimed that Apple Intelligence will help set a new standard for privacy in AI and a system that has personal context at the heart of its offerings.



What is Apple Intelligence?

Apple has described its new AI as a personal intelligence system that has been built for iPhone, iPad, and Mac. It combines the capabilities of generative AI models with personal context to deliver personalised intelligence — which means that it understands user behaviour and comes up with appropriate responses. It is like ChatGPT

but with more contextual awareness — it knows the user's likes and dislikes, online preferences, will keep a tab on their calendar, etc.

What can Apple Intelligence do?

Apple Intelligence lets users improve their writing and communicate with more ease. Apple is bringing systemwide Writing Tools that are built into iOS 18, iPadOS 18, and macOS Sequoia. These tools will allow users to write, rewrite, proofread, and summarise text almost anywhere they write including Notes, Pages, Mails, and even third-party apps.

Apple says that 'Writing Tools' backed by Apple Intelligence will help users feel more confident in their writing. For example, the 'Rewrite' feature shows users different versions of what they wrote. These versions adjust the tone to suit their audience and the task at hand. On the other hand, the 'Summarise' feature lets users select text and have it condensed into easily consumable paragraphs, bulleted points, tables, or a list.

When it comes to 'Mail', Apple Intelligence makes it easier to manage emails. Features like Priority Messages show a new section at the top of the inbox with the most urgent emails. Owing to AI integration, users can now see summaries of emails without needing to open them. Another feature, 'Smart Reply' gives suggestions for quick responses and it will also identify questions in an email to ensure everything is answered.

Apple Intelligence makes Siri the ideal assistant

With Apple Intelligence, Siri is now more contextually aware and comes with richer language-understanding capabilities. Powered by AI, the virtual assistant is more natural, contextually relevant, and more personal. Apple claims that Siri can follow along if a user stumbles over their words and it can maintain context from one request to the next. Also, now Siri comes with a brand-new design with glowing light around the edge of the screen to indicate Siri is active.

Apple Intelligence also brings something known as 'onscreen awareness' to Siri. This essentially means Siri can take actions with all that is visible on the screen. For example, if a friend sends the user their new address, the user can simply say "add this address" to their contact card and Siri will follow.

What about security?

Contextual awareness means that Siri will be aware of all your activity, and that brings to the question of privacy and security. Apple has said that Apple Intelligence has been designed to protect user privacy at every step. It is integrated right into iPhone, iPad, and Mac through on-device processing.

Relevance: GS Prelims; Science & Technology

Source: Indian Express

2. How SpaceX's Starship can revolutionise space travel and exploration

Why in News?

Elon Musk-owned SpaceX's Starship rocket accomplished its first fully successful test flight last week, with both its booster and spacecraft making a gentle splashdown after an hour-long sub-orbital space flight. This was SpaceX's fourth attempt to launch the mammoth Starship.

Starships' booster (called Super Heavy) detached from the upper section (or the Starship spacecraft), to make a soft landing in the Gulf of Mexico. The spacecraft, however, travelled halfway around the planet to make a controlled splashdown in the Indian Ocean.

This test flight brings SpaceX one step closer to its aim of building a fully and rapidly reusable rocket system. Once entirely operational, Starship can redefine space travel and exploration for the benefit of astronomy and planetary science.

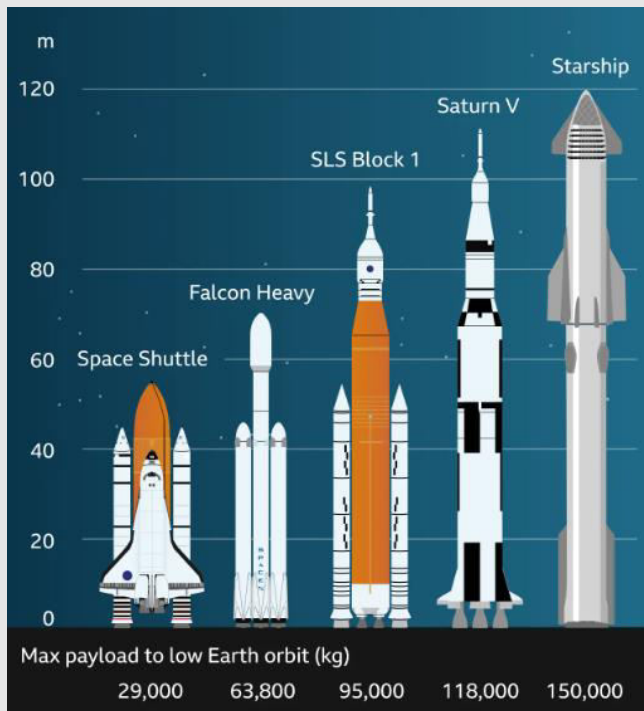
But first, what is Starship?

Starship is a two-stage heavy lift-off vehicle designed to carry crew or/and cargo to Earth orbit, the Moon, Mars, and beyond. Put together, the rocket system is nearly 120 metres tall, making it the largest rocket ever flown — taller than even the Saturn V (111 m), which took Neil Armstrong to the Moon. For perspective, the Qutab Minar is 72.5 m tall.

The Super Heavy booster consists of 33 Raptor engines that can produce 74 meganewtons of thrust. NASA's biggest currently-operational rocket, the Space Launch System (SLS), generates

39 meganewtons off the pad. Saturn V delivered some 35 meganewtons of thrust off the pad. These Raptor engines use a 3.6:1 ratio of liquid oxygen (the oxidiser, a chemical which reacts with the fuel to cause combustion) and liquid methane (the fuel).

According to SpaceX, upon the project's completion, the Super Heavy will be fully reusable, and capable of re-entering Earth's atmosphere after a mission to land at the launch site.



How can Starship reduce the cost of space travel?

One of Starship's biggest selling points is that it will drastically bring down the cost of space travel. Three main features will allow this.

First, the Starship is eventually expected to be able to carry up to 150 tonnes of payload to low-Earth orbit, and at least 100 tonnes to the Moon and Mars. This is more mass than humankind has collectively soft-landed on the lunar surface so far.

Two, SpaceX is developing the Starship's upper stage in such a way that it can be refuelled in Earth orbit by other Starships. In theory, this will allow it to operate like

an aeroplane that can be refuelled and put out in the air quickly.

Three, the Starship rocket system is designed to be entirely, and rapidly reusable. Unlike in the case of other launch systems, Starship's principal hardware elements are not discarded — either by being dropped in the ocean or allowed to burn up — but rather brought back to the ground so that they can be used again.

Even NASA's reusable Space Shuttle spacecraft used a disposable external fuel tank and reusable thrusters which had to be recovered from the sea, examined, and refurbished after every use. Even the shuttle itself often took months to get running again.

According to some estimates, the Starship will be able to deliver cargo up to 100 tonnes to Mars for just \$50 million. The Space Shuttle, which was retired in 2011, used to cost \$1.5 billion to lift only about one-quarter of what Starship will, and only into low Earth orbit, according to a report by ABC News.

How does this benefit science?

Over the years, the biggest hurdle to space exploration, and the commercialisation of space travel has been the inability of launch vehicles to carry heavy payloads. This requires carrying lots of fuel (hence a bigger rocket), and is a very expensive endeavour.

Starship's capability to carry heavy payloads, while being extremely cost-effective, promises to change that.

For instance, scientists will be able to launch much larger space telescopes, which could be built out of cheaper but heavier materials. They will also be able to send bigger equipment in future Moon and Mars missions, such as a full-sized drilling rig, which can drill up to a kilometre. This will give scientists unprecedented access to the interior of the Moon and Mars, where useful resources are believed to be present.

As Starship is capable of returning to Earth, it would also be able to bring back huge amounts of samples from the Moon and other planets, which could help scientists unlock numerous mysteries about our solar system and the origin of life.

The rocket system is central to NASA's Artemis program, which aims to put astronauts back on the Moon by 2030. It is also supposed to take astronauts to Mars before the end of the next decade.

What are the challenges?

But before these 'benefits' can be actualised, SpaceX needs to prove that Starship is safe and reliable, while keeping costs low, as per its promise. Historically, this has been a major challenge for space flight programmes.

For example, the major criticism of NASA's Space Shuttle programme was that the incremental cost of its reusable space shuttles turned out to be much more expensive than expendable rockets, despite the latter not being reusable.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: Indian Express

3. James Webb Space Telescope spots earliest-known galaxy: What a new study says

Why in News?

NASA's James Webb Space Telescope (JWST) has spotted the earliest-known galaxy, one that is surprisingly bright and big considering it formed during the universe's infancy — at only 2% its current age.

JWST, which by peering across vast cosmic distances is looking way back in time, observed the galaxy as it existed about 290 million years after the Big Bang event that initiated the universe roughly 13.8 billion years ago, the researchers said. This period spanning the universe's first few hundred million years is called cosmic dawn.

The discovery was made by an international team of astronomers, who used JWST to observe galaxies as part of the JWST Advanced Deep Extragalactic Survey (JADES) program. The study was published online last week ahead of formal peer review.

What do we know about the galaxy?

This galaxy, called JADES-GS-z14-0, measures about 1,700-light years across. A light year is the distance light travels in a year, which is 9.5 trillion km. The galaxy has a mass equivalent to 500 million stars the size of our Sun and is rapidly forming new stars — about 20 every year.



Until now, the earliest-known galaxy dated to about 320 million years after the Big Bang, as announced by the JADES team last year.

Why is the galaxy so bright?

Three main hypotheses have been advanced to explain the luminosity of early galaxies. The first attributed it to supermassive black holes in these galaxies gobbling up material. That appears to have been ruled out by the new findings because the light observed is spread over an area wider than would be expected from black hole gluttony.

It remains to be seen whether the other hypotheses — that these galaxies are populated by more stars than expected or by stars that are brighter than those around today — will hold up.

Relevance: GS Prelims; S&T

Source: Indian Express

4. How Agnibaan rocket launch marks a turning point for India's space sector

Why in News?

A private space company, Agnikul Cosmos, carried out the first successful launch of its indigenously-built rocket last week, opening up a new chapter in India's space sector. The event was significant enough to be noticed by the Indian Space Research Organisation (ISRO) and everyone else in the space sector, in India and abroad. Prime Minister Narendra Modi, Home Minister Amit Shah, and External Affairs Minister S Jaishankar congratulated the company for the achievement.

Not first Private Company

To be sure, this was not the first time that an Indian private company had flown a rocket from Indian soil. In November 2022, Skyroot Aerospace, a young space start-up just like Agnikul, successfully launched a rocket which it has named Vikram, after Vikram Sarabhai, the legendary space leader credited with building ISRO in the initial years. That moment too had been hailed by the President, Prime Minister, and many others.



World's first 3-D printed engine

The inaugural flight of Agnikul's creatively named Agnibaan rocket builds on the success of Skyroot and signals the range of options that are opening up in India's space market. Agnibaan was powered by the world's first 3-D printed engine, and was launched from Agnikul's own launchpad, built at ISRO's Sriharikota launch facility. Both Agnikul and Skyroot hope to begin launching commercial satellites on their rockets within a year.

Small satellites

The Angibaan will eventually have several variants, capable of carrying payloads between 30 kg and 300 kg to lower earth orbits. The Skyroot rocket,

Vikram, also has a few variants, with similar capabilities.

Both of these are targeting the small satellite market to cater to a rapidly growing demand for a variety of space-based applications in areas as diverse as communications, broadcasting, disaster management, climate change, earth and ocean observation, urban planning, and surveillance. These satellites are usually not meant for space exploration or scientific experiments.

ISRO itself is developing a new rocket, called SSLV or Small Satellite Launch Vehicle, to serve this demand. SSLV, which has flown twice but only once with success, is slightly more powerful and can carry payloads up to 500 kg.

Agnibaan rocket

The uniqueness of Agnibaan lies in the fact that its semi-cryogenic engine is entirely 3-D printed. The engine does not have any components or moving parts at all. There are no joints, no welding, and no fusing. It is a smooth single piece of hardware. The use of 3-D printing in space hardware is not a novel idea. But no one has used an entire engine that is 3-D printed.

3-D printing can increase efficiency, bring down costs, and reduce the probability of something going wrong. In an engine that is an assembly of several moving points, each joint or wiring is a potential source of error. Agnibaan's engine, named Agnilet, has been an entirely in-house development.

The fact that Agnibaan was launched from a privately owned launch pad is a first for India. Thus far, all space launches were carried out from one of the two ISRO launch pads at Sriharikota. Given the prospect of a sharp rise in the number of space launches, ISRO is in the process of developing a second space port, at Kulasekarapattinam in Thoothukudi district, Tamil Nadu. It is meant to be used mainly for SSLV launches.

Agnikul, the company, has built its own launch pad inside the Sriharikota range with the help of ISRO. It uses a lot of ISRO's facilities, but the separate launchpad gives it the flexibility to schedule its launches whenever it wants. Agnikul is hoping to carry out 35 to 40 launches of its Agnibaan rockets every year.

Rise of private players

Agnikul and Skyroot represent the success of India's efforts to open up the space sector for private participation. They are not alone. Dozens of space companies have come up in the last few years, operating in different segments of the space market — satellites, space-based applications, hardware, communications, data centres, and everything else. Many of them have already started to make their mark.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: Indian Express

5. First human death from H5N2 bird flu: Why are the experts concerned?

Why in News?



The World Health Organization (WHO) recently confirmed the death of a 59-year-old man in Mexico caused by a strain of bird flu called H5N2, which was never recorded in humans before.

The man, who died on April 24, had no history of exposure to poultry or other animals, raising significant concerns about the virus's

transmission.

But first, what is avian influenza?

Avian influenza, commonly known as bird flu, is a viral infection that primarily affects birds. However, certain subtypes of the virus can infect humans, leading to severe respiratory illnesses. The most notable of these subtypes is H5N1, which has been responsible for numerous human infections and fatalities in the past.

Symptoms of avian influenza in humans are similar to those of regular flu and can include: Fever, cough, sore throat, muscle aches, and severe respiratory distress in advanced cases.

Why is the Mexico death a concern?

The recent case in Mexico is particularly concerning because the victim had no known exposure to infected animals, indicating a potential shift in the virus's ability to infect humans without direct contact with poultry.

This indicates that the virus can infect humans without the traditional route of transmission through poultry exposure. Avian influenza primarily affects birds, but certain strains, such as H5N1, can infect humans and cause severe respiratory illnesses.

Avian influenza is a zoonotic disease, meaning it can spread from animals to humans. The global nature of the poultry industry and international travel means that outbreaks can quickly become international public health emergencies.

While human cases of avian influenza are rare, the potential for the virus to adapt and spread among humans is a serious public health concern. It indicates a new level of transmission or virulence of the virus that was not previously observed in the region.

What are the previous instances of bird flu in humans?

Human infections with avian influenza viruses are not unprecedented. The H5N1 subtype, in particular, has caused human fatalities since it was first identified in humans in 1997. However, each new case, especially one without direct animal contact, underscores the importance of continuous monitoring and preparedness.

How has the WHO responded?

The WHO has emphasized the need for heightened vigilance and preventive measures to reduce the risk of infection.

Key recommendations include: avoiding contact with sick or dead birds; ensuring poultry products are thoroughly cooked; and implementing robust surveillance systems to detect and respond to new cases promptly.

The Mexico case serves as a reminder of the ongoing need for global health systems to remain alert to the threats posed by zoonotic diseases and to ensure rapid response mechanisms are in place to prevent widespread outbreaks.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: Indian Express

6. Why is China probing the far side of the moon? What is the latest in its ambitious space odyssey? How did China's other moon missions fare?

Why in News?

In the pre-dawn hours (IST) of June 4, a small spacecraft bearing lunar samples took off from the moon's far side, headed for an orbit that would bring it in contact with an orbiter waiting for it. There, the spacecraft 'handed over' the samples to a capsule on the returner, which will

bring the samples back to the earth in a two-week journey. Scientists will thus finally have access to pieces of moon soil and rocks from its far side. This is China's ambitious and ongoing Chang'e 6 mission.

What are the Chang'e missions?

China's moon missions are called Chang'e, named for the goddess of the moon in Chinese mythology. The Chinese National Space Administration (CNSA) launched the Chinese Lunar Exploration Programme (CLEP) in 2003, and the first Chang'e mission happened in 2007. Chang'e 1 created a map of the moon's surface.

With Chang'e 2, CLEP launched phase I of its moon missions, and equipped the orbiter with a better camera. Its images were used to prepare the Chang'e 3 mission's lander and rover for their descent on the moon, which they successfully achieved on December 14, 2013, starting CLEP's phase II missions.

In 2019, Chang'e 4 carried the first lander and the rover to descend on the moon's far side and explore this more mysterious region.

Phase III began with the Chang'e 5 mission. In late 2020, it deployed a lander on the moon's near side. It included a mission component called an ascender, which, after collecting and stowing some lunar soil samples, launched itself into orbit. There, an orbiter collected the samples, transferred them to a returner, which brought them to the earth.

Chang'e 6 is attempting to replicate its predecessor's feat but from the moon's far side. The scientific goal here is to understand why the far side is so different from the near side.

What is the far side?

The lunar hemisphere facing the earth will always face the earth, and the hemisphere facing away (far side) will always face away. The far side has rockier terrain and fewer smooth plains. Thus, it's harder to land a spacecraft on the far side — more so since it's impossible to communicate directly from the earth with a spacecraft here: there's no line of sight. A workaround is to have a second spacecraft in space that relays signals between ground stations on the earth and the surface spacecraft. This makes the mission more complex.

The far side is expected to be a good place to install large telescopes, which would have a view of the universe unobstructed by the earth. ISRO and scientists at the Raman Research Institute, Bengaluru, are currently working on such a device, called PRATUSH.

What is the status of Chang'e 6?

CNSA launched the 8.3-tonne Chang'e 6 orbiter-lander assembly on May 3 and it entered a lunar orbit on May 8. On May 30, the lander complex split from the orbiter and descended over a large crater called Apollo on June 1.

CLEP scientists coordinated this part of the mission with help from the Queqiao 2 relay satellite, which the CNSA launched in February this year into an elliptical orbit around the moon. Once

within Apollo, a drill plunged into the soil, and with help from a scoop extracted about 2 kg of material, and transferred it to the ascender. On June 4, the ascender took off for moon orbit. There, it rendezvoused with the orbiter and transferred the samples to a capsule in the returner on June 6.

The returner is expected to bring them to the earth on June 25.

Relevance: GS Prelims & Mains Paper III; Science & Technology
Source: The Hindu

7. China's Chang'e-6 brings back samples from far side of Moon: What was the mission?

Why in News?

China's Chang'e-6 became the world's first spacecraft to bring back samples from the far side of the moon (part of the Moon that the Earth never gets to see).

Here is a look at why scientists want to explore the far side of the Moon, and the details about the Chang'e-6 mission.

Why explore the far side of the Moon?

The Moon's far side is often referred to as the dark side because it cannot be seen from the Earth, not because it does not catch the Sun's rays. The Moon is tidally locked with the Earth and therefore, we see only one side of the Moon, also known as the near side.

Tidal Locking

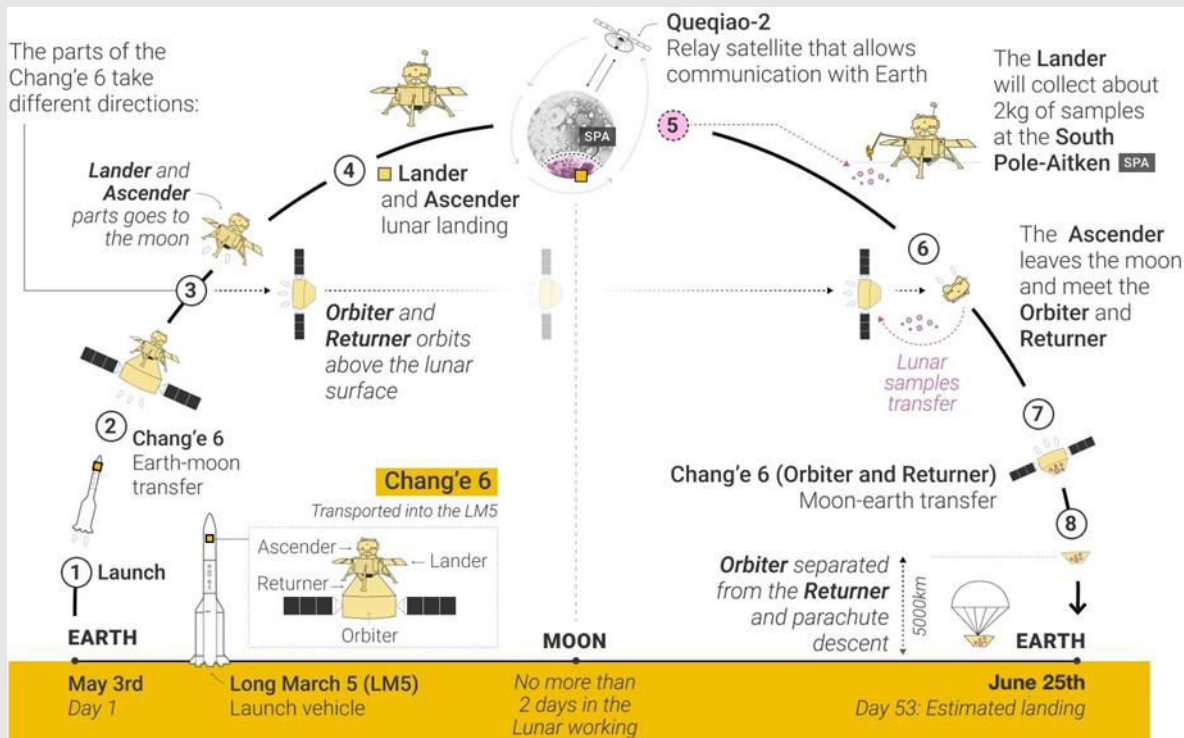
Tidal locking between a pair of co-orbiting astronomical bodies occurs when one of the objects reaches a state where there is no longer any net change in its rotation rate over the course of a complete orbit. In the case where a tidally locked body possesses synchronous rotation, the object takes just as long to rotate around its own axis as it does to revolve around its partner. For example, the same side of the Moon always faces Earth, although there is some variability because the Moon's orbit is not perfectly circular.

Relevance of examining samples from far side

Examining the samples from the far side can help scientists solve mysteries about the origin and evolution of the Moon — till now, scientists have only been able to analyse samples from the near side. The far-side samples can also give answers to the longstanding question: why is it different from the near side?

What was the Chang'e-6 mission?

The Chang'e-6 was a 53-day-long mission. After reaching the Moon's orbit, the mission's orbiter circled the natural satellite while its lander descended into the 2,500-kilometre-wide South Pole-Aitken basin on the lunar surface.

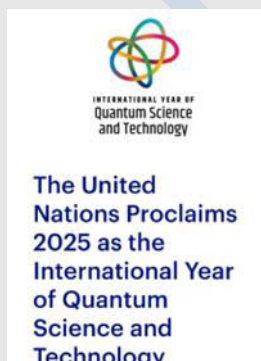


After collecting samples through scooping and drilling, the lander launched an ascent vehicle, which transferred the samples to the orbiter's service module. This module then returned to the Earth.

China is the only country to achieve a soft-landing on the far side of the Moon. In 2019, its Chang'e-4 mission landed on the region and explored the Moon's Von Karman crater with the help of a rover.

Relevance: GS Prelims & Mains Paper III; Science & Technology
Source: Indian Express

8. UN declares 2025 the Year of Quantum Science



Why in News?

The United Nations has said 2025 will be designated the 'International Year of Quantum Science and Technology'. In a statement, the body said the initiative will be "year-long", "worldwide", and that it will "be observed through activities at all levels aimed at increasing public awareness of the importance of quantum science and applications."

In May this year, Ghana submitted a draft resolution to the U.N. General Assembly asking for an official proclamation, with the support of over 70 other countries. The General Assembly acceded on June 7.

National Quantum Mission

In line with this belief, the Government of India announced a 'National Quantum Mission' in April 2023 at a cost of Rs 6,000 crore, to be implemented from 2023 to 2031 by the Department of Science & Technology (DST). It will have four verticals: quantum computing, quantum communication, quantum sensing and metrology, and quantum materials and devices.

Relevance: GS Prelims; Science & Technology
Source: The Hindu

9. Meet the new Sino-French satellite, which will detect the most powerful explosions in the universe

Introduction

A satellite jointly developed by China and France was launched into orbit from the Xichang Satellite Launch Center in Sichuan province recently. It is the most powerful satellite yet for studying gamma-ray bursts (GRBs) — they result from some of the universe's most explosive events such as the birth of black holes and neutron star collisions.

Known as Space Variable Objects Monitor (SVOM), the spacecraft is expected to play an important role in astronomical explorations. It is the first astronomy satellite jointly developed by China and France. In 2018, the two countries had together developed and launched an oceanographic satellite.

But first, why study gamma-ray bursts?

GRBs are bursts of highly energetic gamma rays, which last from less than a second to several minutes. They are known to occur in distant realms of the universe, and "can erupt with a quintillion (a 10 followed by 18 zeros) times the luminosity of the Sun".

There are two types of GRBs, short GRBs and long GRBs. Short GRBs are a result of the collision of either two neutron stars or a neutron star and a black hole, resulting in a black hole. They last for less than two seconds. Sometimes, short GRBs are followed by kilonovas — blasts of electromagnetic radiation (or light) that are produced by the radioactive decay of chemical elements. The decay can lead to the generation of heavier elements like gold, silver, and platinum.

Long GRBs are produced due to the explosive deaths of massive stars. These can last for two seconds or longer. Scientists observe GRBs as they carry information pertaining to violent events such as the end of life of massive stars, the formation of black holes in distant galaxies, and how they shape the universe.

What will SVOM do?

The primary objective of SVOM is to look for GRBs across the universe. Once found, the satellite will measure and study their electromagnetic radiation properties. It will also use the bursts to unlock mysteries regarding the evolution of the universe, and gravitational waves (scientists have observed that both gravitational waves and GRBs originate from the collision of neutron stars).

The SVOM satellite is capable of searching for kilonovas as well. Such a detection would be of great significance to the study of stellar evolution, and to answering very interesting scientific questions such as where heavy elements like gold and silver come from in the universe.

What are the features of SVOM?

The 930-kg satellite consists of four payloads — two developed by the French and two by the Chinese. The satellite has been placed in a low earth orbit at an altitude of 625 km with an orbital period of 96 min.

Relevance: GS Prelims; Science & Technology

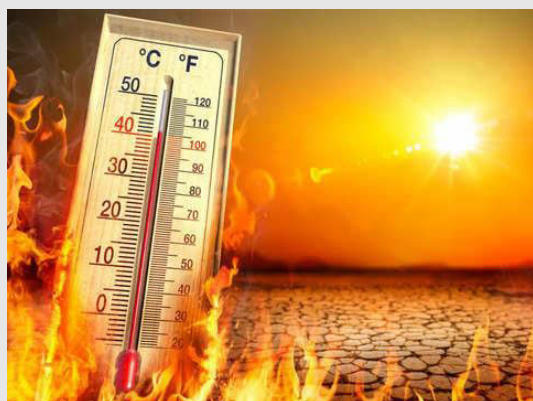
Source: Indian Express

1. Why heatwaves have not been included as a notified disaster in the Disaster Management Act

Why in News?

The ongoing spell of extreme heat in many parts of the country has once again reopened discussions on the inclusion of heatwaves as one of the notified disasters under the Disaster Management (DM) Act, 2005.

If the inclusion does happen, states will be allowed to use their disaster response funds to provide compensation and relief, and carry out a range of other activities for managing the fallout of a heatwave. Currently, states need to use their own funds for these activities.



What are notified disasters?

The DM Act was enacted in the wake of the 1999 Odisha super-cyclone and the 2004 tsunami. It defines a disaster as a “catastrophe, mishap, calamity or grave occurrence” arising from “natural or man-made causes” that results in substantial loss of life, destruction of property, or damage to the environment. It must also be of such nature which is “beyond the coping capacity” of the community.

Invocation of DM Act

If such an event happens, then the provisions of the DM Act can be invoked. The provisions allow states to draw money from the two funds that have been set up under this law — the National Disaster Response Fund (NDRF) at the national level and the State Disaster Response Fund (SDRF) at the state level. The states first utilise the funds available in the SDRF, and only if the magnitude of the disaster is unmanageable with the SDRF, states seek the money from the NDRF. In the FY 2023-24, only two states drew money from the NDRF, namely Himachal Pradesh and Sikkim.

While the entire money of the NDRF comes from the central government, states contribute 25% of the money in the SDRF (10% in case of special category states), the rest comes from the Centre. The money in these funds cannot be used for any purpose other than response and management of notified disasters.

Currently, there are 12 categories of disasters which are notified under this Act. These are cyclones, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, and frost and cold waves.

Why heatwaves were not included as notified disasters?

Though heatwaves are not a new phenomenon in India, and heat-related illnesses and deaths have been common in large parts of northern, eastern and central India, these were not viewed as a disaster when the Act came into being in 2005. It was because heatwaves were a common occurrence during summer, and not really an unusual weather event.

In the last 15 years, however, both the severity and frequency of heatwaves have increased. Due to increased economic activity, there is a far larger number of people who have to remain outdoors for their livelihoods or other reasons, exposing them to the risk of a heat-stroke. There are 23 states, which are vulnerable to heatwaves.

These states as well as several vulnerable cities have now prepared heat action plans (HAPs) to deal with the impacts of extreme heat. HAPs involve activities like creation of shaded spaces, ensuring availability of cool water in public places, distribution of simple oral solutions, and reorganising the schedules of schools, colleges and office working hours.

These measures require expenditure but state governments have not been able to use the SDRF for them. This is the reason for the demand for inclusion of heatwaves as a notified disaster in the DM Act.

Why is the Centre not adding heatwaves as a notified disaster now?

There are primarily reasons for this:

1. Finance Commission Reluctance

States have put the demand of including heatwaves as a notified disaster before the last three Finance Commissions — the periodically established Constitutional body that decides on the distribution of financial resources between the Centre and states.

However, the Finance Commissions have not entirely been convinced. The 15th Finance Commission, whose recommendations are currently being applied, said the existing list of notified disasters “covers the needs of the states to a large extent” and did not find merit in the request to include heatwaves.

But it endorsed an enabling provision created by the preceding Commission that allowed states to utilise at least a part of the SDRF money — up to 10% — for “local disasters” such as lightning or heatwaves, which states could notify on their own.

Using this new enabling provision, at least four states — Haryana, Uttar Pradesh, Odisha, and Kerala — have added heatwaves as local disasters.

The Centre has so far resisted demands to notify it as a national disaster, using the Finance Commission as an excuse.

2. Practical Difficulties

Although unstated, the main reason behind the reluctance to add heatwave as a notified disaster is the potentially huge financial implication of the move. The government has to

provide monetary compensation — Rs 4 lakh — for every life lost because of a disaster that is in the notified list. Grievous injuries also have to be compensated.

Heatwaves claim a large number of lives every year, even though the recorded number of deaths have not been very high in recent years. But this is changing. This year, more than 500 heat-related deaths have already been reported. Once the government is mandated to provide compensation, a larger number of deaths could be revealed.

The other reason is the problem in attributing deaths to heatwaves. In most cases, heat itself does not claim lives. Most people die due to other pre-existing conditions, made worse by the impact of extreme heat. It is often difficult to ascertain whether it was heat that made the difference. This is very different from other disasters in whose case the identification of the victims is easier and more straight-forward.

For the five year period between 2021-26, the 15th Finance Commission had recommended an allocation of Rs 1,60,153 crore to the various SDRFs, a substantial sum of money. A state like Uttar Pradesh has been allocated about Rs 11,400 crore in its SDRF for the five-year period. Maharashtra's share is the maximum, about Rs 19,000 crore. This money is meant to deal with all kinds of disasters during this period. The fear is that even this money could become insufficient if heatwaves and lightning — another disaster that claims a large number of lives every year — is added to the notified list of disasters.

On the other hand, inclusion as a notified disaster can improve the management of heatwaves. Heat-related illnesses and deaths would be better reported, and authorities would be more alert to minimise the impacts of heatwaves.

Relevance: GS Prelims & Mains Paper III; Disaster Management

Source: Indian Express

2. What led to the mishap involving the Kanchanjunga Express in north Bengal?

Why in News?



On June 17, a train accident killed 10 people and injured over 40 near New Jalpaiguri in West Bengal, about 600 km from Kolkata. The mishap was caused when a goods train hit the 13174 Down Agartala Sealdah Kanchanjunga Express in the rear at 8.55 a.m. The two trains were manually cleared to run in the same block section, a mere 15 minutes apart, since automatic signalling was malfunctioning

between the Ranipatra and Chattar Hat stations which fall under the Northeast Frontier Railway.

What was initial response of Railway Board?

The Railway Board initially said the prima facie cause of the accident was that the loco pilot of the goods train, who died in the accident, disregarded the Railways' General and Subsidiary Rules (G&SR) and proceeded at normal speed which led to the collision with the Kanchanjunga Express. The Railways has ordered a statutory inquiry.

Who is at fault?

The Railway Board initially blamed the loco pilot of the goods train; this was later rescinded, but the damage had already been done. It is impossible to operate a train across a block section on the instruction of one person; there's a chain of command and a list of procedures that need to be followed.

For instance, the station masters of stations between which a train is running, the section controller (who is stationed at the divisional headquarters and monitors all rake movements), the signal staff and the gatemen between the stations have to be informed in a particular manner, and a line clearance obtained before a train leaves a station. If there is a discrepancy — like an automatic signal failure, for example — it has to be immediately escalated.

In this case, the Katihar division (where the accident occurred) Railway Manager Surendra Kumar stated on record that the gateman had informed Rangapani station about the goods train on the same track as the Kanchanjunga Express. An inquiry will take into consideration this statement, and explore who all were privy to this information. While the inquiry will establish the shortcomings which led to the accident, the Railways has often been seen to take action against lower level staff, while officers at higher levels have gone scot-free after accidents.

Is signal failure a routine event?

In a paper, 'Analysis Report by High Level Safety Review Committee,' (2017), Mukesh Mehrotra, a chief signal engineer, noted that only 3% of the accidents in Indian Railways are due to "failure of equipment." During signal failure, trains can be operated under caution. The station master issues a TA-912 notice, which authorises loco pilots to cross a signal in red during signal failures, and a 'line clear' ticket, under the G&SR. The combination empowers the loco pilot to move forward. In this situation, the rule book says that the "driver shall proceed cautiously, so as to stop short [at] any obstruction."

But if there is no prior indication that a signal is defective and the loco pilot suddenly encounters a red signal (stop sign) when the train is on the move, the loco pilot has to stop at the defective signal for a minute during day time, and for two minutes during night time. After this, the loco pilot is expected to proceed with extreme caution at a speed of 15 kmph. This procedure is not applicable when a 'line clear' ticket has been issued. Trains are not detained at wayside stations till the signals are set right. The only rule is that there should be only one train between two block sections at any given point of time. Another train can enter only after this train has left that block section.

Would Kavach have prevented the accident?

Yes. But the much-touted anti-collision device, Kavach, was not installed on this route. Kavach would have slowed down the freight train (it was moving at 45 kmph at the time of accident) as the automatic braking system would have become operational. However, progress on implementation of Kavach has been slow because of lack of vendors. According to the Railway Board, the Kavach system is operational in only 1,500 km. The entire Railways spans nearly 68,000 km.

Railway accidents are rare if one takes this statistic into consideration: a minuscule 0.03 accidents happened per million km in both 2020-21 and 2021-22. But this number becomes infructuous if we consider the fact that there were 34 consequential train accidents in 2021-22 in which nine were killed and 45 injured. In 2022-23, however, there were 48 consequential train accidents. In fact, June 2023 witnessed the worst train accident in about two decades in Balasore, where nearly 300 passengers died.

What more needs to be done?

Several committees have closely examined the question of Railway safety. While some of the recommendations have been accepted, others have not been considered for implementation. For instance, one of the most important recommendations of the Kakodkar Committee is related to division of responsibilities: "Three vital functions (rule-making, operations and the regulation) are all vested in the Railway Board. There is need for an independent mechanism for safety regulation. The Committee recommends the creation of a statutory Railway Safety Authority with enough powers to have a safety oversight on the operational mode of Railways."

Relevance: GS Prelims & Mains Paper III; Disaster Management

Source: The Hindu

1. Anish Kapoor and his art: What makes him the most successful Indian artist alive

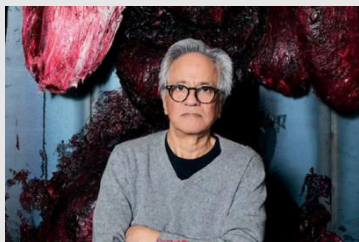
Why in News?

Anish Kapoor, one of the most influential artists of his generation, known for arresting abstract forms and large-scale installations, has topped the Hurun India Art List of most successful Indian artists alive for the sixth consecutive year.

Issued by Shanghai-based Hurun Research Institute, the list ranks the top 50 living Indian artists, according to the value of their works sold in public auctions (as of January 1, 2024). Others names on the list include artist-pedagogue Gulam mohammed Sheikh (rank 2), Arpita Singh (rank 3), and the 98-year-old modernist Krishen Khanna (rank 5).

Commenting on Kapoor's work, Hurun India's report states: "His sustained achievement is largely due to the robust sales of his artworks at public auctions, which amounted to INR 79.9 cr".

About Anish Kapoor



1. He was born in Mumbai, India

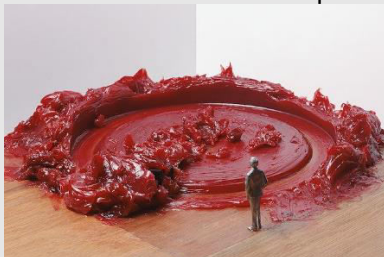
Anish Kapoor was born in Mumbai, India on March 12, 1954. He attended an elite boarding school in India called The Doon School.

2. He moved to London in 1973

In 1973, he decided to become a professional artist and moved to the United Kingdom, where he studied at Chelsea School of Art and Design.

3. He began to use red wax in the 90s

In the 1990s, he started using the red wax so characteristic of his work, evoking blood, human flesh and transfiguration. Kapoor commented on his personal connection to the color when he said that for him it represented his homeland.



Wax model by Anish Kapoor

4. He began producing giant works in the late '90s

Since the late 1990s, Kapoor has been producing gigantic pieces.

5. His recent works use reflective surfaces and mirrors



Sky Mirror, Blue, 2016 © Anish Kapoor

Kapoor's recent works rely on reflective surfaces and mirrors, offering the viewers a distorted image of themselves. One example of his reflective works is Sky Mirror.

6. He was named a Commander of the Order of the British Empire.

In 2003, Kapoor was named a Commander of the Most Excellent Order of the British Empire. He was then knighted in 2013, in recognition of his contribution to the arts in Britain.

7. He bought exclusive rights to a pigment

In 2016, Kapoor bought the exclusive artistic rights to a pigment called Vantablack. The pigment was produced by Surrey NanoSystems, and was promoted as the blackest black to exist in the world, absorbing almost all visible light.

8. He won the Turner Prize in 2011

Kapoor won the Turner Prize, the prestigious contemporary art award given by the Tate Gallery, in 1991.

Relevance: GS Prelims; Miscellaneous

Source: Indian Express

2. All about Kavli Prize, mirroring Nobel in fields of astrophysics, neuroscience, and nanoscience

Why in News?

The winners of the 2024 Kavli Prize (not to be confused with the Kavli Medal) were announced recently. Eight winners were awarded for their contributions to astrophysics, neuroscience, and nanoscience.

Kavli Foundation

The Kavli Prize is awarded in honour of Norwegian-American businessman and philanthropist Fred Kavli (1927-2013).

Born in Ereksford, Norway, Kavli moved to California in 1956 after getting an engineering degree. In the US, he began working for a company which built high-tech sensors for missiles, becoming its chief engineer within a year.

In 1958, he started his own enterprise, founding Kavlico. In 2000, Kavli sold his company for \$ 340 million, and established the Kavli Foundation, with the aim to support wide-ranging basic research to improve the quality of life for people worldwide. The foundation runs 20 institutes which specialise in astrophysics, neuroscience, nanoscience, and theoretical physics.

Kavli Prizes

The Kavli Prizes are awarded in three areas: astrophysics, nanoscience and neuroscience — the largest, the smallest, and the most complex.



The inaugural prize was announced in 2008. The award is given biennially. Till date, 73 scientists from 19 countries have been honoured. Ten of them have gone on to win the Nobel Prize.

In fact, the Kavli Prize was designed to be like the Nobel in the fields of astrophysics, neuroscience, and nanoscience. But it is more far-reaching in its outlook. As per the will of Alfred Nobel, the Nobel Prize is only awarded for achievements made "during the preceding year". But the Kavli Prize does not operate under such a restriction.

The prize comprises a \$1 million cash prize (per field), a scroll, and a medal, 7 cm in diameter. The award ceremony is more flamboyant than the one for the Nobel, with a red carpet rolled out for invitees.

Along with the US-based Kavli Foundation, the prize is given in partnership with the Norwegian Academy of Science and Letters, and the Norwegian Ministry of Education and Research.

Three independent selection committees review entries to present a unanimous recommendation to The Norwegian Academy of Science and Letters. Each committee comprises five members, who are nominated by science institutes around the world, including the Chinese Academy of Sciences, the French Academy of Sciences, Germany's Max Planck Society, the National Academy of Sciences in the US, and the Royal Society in the UK.

The award ceremony this year is scheduled to take place on September 3, at the Oslo Concert Hall. The Norwegian Royal Family will be handing out the prizes.

Relevance: GS Prelims

Source: Indian Express

3. Cultural significance of Uttarakhand's Joshimath and Kosiyakutoli, now set to be renamed

Why in News?

The Centre recently approved the Uttarakhand government's proposal for renaming the Joshimath tehsil in Chamoli district to Jyotirmath, and the Kosiyakutoli tehsil in Nainital district to Pargana Shri Kainchi Dham tehsil. The move will likely enhance the religious and cultural significance of these areas, in a state that is already a major destination for religious tourism.

The Union Ministry of Science and Technology has also given a No Objection Certificate. It is required as the Survey of India, the body responsible for preparing maps in India, comes under the central ministry.

The story of Adi Shankaracharya and Jyotirmath



Jyotirmath (also known as Jyotir Peeth) is one of the four cardinal mathas (monasteries) that 8th-century philosopher Adi Shankaracharya is believed to have established across India. The Jyotirmath was established for the preservation and dissemination of spiritual knowledge and practices.

It is believed that when Adi Shankaracharya or Adiguru came here, he performed penance under a tree known as the Amar Kalpavriksha. The name "Jyotirmath" comes from the divine light of knowledge he is said to have attained, with 'jyoti' meaning divine light.

From Jyotirmath to Joshimath

Jyotirmath was the hill town's ancient name. Over time, the local population began referring to the area as "Joshimath". This change was likely gradual and organic, influenced by regional languages, local dialects and the ease of pronunciation. The transition reflects a linguistic and cultural evolution rather than a specific historical event.

The name came into use sometime before the advent of British colonial rule. As a result, this name was registered in the government records. Later, when the tehsil and block were formed, they were also named Joshimath. While "Jyotirmath" was used in a more formal or religious context, "Joshimath" became the more commonly used name.

In recent years, some residents have demanded a change in the name to honour the town's historical and religious importance. The official recognition may further cement the town's status as a spiritual centre, attracting more pilgrims and thereby boosting local tourism and economic development.

Where "Kosiyakutoli" comes from

While Joshimath represents a subtle change from an older name, the case of Kosiyakutoli is about changing a lesser-known name that lacks wider recognition. Renaming it to Pargana Shri Kainchi Dham aligns its identity with Neem Karoli Baba's Kainchi Dham Ashram, which is a major site here that attracts devotees from across the world.

In the name "Kosiyakutoli", "Kosi" refers to the river of the same name which flows through the Nainital district and is important for the Kumaon region of Uttarakhand. Along with adding to the scenic beauty, it matters to the local ecology and economy.

The term "kutoli" is derived from the local language, referring to a village or settlement. In the Kumaoni language, naming a place after a prominent geographical feature like a river is common practice and the names often have meanings connected to the landscape, local history, or cultural attributes.

The link to Neem Karoli Baba



Kosiyakutoli came to be known for its association with Neem Karoli Baba and the Kainchi Dham Ashram he founded in 1962. Also known as Neem Karori Baba, he was a renowned Hindu guru and saint with followers in India and abroad. Although he passed away in 1973, he is revered to date for his teachings on bhakti yoga and devotion to God.

Among his Western disciples were well-known figures, including Apple co-founder Steve Jobs, former Harvard University professor Ram Dass (earlier named Richard Alpert) and kirtan singer Krishna Das, who helped spread his teachings globally.

Relevance: GS Prelims

Source: Indian Express

4. What is INCOIS's new product to forecast El Niño and La Niña conditions?

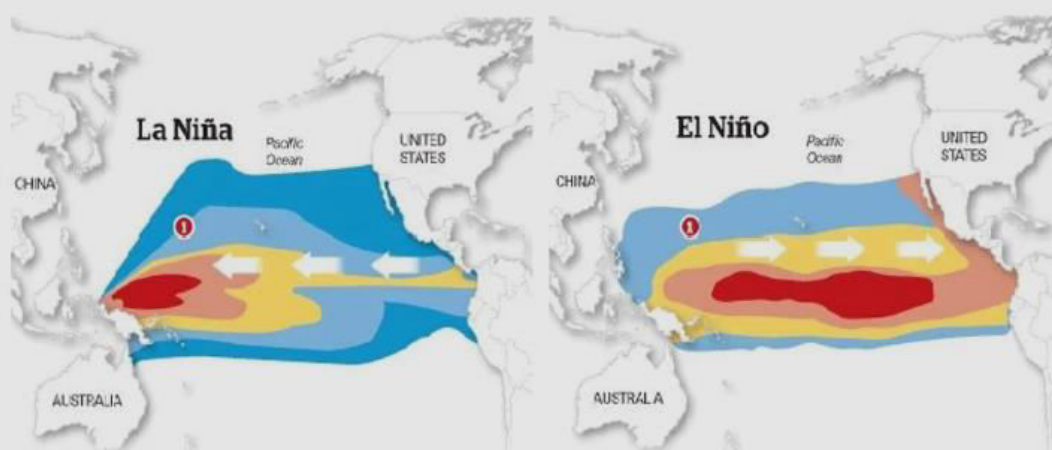
Why in News?

Hyderabad-based Indian National Centre for Ocean Information Services (INCOIS) has developed a new product to predict the emergence of El Niño and La Niña conditions — they are different phases of El Niño Southern Oscillation (ENSO) — up to 15 months in advance.

But first, what is ENSO?

ENSO is a climate phenomenon which involves changes in the temperature of waters in the central and eastern tropical Pacific Ocean, coupled with fluctuations in the overlying atmosphere. It can alter the global atmospheric circulation, which, in turn, influences weather across the world.

ENSO occurs in irregular cycles of 2-7 years and has three different phases — warm (El Niño), cool (La Niña), and neutral. In the neutral phase, the eastern side of the Pacific Ocean (near the northwestern coast of South America) is cooler than the western side (near the Philippines and Indonesia). This is due to the prevailing wind systems that move from east to west, sweeping the warmer surface waters towards the Indonesian coast. The relatively cooler waters from below come up to replace the displaced water.



In the El Niño phase, however, wind systems weaken, leading to lesser displacement of warmer waters. As a result, the eastern side of the Pacific becomes warmer than usual. In the La Niña phase, the opposite happens.

In India, while El Niño conditions usually lead to a weak monsoon and intense heatwaves, La Niña conditions result in a strong monsoon.

What is the new product?

Known as Bayesian Convolutional Neural Network (BCNN), the new product uses the latest technologies such as Artificial Intelligence (AI), deep learning, and machine learning (ML) to improve forecasts related to the ENSO phases.

The model's prediction relies on the fact that El Niño or La Niña are connected to the slow oceanic variations and their atmospheric coupling, which gives sufficient lead time to issue early forecasts. It calculates the Niño 3.4 index value — used to determine the different phases of ENSO phases — and makes the forecast. The index value is obtained by averaging the sea surface temperature (SST) anomaly in the central equatorial Pacific, extending from 5°N to 5°S, and 170°W to 120°W.

How does BCNN compare with existing models?

There are largely two kinds of weather models used for forecasting. One is the statistical model, which generates forecasts based on various information sets received from different countries

and regions. The other is the dynamic model, which involves a 3D mathematical simulation of the atmosphere done using High Performance Computers (HPC). The dynamic model is much more accurate than the statistical model.

The BCNN, however, is a combination of the dynamic model with AI. This helps it forecast the emergence of El Niño and La Niña conditions with a 15-month lead time — unlike other models which can give a prediction up to six to nine months in advance.

What is the prediction?

According to the June 5 bulletin, La Niña conditions would emerge during July-September (probability 70-90%) and continue till February 2025.

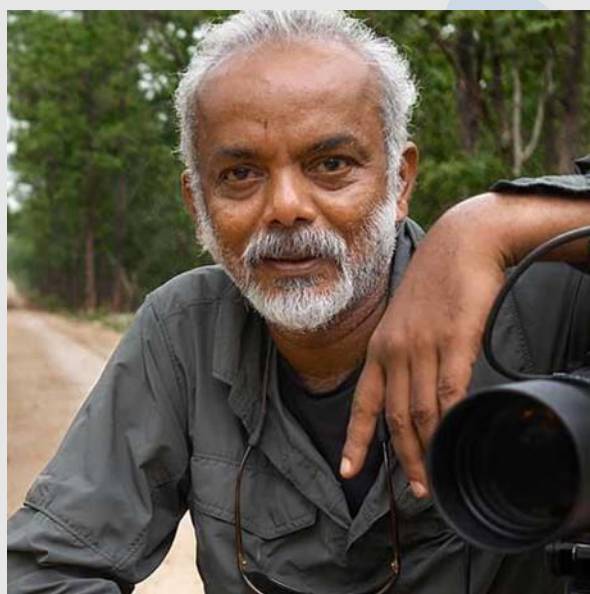
Relevance: GS Prelims

Source: Indian Express

5. Renowned Wildlife Filmmaker Shri Subbiah Nallamuthu announced as winner of V. Shantaram Lifetime Achievement Award

Introduction

The 18th Mumbai International Film Festival (MIFF) is honoring the illustrious wildlife filmmaker Shri Subbiah Nallamuthu by conferring upon him the much coveted V. Shantaram Lifetime Achievement Award.



Shri Subbiah Nallamuthu, has made exceptional contributions to wildlife cinematography, earning him global acclaim. His expertise extends to his tenure with the Indian Space Research Organisation (ISRO) as a high-speed cameraman.

About V Shantaram Lifetime Achievement Award

The prestigious Dr. V Shantaram Lifetime Achievement Award is presented in every edition of MIFF, to a filmmaker for seminal contribution to documentary films and its movement in India. It carries a cash award of 10 lakh rupees, trophy and a citation. Other illustrious recipients of the award in previous years include Shyam Benegal, Vijaya Mulay and other prominent filmmakers. The award is instituted in memory of legendary filmmaker V Shantaram.

Relevance: GS Prelims

Source: PIB

6. Thailand to become third Asian country to legalise same-sex marriage

Why in News?

The Thai Senate, the upper house of Thailand's National Assembly, passed the Marriage Equality Bill. This puts Thailand on the verge of becoming the first country in Southeast Asia, and third in Asia after Nepal and Taiwan, to legalise same-sex marriage. The Bill now awaits the formal endorsement of Thai monarch King Rama X. The lower house of the National Assembly had already approved the Bill.



The Bill

The new legislation changes references to "men", "women", "husbands" and "wives" in Thai marriage laws to gender-neutral terms such as "spouse" and "person". This means that two persons can marry each other, regardless of their gender.

It also grants same-sex couples the same rights as heterosexual couples in areas such as adoption, inheritance, and tax benefits. LGBTQ+ couples effectively possess the same legal powers as their heterosexual counterparts in case of legal incapacitation, from being able to access bank accounts to providing consent for medical treatment.

Situation in rest of Asia

Apart from Thailand, Taiwan, and Nepal, other Asian countries do not fare well when it comes to marriage equality and LGBTQ+ rights.

Situation In India

Last October, a five-judge Bench of the Supreme Court of India refused to alter the Special Marriage Act (SMA) of 1954 to give legal recognition to same-sex marriages, putting the onus on Parliament to legislate marriage equality. Thus far, there has been next to no political backing of the move.

Considered illegal

In fact, at least 20 Asian countries outlaw same-sex sexual activity, with Afghanistan, Brunei, Iran, Qatar, Saudi Arabia, the UAE and Yemen, even prescribing the death penalty. In India, same-sex relations between consenting adults were decriminalised after a landmark Supreme Court judgment in 2018.

Considered legal

Currently, same-sex marriage is legal in 36 countries (not including Thailand) globally, according LGBTQ+ rights advocacy Human Rights Campaign. These are: Andorra, Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Denmark, Ecuador, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Luxembourg, Malta, Mexico, the Netherlands, New Zealand, Norway, Portugal, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, the United Kingdom, the United States of America and Uruguay.

Relevance: GS Prelims & Mains; Miscellaneous

Source: Indian Express

7. As a new campus rises at an ancient site, the story of Nalanda

Introduction

The campus of Nalanda University was formally inaugurated by Prime Minister Narendra Modi. Spread across 455 acres, it is located in Rajgir, roughly 100 km from Patna, and merely 12 km away from the ruins of the eponymous ancient Buddhist monastery, considered to be among the greatest centres of learning in all of Antiquity.

'Reviving' Nalanda

It was then President APJ Abdul Kalam who officially proposed 'reviving' Nalanda in 2006. Addressing the Bihar Assembly, he said: "To recapture [Nalanda's] past glory... it has been proposed to establish a Bodhgaya Nalanda Indo-Asian Institute of Learning in partnership with select Asian countries".

In 2007, the proposal to re-establish Nalanda was endorsed at the East Asia Summit in Mandaue, Philippines. This endorsement was re-iterated in the East Asia Summit of 2009, in Hua Hin, Thailand.



In total, 17 countries other than India — Australia, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Indonesia, Laos, Mauritius, Myanmar, New Zealand, Portugal, Singapore, South Korea, Sri Lanka, Thailand, and Vietnam — have helped set up of the university. Ambassadors of these countries attended inauguration ceremony.

The Bihar Assembly, in 2007, passed the University of Nalanda Bill to facilitate the creation of a new, international university near the site of the ancient learning centre in Rajgir. In 2010, Parliament replaced this Act with the Nalanda University Bill, which deemed the proposed

university to be one of “national importance”, and laid down rules regarding how it would be governed.

Centre of research, learning

Nalanda University admitted its very first batch of fifteen students in 2014, to the School of Historical Studies, and the School of Ecology and Environmental studies.

Nobel Prize-winning economist Amartya Sen, who had been associated with the project since 2007, became the University’s first Chancellor, and then-President Pranab Mukherjee became the first Visitor.

Since 2014, four more schools have been established — the School of Buddhist Studies, Philosophy and Comparative Religion, the School of Languages and Literature, the School of Management Studies, and the School of International Relations and Peace Studies. The university currently offers two-year Master’s courses, PhD programmes, and a few diploma and certificate courses.

Campus to behold

By 2022, 90% of the campus’s construction was completed. At the time, the university boasted 800 students, including 150 international students from 31 countries. At full capacity, the campus can accommodate as many as 7,500 students and teachers.

With a built area of only 8%, university officials say that the campus attempts to “match the architectural and geographical setting the ancient Nalanda University would have provided”. In fact, the administrative block specifically recreates the exposed brick architecture, and elevated staircase that is the signature image of the Nalanda ruins.

That being said, the campus is a mix of the modern and the traditional. Natural light streams into classrooms’ smart wideboards and electronic podiums. While air-conditioned, it utilises various methods, such as hollow walls, to provide natural cooling.

Water bodies — Kamal Sagar ponds — cover over 100 acres of the campus’s area. Another 100 acres are covered in greenery. The campus boasts a drinking water treatment plant, and a water recycling plant, as well as a yoga centre, a state-of -the-art auditorium, a library, an archival centre, and a fully equipped sports complex. No cars are allowed inside.

Nalanda Mahavira

Mahavira in Sanskrit/Pali means ‘great monastery’. Nalanda Mahavira was active from the fifth to thirteenth century CE.

The chronicles of seventh century Chinese traveller Hsuan Tsang provide the most detailed description of ancient Nalanda. Hsuan Tsang estimated that at the time of his visit, the monastery housed 10,000 students, 2,000 teachers, and a gargantuan retinue of servants.

Multiple scholars, however, have disputed this figure based on archaeological evidence from the ancient university's ruins. That being said, Nalanda was definitely not an average Buddhist vihara.

Relevance: GS Prelims & Mains; Miscellaneous

Source: Indian Express

8. What happened in the Kallakurichi district of Tamil Nadu? How is spurious liquor made and why does it have deadly effects?

Introduction

As on June 20, at least 38 people had died after consuming spurious liquor in the Kallakurichi district of Tamil Nadu while as many as 82 others were receiving treatment in hospitals.



What is the alcohol in liquor?

Liquor is differentiated by its alcohol content — from the 5% or so of beer to the 12% or so of wine to the 40% or so of distilled spirits (all by volume). In the beverages consumed for recreational purposes, the alcohol in question is almost always ethanol. In this context, ethanol is technically a psychoactive

drug that, in low doses, reduces the level of neurotransmission in the body, leading to its typical intoxicating effects.

Contrary to popular belief, the World Health Organisation has found “no level of [its] consumption is safe for our health”. Long-term use leads to dependence, heightens the risk of some cancers and heart disease, and may eventually cause death.

Ethanol (C_2H_5OH) is one carbon atom bonded to three hydrogen atoms and one more carbon atom; the second carbon atom is also bonded to two hydrogen atoms and the hydroxyl group, also known as the ion OH^- . Inside the body, ethanol is metabolised in the liver and the stomach by alcohol dehydrogenase (ADH) enzymes to acetaldehyde. Then, acetaldehyde is transformed into acetate by aldehyde dehydrogenase (ALDH) enzymes. The adverse effects of alcohol consumption, from the hangover to a cancer, are due to acetaldehyde.

What is spurious liquor?

Spurious liquor is characterised by the liquid mixture containing methanol as well. Often, spurious liquor including arrack sellers purchase methanol from factories and sold it to the victims (Arrack is distilled from the fermented sap of the palm tree).

In many older cases, spurious liquor has typically been a homemade liquor to which methanol was added to strengthen the intoxicating effects (in colloquial parlance, its ‘kick’) and/or to increase its bulk volume. The Food Safety and Standards (Alcoholic Beverages) Regulations

2018 stipulate the maximum permissible quantity of methanol in different liquors. These values span a wide range, including “absent” in coconut fenny, 50 grams per 100 litres of country liquor, and 300 grams per 100 litres of pot-distilled spirits.

What is methanol?

The methanol molecule (CH_3OH) consists of one carbon atom bonded with three hydrogen atoms and one hydroxyl group.

Schedule I of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 includes methanol. The Indian Standard IS 517 applies to how the quality of methanol is to be ascertained and, together with the Tamil Nadu Denatured Spirit, Methyl Alcohol, and Varnish (French Polish) Rules 1959, what signage methanol packaging should carry.

The most common way to produce methanol is to combine carbon monoxide and hydrogen in the presence of copper and zinc oxides as catalysts at 50-100 atm of pressure and 250°C . In the pre-industrial era, going back to ancient Egypt, people made methanol (together with several other byproducts) by heating wood to a very high temperature.

Methanol has several industrial applications, including as a precursor to acetic acid, formaldehyde, and aromatic hydrocarbons. It is also used as a solvent and as antifreeze. In Tamil Nadu, the manufacture, trade, storage, and sale of methanol requires licences under the 1959 Rules.

How does spurious liquor kill?

The deadliness of spurious liquor arises from methanol. In almost every hooch tragedy in the history of India – and of the world since 1945 – the poison has been methanol. The human body contains infinitesimal quantities of methanol (4.5 ppm in the breath of healthy individuals, per a 2006 study) as a result of eating some fruits. But even for an adult, more than 0.1 ml of pure methanol per kilogram of body-weight can be devastating.

Once ingested, ADH enzymes metabolise methanol in the liver to form formaldehyde (H-CHO). Then ALDH enzymes convert formaldehyde to formic acid (HCOOH). The accumulation of formic acid over time leads to a condition called metabolic acidosis, which can lead to acidaemia: when the blood's pH drops below its normal value of 7.35, becoming increasingly acidic. The blood's pH is normally maintained by a balance between an acid, like carbon dioxide (CO_2), and a base, like the bicarbonate ion (HCO_3^-). The ‘metabolic’ in ‘metabolic acidosis’ means the concentration of the bicarbonate ion is dropping, leading to the acid gaining the upper hand. Formic acid also interferes with an enzyme called cytochrome oxidase, disrupting cells’ ability to use oxygen and leading to the build-up of lactic acid and contributing to acidosis.

According to a paper published by the journal Archives of Toxicology in January 2022, consuming methanol also leads to “methanol-induced optic neuropathy ..., a serious condition that may result in long-term or irreversible visual impairment or even blindness [due to] damage and loss of function of the optic nerve and retina”.

Relevance: GS Prelims & Mains Paper; Miscellaneous
Source: Indian Express

9. Frank Duckworth dies: How his DLS method works

Why in News?

Frank Duckworth, 84, passed away on June 21. It is not a stretch to say that he, along with fellow statistician Tony Lewis, has had a greater impact on cricket than many who have actually played the game.

The duo co-invented the Duckworth-Lewis method, used to fairly determine results and set targets in rain-truncated matches. First used in international cricket in 1997, the method was fully adopted by the ICC in 1999. In 2014, the DL method became the DLS (Duckworth-Lewis-Stern) method in 2014, after Australian statistician Steven Stern made some crucial updates to better reflect modern scoring trends.

Here is why the method was brought in, and how it works (in simple terms).

Most Productive Overs Method

In 1992, Duckworth presented a paper, "A fair result in foul weather" at the Royal Statistical Society. This was a response to the rather farcical ending of the 1992 South Africa vs England semi final. South Africa needed an achievable 22 from 13 balls when rain interrupted play. After the rain delay, the revised target was calculated as 22 required of one ball — an impossible task.

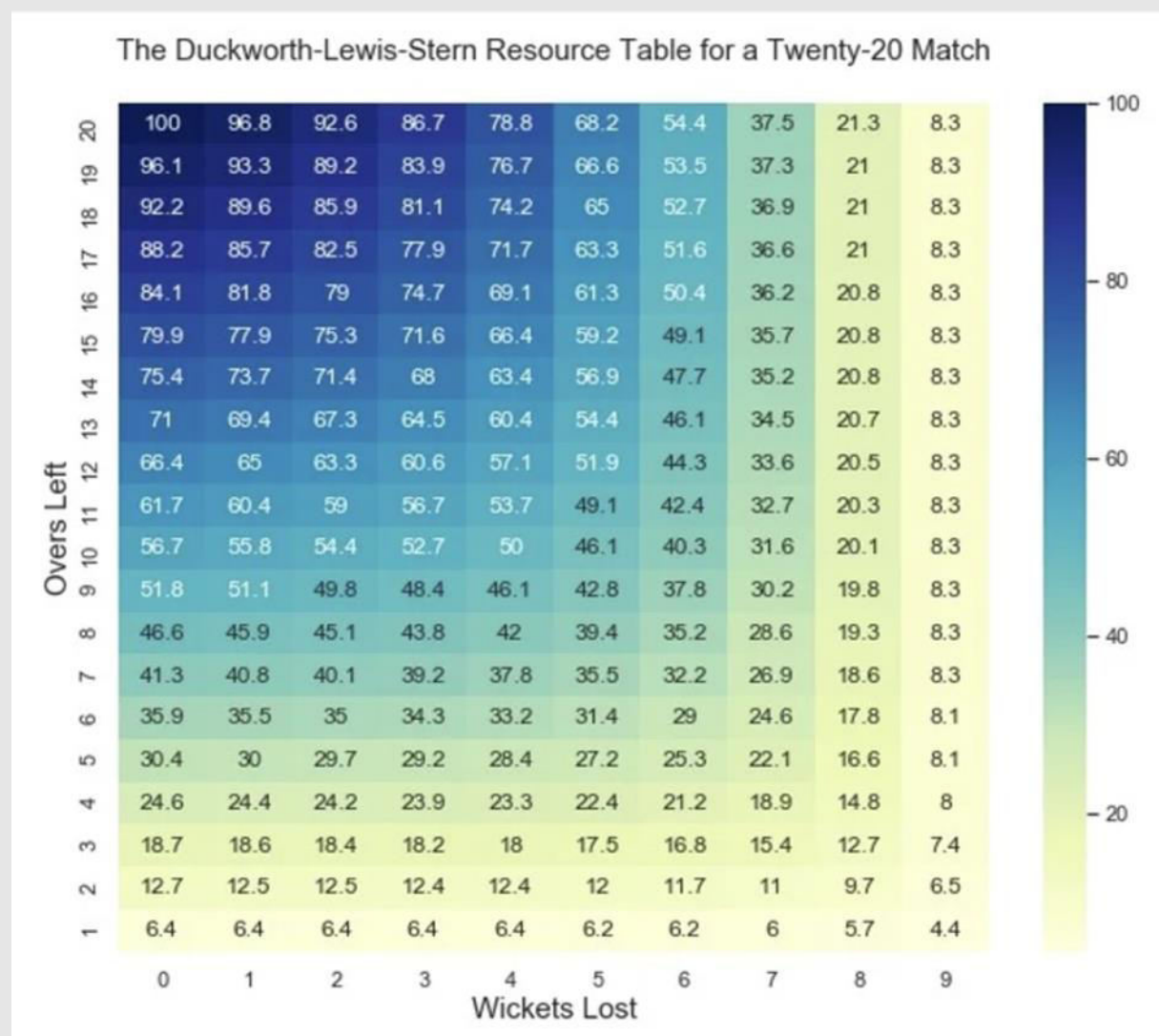
The revised target was determined using the newly adopted Most Productive Overs method. Devised by a panel of cricketing experts, the method took into account runs scored in the best 'x' number of overs in the first innings to set the target, when 'x' was the number of overs the second innings was reduced to. So if a team scored 300 runs in 50 overs, and 200 of these came in say 25 overs, a match reduced to 25 overs would set a target of 201 for the chasing team.

While the MPO method took into account that run scoring is not evenly distributed across the innings, something that a simple average run rate calculation does not, it unfairly penalised the chasing team by simply ignoring the best overs bowled by them in its calculations of a revised target. It also took no consideration of how wickets impacted run-scoring.

The DLS method

The DL method introduced the concept of 'resources' in making score estimations for truncated games. In limited-overs cricket, each team, in effect, has two 'resources' to score as many runs as possible — the number of overs (balls) yet to be bowled, and the number of wickets in hand. Duckworth and Lewis studied historical scores and found that there is a very close correlation between availability of these resources and a team's final score.

The DL method converts all possible combinations of balls and wickets in hand to a combined “resources remaining” figure, which is expressed in percentage — full 50 overs, and 10 wickets in hand means 100% resources available.



Target scores for a team batting second can be adjusted (either up or down) from the total of the team batting first, simply based on the number of resources either team has lost. The following formula is used:

$$\text{Team 2's par score} = \text{Team 1's actual score} \times \frac{\text{Team 2's resources}}{\text{Team 1's resources}}$$

Some criticisms

The DLS method has faced criticism on the grounds that it weighs wickets more heavily (as a resource) than balls available. This means that in big run chases with rain looming, teams simply need to keep wickets in hand to match the DLS par score — they can win even while scoring at a losing rate. The underlying assumption of “keeping wickets in hand” is in line with traditional cricketing logic, but flies in the face of data today, especially as run-scoring has become ever more rampant.

This emphasis on wickets has also meant that the DLS is less accurate for T20s, where one good partnership can decisively swing a game.

Steven Stern's additions to the DL method updated it for the modern-day run-environment, but these criticisms still persist. Today, the data to calculate the DLS par score is taken from a running average of four years of international cricket.

Relevance: GS Prelims & Mains Paper III; Miscellaneous

Source: Indian Express

Practice Questions

1. Consider the following impacts of Tobacco Production:

1. Tobacco absorption through skin by workers during production
2. Large consumption of wood contributing to deforestation
3. Depletion of Soil nutrients as tobacco is highly erosive crop
4. Tobacco production leads to huge amount of waste generation

How many of the above Statements are correct?

- (a) Only One
- (b) Only Two
- (c) Only Three
- (d) All Four

2. The Private companies such as Agnikul and Skyroot have been in news. These companies are engaged in

- (a) Defence Sector
- (b) Space Sector
- (c) Artificial Intelligence
- (d) Data Security

3. The counting of postal ballots

- (a) is undertaken immediately as they are received
- (b) is undertaken one day before EVM counting
- (c) begins 30 minutes before EVM counting
- (d) concludes 30 minutes before EVM counting

4. The Members of European Parliament are

- (a) Chosen through Indirect elections
- (b) Chosen through Direct elections
- (c) Nominated by Member Governments
- (d) Chosen by legislatures of member States

5. If in a Lok Sabha Constituency, the highest number of votes are given to NOTA, then

- (a) No candidate is declared elected from that Constituency
- (b) The candidate with second highest votes is declared elected
- (c) The election is conducted again for the constituency
- (d) The contesting candidates are barred from Lok Sabha elections for 5 years.

6. Who among the following can contest Lok Sabha elections?

- (a) A candidate convicted under Unlawful Activities Prevention Act
- (b) A candidate convicted under POSCO Act

- (c) A candidate detained under National Security Act without any formal charges pressed against him
- (d) None of the Above

7. Which of the following countries is not a member of the Indo-Pacific Economic Framework for Prosperity (IPEF)?

- (a) China
- (b) India
- (c) Australia
- (d) Japan

8. Repo rate is reduced

- (a) When Inflation rate is high
- (b) To Increase interest rates
- (c) When the focus is on Economic Growth
- (d) When taxes are high

9. Which of the following statements is correct about National Testing Agency (NTA)?

- (a) It is a private company
- (b) It is registered as Cooperative society
- (c) It functions under Ministry of Education
- (d) It functions under Ministry of Skill Development

10. Chang space missions have been sent by China to explore

- (a) Sun
- (b) Mars
- (c) Moon
- (d) Asteroid belt

11. The leader from which of the following country was not invited to Modi 3.0 Swearing in ceremony?

- (a) Pakistan
- (b) Seychelles
- (c) Mauritius
- (d) Maldives

12. Which of the following statements is correct about the status of Heatwaves?

- (a) Notified as Natural disaster under Disaster Management (DM) Act, 2005.
- (b) Notified as State Disaster under DM Act
- (c) Notified as Disaster in some of the States
- (d) Not Notified as Disaster under either DM Act or by any State

13. The 'India Out' campaign was used as Presidential election plank in which of the following neighbouring countries?

- (a) Sri Lanka
- (b) Pakistan
- (c) Nepal
- (d) Maldives

14. Which of the following States has been granted Special Category Status in India?

- (a) Bihar
- (b) Andhra Pradesh
- (c) Assam
- (d) Goa

15. Which of the following is the correct religious significance of Joshimath (in Uttarakhand)?

- (a) Ardha Kumbha is organised here
- (b) Shankaracharya established a math here
- (c) Vaishnavism movement began here
- (d) Sati worship started here

16. What is New Collective Quantified Goal (NCQG)?

- (a) Global biodiversity target under consideration to be attained by 2025
- (b) Climate Change finance which developed countries will pay post 2025
- (c) Global afforestation target to be attained by 2030
- (d) Provision of primary education to all Children by 2030

17. Which of the following Greenhouse Gas is primarily released by Ruminants by way of burp?

- (a) Carbon Dioxide
- (b) Nitrogen Dioxide
- (c) Sulphur Dioxide
- (d) Methane

18. V. Shantaram Lifetime Achievement Award is given in the field of

- (a) Theatre
- (b) Film Making
- (c) Science
- (d) Sports

19. The Global Gender Gap Report is published every year by

- (a) World Economic Forum
- (b) World Bank
- (c) International Monetary Fund
- (d) UNESCO

20. The particularly vulnerable tribal group (PVTG) Shompen is based in

- (a) Ladakh
- (b) Odisha
- (c) Nicobar Islands
- (d) Lakshadweep

21. Which South Asian country is first to legalize same sex marriages?

- (a) India
- (b) Bhutan
- (c) Nepal
- (d) Sri Lanka

22. The maximum period of sentence for cheating under Public Examinations (Prevention of Unfair Means) Act 2024 is

- (a) 1 year
- (b) 3 years
- (c) 5 years
- (d) 7 years

23. Spurious liquor often consists high degree of

- (a) Ethanol
- (b) Methanol
- (c) Sugar
- (d) Vinegar

24. Which of the following countries is part of G-7?

- (a) India
- (b) Saudi Arabia
- (c) Australia
- (d) Italy

25. Which is Kawach?

- (a) Anti-collision Device in Trains
- (b) Electronic surveillance at border
- (c) Missile shield
- (d) Space based observation system

26. Project Nimbus is being jointly implemented by Google and Amazon to provide cloud computing services to

- (a) India
- (b) Saudi Arabia
- (c) Israel
- (d) Iran

27. Which is the only country to have brought the samples from the other side of the Moon on earth?

- (a) Japan
- (b) USA
- (c) India
- (d) China

28. What is Regulatory Sandbox?

- (a) Unlimited powers of government to regulate newer technologies
- (b) Controlled environment for live testing of new products
- (c) Sectors which cannot be regulated
- (d) Loopholes in existing laws

29. Foreign investment in Indian government bonds may lead to

- (a) Fall in forex
- (b) Reduction in Government debt
- (c) Inflation
- (d) Depreciation of Rupee

30. Teesta river which flows between India and Bangladesh, originates in

- (a) Sikkim
- (b) Arunachal Pradesh
- (c) Bhutan
- (d) Nepal

Answers

Sol.1(d) All the above statements are impacts of Tobacco production.

Sol.2(b) Angikul Cosmos and Skyroot Aerospace are Start-ups in space sector.

Sol.3(c) The vote counting of postal ballots begins 30 minutes before EVM counting. As the guidelines stand today, "After 30 minutes of commencement of postal ballot counting, the EVM counting can start and continue irrespective of the stage of postal ballot counting.

Sol.4(b) People of EU nations directly vote to choose members of European Parliament.

Sol.5(b) If in a Lok Sabha Constituency, the highest number of votes are given to NOTA, then the candidate with second highest votes is declared elected.

Sol.6(d) A candidate detained under National Security Act without any formal charges pressed against him is not yet convicted and sentenced. Thus, the candidate is not disqualified to content Lok Sabha Elections.

Sol.7(a) IPEF has 13 member countries. China is not a member amongst these countries.

Sol.8(c) When repo rate is reduced, then interest rates fall in the economy. Consequently, there is more borrowing, expenditure and investment; which further leads to higher economic growth.

Sol.9(c) NTA functions under Ministry of Education.

Sol.10(c) Chang space missions have been sent by China to explore Moon.

Sol.11(a) Leaders of 7 nations were invited to Modi 3.0 Swearing in ceremony. However, none from Pakistan was invited.

Sol.12(c) Heatwaves have not been notified under DM act, but have been notified as disaster in some of the States.

Sol.13(d) Muizzu became President of Maldives last year on an 'India Out' plank. The India Out campaign was movement against India's alleged military presence in Maldives.

Sol. 14(c) Amongst the given States, Assam has been accorded Special Category Status.

Sol. 15(b) Shakaracharya established 4 mathas. One of them was at Joshimath.

Sol. 16(b) New Collective Quantified Goal (NCQG) is the climate change finance which developed countries will pay to the developing countries post 2025.

Sol.17(d) Stomachs of ruminant animals is able to store partially digested food and let it ferment. This partially digested and fermented food generates methane.

Sol.18(b) The prestigious Dr. V Shantaram Lifetime Achievement Award is presented in every edition of Mumbai International Film Festival (MIFF), to a filmmaker for seminal contribution to documentary films.

Sol.19(a) World Economic Forum

Sol.20(c) Nicobar Islands

Sol.21(c) Nepal

Sol.22(c) 5 years

Sol.23(b) Methanol

Sol.24(d) Italy

Sol.25(a) Anti-collision Device in Trains

Sol.26(c) Israel

Sol.27(d) China

Sol.28(b) Controlled environment for live testing of new products

Sol.29(c) Inflation

Sol.30(a) Sikkim