

# Daily Current Affairs



जनसत्ता



The Indian EXPRESS

THE FINANCIAL EXPRESS



6  
The Hindu



3  
PIB, PR4 &  
Other  
newspaper



1  
The Indian  
Express



0  
Jansatta



1  
Financial  
Express

# Class24 App download

**Class pdf**

**10 Questions  
test related to  
this class**



# SSC FOUNDATION BATCH



DOWNLOAD CLASS24 APP



# FEATURES

700+ HOURS CLASSES  
LIVE FROM CLASSROOM

**50% OFF**

**USE CODE**

**SSC50**

~~₹ 13000/-~~ ₹ 6500/-



DOWNLOAD CLASS24 APP



DOWNLOAD CLASS24 APP

# CURRENT AFFAIRS COURSE

- ✓ UPDATED CURRENT AFFAIRS (2023+2024)|
- ✓ COMPLETE NOTES(PDF)

# COMPLETE GK/GS COURSE

- ✓ STATIC GK
- ✓ HISTORY
- ✓ POLITY
- ✓ GEOGRAPHY
- ✓ ECONOMICS

USE CODE

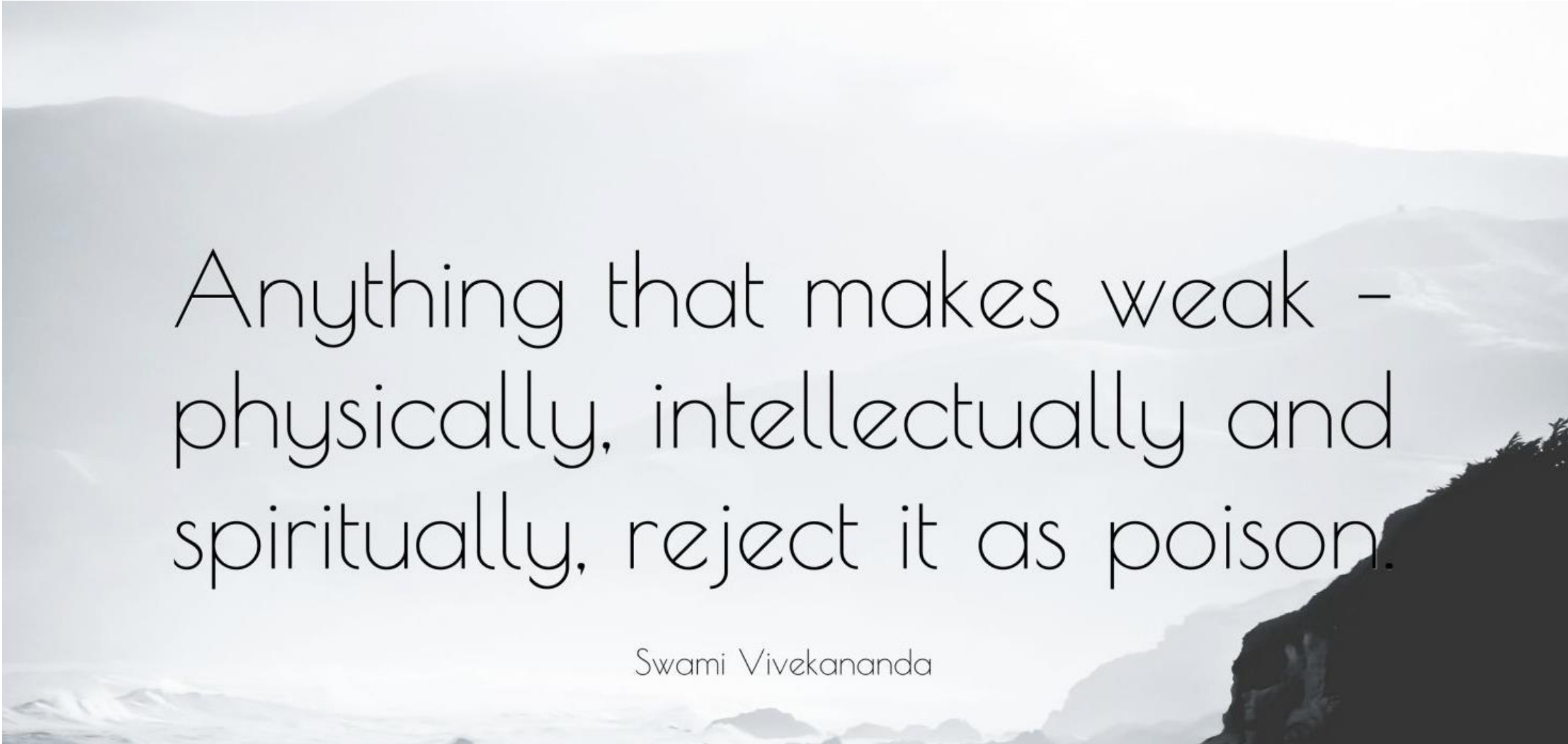
**B60**

CALL FOR SUPPORT: +91-7414862047



• **LIVE**  
**DOUBT SESSION**





Anything that makes weak -  
physically, intellectually and  
spiritually, reject it as poison.

Swami Vivekananda



**FINDING THE BALANCE**  
**Regulations could hinder AI growth**

India faces the challenge of balancing responsible AI development with fostering innovation

NEWS3 PAGE 5



The revival of an ancient centre of learning  
PROFILES PAGE 9

What can the Railways do to stop accidents?  
FAQ PAGE 8



India eases past Bangladesh, registers 50-run victory  
SPORT PAGE 13

**NEARBY**  
**BJP demands CBI probe into T.N. hooch tragedy**

NEW DELHI  
Holding the DMK government responsible for the Kallarhooch hooch tragedy, the BJP on Saturday demanded a CBI probe, and resignation of the Prohibition and Excise Minister S. Muthusamy. PAGE 2



**BSF to recalibrate deployment along Pak. border**

NEW DELHI  
The Border Security Force is likely to "recalibrate deployment" along the Pakistan border in Jammu, in the wake of terror strikes in the past few weeks. PAGE 3

**First arrest made in Arang 'mob lynching' case**

RAIPUR  
The Raipur police on Saturday arrested Harsh Mishra who was part of the group that had allegedly assaulted and chased 3 cattle transporters from Uttar Pradesh in Arang, on the outskirts of Raipur. PAGE 5

**Israeli attacks on Gaza camps leave at least 42 dead**

CAIRO  
At least 42 people were killed in Israeli attacks on districts of Gaza City in northern Palestine on Saturday, the director of the Hamas-run government media office said. PAGE 12

# Govt. removes NTA chief, announces CBI probe

Education Ministry constitutes expert panel to reform organisational structure of the agency | Former ISRO chief K. Radhakrishnan to head the panel; report to be submitted within two months | Health Ministry puts off NEET-PG examination scheduled for today as a 'precautionary measure'

**Ashna Bhatnagar**  
NEW DELHI

The Union government on Saturday removed Subodh Kumar Singh from his position as Director-General of the National Testing Agency (NTA), which has come under fire for an alleged paper leak and irregularities in the NEET-UG examination, and other examinations which it conducts.

Meanwhile, the Health Ministry announced the postponement of the NEET-PG examination "as a precautionary measure", just hours before it was due to be held on Sunday. Conceding a persistent demand by students and the Opposition, the Education Ministry announced

that the probe into the allegations of cheating and malpractice in the NEET-UG examination will be handed over to the Central Bureau of Investigation (CBI). It noted that the Centre has enacted the Public Examination (Prevention of Unfair Means) Act, 2024, and vowed that "strictest action" will be taken against individuals and organisations found to be guilty.

These measures seem to be the first step in a promised overhaul of the examination system, with the Ministry constituting a seven-member committee of experts on Saturday to create a reform roadmap for the NTA and its processes.

Chaired by former ISRO

chief K. Radhakrishnan, the panel has been mandated to make recommendations on the structure and functioning of the NTA, reforms in the mechanisms of the examination process, and improvement in data security protocols, and submit its report within two months.

Unlike the NEET-UG, which was conducted by the NTA, an autonomous body under the Health Ministry, the NEET-PG is conducted by the National Board of Examinations, an autonomous body under the Health Ministry. In a statement issued late on Saturday night, the Health Ministry said that, given the recent allegations, it had decided to "undertake a thorough assessment of the robustness of process-

es of NEET-PG" and thus postponed the examination due to be held the next morning, promising to set fresh dates soon.

Regretting the inconvenience caused to candidates, the Health Ministry said it took the decision in the "best interest of the students".

"Compulsory wait" An hour earlier, the Appointments Committee of the Cabinet issued a notice giving additional charge of the NTA to Pradeep Singh Kharola, chairman and managing director of the India Trade Promotion Organisation, until the appointment of a regular incumbent. It said that Mr. Singh, the current ITC, has been placed on "compulsory wait" in the Department of Personnel & Training.

The Nationalist Congress Party called the NEET-PG postponement a "failure" on the part of the Union government.

The Federation of Resident Doctors' Association called the postponement of the PG examination "a shame". Student leader Abhishek Ghosh, former president of the Students' Union of Jawaharlal Nehru University, said, "The entire system of 'One Nation, One Exam' has collapsed. If Dharmendra Pradhan has taken moral responsibility, he should resign immediately."



**Upkeep time**  
Away from waves: Workers engage in maintenance and repair of deep-sea fishing vessels at a harbour in Mangaluru on Saturday. The annual fishing ban has been in effect from June 1 to July 31 in coastal Karnataka. S.K. SURESH/ANITHA

**INDIA MPs not to assist pro tem Speaker**

**The Hindu Bureau**  
NEW DELHI

The INDIA bloc leaders, who are part of a panel to assist pro tem Speaker Bhartruhari Mahabadi in administering oath to newly elected Lok Sabha members, will not be performing their duties, a senior Opposition leader said on Saturday. This could signal an escalation of tensions between the government and the INDIA bloc.

The Congress's Kodikunni Suresh, Dravida Munnetra Kazhagam's T.R. Baalu, and Sadip Bando paddyay of the Trinamool Congress were part of the panel, but they will skip their duties to protest against the Centre's decision to ignore Mr. Suresh despite his being the senior-most MP. Sources said. Two other senior MPs — BJP leaders Kadhua Mohan Singh and Paggan Singh Kalaste — are also on the panel to assist the pro tem Speaker.

All convention and tradition, Kodikunni Suresh should have been the senior-most member. However, Mr. Mahabadi was not elected in 1998 and 2004, and the pro-tem Speaker's role is to administer the oath to newly elected members. He is also a member of the House.

"WILL COUNTER TACTICS" PAGE 4

**No GST for hostel stay below ₹20,000, Railway services**

**Key decisions:** Union Finance Minister Nirmala Sitharaman chairs the 33rd GST Council meeting in New Delhi on Saturday. PVI

**Vikas Dhoot**  
NEW DELHI

Meeting after almost nine months, the Goods and Services Tax (GST) Council on Saturday approved measures to ease compliance for small businesses, exempted hostel accommodation worth up to ₹20,000 a month and Railway services, and resolved to reconvene in August to initiate parleys on relaxing the multiple rates levied under the seven-year-old indirect tax.

With 11 new members from States such as Bihar, Andhra Pradesh, Haryana, Rajasthan, and Odisha, the council could only take up a part of its heavy agenda of clarifications and trade facilitation measures. It did grant some relief to taxpayers, including a waiver of interest and penalties on some past tax demands, which Mr. Sitharaman said is likely after the Budget Session of Parliament, the Council will take up pending procedural issues on its agenda as well as broader challenges. These include the rationalisation of GST rates, which a ministerial roll out biometric-based Aadhaar authentication for all GST registrations across the country in a phased manner. She stressed that this will not only quicken the registration process but also curb the fraudulent use of input tax credits through fake invoices.

**Future agenda**  
Apart from the GST exemption for hostel accommodation outside the campuses of educational institutions, which Mr. Sitharaman said would benefit students across India, especially those from rural areas, the Council also clarified the GST rates on several items. For instance, it was clarified that a number of products, including milk cans, sprinklers, carton boxes, and solar cookers, will now attract 12% GST, irrespective of use, material, or energy source.

At its next meeting, which Mr. Sitharaman said is likely after the Budget Session of Parliament, the Council will take up pending procedural issues on its agenda as well as broader challenges. These include the rationalisation of GST rates, which a ministerial roll out biometric-based Aadhaar authentication for all GST registrations across the country in a phased manner. She stressed that this will not only quicken the registration process but also curb the fraudulent use of input tax credits through fake invoices.

# New Delhi, Dhaka to hold talks on comprehensive ties

**Kallol Bhattacharjee**  
NEW DELHI

India and Bangladesh on Saturday agreed to begin a dialogue on a comprehensive economic partnership agreement (CEPA) paving the way for broader economic ties between the two neighbouring economies.

In his welcome remarks at Hyderabad House, Prime Minister Narendra Modi said the two sides will intensify connectivity and energy collaboration, and announced that trade between the two countries is being conducted in the Indian currency.

"Between Akhaura and Agartala, the sixth India-Bangladesh cross-border rail link has been started. Cargo facility for India's northeastern States has

been started through the Khulna-Mongla Port. Both sides have started generating electricity. Trade in Indian rupee has started between the two countries," Mr. Modi said.

Bangladesh Prime Minister Sheikh Hasina arrived here on Friday on a two-day visit, the first state visit by a foreign leader since Prime Minister Narendra Modi took charge for the third term.

**Focus on connectivity**  
The two sides signed multiple MoUs covering maritime cooperation and economy, rail connectivity, telegraphy, health and disaster management among others. Elaborating on the MoU on railway connectivity that was ex-

changed on Saturday, Foreign Secretary Vinay Kwatra said that apart from the six existing cross-border railway links between the countries, the document focuses on "transit that they afford between different parts of India through the territory of Bangladesh."

The connectivity essentially strengthens a ver-

ry large part of economic infrastructure within Bangladesh," said Mr. Kwatra.

It is understood that India will attempt to run a train service in the near future that will connect north-eastern States like Tripura with West Bengal through the territory of Bangladesh.

Welcoming Ms. Hasina, Mr. Modi announced that



PM Narendra Modi with Bangladesh counterpart Sheikh Hasina at the Hyderabad House in New Delhi on Saturday. SUSHIL KUMAR VERMA

# Govt. removes NTA chief, announces CBI probe

Education Ministry constitutes expert panel to reform organisational structure of the agency

Former ISRO chief K. Radhakrishnan to head the panel; report to be submitted within two months

Health Ministry puts off NEET-PG examination scheduled for today as a 'precautionary measure'

**Ashna Butani**  
NEW DELHI

The Union government on Saturday removed Subodh Kumar Singh from his position as Director-General of the National Testing Agency (NTA), which has come under fire for an alleged paper leak and irregularities in the NEET-UG examination, and other examinations which it conducts.

Meanwhile, the Health Ministry announced the postponement of the NEET-PG examination "as a precautionary measure", just hours before it was due to be held on Sunday.

Conceding a persistent demand by students and the Opposition, the Education Ministry announced

that the probe into the allegations of cheating and malpractice in the NEET-UG examination will be handed over to the Central Bureau of Investigation (CBI). It noted that the Centre has enacted the Public Examination (Prevention of Unfair Means) Act, 2024, and vowed that "strictest action" will be taken against individuals and organisations found to be guilty.

These measures seem to be the first step in a promised overhaul of the examination system, with the Ministry constituting a seven-member committee of experts on Saturday to create a reform roadmap for the NTA and its processes.

Chaired by former ISRO



**Burning issue:** Congress workers stage a protest over the alleged irregularities in NEET-UG results, in Varanasi on Saturday. PTI

chief K. Radhakrishnan, the panel has been mandated to make recommendations on the structure and functioning of the NTA, reforms in the mechanisms of the examination process, and improvement in data security

protocols, and submit its report within two months.

Unlike the NEET-UG, which was conducted by the NTA, an autonomous body under the Education Ministry, the NEET-PG is conducted by the National Board of Examinations, an

## NEET paper leak: six held in Bihar

PATNA

The Bihar Police on Friday arrested six people from near the All India Institute of Medical Sciences in Deoghar, Jharkhand in connection with the NEET question paper leak case. A team led by officials of the Economic Offences Unit brought them to Patna for questioning. » PAGE 4

autonomous body under the Health Ministry. In a statement issued late on Saturday night, the Health Ministry said that, given the recent allegations, it had decided to "undertake a thorough assessment of the robustness of process-

es of NEET-PG" and thus postponed the examination due to be held the next morning, promising to set fresh dates soon.

Regretting the inconvenience caused to candidates, the Health Ministry said it took the decision in the "best interest of the students".

### 'Compulsory wait'

An hour earlier, the Appointments Committee of the Cabinet issued a notice giving additional charge of the NTA to Pradeep Singh Kharola, chairman and managing director of the India Trade Promotion Organization, until the appointment of a regular incumbent. It added that Mr. Singh, the current DG, has been placed on "compul-

sory wait" in the Department of Personnel & Training.

The Nationalist Congress Party called the NEET-PG postponement a "failure" on the part of the Union government.

The Federation of Resident Doctors' Association called the postponement of the PG examination "a shame". Student leader Aishe Ghosh, former president of the Students' Union of Jawaharlal Nehru University, said, "The entire system of 'One Nation, One Exam' has collapsed. If Dharmendra Pradhan has taken moral responsibility, he should resign immediately."

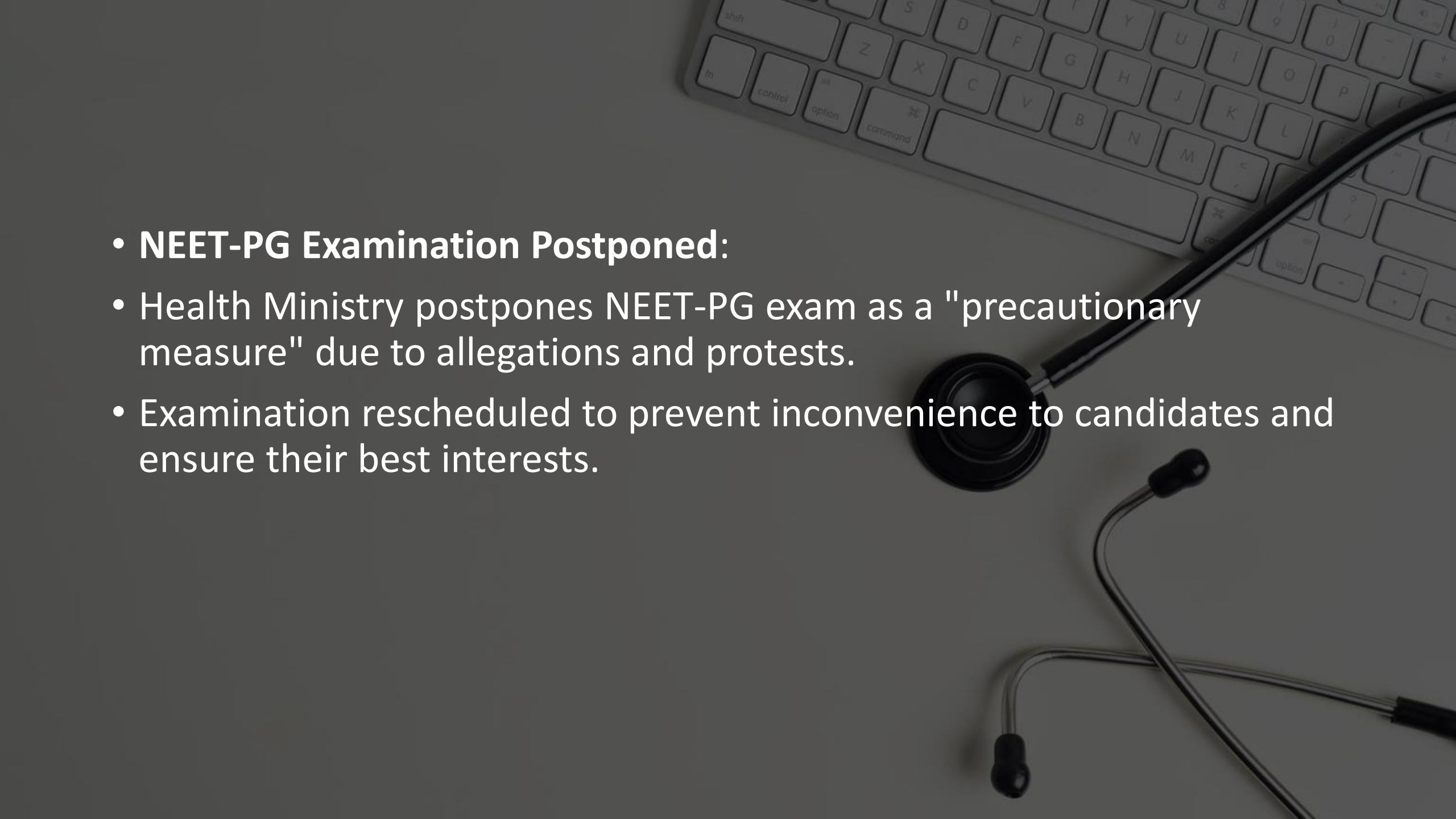
**RELATED REPORTS**  
» PAGE 4

- **NTA Chief Removed:**
- Subodh Kumar Singh, Director-General of National Testing Agency (NTA), removed due to alleged paper leak and irregularities in NEET-UG exam.
- Education Ministry constitutes an expert panel to reform the organizational structure of NTA.
- Panel chaired by former ISRO chief K. Radhakrishnan to submit report within two months.

## **CBI Probe Announced:**

Investigation into cheating and malpractice in NEET-UG to be handled by Central Bureau of Investigation (CBI).

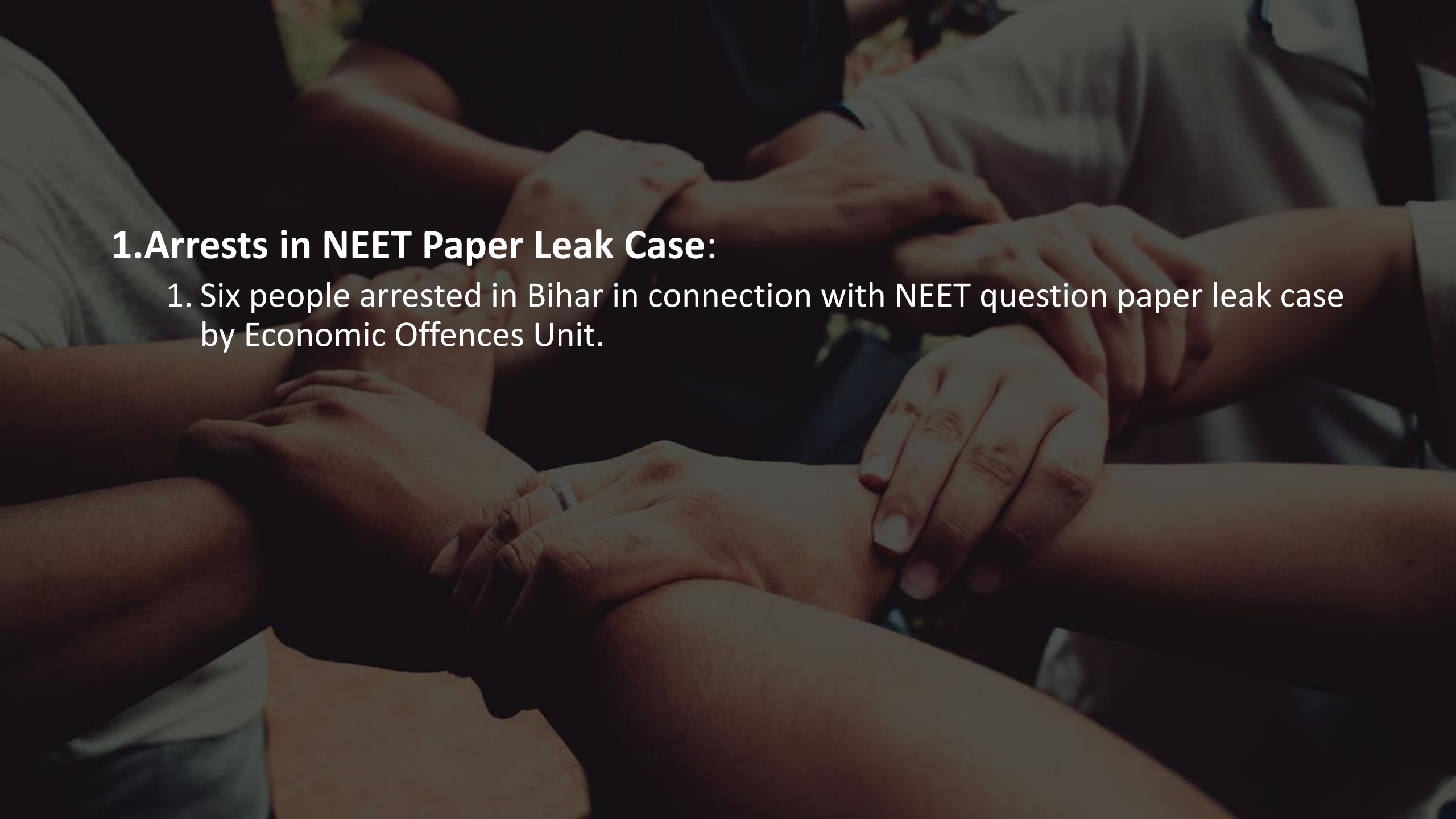
Public Examination (Prevention of Unfair Means) Act, 2024, enacted to ensure strict actions against guilty individuals and organizations.

- 
- **NEET-PG Examination Postponed:**
  - Health Ministry postpones NEET-PG exam as a "precautionary measure" due to allegations and protests.
  - Examination rescheduled to prevent inconvenience to candidates and ensure their best interests.

## Protests and Reactions:

Congress workers protest against irregularities in NEET-UG results.

Various political and student bodies criticize the postponement of NEET-PG, calling it a failure and shame.



## **1.Arrests in NEET Paper Leak Case:**

1. Six people arrested in Bihar in connection with NEET question paper leak case by Economic Offences Unit.

- Consider the following statements regarding the recent changes and actions taken by the Indian government related to the National Testing Agency (NTA) and the NEET examinations:
  1. The Director-General of the National Testing Agency (NTA) was removed due to alleged paper leak and irregularities in the NEET-UG examination.
  2. An expert panel chaired by a former ISRO chief has been constituted to recommend reforms in the NTA's structure and functioning.
  3. The Central Bureau of Investigation (CBI) will investigate the NEET-UG exam malpractice, and the Health Ministry has postponed the NEET-PG exam as a precautionary measure.
- Which of the statements given above are correct?
  - a) 1 and 2 only
  - b) 2 and 3 only
  - c) 1 and 3 only
  - d) 1, 2, and 3



# No GST for hostel stay below ₹20,000, Railway services



**Key decisions:** Union Finance Minister Nirmala Sitharaman chairs the 53rd GST Council meeting in New Delhi on Saturday. PTI

**Vikas Dhoot**  
NEW DELHI

Meeting after almost nine months, the Goods and Services Tax (GST) Council on Saturday approved measures to ease compliance for small businesses, exempted hostel accommodation worth up to ₹20,000 a month and Railway services, and resolved to reconvene in August to initiate parleys on rejigging the multiple rates levied under the seven-year-old indirect tax.

With 11 new members from States such as Bihar, Andhra Pradesh, Haryana, Rajasthan, and Odisha, the council could only take up a part of its heavy agenda of clarifications and trade facilitation measures, but did grant some relief to taxpayers, including a waiver of interest and penalties on some past tax demands, along with steps to reduce litigation.

Finance Minister Nirmala Sitharaman, the Council's chairperson, said that members had agreed to roll out biometric-based Aadhaar authentication for all GST registrations across the country in a phased

manner. She stressed that this will not only quicken the registration process but also curb the fraudulent use of input tax credits through fake invoices.

## Future agenda

Apart from the GST exemption for hostel accommodation outside the campuses of educational institutions, which Ms. Sitharaman said would benefit students across India, especially those from rural areas, the Council also clarified the GST rates on several items. For instance, it was clarified that a number of products, including milk cans, sprinklers, carton boxes, and solar cookers, will now attract 12% GST, irrespective of use, material, or energy source.

At its next meeting, which Ms. Sitharaman said is likely after the Budget Session of Parliament, the Council will take up pending procedural issues on its agenda as well as broader challenges. These include the rationalisation of GST rates, which a ministerial group is tasked with, and the future of the GST Compensation Cess after its expiry in March 2026.

,  
o  
r  
l  
y  
t  
r  
n  
ul  
s  
it  
i-  
a  
l.  
r-  
l  
e  
p  
it  
i-  
h  
r-  
s  
s  
r-  
n  
n  
o  
d  
t-  
e  
t-  
n  
n  
s  
t-  
t-  
n  
r-  
it  
a  
r-  
t-  
e

- **Recommendations Relating to GST Rates on Goods**

- 1. Uniform 5% IGST:** Applied to imports of aircraft parts, components, and tools.
- 2. 12% GST:** Applied to all milk cans and solar cookers.
- 3. Reduction from 18% to 12%:** For cartons, boxes, and cases of corrugated and non-corrugated paper.
- 4. Clarification and Regularization:** Poultry keeping machinery parts, all types of sprinklers at 12% GST.
- 5. Extensions and Exemptions:** IGST exemption for defense imports extended; IGST exemption for RAMA research equipment.



- **Recommendations Relating to GST Rates on Services**

- 1.Exemptions:** Services by Indian Railways to the general public, services by SPVs to Indian Railways.

- 2.Accommodation Services:** Exemption for accommodation up to Rs. 20,000 per month per person for a minimum continuous period of 90 days.

- 3.Insurance Services:** Clarifications on co-insurance premium, re-insurance commission, and retrocession.



- **Trade Facilitation Measures**

- 1. Waiver of Interest and Penalties:** For demands under Section 73 for FY 2017-18 to FY 2019-20 if tax is paid by 31.03.2025.

- 2. Reduction of Government Litigation:** Monetary limits set for filing appeals by the department.

- 3. Reduction in Pre-Deposit Amount:** For filing appeals under GST to ease cash flow.

A background image showing various pieces of laboratory glassware on a shelf. From left to right, there is a beaker with red liquid, a graduated cylinder with orange liquid, a beaker with green liquid, a flask with yellow liquid, and a flask with green liquid. The glassware is set against a dark, slightly blurred background.

- **Other Key Recommendations**

- 1. Non-Levy of GST on Extra Neutral Alcohol:** When used for manufacturing alcoholic liquor for human consumption.

- 2. Reduction in TCS Rate:** For Electronic Commerce Operators (ECOs) from 1% to 0.5%.

- 3. Amendments and Clarifications:** Various clarifications on valuation of services, place of supply, and input tax credit.

**IN BRIEF**



**Another bridge collapses in Bihar: no casualties reported**

Within a week, another bridge has collapsed in the Daraunda area of Siwan district in Bihar on Saturday. According to the local people, the bridge was 40 years old and collapsed due to soil erosion. As in the previous time, video of the bridge collapsing has been captured by villagers. The bridge had been connecting Patedhi Bazaar in Siwan and the Ramgarh panchayat in Darbhanga district. On Tuesday, a portion of an under-construction bridge that cost ₹12 crore had collapsed in Araria. The 100-metre bridge over the Gandak canal in the Maharajganj sub-division of Ramgarh panchayat collapsed early in the morning. No casualties have been reported.

**Salman firing case: police trace new links to Bishnoi**

In a major development in the case of gunfire in front of actor Salman Khan's residence on April 14, the Mumbai Police on Saturday said an audio recording had been retrieved from the phones of one of the arrested suspects. The forensic investigation of the audio revealed that it matched the voice of Anmol Bishnoi, the Canada-based brother of gangster Lawrence Bishnoi. The audio file revealed that Anmol had been in constant touch with the shooter, a police official said. The police believe that the shooting was planned and executed by the Lawrence Bishnoi gang which has made several attempts on the life of the actor in the past.

**Taking U.P. lightly cost us badly: Axis My India chief**

Blaming an error of judgment for his exit polls going off the mark, Axis My India chief Pradeep Gupta has said taking Uttar Pradesh lightly in the last three phases of the elections cost it dear. Axis My India's exit poll predicted 361-400 seats for the BJP-led alliance in the Lok Sabha election, including 67 seats in Uttar Pradesh that sends 80 members to the Lower House of Parliament. But the actual results showed the BJP getting 240 seats, missing the majority mark, and the party winning just 33 seats in U.P. "This is a lesson to never ignore any State when it comes to exit polls," Mr. Gupta said in an interaction in New Delhi.

**Police arrest two for burglary at actor Anupam Kher's office**

The Oshiwara police in Mumbai have arrested two men for burgling actor Anupam Kher's office on Veera Desai Road in Andheri West on the night of June 19, Deputy Commissioner of Police Raj Tilak Roushan said on Saturday. The burglars broke into Anupam Kher's office premises during the night, making away with cash and valuables amounting to approximately ₹4.15 lakh, officials said. Earlier this week, Mr. Kher took to his Instagram handle and provided details of the burglary. In the video he uploaded, the actor said that money and some film negatives had been stolen from the property. The police have registered a case against the accused.

**SUDOKU**

Solving to yesterday's Sudoku

2	5	3	3	4	9			
9		8	6		5		6	
3	7		1					5
			9				2	
4	5	3		4	6		9	
	6	3		9	8	4		3

DIFFICULTY RATING: ★★★★★

Solution to yesterday's Sudoku  
5 4 9 2 6 3 8 7 1

**First arrest made in 'lynching' of 3 cattle transporters in Arang**

Harsh Mishra sent to judicial custody; police say he did not have links to any right-wing organisation or previous involvement in any such crime

**Shubhomoy Sikdar RAIPUR**

The Raipur police on Saturday made the first arrest in connection with the 'lynching' of three cattle transporters from Uttar Pradesh in Arang, on the outskirts of Raipur. Harsh Mishra, 23, was part of the group that had allegedly assaulted the men and chased them, after which the three were found lying below the Mahanadi bridge in the early hours of June 7.



Night of attack: The truck used to transport cattle when the lynching took place in Arang in Chhattisgarh. (PHOTO: ANS/ANILKUMAR)

Asked if the police had established how many people had been involved in the attack, Mr. Rathore replied in the negative and said they were verifying the different names that had cropped up during the investigation. He also said that Mr. Mishra had no previous involvement in any such crime nor was he linked to any right-wing organisation, an allegation Qureshi's family had levelled repeatedly.

While family members of the three deceased men — Saddam Qureshi and his cousin Chand Miya Khan both from Uttar Pradesh's

Saharanpur district, and Gaudu Khan, 35, from Shamli district — said that they had been chased down and assaulted by a mob, the police continued to remain tight-lipped about the exact sequence of events of the night. With Qureshi succumbing to his injuries on June 19, the investigations had hit a fresh roadblock, even as the police had maintained all along that they were checking the video footage.

Meanwhile, with police officials saying Mr. Mishra's custody was not required for the three deceased men, the case has moved to judicial custody after being produced before a Magistrate court on Saturday.

**New criminal law Bill has no Section on rape of men, transgender people**

**Alisha Dutta NEW DELHI**

The suicide of a 23-year-old man, hours after he was gang-raped by four men in Uttar Pradesh, has shed light on the soon-to-be implemented Bharatiya Nyay Sanhita (BNS) that does not have any Section that deals with rape of men and transgender persons.

With the non-inclusion of a Section 377 equivalent in BNS, rape of men and transgender persons will become a non-offence post July 1. ANAND GROVER, senior lawyer

of *Navtej Johar vs the Union of India*, the Supreme Court had "read down" Section 377, and not "struck down", implying that consensual sex between people of the same gender and transgender persons was no longer punitive, but the Section was retained since it was the only provision that covered the rape of men, transpersons and animals.

"With the striking down of Section 377 from the BNS, the case opened a debate on the future of such cases in the absence of Section 377 or its equivalent in the new code. Speaking to *The Hindu*, advocate Karuna Nundy said that in the landmark Supreme Court judgment

Anand Grover said that in the garb of "decolonising criminal laws", the government removed Section 377 from the BNS Bill, which will reduce severity of the sentence once the crime is proven.

In India, rape laws are not gender-neutral. A Section 376 of the IPC only deals with rape against women and with the non-inclusion of a Section 377 equivalent in the BNS, rape of men and transgender persons will become a non-offence post July 1, said senior lawyer Anand Grover. In such cases, only Sections related to grievous hurt and transgender persons are invoked, which have far less legal consequences than the sections related to rape, he added.

Cases registered before July 1, under Section 377 will continue to be governed by the IPC while those filed after that will not. "Two legal systems will run parallel and cases registered before will have different punitive consequences," he warned.

Further, Supreme Court advocate Yashasvi S.K. Chocksey said, "When Sec-

tion 377 is invoked, the intensity with which the case is treated is much higher than compared to a case where Sections related to grievous hurt are invoked. It's reflected in the urgency of arrests or the ease of getting bail. In the latter case, if the accused is not arrested, he can tamper with evidence and investigate."

A senior official of the Delhi Police attending training sessions for the BNS, told *The Hindu* that in none of the training sessions were they instructed on how to deal with cases of rape of men and transgender persons.

Ms. Nundy also said that the non-inclusion of Section 377 would also imply that men who have committed anal rapes of their wives would also not face criminal consequences if the new code is not amended.

Mr. Grover said the non-inclusion of Section 377 would make men and transgender persons especially vulnerable since those who rape them would be unscathed.

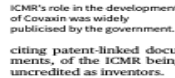
Those in distress can reach out to the 24x7 helpline: KIRAN 1030-330-0019

OCI cardholders will be covered, and foreign travellers will be included in the second phase. The FTI-TTP will be implemented through an online process. The Union Home Minis-

**Erred in not crediting ICMR as co-inventor of Covaxin, admits Bharat Biotech**

**Jacob Koshy NEW DELHI**

Bharat Biotech International Limited (BBIL), the manufacturer of India's first indigenous Covid-19 vaccine Covaxin, said it had made an "inadvertent mistake" in not including scientists from the Indian Council of Medical Research (ICMR) as "co-inventors" in patent applications filed in India and abroad to protect the intellectual property rights around the vaccine.



ICMR's role in the development of Covaxin was widely publicised by the government.

It would include their names in fresh filings for patent purposes, the Hyderabad-based firm said in a statement late on Saturday. "BBIL has great respect for ICMR and is thankful to ICMR for their continuous support on various projects. Therefore, as soon as this inadvertent mistake was noticed, BBIL has already started the process to rectify it by including ICMR as co-inventors in patent applications for Covid-19 vaccine. Necessary documents are being prepared for it and BBIL will file those documents with the patent office, as those are ready and signed," the company said.

Response after report The statement came on the day *The Hindu* reported,

or data being published in journals. Bharat Biotech said it did not have "access" to its own agreement with ICMR that governed the terms of engagement between both entities regarding Covaxin as this was a "confidential document".

The *Hindu* reached out to BBIL to clarify this point but did not get a response till the time of going to press.

"Bharat Biotech's Coviv vaccine application was filed in above circumstances and since BBIL-ICMI agreement copy, being a confidential document, was not accessible. Hence ICMR was not included in the original application. Other than that, ICMR's role in the development of vaccine was widely publicised by the government as well as ICMR's own leadership through multiple channels during the pandemic.

"In a rush" By way of explanation, the company, in its press statement, said like other pharmaceutical companies working on Covid vaccines, it was faced with multiple challenges and "all organisations were in a rush" to develop vaccines and file the appropriate patents, prior to competitors

**Stringent regulations could hinder growth of AI in India: experts**

**Soliban Rocky Singh NEW DELHI**

As India grapples with the regulatory landscape for artificial intelligence (AI), a sector which has seen rapid development in recent years, experts opine that strict regulations could stifle the country's burgeoning AI-driven economy.

Currently, India does not have specific laws directly addressing generative AI, such as deepfakes. It has instead introduced a series of advisories and guidelines to encourage the responsible development and implementation of AI technologies.

After a "deepfake" video clip of actor Rashmika Mandanna went viral on social media platforms last year, the Ministry of Electronics and Information Technology (MeitY) asked content creators to be diligent to take such content down within 36 hours, a requirement outlined in the IT Rules, 2021.

Plea in court In December last year, the Delhi High Court asked the Centre to respond to a public interest litigation (PIL) plea against the unregulated use of AI and deepfakes.

Deepfake videos utilise AI to swap the likeness of a person in an existing video with someone else's. Recently, concerns have grown around deepfake technology, as it can produce highly realistic fake videos that may be misused for spreading misinformation, creating fake news, or generating false narratives. The petition said while technical advances of AI have

been rapid, the lack of specific laws addressing generative AI, such as deepfakes, is a concern. "The absence of clear guidelines to encourage the responsible development and implementation of AI technologies. After a 'deepfake' video clip of actor Rashmika Mandanna went viral on social media platforms last year, the Ministry of Electronics and Information Technology (MeitY) asked content creators to be diligent to take such content down within 36 hours, a requirement outlined in the IT Rules, 2021.

At present, India does not have specific laws addressing generative AI. STOCK

Deepfake videos utilise AI to swap the likeness of a person in an existing video with someone else's. Recently, concerns have grown around deepfake technology, as it can produce highly realistic fake videos that may be misused for spreading misinformation, creating fake news, or generating false narratives. The petition said while technical advances of AI have



Deepfake videos utilise AI to swap the likeness of a person in an existing video with someone else's. Recently, concerns have grown around deepfake technology, as it can produce highly realistic fake videos that may be misused for spreading misinformation, creating fake news, or generating false narratives. The petition said while technical advances of AI have

Deepfake videos utilise AI to swap the likeness of a person in an existing video with someone else's. Recently, concerns have grown around deepfake technology, as it can produce highly realistic fake videos that may be misused for spreading misinformation, creating fake news, or generating false narratives. The petition said while technical advances of AI have

Deepfake videos utilise AI to swap the likeness of a person in an existing video with someone else's. Recently, concerns have grown around deepfake technology, as it can produce highly realistic fake videos that may be misused for spreading misinformation, creating fake news, or generating false narratives. The petition said while technical advances of AI have

Deepfake videos utilise AI to swap the likeness of a person in an existing video with someone else's. Recently, concerns have grown around deepfake technology, as it can produce highly realistic fake videos that may be misused for spreading misinformation, creating fake news, or generating false narratives. The petition said while technical advances of AI have

# New criminal law Bill has no Section on rape of men, transgender people

**Alisha Dutta**  
NEW DELHI

The suicide of a 23-year-old man, hours after he was gang-raped by four men in Uttar Pradesh, has shed light on the soon-to-be implemented Bharatiya Nyay Sanhita (BNS) that does not have any Section that deals with rape of men and transgender persons.

On June 14, the U.P. Police filed a first information report (FIR) against four persons for allegedly raping the man at a hotel in the Chiluatal area of Gorakhpur district. While the police booked the four accused under Section 377 of the Indian Penal Code (IPC) that deals with rape of a man, transgender person or an animal, alongside Sections dealing with extortion, theft, criminal intimidation, causing grievous hurt and criminal conspiracy, the case opened a debate on the future of such cases in the absence of Section 377 or its equivalent in the new code.

Speaking to *The Hindu*, advocate Karuna Nundy said that in the landmark Supreme Court judgment



With the non-inclusion of a Section 377 equivalent in BNS, rape of men and transgender persons will become a non-offence post July 1

**ANAND GROVER**  
senior lawyer

of *Navtej Johar vs the Union of India*, the Supreme Court had “read down” Section 377, and not “struck down”, implying that consensual sex between people of the same gender and transgender persons was no longer punitive, but the Section was retained since it was the only provision that covered the rape of men, transpersons and animals.

“With the striking down of Section 377 from the BNS, and with no alternative law in place, men or transgender persons who rape other men, transgender persons or animals will not be penalised for rape,” Ms. Nundy said.

Expressing concern over the future of justice in such cases, senior lawyer

Anand Grover said that in the garb of “decolonising criminal laws”, the government removed Section 377 from the BNS Bill, which will reduce severity of the sentence once the crime is proven.

“In India, rape laws are not gender-neutral. Section 376 of the IPC only deals with rape against women and with the non-inclusion of a Section 377 equivalent in the BNS, rape of men and transgender persons will become a non-offence post July 1,” said senior lawyer Anand Grover. In such cases, only Sections related to grievous assault can be invoked, which have far less legal consequences than Sections related to rape, he added.

Cases registered before July 1, under Section 377, will continue to be governed by the IPC while those filed after that will not. “Two legal systems will run parallel and cases of the same nature will have different punitive consequences,” he warned.

Further, Supreme Court advocate Yashaswi S.K. Chocksey said, “When Sec-

tion 377 is invoked, the intensity with which the case is treated is much higher when compared with a case where Sections related to grievous hurt are invoked. It’s reflected in the urgency of arrests or the ease of getting bail. In the latter case, if the accused is not arrested, he can tamper with evidence and impact the course of investigation.”

A senior official of the Delhi Police, who attended training sessions for the BNS, told *The Hindu* that in none of the training sessions were they instructed on how to deal with cases of rape of men and transgender persons.

Ms. Nundy also said that the non-inclusion of Section 377 would also imply that men who have committed anal rapes of their wives would also not face criminal consequences if the new code is not amended.

Mr. Grover said the non-inclusion would make animals especially vulnerable since those who rape them will go scot-free.

*Those in distress can reach out to the 24x7 helpline: KIRAN 1800-599-0019*

- **Case Highlight:**

- A 23-year-old man's suicide after being gang-raped by four men in Uttar Pradesh brings attention to the lack of a specific section addressing the rape of men and transgender persons in the Bharatiya Nyay Sanhita (BNS).
- An FIR was filed on June 14 by U.P. Police against four persons under Section 377 of the Indian Penal Code (IPC), which deals with unnatural offenses.



---

- **Section 377 and BNS:**

- The non-inclusion of Section 377 equivalent in BNS will make rape of men and transgender persons a non-offense post July 1.
- The Supreme Court's ruling in Navtej Johar vs. the Union of India read down Section 377, decriminalizing consensual sex between adults of the same gender while retaining provisions for non-consensual acts.

## Impact of Non-Inclusion:



```
graph TD; A[Impact of Non-Inclusion:] --> B[Advocates express concern that removing Section 377 from BNS without an alternative law will leave men and transgender persons vulnerable to sexual assault without legal recourse.]; B --> C[The lack of gender-neutral rape laws in India means Section 376 of the IPC only covers rape against women.];
```

Advocates express concern that removing Section 377 from BNS without an alternative law will leave men and transgender persons vulnerable to sexual assault without legal recourse.

The lack of gender-neutral rape laws in India means Section 376 of the IPC only covers rape against women.

## Legal and Social Implications:


Anand Grover warns that non-inclusion of Section 377 equivalent in BNS will reduce the severity of sentences for proven rape cases involving men and transgender persons.

Cases of rape under Section 377 will continue to be governed by IPC for those filed before July 1.

Critics argue that this legislative gap could lead to mass exploitation of men and transgender individuals



## **1. Concerns from Legal Experts:**

1. Ms. Nundy and other advocates stress that failing to address the rape of men and transgender persons in new laws will have dire consequences.
  2. Senior officials suggest that non-inclusion in BNS could lead to lenient treatment of such cases compared to other grievous hurt sections.
- 

- 
- Consider the following statements regarding the new criminal law Bill and its implications:

1. The Bharatiya Nyay Sanhita (BNS) does not include a section equivalent to Section 370 of the Indian Penal Code, which addresses the rape of men and transgender persons.
2. The removal of Section 377 from BNS without an alternative provision will make the rape of men and transgender persons a non-offense post July 1.
3. The Supreme Court's ruling in Navtej Johar vs. the Union of India retained Section 377 to cover the rape of men, transgender persons, and animals.

- Which of the statements given above are correct?
- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2, and 3

Delhi • Chandigarh • Bangalore • Hyderabad • Mumbai • New Delhi • Chennai • Kolkata • Bhopal • Lucknow • Patna • Guwahati • Thiruvananthapuram • Coimbatore • Mysore • Pune • Jaipur • Ranchi • Bhubaneswar • Bikaner • Raipur • Agartala • Dispur • Itanagar • Dibrugarh • Shillong • Imphal • Kohima • Aizawl • Port Blair • Silvassa • Daman • Diu • Lakshadweep



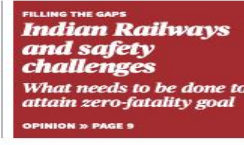
**FRESH START**  
IS Session begins today;  
Cong. calls meet of MPs  
NEWS » PAGE 5



**MILESTONE ALERT**  
ISRO reusable launch vehicle test successful  
NEWS » PAGE 6



**CENSUS IN COUNTRIES**  
India among few that haven't held exercise  
OPINION » PAGE 9



**FILLING THE GAPS**  
Indian Railways and safety challenges  
What needs to be done to attain zero-fatality goal  
OPINION » PAGE 9



**ON A HIGH**  
Afghanistan humbles Australia, stays alive  
SPORT » PAGE 16

**INSIDE**



**JDS (MLC Suraj Revanna held in sexual abuse case**

**BENGALURU/HASSAN**  
Janata Dal(S) MLC Suraj Revanna was arrested on Sunday for allegedly sexually abusing a male party worker a few days ago. » PAGE 3

**Industry seeks rethink on high import tariffs**

**NEW DELHI**  
Indian industry has urged the government to slash high import duties on electronics components as they have made Indian electronic goods globally uncompetitive vis-à-vis rivals such as Vietnam and China. » PAGE 4

**India might be returning Israel a favour: ex-envoy**

**NEW DELHI**  
Former Israeli Ambassador to India Daniel Carmon, speaking with Israeli publication Ynetnews, has said that India might be supplying weapons to Israel as a sign of gratitude for Israeli assistance during the Kargil war of 1999. » PAGE 4

**Israeli soldiers tie wounded man to front of jeep**

**JENIN**  
Israeli troops tied a wounded Palestinian to a military vehicle during a raid in the occupied West Bank city of Jenin, the Army said. Footage of the incident shows a man strapped horizontally to the bonnet of a military jeep as it passes through a alley. » PAGE 14

## CBI team in Patna, Godhra for NEET probe

The first information report filed by the agency says there were 'certain isolated incidents' in a few States during the May 5 test; Education Ministry asks it to investigate the role of public servants, if any, connected to the conduct of the examination and also conduct a comprehensive probe into the entire gamut of alleged irregularities

**New Delhi**  
The Central Bureau of Investigation on Sunday registered a case of alleged irregularities in the conduct of the National Eligibility-cum-Entrance Test for admission to undergraduate medical programmes held on May 5. "The process to take over the other cases related to the examination has also been initiated by the CBI for a comprehensive investigation," an agency official said. The CBI's first information report says that there were "certain isolated incidents" in a few States during NEET conducted by the National Testing Agency in 4,750 centres for over 23 lakh candidates. "Therefore, the Ministry

### Maharashtra ATS detains two teachers from Latur

**The Hindu Bureau PUNE**  
The Nanded branch of the Maharashtra Anti-Terrorism Squad on Saturday night detained two teachers from Latur district in connection with the NEET-UG question paper leak case. Sources said Sanjay Tularam Jadhav and Jaleel Umrakhan Pathan were released after several hours of questioning, but they could be called for further questioning later as further investigation is still on. Another case of alleged cheating at a Godhra test centre, in which six people had been arrested, is currently being investigated by the Gujarat Police, but is likely to be taken over by the CBI. This year's NEET has been embroiled in several controversies. After students alleged irregularities in the rankings, the matter went to the Supreme Court which approved a re-test for over 1,500 students who had previously been given "grace marks" to compensate for the time they lost while taking the test. Citing concerns about the integrity of competitive examinations, the Union government took a last-minute decision to postpone the NEET-UG examination scheduled for Sunday. Last week, the CBI registered a

case against unknown persons following an Education Ministry complaint alleging that the integrity of the University Grants Commission-National Eligibility Test, also conducted by the NTA, may have also been compromised, based on inputs from the Home Ministry. The UGC-NET, meant for Ph.D. admissions and determining eligibility for recruitment as Assistant Professors, was also cancelled. On Wednesday, Education Minister Dharmendra Pradhan had acknowledged that the back-to-back paper leaks, affecting the lives of at least 35 lakh students, were an institutional failure of the NTA, whose chief has now been removed. **MORE REPORTS » PAGE 5**

**Hungry herd**



**On the move:** Elephants in search of food cross National Highway 37 at Boko on the outskirts of Guwahati on Sunday. RTU RAJ BHOWRAH

of Education has requested the CBI to conduct a comprehensive investigation into the entire gamut of alleged irregularities, including conspiracy, cheating, impersonation, breach of trust, and destruction of evidence by candidates, institutes, and middlemen, including attempted irregularities," the agency said. **Special teams sent** The Ministry has requested it to investigate the role of public servants, if any, connected to the conduct of the examination or by the larger conspiracy. "Special teams are being sent to Patna and Godhra where local police cases have been registered," it said. On Friday night, the Economic Offences Unit of the Bihar Police picked up six more people from Deoghar in Jharkhand for their involvement in the alleged paper leak. The police had earlier arrested 13

of the accused, including four examinees. They suspect that Sanjeev Mukhiya, a resident of Nalanda in Bihar, is the kingpin. He had earlier been arrested on the charge of leaking the paper for a constable recruited on exam conducted by the Bihar Public Service Commission in 2016. **Rahul Karmakar GUWAHATI** In the wake of the recent seizures of intelligent flight batteries and drone parts in Assam, armed forces officials posted in the conflict zones in Manipur believe unmanned aerial vehicles could be used by the warring groups in the State for attacks. On June 14, 10 intelligent flight batteries were seized from a Manipur-based man in a vehicle at a toll gate about 30 km east of Guwahati. A day later, another person was caught from the Rupnagar area in the Assam capital carrying drone parts on a two-wheeler. While Khaigoulen Kipgen, 27, of Gamngal village in Kangpokpi district of Manipur, apprehended at the toll gate, was found to have links with Kukl-Zo extremist groups, the police said the parts were from Sanjib Kumar Mishra in Guwahati, who was arrested for Meitei outfits involved in the conflict. These seizures following reliable input about the transportation of drones and related equipment for armed groups on either side of the ethnic divide in Manipur could be the tip of the iceberg, an Assam police officer of the Inspector-General rank said. He did not rule out the possibility of intelligent flight batteries and drone parts slipping through checkpoints on the arterial National Highway 27 leading to Manipur, via Nagaland, and an alternative route from Silchar in the Barak Valley of southern Assam. A few days ago, Lieutenant-General Pradeep Chandran Nair, Director-General of Assam Rifles, said that some 5,400 refugees from Myanmar in Kamjong district of Manipur feared aerial attacks. **'No reports'** "We have no reports of drones having been used in the ethnic battle between the Kukl-Zo and Meitei people in Manipur, but their visibility is all across Manipur of late. Hoi maia to are in operation and for what purpose is anybody's guess, though these could be used for surveillance for the time being," an Army officer below the rank of Brigadier said. The footfalls on the periphery of the Imphal Valley, almost at the centre of the drone attacks because the corrugated territory allows the flying gadgets to "peek and fire" from the top of mounds of trees. **A 9X**

## Oram promises to look into Great Nicobar clearances

**Abhinav Lakshman NEW DELHI**  
The Union Tribal Affairs Ministry will be looking into the forest clearance paperwork of the ₹72,000-crore infrastructure project on Great Nicobar Island that the NDA government has been pushing for, and accordingly determining the next steps, Tribal Affairs Minister Jui Oram has said. In an exclusive interaction with The Hindu, he outlined his intent to give special attention to forest and land rights of tribal communities during his term. The Opposition Congress has been demanding the withdrawal of clearances granted for the Great Nicobar project and a ground-up review of it over the environmental concerns flagged by experts and constitutional bodies

and amid reports of alleged violations of land rights of the tribal people residing in the region. Asked about the concerns raised by the National Green Tribunal (NGT) and the NCSIT over the environmental and forest clearances, Mr. Oram said, "This is a specific case. It will take time to go through the files, but we will be looking into the issues that have been raised by calling for the relevant files and documents." The Great Nicobar Project involves developing a trans-shipment port, an international airport, township development, and a 450-MVA gas and solar-based power plant on the island. The project area is expected to cover over 130 sq. km. of pristine forest, and has been accorded environmental clearance, one of the mandatory pre-

requisites - by an expert committee. The government told Parliament in August 2023 that 9.6 lakh trees would likely be cut for it and 'compensatory afforestation' for the loss of this unique rainforest ecosystem had been planned, but in Haryana, thousands of kilometres away and in a vastly different ecological zone. A total of 7,114 sq. km of tribal reserve forest land, where the Shompen, a Particularly Vulnerable Tribal Group resides, is also expected to be used for this project with the government insisting that they will not be relocated because of this work. **FRA violations** Meanwhile, the NCSIT is in the middle of investigating a complaint from retired bureaucrat R.A.S. Sarma, a former Tribal Affairs Secretary to the Andhra Pradesh government, who alleged that the Forest Rights Act (FRA) in the forest clearance process for

the project, for which the government had also not consulted the Andaman and Nicobar administration, has neither recognised nor granted ownership of any forest land across the UT to local tribespeople under FRA - a requisite step under the Forest Conservation Rules, 2017 - before Stage-I clearance, which was granted in October 2022. The UT administration has argued that the existing Andaman and Nicobar Islands (Protection of Aboriginal Tribes) Act of 1956, (PAT56), adequately protects forest rights of tribespeople in the area. PAT56 gives the administrator of the islands sole power over notification and de-notification of land as a Tribal Reserve - determining which areas forest dwellers and tribespeople can use for their daily sustenance.

IN BRIEF

Cloudburst in Itanagar causes landslips, flood-like situation

A cloudburst on Sunday morning triggered landslips and a flood-like situation in Itanagar. Though Arunachal Pradesh has been witnessing heavy rain over the past few weeks, the situation had improved in the past two days. Following the cloudburst around 10.30 a.m., landslips were reported from various parts of Itanagar and its adjoining areas, while a flood-like situation occurred in several stretches of National Highway 415. Meanwhile, Union Home Minister Amit Shah chaired a meeting in New Delhi for flood preparedness ahead of monsoon. He instructed departments concerned to study the recent floods in Sikkim and Manipur and file a report.

Two CoBRA personnel killed in bomb blast in Chhattisgarh

Two personnel of the Central Reserve Police Force's jungle warfare unit (CoBRA) were killed after a Nasalite blew up a truck with an improvised explosive device (IED) in Sukma district of Chhattisgarh on Sunday, the police said. Constable Shalendra, 29, and vehicle driver R. Vishnu, 35, were killed in the blast that took place around 3 p.m. near Timmapuram village between Silger and Tekalgudem camps of the security forces.

Censor board thwarts Monkey Man release even after global cuts

Acroon Doss

The Dev Patel-directed reverse drama Monkey Man, set in a dystopian version of India, is yet to be seen in the country because the Central Board of Film Certification has thwarted its release without formally banning it, by simply not scheduling a screening of the film for its advisory panel, according to a source. This is despite the fact that Universal Studios has already made changes from its original cut of the film, clipping scenes that sharply emphasised the nexus between religion and politics. The version of the film that was released globally in theatres on April 5, and on streaming platforms recently, does not include these scenes. Apart from the cut scenes, Universal Studios also changed the colour of political banners in the film



A promotional still of the film featuring Dev Patel.

scheduling a screening of Monkey Man for its Examining Committee. The Cinematograph (Certification) Rules, 2024, notified in March, and its preceding 1983 version, both lay out a five-day deadline for a film to be referred to the Examining Committee, which watches films before taking decisions on what changes should be made, if any. That deadline passed in May. The CBFC declined to reveal any details of the film's examination in response to a Right to Information request by The Hindu. The CBFC's Chief Executive Officer, Smriti Vats Sharma, upheld its transparency officer's decision to withhold these details under the Right to Information Act. Warner Bros Pictures India, which distributes Universal Pictures movies in the country, declined to comment.

Pushpak, ISRO's reusable launch vehicle, clears test

This was the third and final test of a series; the mission demonstrated the autonomous landing capability of the vehicle under more challenging release conditions, says the space agency

The Hindu Bureau

The Indian Space Research Organisation successfully completed the third reusable launch vehicle landing experiment (RLV LEX) at the Aeronautical Test Range in Chitradurga, Karnataka on Sunday. The third and final test in a series was conducted at 7.10 a.m. "Following the success of RLV LEX-01 and LEX-02 missions, RLV LEX-03 demonstrated the autonomous landing capability of the RLV under more challenging release conditions and more severe wind conditions," the ISRO said. On Sunday morning, Pushpak, the space agency's winged vehicle, was released from an Indian Air Force Chinook helicopter at an altitude of 4.5 km. The ISRO said that from the release point 4.5 km away, Pushpak autonomously executed cross-range correction manoeuvres, approached the



Textbook touchdowns: Pushpak performed a 'precise horizontal landing at runway centre line', the ISRO says. SPECIAL ARRANGEMENT

runway, and performed a precise horizontal landing at the runway centre line. "Due to this vehicle's low lift-to-drag ratio aerodynamic configuration, the landing velocity exceeded 320 kmph, compared with 260 kmph for a commercial aircraft and 280 kmph for a typical fighter aircraft. After touchdown, the vehicle velocity was reduced to nearly 100 kmph using its brake parachute, after which the landing gear brakes were employed for deceleration. During this ground roll phase, Pushpak utilises its rudder and nose-wheel steering system to autonomously maintain a stable and precise ground roll along the runway," it said. The space agency said this mission simulated the approach and landing in-flight, and high-speed landing conditions for a vehicle returning from space, reaffirming its expertise in acquiring the most critical technologies

required for the development of an RLV. "Through this mission, the advanced guidance algorithm catering to longitudinal and lateral plane error corrections, which is essential for the future Orbital Re-entry Mission has been validated," it said. The ISRO said that the LEX used sensors such as an inertial sensor, altimeter, flush air data system and NavIC. Notably, "the LEX-03 mission tested the winged body and flight systems from the LEX-02 mission without any modification, demonstrating the robustness of the ISRO's capability of design to reuse flight systems. ISRO Chairman S. Somnath congratulated the team for its efforts in maintaining the success streak in such missions. S. Unnikrishnan, Mission Director, Vikram Sarabhai Space Centre, emphasised that this "consistent success boosts ISRO's confidence in the critical technologies essential for future orbital re-entry missions".

V. Geethanath

HYDERABAD

Scientists at the CSIR-Centre for Cellular and Molecular Biology (CCMB) here, in association with clinicians of the Regional Cancer Centre (RCC) in Thiruvananthapuram, have identified a potentially cost-effective and non-invasive method to detect various kinds of breast cancer from just a drop of blood. The researchers have analysed microRNA (miRNA) signatures in hundreds of human cancer samples and identified 439 of them associated with invasive breast cancer, of which 107 qualified to be potential biomarkers for the stratification of different types, grades and stages of invasive ductal carcinoma," said CCMB Chief Scientist Lekha Dinesh Kumar, who led the research. Most of the cellular processes in a body are regulated by miRNA molecules, which are 25-26 base small non-coding RNA mole-



Screening test: Scientists have identified a potentially cost-effective, non-invasive method to detect breast cancer. V. RAJU

cules. Identification of miRNAs involved in the regulation of the initiation and progression of breast cancer holds great promise for the development of molecular tools for early diagnosis and prognosis, Dr. Lekha said. The scientist explained that cancer cells shed miRNA into the circulation called 'circulating nucleic acids (CNAs) and tumour-specific genetic changes, including DNA, RNA, and proteins, which are detectable in plasma or other bio-

fluids of cancer patients to identify the earlier stages of cancer development. Based on this principle, the identified biomarkers could be made into a liquid biopsy system that might prove to be a boon for developing countries. "Breast cancer could be detected from one drop of blood. Cost-effective method "Our study has paved the way for the application of miRNAs as biomarkers and would open up new vistas in developing a refined,

Advisory on organ transplantation may be put up at airports

S. Vijay Kumar

CHENNAI

With more number of foreigners visiting India to undergo organ transplantation, the Union Health and Family Welfare Ministry has issued an advisory to sensitise international patients for the organ transplant protocol and legal framework in the country. In a note to the Home Ministry, Health Secretary Aparva Chandra said India had emerged as one of the leading destinations for foreign nationals to undergo organ transplantation due to the availability of world-class facilities and highly skilled medical personnel. It was essential for these foreign nationals to undergo the specific guidelines and legal requirements that regulate the process of organ transplantation in India. To sensitise them on medical visa and organ transplantation and address queries regarding the process pertaining to the surgery, the Health Ministry had prepared a set of protocols and guidelines to be published on websites of the Bureau of Immigration

of the Home Ministry. The Health Secretary also wrote to the External Affairs Ministry to circulate and publish the guidelines at prominent places in airports to create awareness among foreigners visiting the country for organ transplantation. Some of the basic requisites were that treatment of diseases which required organ transplant would be permitted only on a medical visa and all living donors should be of the age 18 or above. Guidelines Going by provisions of the Transplantation of Human Organs and Tissues Act, 1994, and other Rules, no Indian donor is permitted to donate his organ or organs to a foreigner unless they are a near relative of the recipient. A near relative could be a spouse, son, daughter, father, mother, brother, sister, grandfathers, grandmother, grandson or granddaughter. A senior official of the embassy of the country of origin in India is required to certify the relationship between the donor and the recipient.

Student held for alleged terror links in West Bengal

The Hindu Bureau

KOLKATA

The Special Task Force (STF) of the West Bengal Police has arrested a second-year student from Panagarh in Purba Bardhaman district of the State, for his alleged links to a Bangladesh-based terror group. The accused was produced before a district court on Sunday and remanded in police custody for 14 days. "Today, STF West Bengal has arrested Md Habibullah from his residence. It has been learnt that the members of the group mostly communicate through a cryptic messaging platform," an STF official said after the arrest on Saturday. The police said the accused has links to a new terror module named 'Shahadar', which is also operating in Bangladesh. Charges have been brought under the UAPA.

TH CROSSWORD

Crossword puzzle grid with clues for Down and Across words.

14209 To solve this puzzle online, get across to our crossword site at https://org.puzzlelink.in/

- 14 Flung during intermission? It will brighten things up (2,4)
16 Old doggy leaping to tackle thugs at centre is a hero (4,3)
17 Formal ritual performed after end of toast (7)
19 Whirlwind starting to twist violently on road (7)
21 Detailed chronic about invasion (6)
22 A, say, good lady dancing with retired men in retro bar (5,5)
23 One left fumbling in darkness? This will provide illumination (6,5)
26 Former South African cricketer hit a fantastic sixer finally (5)
27 Mark led maiden astray? That's cheap (6-3-4)
Down
2 They destroy crooked insurer (7)
3 Warm clothes or dresses, primarily inexpensive (10)
4 Giant to inspect garden containing more plants (9)
5 Sentimental dined by director, mushy thing that's said before retiring (6,5)
6 Brought back LSD, dope, taking chances (4)
7 Demanding information about arresting journalist at home (7)
8 Tungsten, crude tin or another malleable metal (7,4)
9 Spooner picked up two bats for youngster following latest trends (5,4)
10 Grooved with my date, twirling over carpet (10)
11 Knuck back drink with girl, one serving person at the bar (9)
12 Expedition discovered oil in African capital (7)
13 Sound of clearing throat after consuming drug in a line (7)
14 Son lost temper frequently (9)
15 Criticism of skirt? Ignoring puritan ultimately (4)

SUDOKU

Sudoku puzzle grid with numbers 1-9 in some cells.

Solution to yesterday's Sudoku puzzle.

FAITH

Beyond definition

In his Kandar Anubhuti, Arunagirinatha wonders if Murugan is the sky, earth, fire, water or air? Or is He more than these five elements? Can we say He is the embodiment of the Vedas? But the Vedas themselves seek Him. Is Murugan the mind? He is unaffected by the three malams that Saiva Siddhanta describes. Murugan cannot be restricted by any definition, said So. So., Meenakshisundaram, in a discourse. The questions that Arunagirinatha asks in Kandar work, Kandar Alankaram. Murugan is not sarvati (one with a body) or asarvati (one without a body). Through the questions, Arunagirinatha is, in fact, expressing his own spiritual experience. In the course of his spiritual quest, he must have asked himself all these questions, and must have got the answers through Murugan's grace. Attachment to his family and attachment to material possessions are fetters that keep him from reaching Murugan's feet. Was Murugan not the one who killed Soorpadman with His vel (spear)? Was He not the God who destroyed the Krauncha mountain? Arunagirinatha asks Murugan if it is fair to let him perish. "Thaivaro [is it fair]" Arunagirinatha asks twice, to emphasise the need for help from Murugan. He refers to Murugan as 'hodu velavan', to show that Murugan just has to touch [hodu] His spear for us to be saved. In Thiruppavagai, Arunagirinatha refers to wife, children and relatives as a net that has trapped him.

# Pushpak, ISRO's reusable launch vehicle, clears test

This was the third and final test of a series; the mission demonstrated the autonomous landing capability of the vehicle under more challenging release conditions, says the space agency

**The Hindu Bureau**  
BENGALURU

**T**he Indian Space Research Organisation successfully completed the third reusable launch vehicle landing experiment (RLV LEX) at the Aeronautical Test Range in Chitradurga, Karnataka on Sunday.

The third and final test in a series was conducted at 7.10 a.m.

"Following the success of RLV LEX-01 and LEX-02 missions, RLV LEX-03 redemonstrated the autonomous landing capability of the RLV under more challenging release conditions and more severe wind conditions," the ISRO said.

On Sunday morning, Pushpak, the space agency's winged vehicle, was released from an Indian Air Force Chinook helicopter at an altitude of 4.5 km.

The ISRO said that from the release point 4.5 km away, Pushpak autonomously executed cross-range correction manoeuvres, approached the



**Textbook touchdown:** Pushpak performed a 'precise horizontal landing at runway centre line', the ISRO says. SPECIAL ARRANGEMENT

runway, and performed a precise horizontal landing at the runway centre line.

"Due to this vehicle's low lift-to-drag ratio aerodynamic configuration, the landing velocity exceeded 320 kmph, compared with 260 kmph for a commercial aircraft and 280 kmph for a typical fighter aircraft. After touchdown, the vehicle velocity was reduced to nearly 100 kmph using its brake parachute, after which the landing gear brakes were em-

ployed for deceleration. During this ground roll phase, Pushpak utilises its rudder and nose-wheel steering system to autonomously maintain a stable and precise ground roll along the runway," it said.

The space agency said this mission simulated the approach and landing interface and high-speed landing conditions for a vehicle returning from space, reaffirming its expertise in acquiring the most critical technologies


required for the development of an RLV.

"Through this mission, the advanced guidance algorithm catering to longitudinal and lateral plane error corrections, which is essential for the future Orbital Re-entry Mission has been validated," it said.

The ISRO said that the LEX used sensors such as an inertial sensor, radar altimeter, flush air data system and NavIC. Notably, the LEX-03 mission reused the winged body and flight systems from the LEX-02 mission without any modification, demonstrating the robustness of the ISRO's capability of design to reuse flight systems.

ISRO Chairman S. Somnath congratulated the team for its efforts in maintaining the success streak in such missions. S. Unnikrishnan Nair, Director, Vikram Sarabhai Space Centre, emphasised that this "consistent success boosts ISRO's confidence in the critical technologies essential for future orbital re-entry missions".



- 
- **ISRO's Reusable Launch Vehicle (RLV):**
  - Indian Space Research Organisation (ISRO) successfully completed the third reusable launch vehicle landing experiment (RLV LEX) at the Aeronautical Test Range in Chitradurga, Karnataka.
  - This test demonstrated the autonomous landing capability of the RLV under challenging conditions.

An aerial photograph of three white and blue reusable launch vehicles (RLVs) on a runway. The RLVs are positioned in a line, with the middle one slightly ahead of the other two. They are connected to yellow cables that run across the runway. The runway has white center lines and yellow edge lines. The background shows a grid pattern, likely a map or a simulation overlay.

- **Test Details:**

- The RLV, named Pushpak, was released from an Indian Air Force Chinook helicopter at an altitude of 4.5 km.
- Pushpak performed a precise horizontal landing at the runway center line.



- **Technical Aspects:**

- The vehicle has a low lift-to-drag ratio aerodynamic configuration, with a landing velocity exceeding 320 km/h.
- The mission validated the advanced guidance algorithm necessary for future orbital re-entry missions.



- **Technological Advancements:**

- The mission used sensors such as an inertial sensor, radar altimeter, flush air data system, and NavIC.
- The LEX-03 mission reused the winged body and flight systems from the previous LEX-02 mission, demonstrating ISRO's capability to reuse flight systems.

A blue-tinted image of a robotic hand reaching down towards a computer keyboard. The hand is positioned in the upper right quadrant, with fingers slightly curled. The keyboard is visible in the lower half of the frame, with keys appearing as a grid of small, dark shapes. The overall scene is dimly lit, with the blue tint giving it a futuristic or technological feel.

- **Future Implications:**

- The success of the mission validates the advanced guidance algorithm necessary for the Orbital Re-entry Mission.
- ISRO's confidence in critical technologies for future orbital re-entry missions has been boosted.

- Consider the following statements regarding ISRO's reusable launch vehicle (RLV) test:
  1. The third and final test of ISRO's reusable launch vehicle, Pushpak, was conducted at the Aeronautical Test Range in Chitradurga, Karnataka.
  2. Pushpak was released from an Indian Air Force Chinook helicopter at an altitude of 4.5 km and demonstrated autonomous landing capabilities.
  3. The mission used sensors such as an inertial sensor, radar altimeter, flush air data system, and NavIC for precise landing.
  4. The success of the mission validates the advanced guidance algorithm essential for ISRO's future Orbital Re-entry Mission.
- Which of the statements given above are correct?
- A. 1 and 2 only
- B. 1, 2, and 3 only
- C. 1, 2, 3, and 4
- D. 3 and 4 only



# New research heralds breast cancer diagnosis with just a drop of blood

**V. Geetanath**  
HYDERABAD

Scientists at the CSIR-Centre for Cellular and Molecular Biology (CCMB) here, in association with clinicians of the Regional Cancer Centre (RCC) in Thiruvananthapuram, have identified a potentially cost-effective and non-invasive method to detect various kinds of breast cancer from just a drop of blood.

The researchers have analysed microRNA (miRNAs) signatures in hundreds of human cancer samples and identified 439 of them associated with invasive breast cancer, of which 107 qualified to be potential biomarkers for the stratification of different types, grades and stages of invasive ductal carcinoma, said CCMB Chief Scientist Lekha Dinesh Kumar, who led the research.

Most of the cellular processes in a body are regulated by miRNA molecules which are 23-25 base small non-coding RNA mole-



**Screening test:** Scientists have identified a potentially cost-effective, non-invasive method to detect breast cancer. V. RAJU

cules. Identification of miRNAs involved in the regulation of the initiation and progression of breast cancer holds great promise for the development of molecular tools for early diagnosis and prognosis, Dr. Lekha said.

The scientist explained that cancer cells shed DNA/RNA into the circulation called 'circulating nucleic acids (CNAs) and tumour-specific genetic changes, including DNA, RNA, and proteins, which are detectable in plasma or other bo-

dy fluids of cancer patients to identify the earlier stages of cancer development.

Based on this principle, the identified biomarkers could be made into a liquid biopsy system that might prove to be a boon for developing countries, as cancer could be detected from one drop of blood.

## **Cost-effective method**

"Our study has paved the way for the application of miRNAs as biomarkers and would open up new vistas in developing a refined,

cost-effective, and non-invasive method in breast cancer diagnosis," she said.

Affordable, quick and robust early detection protocols for breast cancer diagnosis using miRNAs could strengthen the healthcare system majorly because breast cancer is a "hidden epidemic in Third World countries, with most rural women in India and elsewhere reluctant to go for a physical examination," Dr. Lekha said.

The discovery of biomarkers has become essential for early detection, classification, and monitoring of cancer. It holds the key for the cure of this scourge and reduces the economic burden of the family in particular and society in general, she added.

Nine international patents have already been granted for these biomarkers as a testimony to the application of results of this study, which got published recently in the journal *Cell Communication and Signalling*.

## **New Diagnostic Method:**

Scientists at CSIR-Centre for Cellular and Molecular Biology (CCMB) in Hyderabad, in association with the Regional Cancer Centre (RCC) in Thiruvananthapuram, have developed a new method to detect breast cancer using just a drop of blood.

This method is cost-effective, non-invasive, and aims to detect various types of breast cancer.



## MicroRNA (miRNA) Analysis:

Researchers analyzed miRNA signatures in hundreds of human cancer samples, identifying 439 miRNAs associated with invasive breast cancer.

These miRNAs can serve as potential biomarkers for different cancer types, grades, and stages.

## Significance of miRNAs:

miRNAs are involved in regulating cellular processes and are found in blood as circulating nucleic acids (CNAs).

Cancer cells shed DNA/RNA into circulation, which can be detected to identify early stages of cancer development.

- **Potential Impact:**

- Early detection and classification using this method can improve diagnosis and treatment, particularly in developing countries where breast cancer is prevalent but physical examinations are less accessible.
- The method holds promise for developing a liquid biopsy system, making it easier and cheaper to diagnose cancer.



- **Patents and Future Applications:**

- Nine international patents have been granted for these biomarkers.
- The research opens new avenues for developing diagnostic tools that are both refined and accessible.

- Consider the following statements regarding the new breast cancer diagnostic method developed by CCMB and RCC:
  - 1.The new method to detect breast cancer requires only a drop of blood.
  - 2.The diagnostic method utilizes the analysis of microRNA (miRNA) signatures.
  - 3.This method is non-invasive and cost-effective, aimed at early detection and classification of breast cancer.
  - 4.The new diagnostic tool requires extensive physical examination to confirm the presence of cancer.
- Which of the statements given above are correct?
- A. 1, 2, and 3 only
- B. 1 and 3 only
- C. 2, 3, and 4 only
- D. 1, 2, 3, and 4

# Next & Current

THE HINDU

## NEWS IN NUMBERS

### Amount infused by FPIs in Indian equities in June

**12,170** In ₹ crore. Foreign investors staged a comeback after the election results in Indian equities, driven by expectations of continued policy reforms. **11**

### Number of infra projects hits by cost overrun in May

**458** Infrastructure projects, each entailing an investment of ₹150 crore or above, were hit by a cost overrun of more than ₹5.71 lakh crore in May this year, according to the MoSPI. **11**

### The funds needed to repair the damage by Cyclone Remal

**237.6** In ₹ crore. Mizoram has requested monetary assistance from the Centre for rehabilitation of people and for the repair of damages caused by Cyclone Remal. **11**

### Domestic exhibitors to participate in the garment fair

**350** Domestic players and foreign buyers from more than 50 nations will participate in the garment fair beginning on June 25, according to the Apparel Export Promotion Council. **11**

### Number of people killed in North Gaza in Israeli strikes

**39** The Palestinian Civil Defence said it pulled approximately the same number of bodies from a building hit by an Israeli strike in an eastern neighbourhood of the Gaza City. **11**  
COMPILED BY THE HINDU DATA TEAM

Follow us [facebook.com/thehindu](https://www.facebook.com/thehindu) [twitter.com/thehindu](https://twitter.com/thehindu) [instagram.com/thehindu](https://www.instagram.com/thehindu)

## What are the duties of a Speaker?

What does the office of the 'Speaker pro tem' mean? What does the Constitution state? Who elects the Deputy Speaker of the Lok Sabha? How can the impartiality of the Speaker's office be preserved? What are the main roles of the Speaker?

### EXPLAINER

Rangarajan, R

#### The story so far:

The President has appointed seven-time MP Bharturhari Mahtab as the 'Speaker pro tem' of the 18th Lok Sabha. The election of the full-time Speaker is scheduled for June 26. There are also reports of the Deputy Speaker being offered to one of the allies of the ruling National Democratic Alliance (NDA), a post that has been held by the Opposition since the 10th Lok Sabha (1991).

#### Who is Speaker pro tem?

Article 94 of the Constitution states that the Speaker of the Lok Sabha shall not vacate his/her office until immediately before the first meeting of the Lok Sabha after its dissolution. This is to ensure that the office of the Speaker is never left vacant. Hence, Om Birla who was the Speaker of the 17th Lok Sabha continues in that post till June 24 when the first meeting of the 18th Lok Sabha is scheduled. Article 95D of the Constitution provides that when the post of Speaker and Deputy Speaker is vacant, the President shall appoint a member of the Lok Sabha to perform the duties of the Speaker. This would be the situation when the first meeting of a new Lok Sabha commences.

Hence, the President appoints 'Speaker pro tem' under this provision till the full-time Speaker is elected. The term 'pro tem' means 'for the time being' or 'temporary'.

This term is not found in the Constitution or rules of Lok Sabha but is a conventional term which finds mention in the 'Handbook on the working of Ministry of Parliamentary affairs'. As per tradition, one of the senior-most members of the Lok Sabha is selected by the government, who is then administered oath by the Deputy Speaker. The Speaker pro tem administers oath of office to other MPs



Important role: Union Minister Dharmendra Pradhan with MP Bharturhari Mahtab on March 28, 2024.

and presides over the election of full-time Speaker. In the 18th Lok Sabha, Bharturhari Mahtab of the Bharatiya Janata Party (BJP) has been appointed as Speaker pro tem.

#### How are the Speaker and Deputy Speaker elected?

Article 93 of the Constitution states that the Lok Sabha shall choose two members to be its Speaker and Deputy Speaker. The election of the Speaker is held on a date fixed by the President. All the Speakers in independent India have been elected unopposed. The election of the Deputy Speaker is held on a date fixed by the Speaker.

declined from 71% during 2009-14 to 16% during 2019-24. With the return of a coalition government, it is expected that the Speaker would refer important Bills to Standing committees for scrutiny. There were also large-scale suspensions of Opposition MPs during the winter session of 2023. Such suspensions affect the robust functioning of Parliament and should be carried out with restraint.

#### What are the conventions?

In Britain, the Speaker once elected to his/her office, resigns from the political party to which he/she belonged. In subsequent elections to House of Commons, he/she seeks election not as a member of any political party but as 'The Speaker seeking re-election'. This is to reflect his/her impartiality while presiding over the House. Somnath Chatterjee, who was the Speaker of the 14th Lok Sabha acted independently by not resigning from the post despite his party's (CPM) direction after it had withdrawn support from the United Progressive Alliance (UPA) government during a confidence vote in 2008. While the Tenth Schedule allows a Speaker to resign from their political party on being elected to their office, it has never been done by any Speaker till date. Resignation from their political parties on being elected as Speaker could be a first step towards demonstrating independence.

The Deputy Speaker is an important constitutional officer who steps in during the vacancy or absence of the Speaker. The convention of offering the post of Deputy Speaker to the Opposition started in the year 1991. Thereafter, till the 16th Lok Sabha this has been followed without a break. It was a travesty of the Constitution that no Deputy Speaker was elected in the 17th Lok Sabha.

The healthy convention of the post being held by Opposition should return in the current Lok Sabha. Rangarajan, R is a former IAS officer and author of 'Poetry Simplified'. He currently trains civil-service aspirants at 'Officers IAS Academy'. Views expressed are personal.

### THE GIST

The President has appointed seven-time MP Bharturhari Mahtab as the 'Speaker pro tem' of the 18th Lok Sabha.

Article 94 of the Constitution states that the Speaker of the Lok Sabha shall not vacate his/her office until immediately before the first meeting of the Lok Sabha after its dissolution.

The Deputy Speaker is an important constitutional officer who steps in during the vacancy or absence of the Speaker.

## How is methanol procured and used as liquor?

Was the Kallakurichi incident the first time that methanol poisoning has come to light?

M. Kalyanaraman

#### The story so far:

The Kallakurichi illicit liquor tragedy that has so far claimed more than 50 lives is entirely familiar in its cause, sequence of events, and aftermath. Such tragedies happen periodically across India in various States. Almost all the postmortem reports of the victims attribute the cause to methanol consumption.

#### How is ethanol, methanol made?

Ethanol is legal liquor for consumption. It is produced biologically whereas methanol is produced from fuels such as coal in India. Molasses, which are a by-product of the sugar making process, form the starting material of distilleries that are often located close to sugar factories. They produce rectified spirit which is distilled further to produce edible extra neutral alcohol that in turn goes into making Indian Made Foreign Liquor, a lucrative cash cow for State

governments. During ethanol production in responsible distilleries, methanol is also produced but is carefully removed since the processes are highly controlled.

Methanol is produced from coal and other fossil fuels. While ethanol can be made edible, methanol is poison. Even very low concentrations of methanol can be toxic, often fatal. However, it is needed to produce a range of products that are highly useful. Paints, for instance, can't be produced without methanol.

#### Is methanol easy to procure?

Just like ethanol, methanol is a highly controlled substance. Rules in Tamil Nadu ensure the manufacturing, transportation and storage are all licensed, monitored and the quantity and quality audited.

In northern Tamil Nadu, much of the methanol used in industries is sourced from Andhra Pradesh. Ground reporting suggests the existence of a lucrative methanol pilferage racket operating enroute and at the end-user side as well. It is possible that methanol formed

during the crude distillation process, adopted by the bootleggers at Kallakurichi, wasn't removed, leading to methanol poisoning. However, the widespread nature of contamination and scale of the Kallakurichi tragedy suggests that methanol was procured and supplied separately, either as part of a brew or alone in a diluted form. Given that illicit liquor has been produced and distributed widely here over many months, possibly years, methanol use was not a one-off event that happened only this fateful week at Kallakurichi.

#### Why is methanol used?

Most of the hooch tragedies in India occur due to methanol contamination in liquor. Street wisdom, or belief rather, may well be that the relatively inexpensive but potent poison that is methanol, if diluted enough, could provide the same effect as ordinary liquor — a state of intoxication or 'kick' for consumers.

Prosecutors in the 2015 Malvani, Mumbai hooch tragedy case in which

more than 100 people died and some 75 were injured argued that all the accused had entered into a criminal conspiracy, and deliberately procured and supplied poisonous methanol. Lawyers defending the accused argued that their defendants would not knowingly add methanol. It made no business sense. And bootleggers, just like in Kallakurichi, live amidst the community. They provide a service that is much in demand and wouldn't want to kill their own folk. The additional sessions Judge S. D. Tawakar, in the Malvani case, acquitted 10 of the 34 accused but convicted four. The judge did not find anyone guilty of violating the Poisons Act of 1919. The four were convicted of crimes of conspiracy and culpable homicide not amounting to murder.

#### What needs to be done?

The periodic occurrence of methanol poisoning provides a strong case for central legislation that can work with State legislation. Various laws such as the Poisons Act that involves State governments can tighten the methanol supply chain. The implementation of laws holds the key, especially when there are plans to ramp up the production of both ethanol and methanol for use in cheaper, eco-friendly alternatives to petrol and diesel for transportation.

The NITI Aayog has talked of ramping up methanol production from two metric tonnes to 20, keeping in mind that ethanol separate and not allowing any pilferage should be a national priority.

### THE GIST

The Kallakurichi illicit liquor tragedy that has so far claimed more than 50 lives is entirely familiar in its cause, sequence of events, and aftermath. Almost all the postmortem reports attribute the cause to methanol consumption.

Methanol is produced from coal and other fossil fuels. While ethanol can be made edible, methanol is poison.

The periodic occurrence of methanol poisoning suggests the need for strong central legislation that can work with State legislation.

# How is methanol procured and used as liquor?

Was the Kallakurichi incident the first time that methanol poisoning has come to light?

**M. Kalyanaraman**

## **The story so far:**

**T**he Kallakurichi illicit liquor tragedy that has so far claimed more than 50 lives is entirely familiar in its cause, sequence of events, and aftermath. Such tragedies happen periodically across India in various States. Almost all the postmortem reports of the victims attribute the cause to methanol consumption.

## **How are ethanol, methanol made?**

Ethanol is legal liquor for consumption. It is produced biologically whereas methanol is produced from fuels such as coal in India. Molasses, which are a by-product of the sugar making process, form the starting material of distilleries that are often located close to sugar factories. They produce rectified spirit which is distilled further to produce edible extra neutral alcohol that in turn goes into making Indian Made Foreign Liquor, a lucrative cash cow for State

governments. During ethanol production in responsible distilleries, methanol is also produced but is carefully removed since the processes are highly controlled.

Methanol is produced from coal and other fossil fuels. While ethanol can be made edible, methanol is poison. Even very low concentrations of methanol can be toxic, often fatal. However, it is needed to produce a range of products that are highly useful. Paints, for instance, can't be produced without methanol.

## **Is methanol easy to procure?**

Just like ethanol, methanol is a highly controlled substance. Rules in Tamil Nadu ensure the manufacturing, transportation and storage are all licenced, monitored and the quantity and quality audited.

In northern Tamil Nadu, much of the methanol used in industries is sourced from Andhra Pradesh. Ground reportage suggests the existence of a lucrative methanol pilferage racket operating enroute and at the end-user side as well.

It is possible that methanol formed

during the crude distillation process, adopted by the bootleggers at Kallakurichi, wasn't removed, leading to methanol poisoning. However, the widespread nature of contamination and scale of the Kallakurichi tragedy suggests that methanol was procured and supplied separately, either as part of a brew or alone in a diluted form. Given that illicit liquor has been produced and distributed widely here over many months, possibly years, methanol use was not a one-off event that happened only this fateful week at Kallakurichi.

## **Why is methanol used?**

Most of the hooch tragedies in India occur due to methanol contamination in liquor. Street wisdom, or belief rather, may well be that the relatively inexpensive but potent poison that is methanol, if diluted enough, could provide the same effect as ordinary liquor – a state of intoxication or 'kick' for consumers.

Prosecutors in the 2015 Malvani, Mumbai hooch tragedy case in which

more than 100 people died and some 75 were injured argued that all the accused had entered into a criminal conspiracy, and deliberately procured and supplied poisonous methanol. Lawyers defending the accused argued that their defendants would not knowingly add methanol. It made no business sense. And bootleggers, just like in Kallakurichi, live amidst the community. They provide a service that is much in demand and wouldn't want to kill their own folk. The additional sessions judge S. D. Tawshikar, in the Malvani case, acquitted 10 of the 14 accused but convicted four. The judge did not find anyone guilty of violating the Poisons Act of 1919. The four were convicted of criminal conspiracy, and culpable homicide not amounting to murder.

## **What needs to be done?**

The periodic occurrence of methanol poisoning suggests the need for strong central legislation that can work with State legislation. Various laws such as the Poisons Act that involves State governments can tighten the methanol supply chain. The implementation of laws holds the key, especially when there are plans to ramp up the production of both ethanol and methanol for use as cheaper, eco-friendly alternatives to petrol and diesel for transportation.

The NITI Aayog has talked of ramping up methanol production from two metric tonnes to 20. Keeping methanol and ethanol separate and not allowing any pilferage should be a national priority.

## Incident Overview:

The Kallakurichi illicit liquor tragedy claimed more than 50 lives, with methanol consumption identified as the cause.

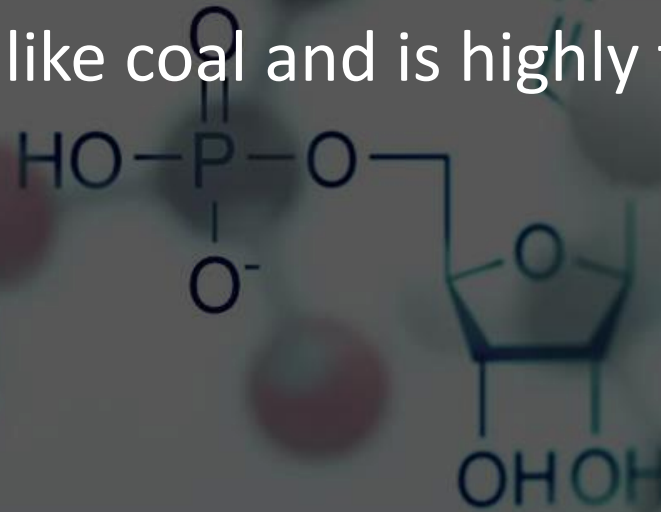
Such tragedies are common across India, with methanol often being the culprit.



- **Ethanol vs. Methanol Production:**

- Ethanol, legal for consumption, is produced biologically.

- Methanol is produced from fuels like coal and is highly toxic, even in low concentrations.





- **Procurement of Methanol:**

- Methanol is a controlled substance, and its manufacture, transportation, and storage are regulated.
- In Tamil Nadu, methanol used in industries often comes from Andhra Pradesh, indicating a lucrative smuggling racket.



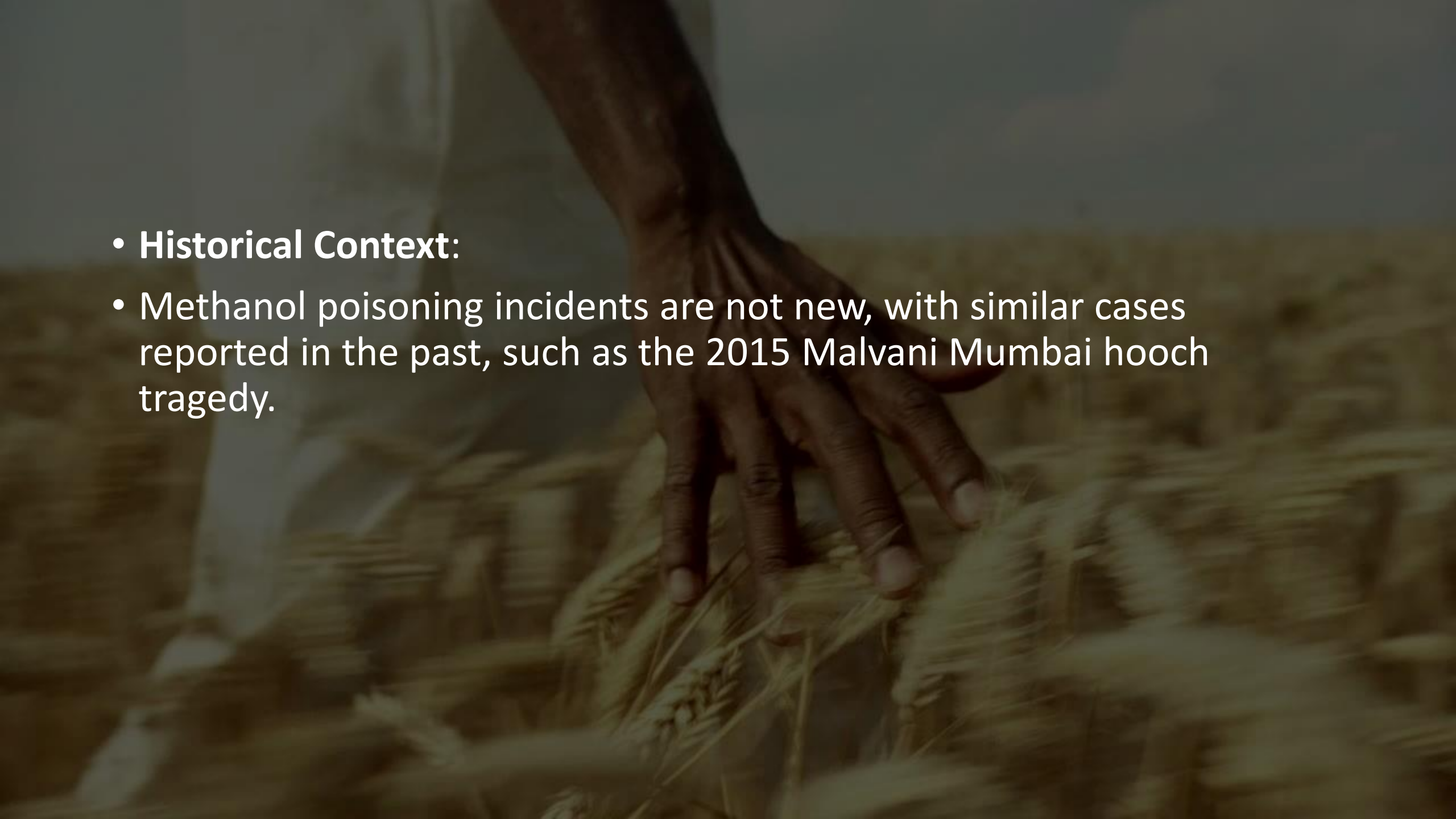
- **Usage of Methanol:**

- Methanol is cheaper and can be used to adulterate liquor, providing the same intoxicating effect.
- Illicit liquor producers use methanol due to its low cost.

## Legal and Regulatory Measures:

The Poisons Act and other regulations need to be strengthened to prevent methanol poisoning.

The NITI Aayog has proposed ramping up methanol production for use as fuel, which necessitates strict regulation to prevent pilferage.

- 
- **Historical Context:**
  - Methanol poisoning incidents are not new, with similar cases reported in the past, such as the 2015 Malvani Mumbai hooch tragedy.

- Consider the following statements regarding the use and effects of methanol in illicit liquor:
  1. Methanol is produced biologically and is safe for consumption in small quantities.
  2. Methanol poisoning is a recurring issue in India due to its use in adulterating illicit liquor.
  3. The Poisons Act and other regulations are in place to control the manufacture, transportation, and storage of methanol.
  4. Methanol is a cheaper alternative used to provide the same intoxicating effect as ethanol in illicit liquor production.
- Which of the statements given above are correct?
  - A. 1 and 2 only
  - B. 2, 3, and 4 only
  - C. 1, 3, and 4 only
  - D. 2 and 4 only



# Estonia looks at Indian partnership to beef up cybersecurity infrastructure

**SOUMYARENDRA BARIK**  
NEW DELHI, JUNE 23

ESTONIA, ONE of the world's most advanced digital countries, is looking to partner with India to collaborate on strengthening the two countries' cybersecurity infrastructure, multiple officials from the Baltic country's government said.

Estonia, courtesy its vicinity to Russia, faces a barrage of cyberattacks from the country, more so because of the former's stance on the war between Russia and Ukraine. India, meanwhile, faces a similar threat from its neighbour China.

"We are keen to work with India and to conduct cyber exercises here. Globally, there is a rise in cyber attacks and Estonia is also facing attacks from hackers," Jonatan Vsevirov, secretary general, Ministry of Foreign Affairs, told a delegation of Indian journalists. He also highlighted areas like digital services and education systems as potential areas for collaboration between the countries.

Estonia, with a population of about 1.3 million, was a former member of the Soviet Union, and faced one of the largest cyberattacks on its digital infrastructure in 2007 by means of a distributed denial of service (DDoS) attack. At the time, the attack took place



A server farm of CR14 (Cyber Range 14), which is a foundation established by the Estonian Ministry of Defence, whose responsibility is to offer and develop cybersecurity training. File

in the backdrop of riots by ethnic Russian Estonians, prompted by the removal of a Soviet war memorial from the centre of the country's capital, Tallinn.

Since the war between Russia and Ukraine, the country has experienced similar threats from Russian actors, government officials said. Government officials in India have previously said that New Delhi faces much of a similar challenge from Beijing, where a group of independent, and state-backed actors have increased attacks on critical infrastructure in New Delhi. China's army of hackers is part of the country's information warfare apparatus and its aim is to access information and

primarily hold it as ransomware, said Mart Noorma, director of the North Atlantic Treaty Organisation (NATO) Cooperative Cyber Defence Centre of Excellence, told reporters. Ransomware attacks are where a cyber-actor gains access to sensitive information of an entity and encrypts, with the condition of decrypting the data only after receiving a payment.

The NATO (CCDCOE) is a NATO-accredited knowledge hub, which was established in 2008, and offers an interdisciplinary approach to the most relevant issues in cyber defence. It has a group of international experts from the military, govern-

ment, academia and industry from 39 countries.

Noorma said: "We wholeheartedly welcome like-minded democratic nations like India to join us. This will help in cyber knowledge and exchanging methods to address cyberattacks. The cooperation will help a large-scale coalition through research, training, and exercises."

The ties between Estonia and India are increasingly growing. An Indian contingent was, for the first time, observers in an NATO-run cyber security exercise in Estonia last month. The exercise was the largest of its kind in Europe, Tiit Riisalo, Estonian economic affairs and information technology minister, said. It involved 32 NATO countries and a handful of invitees.

Although, it is worth noting that the Estonian security establishment does not view favourably the fact that India has become one of the largest purchasers of Russian oil since the war began. *The Indian Express* had earlier reported that India's Russian oil imports climbed to a 10-month high in May as low Russian refinery capacity use due to Ukrainian drone strikes made more of Moscow's oil available for the export market.

Estonian defence minister, Hanno Pevkur, said that the northern European country and India have worked together on

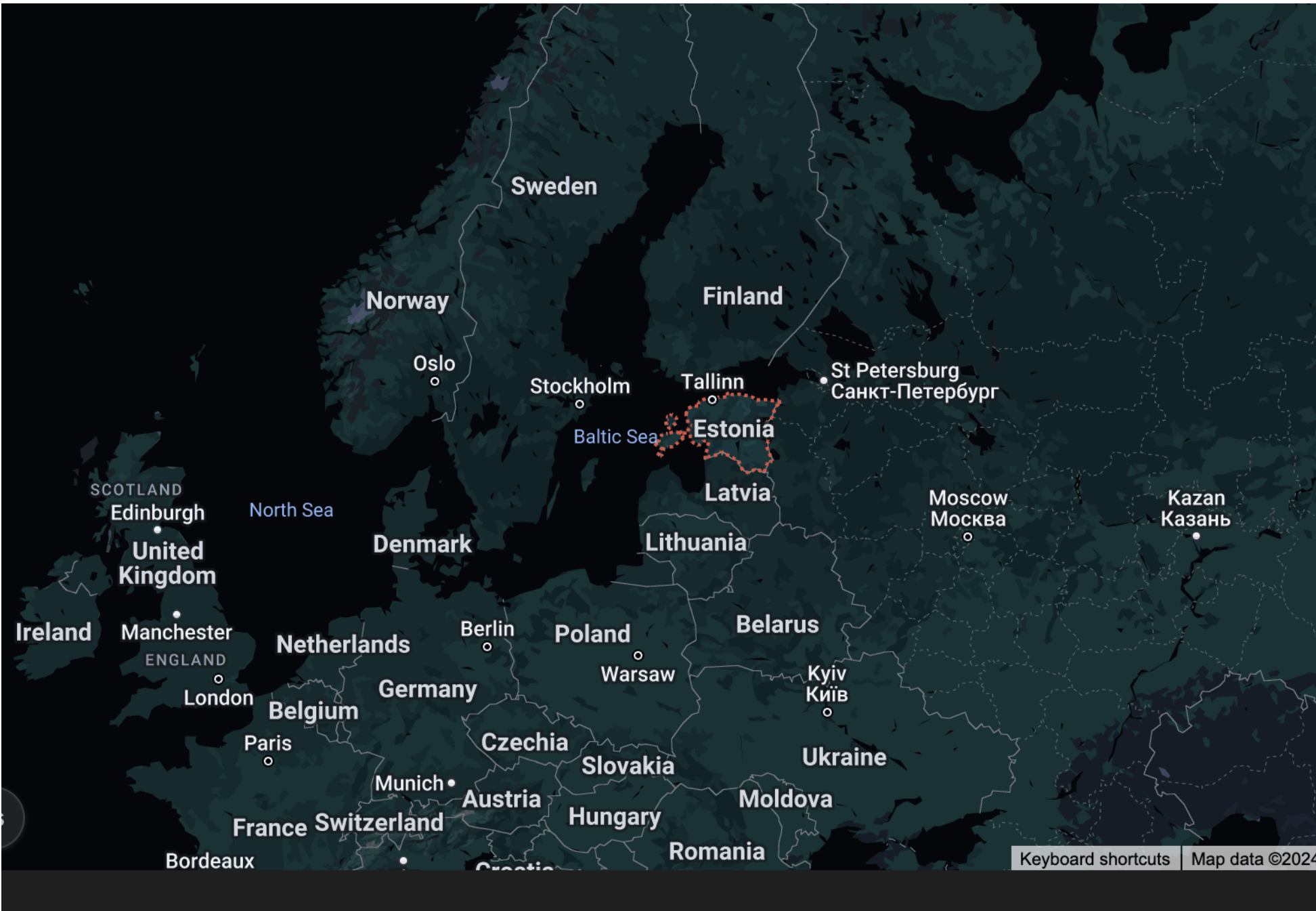
cybersecurity issues previously and could further that collaboration not just from government engagements, but by involving the two nations' private sector as well.

The Estonian Secretary General Vsevirov said that European countries are keen to diversify their bases in various industries over concerns emanating from over-reliance on specific countries, especially those with authoritarian regimes. In this context, Estonian officials highlighted, India could emerge as a potential partner for Europe and Estonia, despite the significant population and size differences between the countries. Courtesy of its NATO membership, Estonia has also become a crucial market for a number of Indian start-ups in the defence space as well.

There's another key similarity between Estonia and India – both the countries possess a ubiquitous national identity system, e-ID in the former, and Aadhaar in the latter, which are tied to a number of government services. In fact, in the early days of Aadhaar, when the system was being worked upon, Indian officials had closely studied Estonia's system, a former official at the Unique Identity Authority of India (UIDAI), said.

*(The reporter was in Tallinn at the invitation of the Estonian government.)*





<b>Capital</b> and largest city	Tallinn <span><span><span><span><span>59°25′N</span> <span>24°45′E</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span><span>Tallinn</span></span></span></span></span>
<b>Official language</b>	Estonian <sup>[a]</sup>
<b>Ethnic groups</b> (2024 <sup>[10]</sup> )	67.8% Estonians 21.5% Russians 5.0% Ukrainians <sup>[8]</sup> 5.1% other 0.6% unknown <sup>[9]</sup>
<b>Religion</b> (2021 <sup>[11]</sup> )	58.4% no religion 26.7% Christianity 12.7% undeclared 2.2% other
<b>Demonym(s)</b>	Estonian
<b>Government</b>	Unitary parliamentary republic
<span> </span> <div><ul style="list-style-type: none"><li>• President</li><li>• Prime Minister</li></ul></div>	<span> </span> <div>Alar Karis</div> <div>Kaja Kallas</div>
<b>Legislature</b>	unicameral <i>Riigikogu</i>
<b>Independence</b> from Russia and Germany	
<span> </span> <div><ul style="list-style-type: none"><li>• Declaration of independence</li><li>• Joined the League of Nations</li><li>• German and Soviet occupations</li><li>• Independence restored</li><li>• Joined the European Union</li></ul></div>	<span> </span> <div>23–24 February 1918</div> <div>22 September 1921</div> <div>1940–1991</div> <div>20 August 1991</div> <div>1 May 2004</div>
<b>Area</b>	
<span> </span> <div><ul style="list-style-type: none"><li>• Total</li><li>• Water<span> </span>(%)</li></ul></div>	<span> </span> <div>45,335<sup>[12]</sup> km<sup>2</sup> (17,504 sq mi) (129th<sup>d</sup>)</div> <div>4.6</div>

<b>Population</b>	
<span> </span> <div><ul style="list-style-type: none"><li>• 2024 estimate</li><li>• 2021 census</li><li>• Density</li></ul></div>	<span> </span> <div>▲1,373,101<sup>[13]</sup></div> <div>1,331,824<sup>[14]</sup></div> <div>30.3/km<sup>2</sup> (78.5/sq mi) (148th)</div>
<b>GDP</b> (PPP)	2024 estimate
<span> </span> <div><ul style="list-style-type: none"><li>• Total</li><li>• Per capita</li></ul></div>	<span> </span> <div>▲\$61.598 billion<sup>[15]</sup> (113th)</div> <div>▲\$45,122<sup>[15]</sup> (41st)</div>
<b>GDP</b> (nominal)	2024 estimate
<span> </span> <div><ul style="list-style-type: none"><li>• Total</li><li>• Per capita</li></ul></div>	<span> </span> <div>▲\$43.486 billion<sup>[15]</sup> (102nd)</div> <div>▲\$31,854<sup>[15]</sup> (36th)</div>
<b>Gini</b> (2021)	▲ 30.6 <sup>[16]</sup> medium
<b>HDI</b> (2022)	▲ 0.899 <sup>[17]</sup> very high (31st)
<b>Currency</b>	Euro (€) (EUR)

- **Estonia's Cybersecurity Concerns:**
- Estonia, a highly advanced digital country, faces cyberattacks, primarily from Russia due to geopolitical tensions related to the Russia-Ukraine war.
- Estonia seeks to collaborate with India to strengthen its cybersecurity infrastructure.



- **India's Cybersecurity Expertise:**

- India faces similar cyber threats from neighboring China and has developed significant cybersecurity capabilities.
- Estonia views India as a valuable partner in combating cyber threats through joint exercises, research, training, and knowledge exchange.

A dark blue puzzle piece is centered on a brown background. The piece has a complex, irregular shape with several interlocking points. The background is a solid, dark brown color. The puzzle piece is slightly offset from the center, with its top-left corner pointing towards the top-left of the frame.

- **Strategic Collaboration:**

- Estonia's Ministry of Foreign Affairs and Ministry of Defence officials emphasize the importance of such partnerships in addressing global cybersecurity threats.
- The collaboration is seen as beneficial for both countries, helping them manage and mitigate cyberattacks more effectively.

The background of the slide is a 3D-rendered digital environment. It features a large, light-colored dome on the right side, surrounded by a circular platform. The ground is covered with various data visualizations, including bar charts in shades of red and teal, and a network of small red and teal squares connected by lines. The overall aesthetic is clean and modern, with a focus on data and technology.

- **Historical Context:**

- Estonia has been a victim of significant cyberattacks, notably the 2007 cyberattack linked to Russia.
- The country has since developed robust cybersecurity measures and aims to further enhance these through international cooperation.

- 
- The background of the slide features a large, semi-transparent NATO logo. The logo consists of a blue circle with a white laurel wreath. The wreath is composed of two branches of laurel leaves, one on the left and one on the right, curving upwards and meeting at the top. The logo is positioned on the right side of the slide, partially overlapping the text area.
- **NATO Involvement:**
  - Estonia is a member of NATO and hosts the NATO Cooperative Cyber Defence Centre of Excellence (CCDCOE), which plays a crucial role in global cybersecurity efforts.

A pair of hands, one light-skinned and one dark-skinned, are shown holding a red string. The string is looped and crossed between the fingers, symbolizing cooperation, connection, or a shared effort. The background is dark and out of focus.

- **Potential Areas of Cooperation:**

- Joint cyber exercises, sharing best practices, training programs, and leveraging each other's technological strengths are key areas of focus.
- Estonia and India are exploring ways to involve private sector entities in these collaborative efforts.



Year	2017	2018	2019	2020	2021	2022	2023
India's Exports to Estonia	32.87	31.87	45.61	30.33	41.00	93.64	42.00
India's Import from Estonia	57.75	86.44	54.19	64.77	97.80	123.85	79.80
<b>Total Bilateral trade</b>	<b>90.62</b>	<b>118.31</b>	<b>99.80</b>	<b>95.10</b>	<b>138.80</b>	<b>217.49</b>	<b>121.80</b>

Source: Statistics Estonia

5. In 2023, India's imports from Estonia amounted to €79.8M. Major items of **imports** from Estonia to India include woodpulp (30.9%), electrical equipment (26.6%), wood and articles of wood (13.4%), optics, measuring, precision instruments (8.29%), iron and steel (5.86%).

**Bilateral Trade in Services****(In EUR million)**

<b>Year</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>India Imports from Estonia</b>	10.0	8.4	14.6	7.7	15.60	19.50	24.2
<b>India exports to Estonia</b>	7.7	8.9	9.4	8.1	11.80	19.90	15.8
<b>Total</b>	<b>17.7</b>	<b>17.3</b>	<b>24.0</b>	<b>15.8</b>	<b>27.40</b>	<b>39.40</b>	<b>40</b>

*Source: Statistics Estonia*

- Consider the following statements regarding Estonia's cybersecurity collaboration with India:
  1. Estonia faces significant cyber threats primarily due to its proximity to Russia and its stance on the Russia-Ukraine war.
  2. India is viewed as a strategic partner by Estonia for strengthening cybersecurity through joint exercises, research, and training.
  3. Estonia is not a member of NATO, which limits its ability to collaborate on international cybersecurity initiatives.
  4. The collaboration aims to involve private sector entities from both countries in enhancing cybersecurity infrastructure.
- Which of the statements given above are correct?
  - A. 1 and 2 only
  - B. 1, 2, and 4 only
  - C. 2, 3, and 4 only
  - D. 1, 3, and 4 only

The image is a digital-themed background. It features a blue-toned globe on the left side, with a bright light source on the right that creates a lens flare and illuminates the scene. The foreground is filled with a grid of binary code (0s and 1s) that recedes into the distance, creating a sense of depth. The overall aesthetic is futuristic and technological.

# Global Initiative on Digital Health

- 
- The background features a dark blue color scheme with a grid pattern. On the left, there are two line charts. The top chart shows a line with a downward arrow and a percentage of 0.07%, and the bottom chart shows a line with an upward arrow and a percentage of 0.05%. On the right, there is a large data table with columns of numbers and percentages. The text is overlaid on this background.
- The Department of Economic Affairs (DEA) under the Ministry of Finance has not approved of India's contribution of USD 10 million for Global Initiative on Digital Health (GIDH).

- 
- What is the Global Initiative on Digital Health (GIDH)?
  - About:
  - The Global Initiative on Digital Health (GIDH) is a network of organisations, institutions and government technical agencies engaged in supporting national digital health transformation.
  - It is managed by the World Health Organization (WHO).

Its objectives include to assess and prioritise needs for sustainable digital health transformation and to match digital health resources and unfunded priorities.

GIDH was launched during India's G20 Presidency at the Health Ministers' meeting in Gujarat in August 2023.

It became part of the New Delhi declaration and India promised to make a USD 10-million contribution to it as a seed fund.

The initiative was formally launched in February 2024.

- **Components of GIDH: It has four Main Components.**

- **Country Needs Tracker: A mechanism to identify and track the digital health needs of different countries.**
- **Country Resource Portal: A map of available digital health resources within each country.**
- **Transformation Toolbox: A repository of quality-assured digital tools for health transformation.**
- **Knowledge Exchange: Facilitation of knowledge sharing among participating nations.**





• **With reference to the Ayushman Bharat Digital Mission, consider the following statements: (2022)**

**1. Private and public hospitals must adopt it.**

**2. As it aims to achieve universal, health coverage, every citizen of India should be part of it ultimately.**

**3. It has seamless portability across the country.**

• **Which of the statements given above is/are correct?**

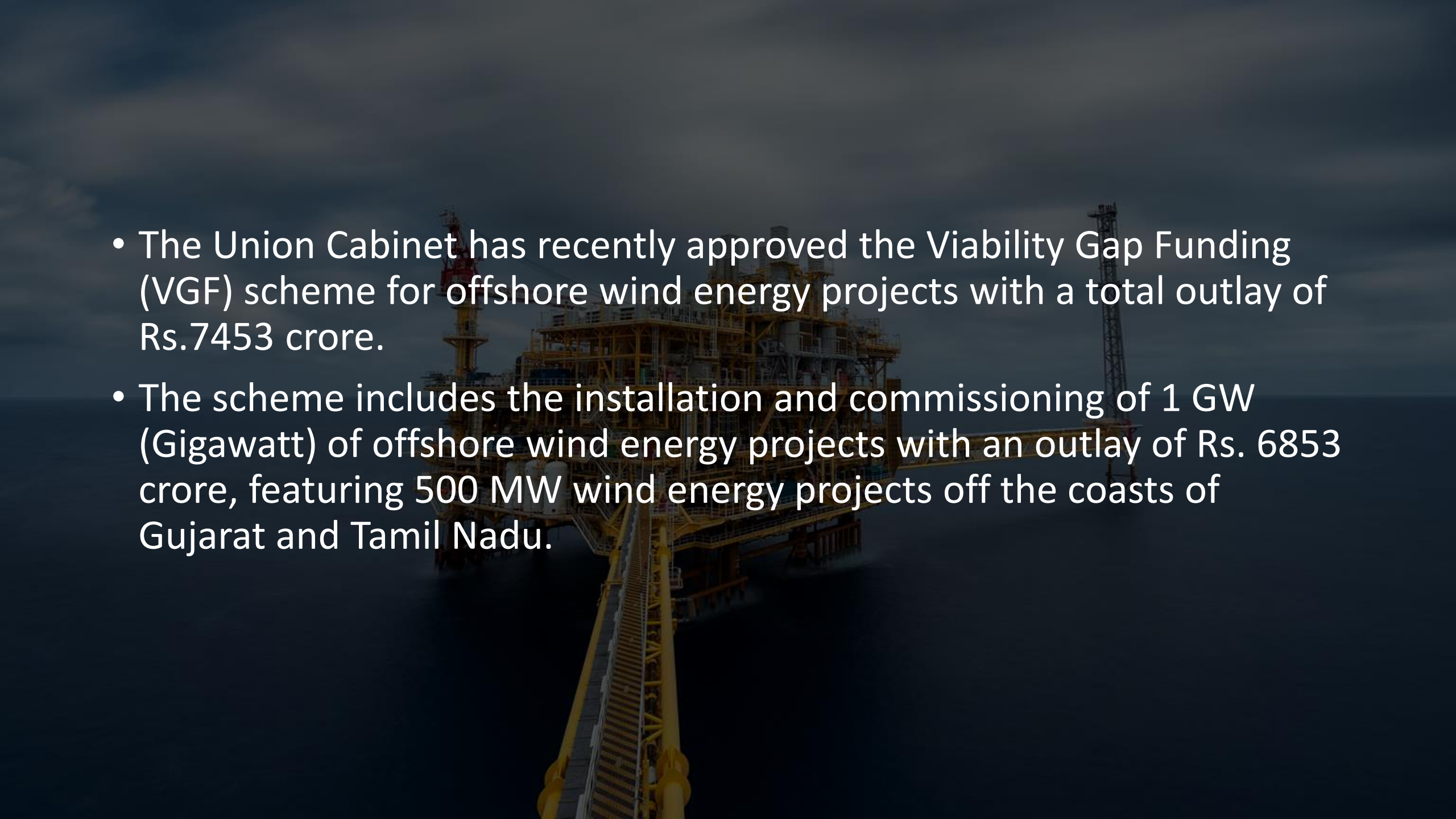
• **(a) 1 and 2 only**

• **(b) 3 only**

• **(c) 1 and 3 only**

• **(d) 1, 2 and 3**

# Viability Gap Funding (VGF) Scheme

- 
- A large offshore oil rig is visible in the background, extending into the dark sea under a cloudy sky. The rig's complex structure of yellow and grey metal is partially obscured by the text overlay.
- The Union Cabinet has recently approved the Viability Gap Funding (VGF) scheme for offshore wind energy projects with a total outlay of Rs.7453 crore.
  - The scheme includes the installation and commissioning of 1 GW (Gigawatt) of offshore wind energy projects with an outlay of Rs. 6853 crore, featuring 500 MW wind energy projects off the coasts of Gujarat and Tamil Nadu.

- Offshore wind is a source of renewable energy which offers several advantages such as higher adequacy & reliability, lower storage requirement.
- The VGF scheme, overseen by the Ministry of New and Renewable Energy, is a major step towards implementing the National Offshore Wind Energy Policy notified in 2015.




VGF is a government grant of up to 40% of the total project cost, provided to support infrastructure projects that are economically justified but not financially viable.

The VGF support from the Government will reduce the cost of power from offshore wind projects and make them viable for purchase by Distribution Companies (DISCOMs)

The background is a vibrant, abstract composition. It features several large, organic shapes in shades of teal, magenta, and mustard yellow. These shapes are filled with various patterns: some have a fine dotted texture, others have wavy white lines, and one has a grid of small white plus signs. The background itself is a dark navy blue with a fine, repeating pattern of small white dots. Scattered throughout are small, white, wavy lines and thin, yellow, zigzag lines, adding a sense of movement and depth to the overall design.

# India's Space Economy

The Government said that the country's share in the **global space economy** is projected to increase fourfold by 2030 compared to 2021.



### About India's Space economy



India has proven itself as a trailblazer in space exploration from the humble beginnings of **transporting rocket parts on bullock carts** to the **proud achievement of launching a record number of satellites** in a single mission.



**2023**

A report by the World Economic Forum and McKinsey estimates the size of the global space industry to be \$630 Bn in 2023.

**2035**

It is expected to grow 9% per annum and reach \$1.8 Tn by 2035.



**India's space economy, valued at \$8.4 Bn in 2023, currently accounts for 2-3% of the global space economy.**



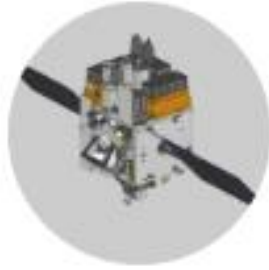
India so far earned **174 Million US Dollars** from the launching of the foreign satellites; out of these \$174 million, as much as \$157 million have been earned only in the last nine years.



**124**

Spacecraft Missions\*

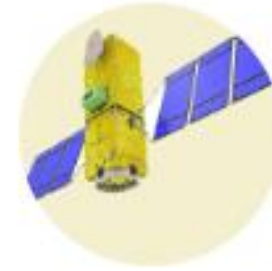
---



**17**

Satellites realised by private players or students

---



**432**

Foreign satellites launched by ISRO

---



**96**

Launch Missions\*\*

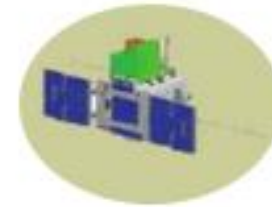
---



**6**

Re-entry Missions & POEMS

---



**1**

Launch missions facilitated by ISRO

---



---

- **Upcoming missions**

- The Indian Space Research Organisation (Isro) will launch the **Gaganyaan** mission in 2025.

- ISRO is planning a mission to study **Venus**, focusing on its surface and atmosphere, which could provide valuable scientific data.

- **NISAR is a joint Earth-observing mission** between NASA and the Indian Space Research Organization (ISRO).

- a. NISAR will be the first radar of its kind in space to systematically map Earth

# CURRENT AFFAIRS COURSE

- ✓ UPDATED CURRENT AFFAIRS (2023+2024)|
- ✓ COMPLETE NOTES(PDF)

# COMPLETE GK/GS COURSE

- ✓ STATIC GK
- ✓ HISTORY
- ✓ POLITY
- ✓ GEOGRAPHY
- ✓ ECONOMICS

USE CODE

**B60**

CALL FOR SUPPORT: +91-7414862047



**• LIVE DOUBT SESSION**





# SSC FOUNDATION BATCH



**DOWNLOAD CLASS24 APP**



# FEATURES

700+ HOURS CLASSES  
LIVE FROM CLASSROOM

**50% OFF**

**USE CODE**

**SSC50**


~~₹ 13000/-~~ ₹ 6500/-



DOWNLOAD CLASS24 APP



**DOWNLOAD CLASS24 APP**

A group of people are clapping in a dimly lit room. The focus is on the hands and forearms of several individuals, with some wearing watches. The background is blurred, showing more people and a window. An orange horizontal bar is located in the top left corner.

Thank you  
guys.

---