

Daily Current

Affairs





4

The Hindu



2

**PIB, PRS & Other
newspaper**



1

**The Indian
Express**



0

Jansatta



1

**Financial
Express**



Download class24



PDF



10 MCQ QUIZ

STILL CONFUSED! HOW TO PREPARE

Start from zero and take the first step
with expert guidance in our **Online Wo**

For English Medium Candidates Only



RAS Mains



Join RASonly Jaipur – Ace RAS 2025!

Looking for the best RAS offline coaching in Jaipur? Our
expert faculty, daily tests, and personalized guidance will
get you exam-ready!



Register Now

📞 9057143412



28–30, JDA Market, Shri Hans
Marg, Gopalpura Bypass Rd

Request a Free Consultation

Name

Mobile Number

E-mail address

Submit Request



+9190571 43412



info.rasonly@gmail.com



We are the team of passionate officer educators and Technocra

We Want to make your RAS jour

"Health is not valued
until sickness comes."

— *Thomas Fuller*

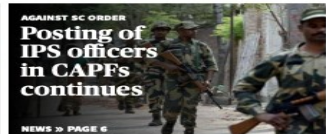
"Your body deserves
the best. Nourish it,
move it, rest it."





CLAIMS TO BE HEARD
Bihar draft voter rolls to be out on August 1

NEWS » PAGE 5



AGAINST SC ORDER
Posting of IPS officers in CAPFs continues

NEWS » PAGE 6



REBUTTAL TO CHINA
Reincarnation is Dalai Lama's decision: Rijju

NEWS » PAGE 4



PARLEY
Threat posed by U.S. imperialism
Trump trying to revive dominance and hegemony of the U.S.

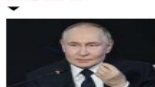
OPINION » PAGE 9



MONUMENTAL EFFORT
Gill's double century puts India in control

SPORT » PAGE 16

INSIDE



Will not 'give up' aims in Ukraine, Putin tells Trump

MOSCOW
Russian leader Vladimir Putin told U.S. President Donald Trump by telephone on Thursday that Moscow will not "give up" on its aims in Ukraine, the Kremlin said. The Kremlin said the call lasted almost an hour. » PAGE 14

Pak. celebrities' social accounts blocked again

NEW DELHI
The social media accounts of several Pakistani celebrities were go-blocked again on Thursday, hours after they became briefly accessible to users in India, triggering sharp reactions across various platforms. » PAGE 4

Govt. officers in Odisha halt work to protest assault

BHUBANESWAR
Official work across Odisha came to a standstill on Thursday as members of the Odisha Administrative Service launched a cease-work protest over the assault on an officer by Bharatiya Janata Party workers. » PAGE 2

Kerala raises its concerns on U.S. trade pact

NEW DELHI
Kerala Agriculture Minister P. Prasad has written to Union Agriculture Minister Shree Singh Chouhan and Commerce Minister Piyush Goyal, raising concerns over the proposed Indo-U.S. Free Trade Agreement. » PAGE 3

Union govt. to gather support to remove Justice Yashwant Varma

Process to obtain signatures for motion seeking removal of the Allahabad HC judge to start soon, says Rijju; final decision on House of introduction yet to be taken, he says; support of 100 members in LS, 50 in RS needed for admission of motion

Nitula Hebbar
NEW DELHI

With the Monsoon Session of Parliament scheduled for July 21, the Centre is set to begin the process of collecting signatures for a motion seeking the removal of Allahabad High Court judge Justice Yashwant Varma over the discovery of burnt currency notes at his official residence. Several major political parties have expressed their willingness, in principle, to support the initiative.

Union Parliamentary Affairs Minister Kiren Rijju on Thursday said that while the process of obtaining signatures would commence shortly, a decision was yet to be taken on whether the motion would

Curious case

Half-burnt notes were found at the official residence of Justice Yashwant Varma in New Delhi after a blaze on March 14

March 22: Then-Chief Justice of India Sanjay Khanna constitutes a three-member in-house panel to probe the issue

March 28: Centre notifies transfer of Justice Varma to Allahabad High Court; SC tells Chief Justice not to assign any judicial work to the judge

May 4: In-house panel submits its report dated May 3 to the C.J.

May 8: SC issues statement saying it had forwarded the panel's report and Justice Varma's resignation dated May 6 to the Prime Minister and the President

The constitutional authority to remove a judge rests solely with Parliament

being introduced in the Lok Sabha or the Rajya Sabha. Support of a minimum of 100 members are required for the Lok Sabha, and at least 50 members for the Rajya Sabha, for such a motion to be admitted. Even if the motion is introduced during the up-

coming session, it is unlikely to reach a conclusion within the same period. Under the Judges (Inquiry) Act, 1968, once a motion for the removal of a judge is admitted in either House, the presiding officer is required to constitute a three-member commit-

tee — composed of a Supreme Court judge, a High Court Chief Justice, and a distinguished jurist — to investigate the matter, and submit a report within three months. Responding to speculation regarding the findings of an in-house panel formed by former Chief Justice of India Sanjay Khanna to probe the case, Mr. Rijju clarified that such a report alone could not suffice to proceed with a removal motion in Parliament. He noted that the panel had not indicted Justice Varma, but recommended the appropriate next steps, as the constitutional authority to remove a judge rests solely with Parliament.

The case concerns a fire incident at Justice Varma's official residence in Delhi

Yatra begins



March to the hills: The first batch of Amarnath pilgrims begin their journey at Rallapathri in J&K on Thursday. (IRFAN NISSAR/REPORT, PAGE 4)

T.N. custody death: autopsy report reveals 44 wounds

The Hindu Bureau
MADURAI

The post-mortem report of B. Ajith Kumar of Sivaganga, a temple security guard who died in police custody, has revealed over 44 external injuries in various parts of the body and several internal injuries. The general appearance section of the report says there was a 14-inch scar measuring 3 cm in length in the right forearm and three old scars "consistent with cigarette burn marks".

FULL REPORT ON
» PAGE 2

Global South's voice key to contemporary world's progress: PM



PM Narendra Modi receives 'The Officer of the Order of the Star of Ghana' from Ghana President John Mahama on Wednesday. (AP)

Kallol Bhattacharjee
NEW DELHI

Progress in the contemporary world will not be possible without giving a voice to the Global South, Prime Minister Narendra Modi said on Thursday while addressing a joint session of Ghana's Parliament in its capital, Accra.

Mr. Modi, who received Ghana's highest state honour "The Officer of the Star of Ghana", quoted the country's founding father Kwame Nkrumah, who said that Africa and India are connected by "intrinsic" forces, in a speech outlining the widespread changes sweeping the world and the challenges that persist. "The world order created after the Second World War is changing fast. The revolution in technology, the rise of the Global South, and the shifting demographics are contributing to its pace and scale. Challenges, such as colonial rule, that humanity has faced in earlier centuries still persist in different forms," Mr. Modi said.

The Prime Minister described the state honour that he received as the "symbol of enduring friendship" between India and Ghana, which has been a priority of India's relations with Africa since the early days of decolonisation in the 1950s.

Governance reforms
» PAGE 2

without giving voice to the Global South," he emphasised, listing "climate change, pandemics, terrorism, and cyber security" as the "new and complex crises" that are posing fresh challenges to the world. "The changing circumstances demand credible and effective reforms in global governance," the Prime Minister said, highlighting the inclusion of the African Union into the G-20.

"We put emphasis on Africa's rightful place at the global high table. We are proud that the African Union became a permanent member of the G-20 during our Presidency," Mr. Modi said.

Uniting forces

Quoting Dr. Nkrumah, Mr. Modi said, "The forces that unite us are intrinsic and greater than the superimposed influences that keep us apart." India is a "pillar of strength in the world" that will stand "shoulder to shoulder" with Ghana as it pursues its developmental goals, he vowed.

This is the first speech by an Indian Prime Minister in Ghana's Parliament, with the special meeting being convened by Speaker Alban Kingsford Sumana Baghin, who had visited India in 2023. Mr. Modi appreciated Ghana's parliamentary system and expressed satisfaction over the formation of the Ghana-India Parliamentary Friendship Society.

Government clears indigenous defence procurement worth ₹1.05 lakh crore

The Hindu Bureau
NEW DELHI

The Defence Acquisition Council (DAC), chaired by Defence Minister Rajnath Singh, on Thursday accorded Acceptance of Necessity (AoN) for 10 capital acquisition proposals valued at ₹1.05 lakh crore through indigenous sourcing. It was the first meeting after Operation Sindoor to enhance the capabilities of the armed forces.

"AoNs were accorded for Procurement of Armoured Recovery Vehicles, Electronic Warfare System, Integrated Common Inventory Management System for Tri-Service and Surface-to-Air Missiles," said the Ministry of Defence in a statement. The agenda of the meet-



The procurement of indigenous Quick Reaction Surface-to-Air Missile systems worth ₹30,000 crore has been approved. (PII)

ing was to enhance air defence capabilities along the Pakistan border. The procurement of indigenous Quick Reaction Surface-to-Air Missile (QRSAM) systems worth ₹10,000 crore for the Indian Army has been approved.

3 Apache combat helicopters to arrive by July 15

NEW DELHI

A top Defence Ministry source has confirmed that it has been communicated to them that the first batch of three Apache AH-64 attack helicopters from the U.S. will be delivered by July 15, and the next batch by November. The development follows U.S.-India Defence Ministers' dialogue. » PAGE 4

Naval and Merchant Vessels, "the procurement of Moored Mines, Mine Counter Measure Vessels, Super Rapid Gun Mount and Submersible Autonomous Vessels" worth ₹10,000 crore will enable mitigation of potential risks posed to the

Student visa aspirants must make social media profile public, says U.S. Embassy

The Hindu Bureau
NEW DELHI

Students, vocational students and exchange visitors from India who are seeking U.S. visas will have to turn their social media profiles into "public" state for establishing their identity and "admissibility" to the United States under U.S. law, the Embassy of the United States announced this week.

The Embassy further said that it could not "guarantee" that Indian students who do not have an appointment already, will be able to secure a visa interview slot "this summer". The State Department is committed to protecting our nation and our citizens from threats posed by the standards of national security and public safety



With around 3.1 lakh students, Indians are the largest community of international students in the U.S. (PII)

through our visa process. A U.S. visa is a privilege, not a right. If you already scheduled a visa interview slot and are applying for an F, M and J non-immigrant visa, which are meant for academic students, vocational students and exchange visitors, respectively. The announcement

echoed recent cases involving several international students in the U.S. academic institutions who were penalised for their remarks about international conflicts, especially the Israel-Palestine war.

India and the U.S. have been in consultation since the arrival of the Donald Trump administration in January about the ways to scrutinise the issue of visas and citizenship in line with the Trump administration's election campaign.

With around 3.1 lakh students, Indians were the largest community of international students in the U.S., and the changes and the social media profile screening are expected to reflect in the social media behaviour of the students on U.S. campuses.

Union govt. to gather support to remove Justice Yashwant Varma

Process to obtain signatures for motion seeking removal of the Allahabad HC judge to start soon, says Rijiju; final decision on House of introduction yet to be taken, he says; support of 100 members in LS, 50 in RS needed for admission of motion

Nistula Hebbar
NEW DELHI

With the Monsoon Session of Parliament scheduled from July 21, the Centre is set to begin the process of collecting signatures for a motion seeking the removal of Allahabad High Court judge Justice Yashwant Varma over the discovery of burnt currency notes at his official residence. Several major political parties have expressed their willingness, in principle, to support the initiative.

Union Parliamentary Affairs Minister Kiren Rijiju on Thursday said that while the process of obtaining signatures would commence shortly, a decision was yet to be taken on whether the motion would

Curious case

Half-burnt notes were found at the official residence of Justice Yashwant Varma in New Delhi after a blaze on March 14

March 22: Then-Chief Justice of India Sanjiv Khanna constitutes 3-member in-house panel to probe the issue

March 28: Centre notifies transfer of Justice Varma to Allahabad High Court; SC tells Chief Justice not to assign any judicial work to the judge

May 4: In-house panel submits its report dated May 3 to the CJI

May 8: SC issues statement saying it had forwarded the panel's report and Justice Varma's response dated May 6 to the Prime Minister and the President



The constitutional authority to remove a judge rests solely with Parliament

be introduced in the Lok Sabha or the Rajya Sabha. Support of a minimum of 100 members are required for the Lok Sabha, and at least 50 members for the Rajya Sabha, for such a motion to be admitted.

Even if the motion is introduced during the up-

coming session, it is unlikely to reach a conclusion within the same period. Under the Judges (Inquiry) Act, 1968, once a motion for the removal of a judge is admitted in either House, the presiding officer is required to constitute a three-member commit-

tee – composed of a Supreme Court judge, a High Court Chief Justice, and a distinguished jurist – to investigate the matter, and submit a report within three months.

Responding to speculation regarding the findings of an in-house panel formed by former Chief Justice of India Sanjiv Khanna to probe the case, Mr. Rijiju clarified that such a report alone could not suffice to proceed with a removal motion in Parliament. He noted that the panel had not indicted Justice Varma, but had recommended the appropriate next steps, as the constitutional authority to remove a judge rests solely with Parliament.

The case concerns a fire incident at Justice Varma's official residence in Delhi

in March, during his tenure as a judge of the Delhi High Court. The incident led to the discovery of several burnt sacks of currency notes in the outhouse. Justice Varma reportedly denied knowledge of the cash.

After a Supreme Court-appointed in-house inquiry committee reportedly found material to recommend removal of Justice Varma, Justice Khanna wrote to the President and the Prime Minister, recommending the removal.

The Monsoon Session will conclude on August 21, following an extension of 10 days from the earlier schedule. "The government has enough business to conduct," Mr. Rijiju said, without elaborating on the reasons for extending the session.

- Union government to initiate the process of obtaining signatures for a **motion seeking removal** of Allahabad High Court Judge **Justice Yashwant Varma**.
- Triggered by discovery of **burnt currency notes** at his official residence during his tenure as a Delhi High Court judge.

Timeline of Events

Date	Event
March 14	Half-burnt currency notes discovered at Justice Varma's official residence
March 22	Chief Justice of India (CJI) Sanjiv Khanna sets up 3-member in-house panel
March 28	Centre transfers Justice Varma to Allahabad HC
May 4	In-house panel submits report to CJI
May 8	Supreme Court forwards report to PM and President
May 6 onwards	PM receives recommendation for removal



Procedure for Removal of a Judge (Judges Inquiry Act, 1968)

Requirement	Details
Motion Introduction	Lok Sabha or Rajya Sabha
Minimum Signatures	100 LS members or 50 RS members
Post Admission Procedure	3-member committee to probe
Final Authority	Parliament decides via motion

Removal Process of High Court or Supreme Court Judges (India)

Constitutional Provision:

- Governed by **Article 124(4)** for **Supreme Court Judges**
 - Governed by **Article 217(1)(b)** read with Article 124(4) for **High Court Judges**
-

Grounds for Removal:

- Proven misbehavior
- Incapacity

1. Initiation:

- A motion for removal can be initiated in either **House of Parliament** (Lok Sabha or Rajya Sabha).
 - Requires signatures of:
 - **100 Members of Lok Sabha OR**
 - **50 Members of Rajya Sabha**
-

2. Admission of Motion:

- The motion is submitted to:
 - **Speaker of Lok Sabha** or
 - **Chairman of Rajya Sabha**
- If admitted, a **three-member committee** is formed.

3. Inquiry by Committee:

- The committee consists of:
 - A Supreme Court judge
 - A Chief Justice of a High Court
 - A distinguished jurist
 - The committee investigates the charges.
-

4. Report of Committee:

- If the committee finds the judge **guilty of misbehavior or incapacity**, the motion proceeds.
- If the judge is found **not guilty**, the process ends.

5. Parliamentary Approval:

- Both Houses of Parliament must pass the removal motion:
 - By a **special majority**:
 - Majority of total membership **AND**
 - Two-thirds of members present and voting.
-

6. Presidential Order:

- After both Houses pass the motion, the President of India issues an **order for removal**.



Aspect

Details

Applicable to

Supreme Court and High Court Judges

First and Only Case


Justice V. Ramaswami (1993) — motion failed in Lok Sabha

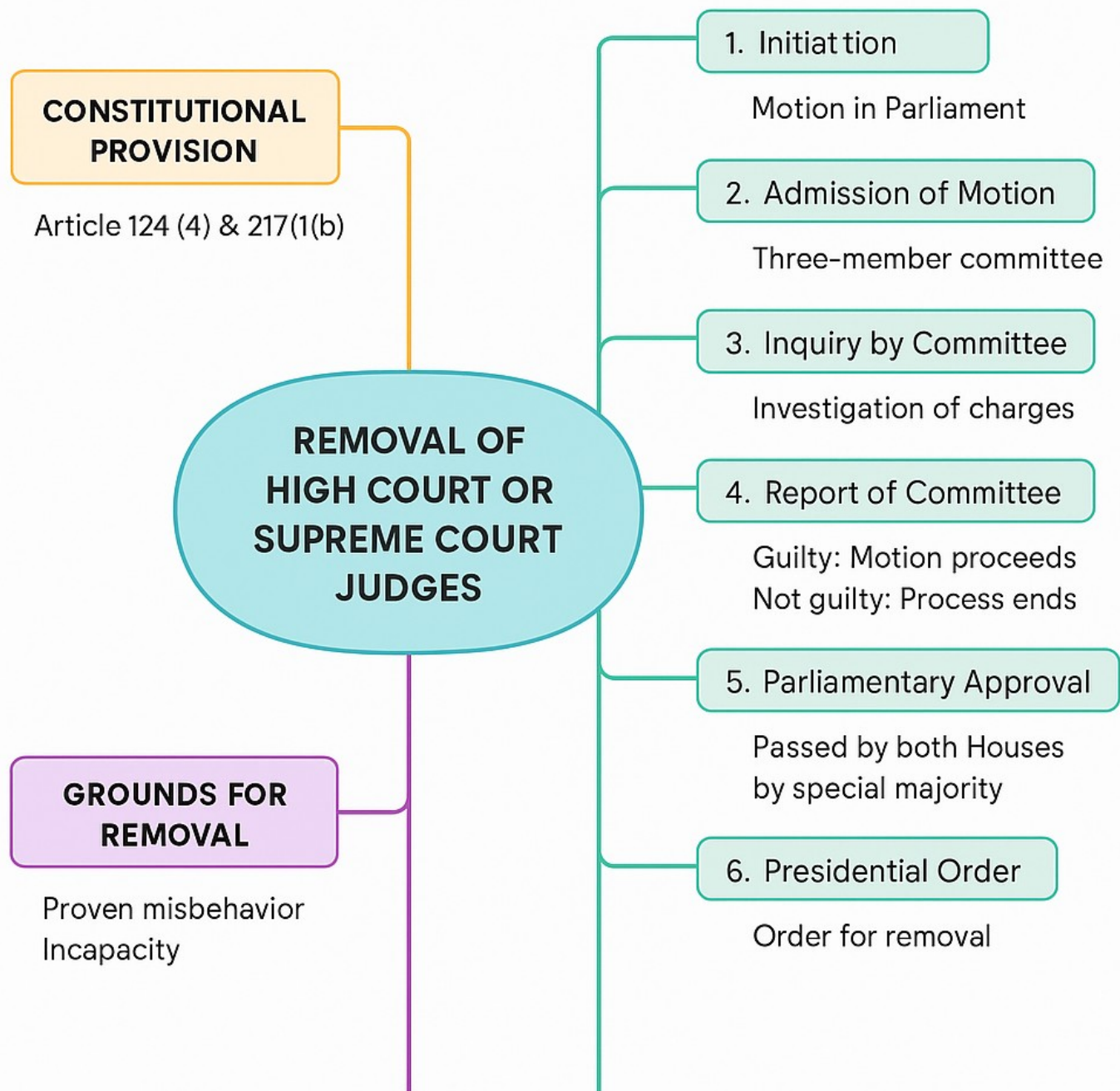
No Impeachment Term Used

Technically called **removal**, not impeachment

Safeguard

The process ensures **independence of judiciary** by making removal difficult.





INBRIEF



Expert team may reach Kerala to repair grounded F-35B

An expert team from the U.K. is expected to arrive in Kerala, possibly this weekend, to inspect the grounded F-35B combat jet of the Royal Air Force (RAF). According to sources, the team will primarily explore three possibilities as part of repairing the aircraft and taking it back to the active service of the RAF. The team is expected to have members from Lockheed Martin apart from engineers from the U.K. At present, the aircraft is guarded by the IAF crew round the clock.

Woman killed as MCH building collapses in Kerala

A 52-year-old woman was killed and two others were injured when a portion of an old and dilapidated building at the Government Medical College Hospital (MCH) in Kottayam collapsed on Thursday. The deceased was identified as D. Bindu, a native resident of Thalayaparamba in Kottayam. A portion of the 68-year-old building consisting of a bathroom complex attached to the 14th ward (Orthopaedics department) of the hospital collapsed by 10.30 a.m.

Naidu opens A.P.'s first Digital Nerve Centre in Kuppam

Andhra Pradesh Chief Minister N. Chandrababu Naidu on Thursday inaugurated the State's first-ever Digital Nerve Centre in Kuppam, the constituency he represents in the Legislative Assembly. The TATA MD Digi Nerve Centre, set up in collaboration with the Gates Foundation, will connect the Area Hospital with the 13 PHCs and 92 Village Health Centers. Inaugurating the facility, Mr. Naidu said it would set a benchmark and be a game changer in the health sector.

Kerala HC rejects plea by teacher charged under PCO Act

The Hindu Bureau
KOCI

Stating that an acquittal in a criminal case does not automatically lead to the setting aside of departmental inquiry and the consequential proceedings, the Kerala High Court on Thursday dismissed a petition filed by a schoolteacher who was charged under the PCO Act for alleged sexual assault on a 10-year-old student in classroom.

The petitioner, an Arabic teacher at a school in Malappuram who was placed under suspension following the registration of the FIR over a year ago, approached the court, seeking that the departmental inquiry report and the consequential proceedings following the incident be set aside.

Among other reasons, the teacher said he had been acquitted in the criminal trial, after the survivor and her mother turned hostile. Referring to the ancient education system in India, a Bench of Justice D.K. Singh said the petitioner was acquitted in the criminal case on the benefit of doubt. Even if a person is acquitted in a criminal trial, the same would not necessarily lead to discharge in a domestic inquiry. Being her teacher, the petitioner had a fiduciary relationship with the survivor. The crime is grossly unbefitting of a teacher, the court said. The petitioner was accused of sexually assaulting the student since January 2023 while she was reading standing near the petitioner in the classroom.

Siddaramaiah's 'insult' to public servants draws flak

Former Bengaluru Police Commissioner describes the Belagavi incident as a 'big mistake' by CM; LoP R. Ashok said the attempt to slap the police officer in public has demoralised the police force

Nagesh Prabhu
BENGALURU

Three recent incidents of alleged "insult" meted out to senior civil servants in different circumstances by Karnataka Chief Minister Siddaramaiah have come under public scrutiny. Besides them, Mr. Siddaramaiah giving instructions "rudely" to senior civil servants at public functions has also not gone down well with many officials. They argue that it has lowered their morale.

The most recent instances that have drawn ire were those of the Chief Minister "trying to slap" a police officer in Belagavi, publicly reprimanding Vi-



Siddaramaiah raising his hand at Narayan Baramani at an event in Belagavi drew a lot of criticism. FILE PHOTO

jaynagara Deputy Commissioner M.S. Dinkar for sitting next to a seer on stage at an event in Hospete and blaming police officers for the stampede at M. Chinnawamy Stadium in Bengaluru.

Additional Superintendent of Police (Biharwad) Narayan Baramani's re-

quest for voluntary retirement from the police service citing "public humiliation" to him by Mr. Siddaramaiah during the Congress' event in Belagavi on April 28 has caused a major embarrassment to the Chief Minister.

Speaking to a private TV channel, Jyothi Prakash

Mirji, former Bangalore Police Commissioner, termed it the "biggest mistake" by Mr. Siddaramaiah. The public conduct of the Chief Minister was not good and other politicians follow him, he said. Incidentally, Mr. Baramani was persuaded to rejoin duty on Thursday.

These incidents have been seized by the Opposition to criticise the government. Leader of the Opposition in the Assembly R. Ashok hit out at the CM, saying that "the attempt to slap the police officer on the public stage has demoralised the police force". He said it showed a CM "intoxicated by power and frustrated at leading a failed government".

Body parts recovered at Telangana blast site

Nareen Kumar
HYDERABAD

Skeletal remains were recovered during a fresh combing of debris at the Sighachi Industries in Pashayaram, Telangana, where an explosion left 38 dead and over 30 injured. Sighachi Industries issued a statement claiming that 38 workers had been killed in the blast.

On Thursday, 20 pieces

of skeletal remains, including a patella, femur and fibula, were found scattered across different areas of the blast site, said Superintendent of Patancheru Government Hospital Srinivas Reddy. The remains were recovered during a re-combing operation and transported for DNA matching, said Inspector of State Disaster Response Force (SDRF) Shobhan Nalamasa.

The Hindu Bureau
BENGALURU

Karnataka Legislative Council Chairman Basavaraj Horati on Thursday expressed his regret over the reported remarks by Chief Whip of the Opposition in the House Ravi Kumar for allegedly making derogatory and sexist remarks against Mr. Horati's wife. Mr. Horati took the step after Congress MLAs

and leaders petitioned him seeking disciplinary action against the BJP leader.

"As it is a serious issue, I have written to Mr. Ravikumar seeking his reply on the reported remarks," Mr. Horati told *The Hindu* on Thursday.

Meanwhile, the Karnataka IAS Officers' Association condemned the alleged remarks by Mr. Ravikumar during a protest on Tuesday.

New *Garcinia* species found in Assam named after botanist's mother

Rahul Karmakar
GUWAHATI



The distinct bloom of *Garcinia kusumae*, a newly identified tree species from Assam.

SPECIAL ARRANGEMENT

Assam has yielded a new-to-science tree species belonging to the genus *Garcinia*, commonly referred to as *thokora* in Assamese. The newly described *Garcinia kusumae* has been named in honour of Kusum Devi, the late mother of Jatindra Sarma, one of the authors of the study and the Chairman of Assam's State Expert Appraisal Committee, appointed by the Union Ministry of Environment, Forest and Climate Change.

The study, co-authored by Hussain A. Barbhuiya of Mumbai's Bhambha Atomic Research Centre, appears in the latest issue of *Food & Bioprocess Technology*, a peer-reviewed journal focusing on botanical taxonomy and geobotany.

Four in a family
Garcinia kusumae marks the fourth instance of Mr. Sarma naming a botanical discovery after a family member. Previous names include *Amomum pruthiense* (after his daughter), *Syngium nive* (wife), and *Garcinia silbeswarii* (father).

This is the first time an Indian botanist-researcher has had four plant species named after immediate family members. "The epithet *kusumae*... is in recognition of her enduring support and sacrifices for his (Mr. Sarma's) education," the study noted.

Garcinia, the largest genus in the family *Clusiaceae*, comprises 414 species of shrubs and trees.

Pan-tropically distributed, its centres of diversity are found in Africa, Australasia, and Southeast Asia. The genus is known for its floral diversity, frequent presence in lowland tropical rainforests, and considerable pharmacological potential.

33 species
In India, 33 species and seven varieties of *Garcinia* have been documented, with Assam accounting for 12 species and three varieties.

Mr. Sarma found the *thokora* specimen in Bannabari, located in Baksa district, in April, during a survey of *Garcinia* species. The tree's distinct morphological features prompted further investigation. Specimens were collected following standard herbarium protocols, including pressing, drying, and preservation.

A dioecious evergreen tree that can grow up to 18 metres tall, *Garcinia kusumae* was observed to flower from February to April, with fruit maturing between May and June.

Rainy hustle



Monsoon impact: Vendors at the iconic Chammai cover their pushcarts with tarpaulin to protect their wares from the rain on Thursday. Hyderabad has been receiving showers for the past three days. NAGARA GOMI

India's first clinic for transgender persons reopens in Hyderabad

Siddharth Kumar Singh
HYDERABAD

Months after India's first transgender persons-led health clinic - Mitr Clinic - was shut down following a funding freeze by USAID, the landmark facility has made a comeback with a new name and renewed financial backing. Now reopened as Sabrang Clinic, the community-run healthcare centre resumed services in May following the funding freeze by USAID, the landmark facility has made a comeback with a new name and renewed financial backing.



India's first clinic for transgender people reopened under a new name Sabrang in Hyderabad on Monday. SIDHANT THAKUR

Hyderabad's Narayana, after a clinic broke new ground as the first in India to be entirely staffed and managed by members of the transgender community. "Over 3,000 patients have been served since the clinic started," he said.

Dhinchak Kallamall
THIRUVANANTHAPURAM

Nearly a month after the Singapore-flagged vessel *Wan Hai 503* caught fire off the coast of Kerala, the vessel continues to be adrift, emitting fire and smoke and weathering stormy weather and rain in the Arabian Sea. Though the vessel is adrift approximately 130 nautical miles off the Indian coastline, outside the Indian Exclusive Economic Zone (EEZ) boundary, the vessel continues to remain on a high-seas shipping corridor, necessitating continuous traffic warnings to passing vessels.

Smouldering *Wan Hai 503* still adrift off Kerala coast without a port of refuge



Rescue efforts: The Indian Navy carries out operation to contain a fire aboard the ship *Wan Hai 503*, off the Kerala coast. FILE PHOTO

ed by the salvage team and moving the vessel to a port of refuge, as removing fuel from the vessel remains difficult. However, the owner and salvors of the ship are yet to submit a detailed plan to the Indian

sweeping concessions in India's agricultural and dairy sectors is deeply concerning, particularly for agrarian States like Kerala, where agriculture forms the backbone of the rural economy," he said.

The Minister pointed out that the U.S. treaty could hamper the coconut oil industry as cheap soybean oil could be imported without any restrictions. Any attempt to allow unchecked import of synthetic rubber would also affect Kerala's rubber farmers, he added.

"Kerala's agriculture, centred on cash crops like coconut, rubber, pepper, cardamom, tea, and coffee, supports millions of smallholder farmers. The proposed FTA poses multiple risks," he said.

adding that he would write letters to Agriculture Ministers of all States urging them to raise their voice against relaxing import duties on agricultural and milk products. Comprehensive consultations with the (Kerala) State governments were necessary to "avoid severe socio-economic and ecological consequences for Kerala's small-scale farmers, cooperatives, and rural communities, who form the backbone of our economy," he wrote.

He acknowledged the Centre's efforts for tariff details and discuss it in Parliament and with States. Even details are being publicised, but on this issue that impacts cores of people, there is complete silence," Mr. Prasad told *The Hindu*, saying that he would write letters to Agriculture Ministers of all States urging them to raise their voice against relaxing import duties on agricultural and milk products.

Authorities for fuel transfer and moving the vessel to a port of refuge, as removing fuel from the vessel remains difficult. However, the owner and salvors of the ship are yet to submit a detailed plan to the Indian

India's first clinic for transgender persons reopens in Hyderabad

Siddharth Kumar Singh

HYDERABAD

Months after India's first transgender persons-led health clinic – Mitr Clinic – was shut down following a funding freeze by USAID, the landmark facility has made a comeback with a new name and renewed financial backing.

Now reopened as Sabrang Clinic, the community-run healthcare centre resumed services in May 2025 with support from the Tata Trusts, project lead Subash Ghosh said. The name Sabrang, meaning 'all colours', signals a more expansive vision for inclusive healthcare.

"Once the USAID issue



India's first clinic for transgender people reopened under a new name Sabrang in Hyderabad on Monday. SIDDHANT THAKUR

happened in January, we had to shut down operations. But we reached out to several philanthropic organisations and individuals. And now, Tata Trusts is supporting us," Mr. Ghosh told *The Hindu*.

Launched in 2021 in

Hyderabad's Narayanguda, Mitr Clinic broke new ground as the first in India to be entirely staffed and managed by members of the transgender community. "Over 3,000 patients have been served since the clinic started," he said.

Aspect	Details
Original Name	Mitr Clinic
Reopened Name	Sabrang Clinic
Location	Narayanguda, Hyderabad, Telangana
Meaning of 'Sabrang'	'All colours' – symbolising inclusive healthcare
Managed & Staffed by	Members of the transgender community
Patients Served (so far)	Over 3,000 patients since inception
Funding Support	Now supported by Tata Trusts after USAID funding freeze
Year of Initial Launch	2021
Reason for Closure	Funding freeze by USAID in January 2025
Resumption of Services	May 2025

Year	Development
2014	NALSA vs. Union of India: SC recognized transgender persons as "Third Gender" & granted legal rights
2019	Transgender Persons (Protection of Rights) Act, 2019 passed
2020	Transgender Persons (Protection of Rights) Rules notified
Ongoing	States implementing policies for welfare, health, education

Challenges Faced by Transgender Community

- ✓ Social Stigma & Discrimination
 - ✓ Exclusion from Employment & Education
 - ✓ Health Inequities & Lack of Gender-Affirmative Care
 - ✓ Housing Insecurity & Poverty
 - ✓ Violence and Harassment
-

Recent Initiatives

- ✓ **Sabrang Clinic**, Hyderabad (2025) – First Transgender persons-led health clinic reopens
- ✓ Ministry of Social Justice: Scholarships, Skill Development Schemes
- ✓ National Portal for Transgender Persons – for ID & welfare scheme applications
- ✓ Some States: Free sex reassignment surgery, pension schemes, shelter homes

Paper

Topic



GS-I

Indian Society: Diversity, Social Empowerment

GS-II

Vulnerable Sections: Rights & Welfare

GS-III

Health & Education

Essay

Social Justice, Inclusion, Human Rights



Mains Practice Question

Q. *Despite progressive legal recognition, transgender persons in India continue to face social exclusion. Critically analyze and suggest measures to address their concerns. (250 words)*

Endocrine disruptors in plastic waste: a new public health threat

Plastic pollution is no longer a distant environmental concern; it is a biological invasion with profound implications for human health. Infiltration of microplastics and plastic-derived EDCs into human bodies is triggering hormonal disruption, reproductive dysfunction and chronic diseases.

Sudheer Kumar Shukla

Plastics have revolutionised modern living with their convenience and affordability, but this same ubiquity is spawning an invisible, long-term health crisis. Beyond choking oceans and clogging landfills, plastics are now infiltrating our bodies through microplastic particles and a cocktail of endocrine-disrupting chemicals (EDCs). The evidence is clear and deeply concerning: these substances are interfering with our hormonal systems, damaging reproductive health and increasing our susceptibility to chronic diseases, including cancer. India, now the world's largest generator of plastic waste, stands at the epicentre of this escalating public health emergency.

Once considered inert pollutants, microplastics — plastic particles smaller than 5 mm — are now recognised as biologically active. A 2022 study by Vrije Universiteit Amsterdam detected microplastics in the blood of 80% of human participants. Further, a 2024 study published in *Nature Scientific Reports* reported the presence of microplastics in nearly 89% of blood samples in India, with an average concentration of 4.2 particles per millilitre. These particles have also been found in human lungs, hearts, placentas, breast milk, ovarian follicular fluid, and semen. Alarmingly, testicular tissue in Indian men was found to contain three times more microplastics than in dogs.

The plastics in our lives are not chemically neutral. They often contain EDCs such as: Bisphenol A (BPA) and BPS: used in water bottles, food containers, and thermal paper. They also have phthalates (e.g., DEHP, DBP) that are used to soften plastics and found in cosmetics, toys and IV tubing and PFAS (Per- and polyfluoroalkyl substances), found in food packaging and non-stick cookware. These chemicals mimic or block natural hormones such as estrogen, testosterone, thyroid hormones, and cortisol. They interfere with receptor binding, disrupt gene expression in reproductive organs, and induce oxidative stress, inflammation, and apoptosis (cell death).

Animal studies published in *Food and Chemical Toxicology* (2023) showed that even low doses of polystyrene microplastics disrupted testosterone levels, impaired sperm production, and damaged the blood-testis barrier. Similar effects were observed in ovaries, where microplastics reduced anti-Müllerian hormone levels, triggered oxidative stress pathways, and induced cell death.

Microplastics in sperm: Recent clinical studies from China and India have linked the presence of microplastics in semen to reduced sperm count, concentration and motility. Exposure to BPA and phthalates has been associated with lower testosterone levels and elevated luteinizing hormone (LH) levels — both indicators of endocrine disruption. A global review published in



The poorest populations, often living near waste dumps or working in the informal recycling sector, bear the brunt of the plastic waste crisis.

Science of the Total Environment further supports the connection between microplastics and male subfertility.

Notably, a 2023 study in *Environmental Science & Technology Letters* reported a strong correlation between microplastic levels in semen and decreased sperm count, motility, and abnormal morphology in Chinese men. In India, studies have documented a 30% decline in average sperm count over the past two decades.

A study published in *Ecotoxicology and Environmental Safety* (2025) found microplastics in 14 out of 18 follicular fluid samples collected from women undergoing fertility treatment in Italy. These particles, along with their associated endocrine-disrupting chemicals (EDCs), were found to compromise egg quality and were linked to menstrual irregularities, reduced estradiol levels, and an increased risk of miscarriage. Epidemiological studies have also linked exposure to phthalates and BPA with conditions such as polycystic ovary syndrome (PCOS), endometriosis, and spontaneous abortions. These associations have been further supported by findings published in *Advances in Pharmacology* (2021) and *Frontiers in Cell and Developmental Biology* (2023).

The International Agency for Research on Cancer (IARC) now classifies several plastic additives as probable human carcinogens. Case-control studies from India have shown that women with elevated levels of DEHP in their urine face nearly a threefold increased risk of breast cancer (odds ratio = 2.97). Exposure to BPA and phthalates has also been linked to higher incidences of prostate, uterine, and testicular cancers.

In addition to their carcinogenic potential, these EDCs have been implicated in metabolic disorders. By mimicking cortisol, altering insulin sensitivity, and promoting fat storage,

EDCs contribute to the development of obesity and type 2 diabetes. Moreover, PFAS exposure has been associated with metabolic syndrome, cardiovascular disease, and thyroid dysfunction, as reported in a 2024 study published in *Frontiers in Public Health*.

Plastic waste in India: India generates over 9.3 million tonnes of plastic waste each year. Of this, approximately 5.8 million tonnes are incinerated, releasing toxic gases, while 3.5 million tonnes end up polluting the environment. Studies have shown that residents in cities like Mumbai are exposed to between 382 and 2,012 microplastic particles daily through air, food, and water. In Nagpur, doctors are reporting an increase in cases of early puberty, respiratory problems, obesity, and learning disorders in children, conditions increasingly linked to plastic pollution. Recent testing by the Central Pollution Control Board (CPCB) detected phthalate concentrations in drinking water samples from Delhi, Jalandhar, and Chennai that exceeded European Union safety limits.

Despite progressive policies like the Plastic Waste Management Rules (2016), updated in 2022 and 2024, enforcement remains inconsistent. Current regulations do not account for low-dose effects or the complex interactions of EDCs, yet they address the specific vulnerabilities of children and pregnant women.

The health burden associated with EDCs in India is staggering, costing over ₹25,000 crore annually due to increased healthcare spending and lost productivity. The poorest populations, often living near waste dumps or working in the informal recycling sector, bear the brunt of this crisis. Globally, the U.S. reports annual healthcare costs of \$250 billion linked to plastic-related chemicals, according to the Endocrine Society.

Biomonitoring and surveillance are

crucial for establishing national programmes that measure EDC levels in blood, urine, and breast milk.

Longitudinal studies must be funded to assess the health impacts of EDC exposure on fertility, neurodevelopment, and chronic diseases. In addition, public awareness needs to be improved, and behaviour changes should be encouraged, such as educating people on the risks of microwaving food in plastic containers and promoting the use of glass, stainless steel, and EDC-free alternatives. It is also important to advocate for antioxidant-rich diets to help counteract oxidative stress.

Further actions should include enforcing plastic segregation, recycling, and safe disposal, while investing in microplastic filtration systems for water treatment plants. Additionally, incentivising the development of biodegradable, non-toxic materials is essential to reduce EDC exposure.

Plastic pollution is no longer a distant environmental concern; it is a biological invasion with profound implications for human health. The infiltration of microplastics and plastic-derived EDCs into our bodies is triggering hormonal disruption, reproductive dysfunction and chronic diseases.

The science is undeniable, and the time for action is now. For India, the world's most exposed population, this is more than a policy issue — it is a generational imperative. We must address this silent epidemic through science-driven regulation, robust monitoring, education, and systemic change. The health of our people, especially our children, depends on it.

Dr. Sudheer Kumar Shukla is an environmental scientist and sustainability expert with over 20 years of experience in crisis. Globally, the U.S. reports annual healthcare costs of \$250 billion linked to plastic-related chemicals, according to the Endocrine Society.

shukla@imbihsfor.org

THE GIST

Once considered inert pollutants, microplastics — plastic particles smaller than 5 mm — are now recognised as biologically active. Further, a 2024 study reported the presence of microplastics in nearly 89% of blood samples in India.

Animal studies showed that even low doses of polystyrene microplastics disrupted testosterone levels, impaired sperm production, and damaged the blood-testis barrier. Similar effects were observed in ovaries, where microplastics reduced anti-Müllerian hormone levels, triggered oxidative stress pathways, and induced cell death.

The health burden associated with EDCs in India is staggering, costing over ₹25,000 crore annually due to increased healthcare spending and lost productivity. This silent epidemic must be addressed through science-driven regulation, robust monitoring, public education, and systemic change.

A new BHARAT — establishing healthy ageing parameters for the Indian population

Rupay Khurana

We don't all age the same way, but we all do age. We intuitively recognise frailty when things start to slow down. Ageing unfolds at different rates, over time, between individuals, within and across populations. Often, it happens in bursts.

Ageing is complicated. It is driven by molecular and cellular interactions and is shaped by one's environment, lifestyle, and socio-economic conditions. This means one's chronological age often does not reflect how old one's body really is. Since researchers discovered in 1935 that ageing can be altered, they have been looking for reliable biological clues, called biomarkers, that in isolation or together can indicate how old our bodies are and how they might respond to factors such as diet, exercise, etc. Last year, the Indian Institute of Science (IISc), Bengaluru, launched a large-scale, nationally called BHARAT, short for 'Biomarkers of Healthy Aging, Resilience, Adversity, and Transitions', as part of its Longevity India Program. The study aims to map the physiological, molecular, and environmental indicators that drive ageing in the Indian population.

"We lack clear information on what features define or influence healthy ageing," says Deepak Kumar Saini, convener of BHARAT and professor of development biology and genetics at IISc. "We are building an authoritative portal to understand the rules of healthy ageing in Indians." Worldwide, life expectancy has risen significantly over the past few decades. Living longer does not mean living healthier. Studies have predicted a 168% increase in Parkinson's disease cases in India by 2050 and a 200% rise in dementia across low- and middle-income countries. Yet, much of what we know about health and disease risk comes from studies in Western populations, which means the diagnostic tools, biomarkers, and



Clearer tasks: The Indian Institute of Science's BHARAT study aims to map indicators that drive ageing across the Indian population.

even treatments may not be optimal for people in India or other non-Western countries.

Gaps for patients

This limited focus has created a gap between population-based biomarkers and diagnostic cut-offs for people in South Asia. This can lead to misdiagnosis and treatments that do not reflect how diseases progress or respond to therapeutic interventions, which means the diagnostic tools, biomarkers, and

even treatments may not be optimal for people in India or other non-Western countries. "Western values for cholesterol, vitamin D, or B12 may la-

bel many Indians as deficient. But are these truly diagnostic within our context? Our study aims to answer that. We are not only identifying biomarkers for healthy ageing but also building the BHARAT database — a reference for what is normal in the Indian population," Prof. Saini says.

Earlier this year, researchers from Sichuan, China, reported in *Scientific Reports* that certain life factors for heart disease, such as high levels of high-density lipoprotein cholesterol,

could signal an elevated risk in European populations but may not serve as supportive indicators in Asians.

"We see differences in inflammatory markers. For instance, inflammatory markers tend to be elevated in Indians even without acute illness. This inflammation often results from early-life infections, poor environmental or chronic nutritional and metabolic issues," Shawn T. Joseph, senior consultant, breast and neck surgical oncology, VPS Lakshmi Hospital in Kochi, says. "Applying Western cut-off risks missing early warning signs. We need to know the normal range for each marker or metabolic disease in Indian patients," he adds.

An India-specific database: BHARAT's goal is to chart this. Its database will include genomic biomarkers (like mutations linked to disease susceptibility), proteomic and metabolomic data, and biological pathways and metabolic health, and environ-

mental and lifestyle factors. Identifying early warning signs of age-related changes can enable better prediction, intervention, and potentially delay the onset of disease.

There is a need for proactive markers of health, indicators that can tell when an organ is functioning below its optimal level, even if it is not yet diseased. For instance, your liver age is more than your chronological age. To do that, researchers must be thorough, large, many-dimensional datasets and plan to take the help of artificial intelligence (AI) models.

AI and machine learning are essential to integrate and analyse layered data to see the full picture. It can simulate the impact of interventions and augment existing datasets to improve signal detection that may otherwise be missed in high-dimensional, small-sample studies. This will help us choose the most effective interventions before launching costly trials," says Tapvireesh Sethi,

professor of computational biology at the Indraprastha Institute of Information Technology, Delhi, who is also one of the investigators of BHARAT. India's population is genetically, environmentally, and socio-economically diverse. Prof. Saini anticipates a few challenges, including the difficulty of obtaining samples from healthy adults, securing long-term government and philanthropic funding, and expanding the study to collect samples from across the country.

(Rupay Khurana is science communicator and outreach lead at the National Centre for Biological Sciences, Bengaluru. khurana.rupay@gmail.com)

For feedback and suggestions for 'Science', please write to science@thehindu.co.in with the subject 'Daily page'

A new BHARAT — establishing healthy ageing parameters for the Indian population

Rupsy Khurana

We don't all age the same way, but we all do age. We intuitively recognise frailty when things start to slow down. Ageing unfolds at different rates, over time, between individuals, within and across populations. Often, it happens in bursts.

Ageing is complicated. It is driven by molecular and cellular interactions and is shaped by one's environment, lifestyle, and socio-economic conditions. This means one's chronological age often does not reflect how old one's body really is. Since researchers discovered in 1935 that ageing can be altered, they have been looking for reliable biological clues, called biomarkers, that in isolation or together can indicate how old our bodies are and how they might respond to factors such as diet, exercise, etc.

Last year, the Indian Institute of Science (IISc), Bengaluru, launched a large-scale study called BHARAT, short for 'Biomarkers of Healthy Aging, Resilience, Adversity, and Transitions', as part of its Longevity India Program. The study aims to map the physiological, molecular, and environmental indicators that drive ageing in the Indian population.

"We lack clear information on what features define or influence healthy ageing," says Deepak Kumar Saini, convener of BHARAT and professor of development biology and genetics at IISc. "We are building an information portal to understand the rules of healthy ageing in Indians."

Worldwide, life expectancy has risen significantly over the past few decades. Living longer does not mean living healthier. Studies have predicted a 168% increase in Parkinson's disease cases in India by 2050 and a 200% rise in dementia across low- and middle-income countries. Yet much of what we know about health and disease risk comes from studies in Western populations, which means the diagnostic tools, biomarkers, and

even treatments may not be optimal for people in India or other non-Western countries.



Closer look: The Indian Institute of Science's BHARAT study aims to map indicators that drive ageing in the Indian population. ISTOCKPHOTO

even treatments may not be optimal for people in India or other non-Western countries.

Gaps for patients

This limited focus has created a gap between population-based biomarkers and diagnostic cut-offs for people in the Global South. This can lead to misdiagnosis and treatments that do not reflect how diseases progress or respond to therapeutics in different groups.

"Western values for cholesterol, vitamin D, or B12 may la-

bel many Indians as deficient. But are these truly abnormal within our context? Our study aims to answer that. We are not only identifying biomarkers for healthy ageing but also building the Bharat Baseline – a reliable reference for what is normal in the Indian population," Prof. Saini says.

Earlier this year, researchers from Sichuan, China, reported in *Scientific Reports* that certain biomarkers for breast cancer, such as high levels of high-density lipoprotein cholesterol, and environmen-

tal and lifestyle factors. Identifying early warning signs of age-related changes can enable better prediction, intervention, and potentially delay the onset of disease. There is a need for proactive markers of health, indicators that can tell when an organ is functioning below its optimal level, even if it is not yet diseased. For instance, your liver age is more than your chronological age. To do that, researchers must sift through large, many-dimensional datasets and plan to take the help of artificial intelligence (AI) models.

"We see differences in inflammatory markers. For instance, C-reactive protein (CRP) levels tend to be elevated in Indians even without acute illness. This inflammation often results from early-life infections, environmental toxins, or chronic nutritional and metabolic issues," Shawn T. Joseph, senior consultant, head and neck surgical oncology, VPS Larkeshore Hospital in Kochi, says. "Applying Western CRP cut-offs risks missing early warning signs of cardiovascular or metabolic disease in Indian patients," he adds.

An India-specific database

BHARAT's goal is to change this. Its database will include genomic biomarkers (like mutations linked to disease susceptibility), proteomic and metabolic indicators (reflecting biological pathways and metabolic health), and environmen-

tal and lifestyle factors.

Identifying early warning signs of age-related changes can enable better prediction, intervention, and potentially delay the onset of disease. There is a need for proactive markers of health, indicators that can tell when an organ is functioning below its optimal level, even if it is not yet diseased. For instance, your liver age is more than your chronological age. To do that, researchers must sift through large, many-dimensional datasets and plan to take the help of artificial intelligence (AI) models.

"AI and machine learning are essential to integrate and analyse layered data to see the full picture. It can simulate the impact of interventions and augment existing datasets to improve signal detection that may otherwise be missed in high-dimensional, small-sample studies. This will help us choose the most effective interventions before launching costly trials," says Tavprites Sethi,

professor of computational biology at the Indraprastha Institute of Information Technology, Delhi, who is also one of the investigators of BHARAT.

India's population is genetically, environmentally, and socio-economically diverse. Prof Saini anticipates a few challenges, including the difficulty of obtaining samples from healthy adults, securing long-term government and philanthropic funding, and expanding the study to collect samples from across the country.

(Rupsy Khurana is science communication and outreach lead at the National Centre for Biological Sciences, Bengaluru. khurana.rupsy@gmail.com)

For feedback and suggestions

for 'Science', please write to science@thehindu.co.in with the subject 'Daily page'

Key Highlights

Aspect	Details
Full Form of BHARAT	Biomarkers of Healthy Aging, Resilience, Adversity, and Transitions
Led By	Indian Institute of Science (IISc), Bengaluru
Objective	To map physiological, molecular, and environmental indicators influencing ageing in the Indian population
Reason for Study	Western biomarkers & diagnostic cut-offs may not apply to Indian population
Unique Focus	Develop India-specific baseline for healthy ageing & disease risk



Why India Needs its Own Ageing Parameters

- Ageing is influenced by:
 - Molecular & cellular interactions
 - Environment
 - Lifestyle
 - Socio-economic conditions
- Existing global diagnostic tools:
 - Derived mostly from Western populations
 - May lead to misdiagnosis or inappropriate treatments in Indians

Global Context & Indian Gaps

Issue	Implication for India
Rise in Parkinson's & Dementia cases	Predicted 168% & 200% increase by 2050 in India
Western biomarker cut-offs	May not suit Indians (e.g., CRP levels, cholesterol, Vitamin D)
Early-life infections & toxins	Lead to different inflammatory markers in Indians
Inadequate data from Global South	Creates treatment & diagnostic gaps




India-Specific Database

BHARAT study will compile:

- ✓ Genomic biomarkers (disease susceptibility)
- ✓ Proteomic & metabolic indicators
- ✓ Lifestyle, nutrition & environmental data

Use of AI & Machine Learning:

- To integrate multi-dimensional data
 - Predict disease risk earlier
 - Improve detection & targeted interventions
- 



A NETFLIX DOCUMENTARY

DON'T DIE

THE MAN WHO WANTS TO LIVE FOREVER

ONLY ON **NETFLIX** | JANUARY 1

Why same cab ride costs more at times: How dynamic, surge pricing work

ANAGHA JAYAKUMAR

NEW DELHI, JULY 3

THE MINISTRY of Road Transport and Highways announced this week that cab aggregator companies such as Uber, Ola, and Rapido may now charge customers up to twice the base fare as the maximum fare.

The Motor Vehicle Aggregator Guidelines, 2025, notified on July 1, raised the limit from its previous ceiling of 1.5 times the base fare. "The aggregator shall be permitted to charge a minimum of 50% lower than the base fare and a maximum dynamic pricing of two times the base fare...", the guidelines said.

Individual state governments notify base fares for specific categories of motor vehicles. The Ministry has advised states to adopt these revised guidelines within three months.

Dynamic pricing

Dynamic pricing is a structural response to customer demand. It entails increasing prices when the demand for a product or service is high, and lowering them during periods of low demand.

Companies resort to dynamic pricing models to benefit from variations in the supply and demand of a product or service. This is simply market economics at work.

Dynamic pricing follows the economic theory of demand, which states that the price of a product will increase when its demand increases in relation to its supply. This can happen due to a variety of factors. Demand for cabs can go up in the business district during the evening rush hour. Rain can reduce the availability or supply of cabs.

Dynamic pricing models are widely used across industries, including entertainment, utilities, and hospitality. The e-commerce giant Amazon has a dedicated 'Automate

Pricing' tool, which allows sellers to set rules and parameters describing when and how prices may fluctuate for a range of products.

The Indian Railways, which transports more than 20 million passengers every day, first considered implementing dynamic pricing in 2006. Then Minister for Railways Lalu Prasad proposed a dynamic pricing scheme for both freight and passenger trains, impacting peak and non-peak seasons, and premium and non-premium services.

In 2016, the Railways formally adopted the 'flexi-fare' scheme, under which base fares of Rajdhani, Duronto, and Shatabdi trains would increase by 10% with every 10% of berths sold, capping at 1.5 times the original fare. Changes were subsequently made following reviews of the scheme.

Dynamic pricing models have been criticised for enabling price gouging. Airlines

have been accused of trying to cash in on high demand in certain sectors at certain times, raising fares unreasonably.

Last September, after ticketing platform Ticketmaster was accused of inflating ticket prices for a concert by the rock band Oasis on checkout, UK Prime Minister Keir Starmer had described the price hike as "depressing".

Surge pricing

While the terms dynamic pricing and surge pricing are sometimes used interchangeably, 'surge' is a part of the dynamic pricing strategy that companies employ.

Surge refers to the additional fee demanded from the consumer during periods of high demand, such as rush hours, when traffic congestion is at its peak. Such fees are also applied to utilities such as electricity, and used to help balance supply and de-

mand and prevent potential blackouts.

In the case of ride-sharing aggregators, the premise is this: Rush hours correspond with periods of increased demand for rides — and with more users in an area demanding the cab service compared to the number of drivers available, ride prices in the area surge.

Surges present the consumer with the choice of either booking the ride at the higher price or waiting for prices to come down. Surge pricing also helps attract more drivers to an area to benefit from the increased prices, which ultimately helps reduce and normalise fares.

According to Uber's website, its drivers are made aware of the surge price through a multiplier to the standard rate, an additional surge amount, or an upfront fare including the surge amount, which incentivises them to accept rides. The Uber Driver app indicates the area-wise demand spikes through a colour-coded scheme. "Light or-

ange areas represent smaller earning opportunities from surge, while dark red areas indicate larger ones," says the website.

In 2016, Wharton Business School researchers Gerard P Cachon, Kaitlin M Daniels and Ruben Lobel argued that the surge pricing model, while critiqued, did benefit Uber consumers by helping subsidise prices during off-peak times.

Their research compared the surge pricing model to a benchmark fixed price and found that it also allowed Uber to serve markets that would otherwise remain underserved under a fixed pricing model, such as consumers hailing a cab on a rainy night.

They also argued that Uber allows drivers to "self-schedule", or decide their operating schedule, allowing them to gravitate towards areas facing a driver shortage when surge prices are effective. (Cachon, Daniels, Lobel, 'The Role of Surge Pricing on a Service Platform with Self-Scheduling Capacity', SSRN, 2016)

**EXPLAINED
ECONOMICS**

Aspect	Details
Issuing Ministry	Ministry of Road Transport & Highways
Guidelines	Motor Vehicle Aggregator Guidelines, 2025
Dynamic Pricing Limit	Minimum 50% lower & maximum 2 times the base fare
Earlier Limit	1.5 times the base fare
Applicability	Cab aggregators like Uber, Ola, Rapido
State Role	States to notify base fares within 3 months



Dynamic Pricing Explained

- ✓ Structural response to changing **demand & supply**
- ✓ Prices increase when demand > supply (e.g., rain, peak hours)
- ✓ Prices decrease during low demand periods
- ✓ Rooted in **economic theory of demand & supply**

Examples Across Industries:

- Airlines
- Electricity utilities
- Entertainment (concerts, events)
- Railways (Indian Railways' flexi-fare for Rajdhani, Shatabdi, Duronto)
- E-commerce (e.g., Amazon's Automated Pricing Tool)

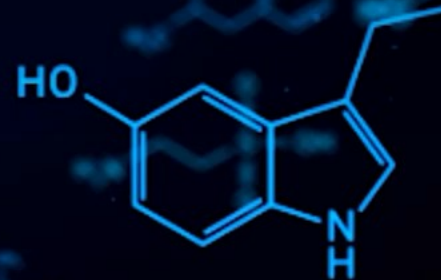
Surge Pricing	Details
Subset of Dynamic Pricing	Specific to temporary spikes in demand
Example	Rush hours, traffic congestion, rainy days
Consumer Choice	Pay higher fare or wait for demand to cool down
Uber's Practice	Drivers see a colour-coded demand map; 'light orange' = small surge, 'dark red' = large surge



Criticism & Debate

- Allegations of **price gouging**
- Public backlash (e.g., Ticketmaster concert controversy in UK)
- Airlines & Railways face similar criticisms
- Ethical concerns during **natural disasters, emergencies**



Genome Sequencing



- 
- 
- Researchers have sequenced the **first whole ancient Egyptian genome** from an individual who lived 4,500-4,800 years ago — the oldest DNA sample from Egypt to date.
 - **About**
 - DNA was successfully extracted from the **individual's teeth**.
 - The genome of the ancient Egyptian is said to be the **most complete and oldest from Ancient Egypt**.

- **Genome**

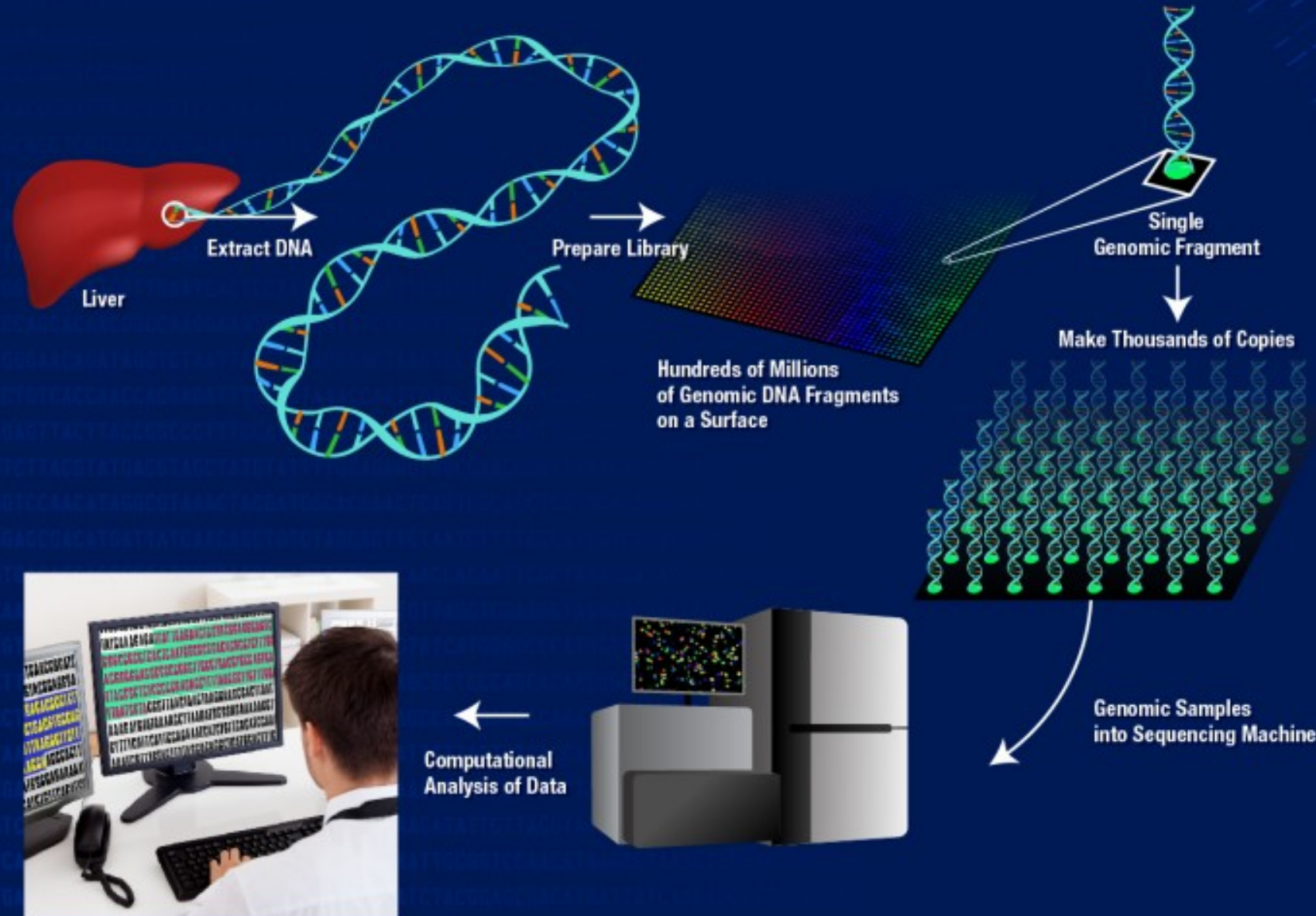
- The genome of an organism is made up of a unique DNA or RNA sequence.
- The human genome is the **complete set of genetic information for Homo sapiens**.
- It consists of **about 3 billion base pairs of DNA**, organized into **23 pairs of chromosomes**.
- Each chromosome carries a **unique set of genes**, which are sequences of DNA that **encode instructions for building proteins** and other molecules **essential for life**.

- **Genome Sequencing**

- Each sequence is composed of chemical building blocks known as **nucleotide bases**.
- **Determining the order of bases** is called “**genomic sequencing**” or, simply, “**sequencing**.”
- The information encoded in the genomes provide **researchers with unique genetic “fingerprints.”**
- The sequence tells scientists the **kind of genetic information** that is carried in a particular DNA segment

DNA Sequencing

NHGRI FACT SHEETS
genome.gov



DengiAll



-
- India has reached the **50% enrolment mark** in its first phase III clinical trial for the **indigenous tetravalent dengue vaccine, DengiAll**.
 - **About DengiAll**
 - It is **developed by Panacea Biotec Limited** under a licensing agreement with the **National Institutes of Health (NIH)**, the primary US federal agency.
 - **DengiAll** has a weakened form of all **four dengue virus subtypes** and has the same virus composition as the vaccine developed by NIH, except for the inactive ingredients.

The trial has been approved by the **Drug Controller General of India**.

A Phase I and II clinical trial conducted in India revealed a balanced and robust immune response across all four dengue virus types.

The ICMR-National Institute of Translational Virology (NITVAR) and AIDS Research (formerly ICMR-NARI) is **responsible for overall trial coordination**.

- **Dengue**
- Dengue is a **mosquito-borne viral disease** caused by the **Dengue virus (DENV)**, which has **four serotypes** (DENV-1, DENV-2, DENV-3, and DENV-4).
 - It is transmitted primarily by the **Aedes aegypti mosquito**.
- **Spread:** The virus **does not spread person-to-person directly**.
 - A mosquito becomes infected by biting a person already infected with the virus, and then can **transmit the virus to another person through a subsequent bite**.

- **Vaccine:** Dengvaxia (CYD-TDV) – approved in some countries, recommended for individuals aged 9-16 with a history of dengue infection.
- **Dengue fever is one of the top 10 threats** to global health, according to the World Health Organisation (WHO).
- **Dengue in India:** India accounts for a large fraction of global dengue cases; 2.3 lakh cases and 297 deaths were reported in 2024.

WHAT IS DENGUE?

- An infection caused by the dengue virus.
- Spread by infected mosquitoes.
- Common in parts of Central and South America, the Caribbean, Africa, the Middle East, Asia, and the Pacific Islands.

WHAT SHOULD I KNOW?

- Anyone who lives or travels to an area with risk of dengue can get infected.
- Before you travel, check to see if the country you are visiting has risk of dengue.

SIGNS AND SYMPTOMS



Fever with any of the following



Aches and pains



Rash



Nausea/vomiting

PREVENTION



Use insect repellent, and treat clothing and gear with permethrin (insecticides).



Wear loose-fitting, long-sleeved shirts and pants.



Choose a hotel or lodging with air conditioning or window and door screens.



Sleep under a mosquito net if you are outside or when screened rooms are not available.

WHEN TO SEE A DOCTOR


Seek immediate medical attention if you or a family member have any of the following symptoms:

- Belly pain or tenderness,
- Vomiting (at least 3 times in 24 hours),
- Bleeding from the nose or gums,
- Vomiting blood, or blood in poop, or
- Feeling extremely tired or restless.



SPREE 2025

-
- The Employees' State Insurance Corporation (ESIC) approved the SPREE 2025 scheme (Scheme for Promotion of Registration of Employers and Employees) during its 196th meeting held in Shimla
 - **The Scheme for Promotion of Registration of Employers and Employees (SPREE) 2025**
 - It is approved by ESIC and aims to expand social security coverage by allowing unregistered employers and employees—including contractual and temporary workers—to register digitally from July 1 to December 31, 2025, without inspections or demands for past dues.

- 
- Registration will be effective from the declared date, with no contributions or benefits applied retroactively, encouraging voluntary compliance by removing penalties and easing the process.

- **Importance**



- It seeks to bring more establishments and workers under the ESI Act, enhancing access to essential health and social benefits.
- It represents a significant step towards a more inclusive and accessible social security system, supporting ESIC's goal of universal protection and a welfare-focused labour ecosystem in India.

NCB's Operation- MED MAX

The Narcotics Control Bureau (NCB), under Operation MED MAX and in coordination with international agencies, has dismantled a transnational drug cartel operating across more than 10 countries in Asia, North America, Europe, and Oceania.

NCB: Headquartered in New Delhi, NCB is the apex drug law enforcement and intelligence agency in India, constituted in 1986 under the provisions of the Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985.

-
- The **National Policy on Narcotic Drugs and Psychotropic Substances** is based on **Article 47 of the Indian Constitution**, a Directive Principle of State Policy, which mandates the prohibition of the consumption of intoxicating drugs except for medicinal purposes.
 - **Functions and Powers of NCB:** Operates under the **Ministry of Home Affairs** and coordinates with various central and state agencies for enforcement and policy implementation.

- 
- 
- **Other Major Legislation Governing Drugs:** Drugs and Cosmetics Act, 1940, and Prevention of Illicit Traffic in NDPS Act, 1988.
 - India is a signatory to key international conventions like Single Convention on Narcotic Drugs, 1961 (as amended by 1972 Protocol), Convention on Psychotropic Substances, 1971, and UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988.

Word of the day

Woebegone:

worn and broken down by hard use; affected by or full of grief or woe

Synonyms: creaky, decrepit, derelict, flea-bitten, run-down

Usage: *That is a woebegone old shack.*

Pronunciation:

newsth.live/woebegonepro

International Phonetic

Alphabet: /'wəʊbɪɡən/

STILL CONFUSED! HOW TO PREPARE

Start from zero and take the first step
with expert guidance in our **Online Wo**

For English Medium Candidates Only



RAS Mains



Join RASonly Jaipur – Ace RAS 2025!

Looking for the best RAS offline coaching in Jaipur? Our
expert faculty, daily tests, and personalized guidance will
get you exam-ready!



Register Now

📞 9057143412



28–30, JDA Market, Shri Hans
Marg, Gopalpura Bypass Rd

Request a Free Consultation

Name

Mobile Number

E-mail address

Submit Request



+9190571 43412




info.rasonly@gmail.com



We are the team of passionate officer educators and Technocra

We Want to make your RAS jour

A blurred background image showing a group of people in a meeting or conference, with several hands raised in the air, suggesting applause or agreement. The image is out of focus, emphasizing the collective action over individual faces.

Thank you
guys.
