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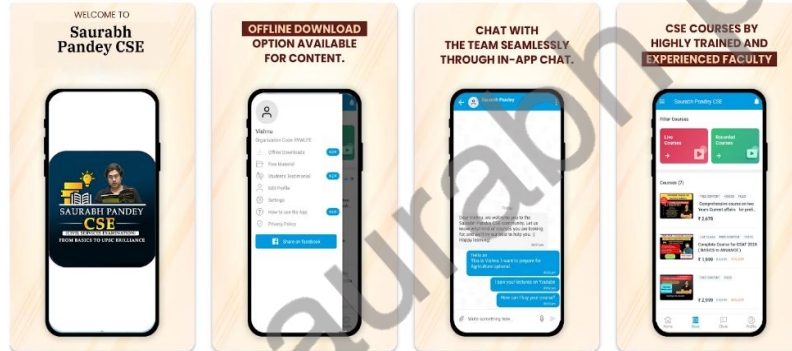
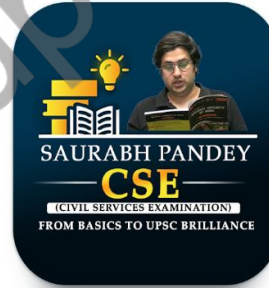
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Q Signing agreement like RELOS shows indian "all alignment " foreign policy. Discuss

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Batch-1

After years, Russia approves draft logistics agreement to be signed with India

Dinakar Peri
NEW DELHI

After being held up for several years, the India-Russia mutual logistics agreement is ready for conclusion, with Russia approving the draft agreement over the past week.

The agreement will simplify military-to-military exchanges for exercises, training, port calls and Humanitarian Assistance and Disaster Relief (HADR) efforts. It is similar to a series of such agreements that India has signed with a number of countries, beginning with the U.S. in 2016.

An official order dated June 20 was published on Russia's official legal information website, authorising the signing of the logistics agreement with India. The draft of the agreement was also published. "It's a Russian governmental decree that approves signing the agreement and makes relevant instruction to the MoD [Ministry of Defence]," a diplomatic source said, commenting

The agreement involves interaction between troops, and supply of weapons and military gear

on the order. Russian Prime Minister Mikhail Mishustin has instructed the MoD to hold negotiations with the Indian side on the draft document, sources said.

Delayed agreement

The conclusion of the Reciprocal Exchange of Logistics Agreement (RELOS) has been delayed for several years. Official sources said that this was the same agreement which has now been approved by the Russian side, and has to be signed by both sides before it can become effective. The agreement, as and when concluded, will be valid for five years and will be renewed automatically unless either party notifies the other of its desire to terminate it, sources said.

Defence cooperation is

a major pillar of the India-Russia strategic partnership and is guided by the agreement on military technical cooperation. The agreement for the decade from 2021 to 2031 was signed during the inaugural meeting of India-Russia 2+2 dialogue held in December 2021.

The cooperation agreement involves interaction between troops, and also addresses issues of the supply and development of weapons and military equipment, the Russian Ministry of Defence explained.

A Navy-to-Navy cooperation agreement along the same lines has also been in the works for some time.

Among the three services, the Indian Navy has been the biggest beneficiary of these administrative arrangements signed with several countries, improving its operational turnaround and increasing interoperability on the high seas. The agreements have been a win-win for both the parties involved.

India-Russia mutual logistics agreement (Reciprocal Exchange of Logistics Agreement (RELOS))

- **After being held up for several years, the India-Russia mutual logistics agreement is ready for conclusion, with Russia approving the draft agreement over the past week.**
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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

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 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”.

RLV LEX)

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Nuclear study provides major update on plutonium isotope fission

Researchers have reported the results of the first attempt to measure the PFNS of induced fission in Pu-240 with neutrons of energy greater than 0.85 MeV. They found significant deviations from values predicted by models, with implications for reactor design, radiation shielding, and nuclear medicine

Vasudevan Mukunth

In March 4 this year, India stepped on the threshold of the second stage of its nuclear power programme when engineers started the core-loading process of the prototype fast breeder reactor (PFBR) at the Madras Atomic Power Station, Kalpakkam. While the first stage used uranium isotopes as nuclear fuel in pressurised heavy-water reactors to produce plutonium-239 (Pu-239) and energy, the second stage is more concerned with plutonium fission.

When a Pu-239 nucleus captures a neutron, it has a 27.38% chance of becoming Pu-240 instead of undergoing fission. It is thus present in many nuclear reactors and in the fallout of nuclear weapon tests. When Pu-240 captures a neutron, it most often turns into Pu-241. On the off chance it does undergo fission, however, there is a significant amount of uncertainty about the energy carried away by its fission products. Researchers currently use models that incorporate several complicated calculations based on theory to estimate the output.

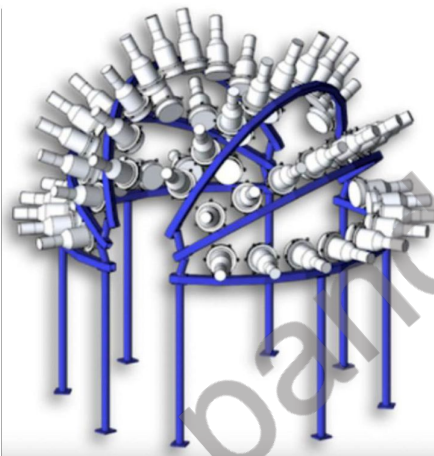
Only the second time

A part of the fission energy carried away by neutrons is called the prompt fission neutron spectrum (PFNS). The 'prompt' stands for neutrons a Pu-240 nucleus might emit right after it has captured a neutron with enough energy to destabilise it, but before the nucleus has reached a stable (or equilibrium) state.

So far there has only been one study that attempted to study the PFNS of induced fission in Pu-240, where neutrons that bombarded the Pu-240 nuclei had an energy of 0.85 mega-electron-volt (MeV). Recently, researchers in the U.S. reported only the second attempt ever to measure the PFNS of induced fission in Pu-240, and the first to use neutrons of energy greater than 0.85 MeV.

Their findings, reported in the journal *Physical Review C* on June 13, note significant differences between the predicted and the measured PFNS after induced fission. This information will be useful for researchers in various fields, from reactor designers to practitioners of nuclear medicine.

"The PFBR uses plutonium recovered from CANDU spent fuel and so will contain ample quantities of Pu-240. And if the spent fuel arising from the PFBR is reprocessed, that too will contain Pu-240," M.V. Kamana, a professor at the University of British Columbia, told *The Hindu*. "Therefore any new information



A computer-generated rendering of the liquid scintillator detector system at LANSCE. The Pu-240 sample is located at the top and the neutrons intended to bombard the sample enter from the bottom left side. U.S. DEPARTMENT OF ENERGY

about how Pu-240 behaves will be relevant."

CANDU is a Canadian design for pressurised heavy-water reactors, such as those India uses for its first stage.

A profile of Pu-240

Pu-239 is produced when U-238 is exposed to neutrons of certain energy in a reactor. Because Pu-239 captures neutrons to become Pu-240 at a fixed rate, Pu-239 left in the reactor for a certain duration will accumulate a predictable quantity of Pu-240. The two isotopes are hard to separate, so as Pu-240 builds up, the spent fuel is pulled out.

Pu-240 undergoes spontaneous fission, i.e. without 'external' neutrons striking it first, and emits alpha particles. For these reasons, the isotope is considered a contaminant of weapons-grade plutonium, where its composition by weight is restricted to under 7%. There are some ways to use higher quantities of Pu-240 to build a nuclear weapon, however.

Generally, if a mass of plutonium

substances that emit flashes of light when struck by energetic particles – arranged around the Pu-240 sample tracked its output. The Pu-240 weighed all of 20 milligrams; the researchers wrote in their paper that they used such a small sample to minimise the amount of alpha particles emitted.

With this setup, the researchers measured the energies of the neutrons emitted by the sample as well as of other fission products.

Because they were interested in particles of a specific origin (neutrons induced fission), extracting the corresponding PFNS data from the overall data required the researchers to carefully subtract contributions from spontaneous fission, alpha particles, and other sources. After doing so, they reported their analysis for incident neutrons of energies 1-20 MeV.

Updating nuclear data libraries

In addition to deviations between PFNS predicted by models and those observed in the test, the researchers also reported a higher-than-expected rate of second-chance fission of Pu-240: when a nucleus isn't fissionable but becomes so after losing a neutron. They also reported finding signs of "a smaller contribution from third-chance fission" but added that this "was difficult to observe in the data directly".

Models that predict the outputs of nuclear reactions are based on data libraries pieced together from various experiments, reactor operation records, simulations, and other sources. For example, applications of the ENDF library prepared by the U.S. National Nuclear Data Centre include research on nuclear reactors, radiation shielding design, calculating radiation dose in nuclear medicine, investigating the trafficking of nuclear materials, and to understand the origins of elements in the universe. Other such libraries are JEFF-3.3, prepared by the OECD's Nuclear Energy Agency, and JENDL-5.0, by the Japan Atomic Energy Agency.

contains more than 19% of Pu-240, it is considered to be reactor-grade rather than weapons grade.

The test setup

The new findings are based on a test conducted by researchers at the Los Alamos Neutron Science Centre (LANSCE) in the U.S. They struck a tungsten disc with pulses of protons, which produced neutrons of energy 0.01-800 MeV. Those neutrons moving 15 degrees to the left of the proton beam were redirected to a chamber containing 99.875% pure Pu-240.

An array of liquid scintillators –

THE GIST

▶ A part of the fission energy carried away by neutrons is called the prompt fission neutron spectrum. 'Prompt' stands for neutrons Pu-240 might emit right after it has captured a neutron with the energy to destabilise it

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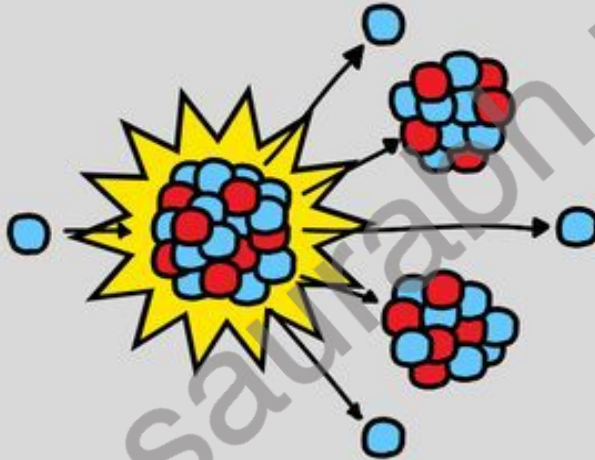
plutonium isotope ☐ fission

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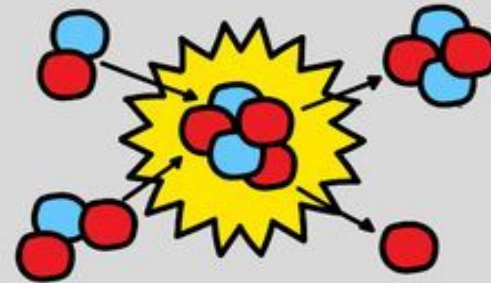
Fission vs Fusion

Both fission and fusion release vast amounts of energy, but they do it in different ways.

Fission is the splitting of a large atomic nucleus into smaller particles.



Fusion is the combination of light atomic nuclei to form a heavier nucleus.



- When a Pu-239 nucleus captures a neutron, it has a 27-38% chance of becoming Pu-240 instead of undergoing \square fission.
- It is thus present in many nuclear reactors and in the fallout of nuclear weapon tests. When Pu-240 captures a neutron, it most often turns into Pu-241.
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WHAT IS IT?

Complex PTSD: When trauma persists...

Karthik Vinod

Around 4% of the world's population has suffered post-traumatic stress disorder (PTSD) at some point, according to the World Health Organisation (WHO).

PTSD is often associated with war veterans, survivors of sexual violence and typically anybody who has lived through a life-threatening situation. They often experience anxiety, flashbacks, and nightmares. But health workers have also recorded PTSD symptoms among people who have suffered repeated bullying, emotional abuse, and/or neglect. These individuals include children bullied or gaslighted since a young age and someone who has suffered domestic abuse for many years. They are said to have complex PTSD, or cPTSD.

For these individuals, flashbacks and nightmares are only the tip of the iceberg of symptoms. As a result of the lack of a nourishing living environment, they have been known to develop a crippled sense of self. Apart from anxiety issues rooted in a negative self-image and/or issues with self-confidence, they also display a difficulty trusting other people and trouble maintaining friendships or romantic relationships.

cPTSD was listed as a standalone



cPTSD was listed as a standalone diagnosis in the 11th edition of the International Statistical Classification of Diseases and Related Health Problems in 2018 ADRIAN SWANCAR/UNSPASH

diagnosis in the 11th edition of the International Statistical Classification of Diseases and Related Health Problems, or ICD-11, in 2018. In 2019, the WHO also recognised cPTSD as a separate mental health disorder.

We don't yet know how prevalent cPTSD is in the general population. Researchers have estimated it is 1-8%.



For feedback and suggestions

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BIG SHOT



▲ A Long March-2C rocket carrying the Space Variable Objects Monitor (SVOM), a satellite developed by China and France, takes off in Sichuan province of China on Saturday. SVOM will study gamma-ray bursts. Shortly after launch, a booster from the rocket dropped over a populated area in Guizhou province as people ran for cover. VIA REUTERS

SVOM

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- SVOM will study gamma-ray bursts.

- **The SVOM mission (Space-based multi-band astronomical Variable Objects Monitor) is a Franco-Chinese mission dedicated to the study of the most distant explosions of stars, the gamma-ray bursts.**
- **It is to be launched end 2023 by the Chinese Long March 2C rocket from the Xichang launch base.**
-

- It is the result of a collaboration between the two national space agencies, CNSA (China National Space Administration) and CNES (Centre national d'études spatiales), with the main contributions of the Institute of Research into the Fundamental Laws of the Universe (Irfu) and the Research Institute of Astrophysics and Planetology (IRAP) for France and the National Astronomical Observatory (NAO) and the Beijing High Energy Institute (IHEP) for China.

Create the space for governance with a green heart



As a new term begins for the government and the Lok Sabha, it must have green concerns close to the heart. While we have never had a government that truly put the environment first, the last one, which was in pursuit of its 'development' agenda, proved to be actively inimical to the interests of the environment. For more than a dozen years, Environment Ministers have been concerned primarily with the welfare of mining, oil, coal, highways, and power industries. India stands on the cusp of severe environmental degradation, which can only be arrested by the conscious adoption of green policies even as the country pursues the goal of becoming a middle-income economy. These are the areas that need to be addressed urgently.

Greater vulnerability

Climate change is something India's leadership mentions often but does little to engage with (with the limited exception of promoting the solar energy industry). Even as energy consumption soars, no steps have been taken to consciously pursue an agenda of cutting down emissions. More importantly, the remedial aspects of climate change which include building resilience, food security, and access to essentials have fallen far behind in priorities. As floods, famines, heatwaves, wildfires, water shortages and droughts become increasingly common, contingency plans must be put in place to protect vulnerable populations and diminish harm. From updating building guidelines to preserving natural storm barriers such as mangrove forests, to establishing funds for evacuation and rehabilitation, these are the tasks that the Ministry of Environment, Forest and Climate Change has had no time for recently.

First, forest cover, India has one of the world's lowest levels of green cover per capita. It has only 28 trees per headcount of the populace, in contrast with Canada's 8953 or even China's 130. Qualitatively important forest cover has



Satyajit Sarna

a practising lawyer
in New Delhi



Arun Srikumar

a practising lawyer
in New Delhi

A conscious focus on green policies is crucial as environmental issues in India impact the survival and the health of millions

decreased significantly in the last 20 years, and the less said about urban forestry the better. The damage to our forests has been covered up with questionable accounting, which includes plantation forests and tree cover in urban centres. Recent legislation such as the Forest (Conservation) Amendment Bill, 2023, which was legislation ramrodded through the outgoing Parliament, needs to be rolled back and robust new protections put in place.

Second, unliveable cities. The metropolitan centres of India have overgrown any plans that were laid for them. Delhi, Mumbai and a large swathe of tier 2 and tier 3 cities across the Gangetic belt now have unacceptable levels of air pollution, destroying the lifespans of their residents. Bengaluru and Delhi are running out of water, and the poor have to queue for hours to have access to the bare minimum. The rivers that brought life to cities, such as the Adyar in Chennai or the Yamuna in Delhi, have become open sewers. Green spaces and water bodies in cities have been built over, which has created heat islands. Smaller cities have more manageable problems, but without timely intervention, will reach the same crisis levels as the metros. Sewage treatment specifically requires a major national overhaul as Indian cities treat only approximately 28% of the sewage they generate.

Destruction in the Himalayas

Third, concerns in the Himalayas. Climate change has had outside repercussions in the mountains of India. Glaciers are rapidly receding, and in some places, have disappeared. Up to 80% of their volume is forecast to disappear in this century. Rainfall and temperature patterns have changed beyond recognition. This impacts the water and food security of not just the people of the mountains but also of much of North India. When thousands of Ladakhis fasted and protested to demand governmental action they were ignored – perhaps because they held no

votes. Similar concerns arise for wetlands – whose importance has never been greater – and other marginal landscapes which are critical for biodiversity as well. Fourth, public participation. At the root of many of these problems is the Indian government's age-old refusal to listen to stakeholders and affected persons.

Environmental Impact Assessment (EIA) mechanisms have become mere checkboxes to be ticked for all projects. Protests are swept aside, criticism is ignored, and the absence of a meaningful Opposition has resulted in rapid, ill-considered steps being taken. The Char Dham Highway project is an example. Passed through amidst a barrage of small EIAs, the grandiose scheme has caused irreparable harm to the river valleys of Uttarakhand. The deforestation and erosion caused has created additional unforeseen risks, best exemplified by the tunnel collapse of November 2023. More importantly, the sanctity of the EIA Notification of 2006 has been watered down over the last five years with hundreds of amendments. EIA mechanisms need to be elevated to statutory status, so that they are beyond such sabotage.

Restore genuine conservation

Fifth, greenwashing. Ill-advised policies, which have been driven by commercial interest, such as green credits and compensatory afforestation, have taken the place of genuine conservation efforts. Sustainable development does not mean that only commercially profitable steps may be taken by the government. Enforcement mechanisms and bodies also need more teeth so as to ensure genuine environmental rule of law.

These are not luxury concerns. They impact the survival and the health of millions. The absence of these issues from the election manifestos of the major political parties was bitterly disappointing. But it is not too late. If the government is to truly be the steward of the people, it must start by taking a hard look at the physical health of the country.

Environment and Governance

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- **Qualitatively important forest cover has decreased significantly in the last 20 years, and the less said about urban forestry the better**

- **Second, unliveable cities.**
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- **Bengaluru and Delhi are running out of water, and the poor have to queue for hours to have access to the bare minimum. The rivers that brought life to cities**

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- **Sustainable development does not mean that only commercially profitable steps may be taken by the government.**
- **Enforcement mechanisms and bodies also need more teeth so as to ensure genuine environmental rule of law.**

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 Bhartruhari 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 95(1) 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 President. The Speaker *pro tem* administers oath of office to other MPs



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

and presides over the election of full-time Speaker. In the 18th Lok Sabha, Bhartruhari 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 Deputy Speaker is held on a date fixed by the Speaker.

What is the role of the Speaker?

Apart from the conduct of business, the Speakers perform two important constitutional functions of certifying a Bill to be a Money Bill (over which the Rajya Sabha has limited role), and deciding on disqualification under the Tenth Schedule for defection. In discharging these roles in the past, the Speakers have invariably favoured the ruling dispensation, something that should be avoided.

The Lok Sabha rules provide the Speaker with the powers of referral of Bills introduced to Standing Committees and suspension of members for grave disorder up to a maximum of five days. Referral of Bills to committees have

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 'Polity Simplified'. He currently trains civil-service aspirants at 'Officers IAS Academy'. Views expressed are personal.

THE GIST

▼ The President has appointed seven-time MP Bhartruhari 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.

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 95(1) 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 President.**
- **The Speaker pro tem administers oath of office to other MPs and presides over the election of full-time Speaker.**
- **In the 18th Lok Sabha, Bhartruhari 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 Deputy Speaker is held on a date fixed by the Speaker.**

What is the role of the Speaker?

Apart from the conduct of business, the Speakers perform two important constitutional functions of certifying a Bill to be a Money Bill (over which the Rajya Sabha has limited role), and deciding on disqualification under the Tenth Schedule for defection.

In discharging these roles in the past, the Speakers have invariably favoured the ruling dispensation, something that should be avoided.

The Lok Sabha rules provide the Speaker with the powers of referral of Bills introduced to Standing Committees and suspension of members for grave disorder up to a maximum of five days..

- **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'.

- **. 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**



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 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.

THE GIST

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

Is the European Union's 'chat control' law undermining online privacy?

The EU's proposal to thwart child sexual abuse online could potentially create a backdoor for authoritarian governments to snoop on citizens. Some tech companies, along with trade associations, and privacy experts have all vehemently opposed the regulation

Poulomi Chatterjee

The story so far: The European Union's proposed 'chat control' law has become a bone of contention between members of the bloc. First proposed by the European Commissioner for Home Affairs Ylva Johansson in May 2022 as part of the bloc's push to combat child sexual abuse online, the framework of the bill has now gone under fire, earning itself a derisive term 'Chat Control'. France, Germany and Poland have partially refused to accept a clause that allows for mass scanning of private messages by breaking end-to-end encryption. Some tech companies, along with trade associations, and privacy experts have all vehemently opposed the regulation. On the other hand, the Interior Ministers of Spain and Ireland have supported the proposal. Separately, a network of organisations and individuals, advocating for children's rights in Europe, have lashed out at EU leaders for failing to tackle child sexual abuse online.

What are the concerns of those against the proposal?

Scanning end-to-end encrypted messages has remained a controversial issue that's because there is no way to do this without

opening up backdoors that can be accessed by third parties who can exploit the vulnerability, in turn ending the promise of end-to-end encryption. The firms that have tread the encryption bypassing path have often been made to retreat. In 2021, Apple announced NeuralHash, a feature that could automatically scan iCloud photo libraries of individual devices for Child Sexual Abuse Material (CSAM). Employees and activist groups expressed concerns over the loss of privacy. A year later, Apple said it had abandoned the initiative. Another looming issue the iPhone maker recognised in the process was how authoritarian governments could potentially misuse the feature by using it as a tool to target individuals who oppose the regime.

Erik Neuenchwander, Director of user privacy and child safety at Apple, admitted this in a note, "It would [...] inject the potential for a slippery slope of unintended consequences. Scanning for one type of content, for instance, opens the door for bulk surveillance and could create a desire to search other encrypted messaging systems across content types. When bringing in a similar clause through the UK's Online Safety Bill, lawmakers attempted to make way for client-side scanning of private and

encrypted messages. The proposal was postponed after receiving pushback from encrypted messaging app owners like WhatsApp and Signal. The duo threatened to leave the UK, if such a law was passed. In its final stages, in September, 2023, the House of Lords considered the potential security threat that the clause would bring saying it would not implement scanning until it was "technically feasible."

What is the status of the EU's chat control law?

On June 30, a new draft of the proposal is set to be reviewed. Legislators have felt the idea of scanning text messages and audio, and are instead targeting shared photos, videos and URLs with an adjustment to appease the naysayers.

Another tweak in the making could be people's consent in sharing material being scanned before being encrypted. But this compromise has been largely called out as a farcical one. A report by Euractiv which has been confirmed by internal documents shows that if a user refuses the scanning, they will simply be blocked from sending or receiving images, videos and links hardly leaving them with a choice. Despite these measures, EU's enforcement of such regulations have seen elements attempt to make way for 2023, the European Commission

reportedly published a proposal to amend the regulation on a temporary derogation of the E-Privacy Directive against CSAM. Under the regulation, specific online communications service providers were allowed to sift through or scan messages to detect, report and remove online CSAM and content that solicits children. The regulation is set to expire in early August. The initial plan on the table was to simply extend this regulation for another three years. But, according to media reports, plans for further extensions were stalled in February this year.

Meredith Whittaker, President of Signal app called the measures to assuage concerns as "cosmetic", and has signed a joint statement along with a group of over 60 other organisations like Mozilla, Proton, Surfshark and Tuta, voicing out her concerns. Ms. Whittaker has echoed her earlier warning saying Signal will leave the UK, rather than undermine end-to-end encryption.

A blog, co-authored by Riana Pfefferkorn, a research scholar at the Stanford Internet Observatory and Callum Voge, director of government affairs and advocacy at the Internet Society, notes, "If government surveillance is a concern in an established democratic entity like the EU, what hope is there for beleaguered democracies like Turkey, India and Brazil, much less autocracies?"

“Chat Control”

- **The European Union’s proposed ‘chat control’ law has become a bone of contention between members of the bloc.**
- **First proposed by the European Commissioner for Home Affairs Ylva Johansson in May 2022 as part of the bloc’s push to combat child sexual abuse online, the framework of the bill has now come under fire, earning itself a derisive term “Chat Control”.**
- **France, Germany and Poland have particularly refused to accept a clause that allows for mass scanning of private messages by breaking end-to-end encryption.**

Are heatwaves natural disasters?

Who decides which disasters qualify for relief and aid? Are all heatwave deaths reported and counted?

Jacob Koshy

The story so far

North India has been bearing the brunt of the longest stretch of a heatwave in the last 15 years. Figures from the Ministry of Health and Family Welfare suggest that at least a 100 have died from heat-related illnesses from March 1 to June 18 across India though this is likely to be significantly under-reported. The high number of deaths have revived discussions on labelling heatwaves as a natural disaster.

Are heatwaves a natural disaster?

The National Disaster Management Act (NDMA) is the legislation governing the roles of the Centre and States in responding to a natural disaster. The Ministry of Home Affairs is the nodal body that governs the execution of this Act. Several disaster management authorities draw their powers from this legislation and they define which natural calamities qualify for state-backed compensation. The legislation is also the genesis of special funds – at the State level and the Centre – that can be drawn upon for a disaster.

As of now, 12 disasters are listed in the Guidelines on Compensation and Administration of the State Disaster Response Fund (SDRF) and National Disaster Response Fund (NDRF), namely cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves. Heatwaves are not included and this has to do with a government body that is unconnected to institutions under the NDMA.

Which is this body?

The 15th Finance Commission, the constitutional body that decides upon the revenue sharing between the Centre and States, had in its report "observed" that the list of natural disasters eligible for funding from SDRF and NDRF covers the essence of the State disaster codes and thus did not find merit in the request to expand its scope. States have appealed to the Finance Commission to expand the scope of natural calamities that can be considered a disaster as this makes them eligible for more funds.

However, in terms of the aforesaid guidelines, a State Government can use up to 10% of the annual fund allocation of the SDRF, with certain caveats, for providing immediate relief to the victims of natural disasters, other than the aforesaid 12 disasters, that they consider to be "disasters" within a local context in the State.

Thus, compensation awarded to those succumbed to heatwaves comes from these funds. The 16th Finance Commission headed by economist Arvind Patangarya may revive fresh requests by States.

Are heatwave deaths rising in India?

Heatwave deaths in India decreased from 1,127 in 2017 to 374 in 2021, according to data from the National Crime Records Bureau, though these are classified as "accidental deaths". In 2022, 33 deaths were reported, in 2023, none, and in a year at least a 100 have been confirmed. While these are fewer than the 1,100 deaths in Andhra Pradesh in 2016, longer spells of heatwaves are becoming more frequent. State health departments are tasked with furnishing information to the Centre on heatwave-related illnesses and deaths. A challenge with classifying deaths due to heatwaves is that in several cases, people succumb under the combined impact of high temperatures and existing comorbidities such as cardiovascular disease or hyper-tension. Secondly, there are varying definitions of a heatwave. While temperatures above 45 degrees Celsius are considered to have these conditions, it can also mean temperatures that are 4-5 degrees or more above normal for any place. Several places in the Himalayan States with temperatures in the mid-30s have reported heatwaves, because it is several degrees above normal. There have been no official reports of heat-related deaths in these places. In most years, Andhra Pradesh, Odisha, Telangana, Gujarat, Rajasthan are the States that report most casualties from heat. There are medical guidelines to help doctors declare, or rule out, suspected cases of heatwave illness but these are often applied unevenly.

What measures do States have in place?

With the frequency of heatwaves rising, State, district, and cities have prepared heat action plans (HAPs). The NDMA and the India Meteorological Department are working with 23 States to develop HAPs. IAPs provide a snapshot of a region's heat profile including information on the number of past heatwave events, yearly trends in the summer maximum temperature, land surface temperature, and so on, followed by a vulnerability assessment which maps out regions that require immediate attention and a response plan.



Are heatwaves natural disasters?



Are heat waves a natural disaster?

- **The National Disaster Management Act (NDMA) is the key piece of legislation governing the roles of the Centre and States in responding to a natural disaster.**
- **The Ministry of Home Affairs is the nodal body that governs the execution of this Act. Several disaster management authorities draw their powers from this legislation and they define which natural calamities qualify for state-backed compensation.**
- **The legislation is also the genesis of special funds — at the State-level and the Centre — that can be drawn upon for a disaster.**

- **As of now, 12 disasters are notified in the Guidelines on Constitution and Administration of the State Disaster Response Fund (SDRF) and National Disaster Response Fund (NDRF), namely cyclone, drought, earthquake,, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves.**
- **Heatwaves are yet to be included and this has to do with a government body that is unconnected to institutions under the NDMA.**

Which is this body?

- **The 15th Finance Commission, the constitutional body that decides upon the revenue sharing between the Centre and States, had in its report “observed” that the list of notified disasters eligible for funding from SDRF and NDRF covers the needs of the State to a large extent and thus did not find merit in the request to expand its scope.**
- **States have appealed to the Finance Commission to expand the scope of natural calamities that can be considered a disaster as this makes them eligible for more funds.**

- **However, in terms of the aforesaid guidelines, a State Government can use up to 10% of the annual fund allocation of the SDRF, with certain caveats, for providing immediate relief to the victims of natural disasters, other than the aforesaid 12 disasters, that they consider to be ‘disasters’ within a local context in the State.**
- **Thus, compensation awarded to those confirmed by State authorities as having succumbed to heatwaves comes from these tranche**

What can the Railways do to stop accidents?



What led to the mishap involving the Kanchanjunga Express in north Bengal? What is the protocol when automatic signals are not working? Would the Kavach system have averted a collision? Why is it taking time to be installed? What about manpower shortage?

R.K. Radhakrishnan

The story so far:

In June 17, a train accident killed 10 people and injured over 40 near New Jalpaiguri in West Bengal, about 600 km from Kolkata. The mishap was caused when a goods train hit the 12174 Down Agarata Sealdah Kanchanjunga Express in the rear at 8.55 a.m. The two trains were manually cleared to run in the same block section, a mere 15 minutes apart, since automatic signalling was malfunctioning between the Ranipatra and Chattr Hat stations which fall under the Northeast Frontier Railway.

What was initial response of Railway Board?

The Railway Board initially said the *prima facie* cause of the accident was that the loco pilot of the GFCJ container train (goods train), who died in the accident, disregarded the Railways' General and Subsidiary Rules (G&SR) and proceeded at normal speed which led to the collision with the Kanchanjunga Express. The Railways has ordered a statutory inquiry.

Who is at fault?

The Railway Board initially blamed the loco pilot of the goods train; this was later rescinded, but the damage had already been done. It is impossible to operate a train across a block section on the instruction of one person; there's a chain of command and a list of procedures that need to be followed. For instance, the station masters of stations between which a train is running, the section controller (who is stationed at the divisional headquarters and monitors all rake movements), the signal staff and the gatemen between the stations have to be

It is impossible to operate a train on the instruction of one person; there's a chain of command and a list of procedures

informed in a particular manner, and a line clearance obtained before a train leaves a station. If there is a discrepancy – like an automatic signal failure, for example – it has to be immediately escalated. In this case, the Katihar division (where the accident occurred) Railway Manager Surendra Kumar stated on record that the gatemen had informed Rangapani station about the goods train on the same track as the Kanchanjunga Express. An inquiry will take into consideration this statement, and explore who all were privy to this information. While the inquiry will establish the shortcomings which led to the accident, the Railways has often been seen to take action against lower level staff, while officers at higher levels have gone scot-free after accidents.

Is signal failure a routine event?

In a paper, 'Analysis Report by High Level Safety Review Committee,' (2017), Mukesh Mehrotra, a chief signal engineer, noted that only 3% of the accidents in Indian Railways are due to "failure of equipment." During signal failure, trains can be operated under caution. The station master issues a TA-912 notice, which authorises loco pilots to cross a signal in red during signal failures, and a 'line clear' ticket, under the G&SR. The combination empowers the loco pilot to move forward. In this situation, the rule book says that the "driver shall proceed cautiously, so as to stop short [at] any obstruction." But if there is no prior indication that a signal is defective and the loco pilot suddenly encounters a red signal (stop sign) when the train is on the move, the loco pilot has to stop at the defective signal for a minute during day time, and for two minutes during night time. After this, the loco pilot is expected to proceed with extreme caution at a speed of 15 kmph. This procedure is not applicable when a 'line clear' ticket has been issued. Trains are not detained at wayside stations till the signals are set right. The only rule is that there should be only one train between two block sections at any given point of time. Another train can enter only after this train has left that block section.

Would Kavach have prevented the accident?

Yes. But the much-touted anti-collision device, Kavach, was not installed on this route. Kavach would have slowed down the freight train (it was moving at 45 kmph at the time of accident) as the automatic braking system would have become operational. However, progress on implementation of Kavach has been slow because of lack of vendors. According to the Railway Board, the Kavach system is operational in only 1,500 km. The entire Railways spans

nearly 68,000 km.

Railway accidents are rare if one takes this statistic into consideration: a minuscule 0.03 accidents happened per million km in both 2020-21 and 2021-22. But this number becomes infructuous if we consider the fact that there were 34 consequential train accidents in 2021-22 in which nine were killed and 45 injured. In 2022-23, however, there were 48 consequential train accidents. In fact, June 2023 witnessed the worst train accident in about two decades in Balasore, where nearly 300 passengers died.

How big of a role does human failure play?

Human failure is a major reason for accidents. In fact, almost all accidents in the recent past have listed human failure as one of the reasons. This includes the derailment of two passenger trains at Kothavalasa railway station (near Vizianagaram) in 2023; the disastrous accident in Balasore involving the Chennai-bound Coromandel Express, the Bangalore-Howrah Express and a goods train; and the 2018 derailment of the New Farakka Express.

But this is not applicable in this case. The crew of the GFCJ container train had complete rest before they signed on in the morning of June 17. Loco pilot Anil Kumar, who died in the accident, signed in at 6:44 am after a night off (he had more than 30 hours of rest). His assistant, ALP Monu Kumar, signed in at 06:42 am. His last sign-off was at 1 pm on June 15.

This cannot obliterate the fact that there are thousands of vacancies across Indian Railways for loco pilots. On June 20, the Indian Railways has pegged the vacancies at 18,799.

What more needs to be done?

Several committees have closely examined the question of Railway safety. While some of the recommendations have been accepted, others have not been considered for implementation. For instance, one of the most important recommendations of the Kakodkar Committee is related to division of responsibilities: "Three vital functions (rule-making, operations and the regulation) are all vested in the Railway Board. There is need for an independent mechanism for safety regulation." The Committee recommends the creation of a statutory Railway Safety Authority with enough powers to have a safety oversight on the operational mode of Railways." At a macro-level, Ramesh Subramanian (Evolution and Diffusion of ICTs in Indian Railways: A Historical Analysis, 2022) argues that since "Indian Railways' fortunes are vastly dictated by political needs rather than profitability," capital available to be invested in newer technologies is limited. The Indian passenger cannot afford massive expenses for modernising the system.

Hence, the Union government has to prioritise. For starters, it needs debates in Parliament to forge a political consensus on the direction of growth of Indian Railways.



Tragic event: The remains of a goods train which rammed into the Kanchanjunga Express, near New Jalpaiguri station, West Bengal on June 17. AP

What can the Railways do to stop accidents?

- **During signal failure, trains can be operated under caution.**
- **The station master issues a TA-912 notice, which authorises loco pilots to cross a signal in red during signal failures, and a ‘line clear’ ticket, under the G&SR.**
- **The combination empowers the loco pilot to move forward. In this situation, the rule book says that the “driver shall proceed cautiously, so as to stop short [at] any obstruction.”**

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- **The Indian passenger cannot afford massive expenses for modernising the system**

Where does India stand with respect to G-7?



What was on the agenda of the recent Group of Seven meet in Italy? How many times has India been invited? As a key player in the Global South, is its voice heard? What are some of the criticisms against the grouping?

Suhasini Haidar

The story so far:

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

What was the G-7 summit hoping to achieve?

Bridging differences between the “West and the Rest”, finding new ways to fund support for the Ukraine war, investing in Africa and grappling with migration, climate change and artificial intelligence challenges, were all on the agenda for G-7 leaders. They agreed to make \$50 billion more available for Ukraine, carving it out from frozen sovereign wealth funds of Russia, held a special “Energy for Growth in Africa” summit to spur investments in clean energy, attacked

It remains to be seen whether India will continue to accept a spot on the G-7's margins

China for coercive trade practices, and met with leaders of 10 countries, including India, and multilateral organisations, as part of the “G-7 Outreach”, to discuss the concerns of the Global South. Apart from substantive issues, the G-7 grouping has also been trying to battle its own image, as a tired set of countries representing the old world of the ‘western elite’.

It was also widely commented upon that apart from Italian Prime Minister Giorgia Meloni, whose party did well in this month's European Parliament elections, all other G-7 leaders are battling tough election campaigns with sagging approval ratings.

How important is India to the G-7 process?

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

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

Is it an important platform for India?

For India, the outreach session of the G-7 meeting, that follows a day after the main G-7 deliberations, has always been an important platform to showcase its achievements and outlook to the world. The importance of the event and India's participation can be gauged from the fact that Ms. Meloni called Mr. Modi during the election campaign to ensure his participation, and he travelled to Italy just four days after his swearing-in and even before he had proven his majority in Parliament. During the outreach session, Mr. Modi spoke about the

importance of the Indian elections, which he called the “victory of the democratic world”, and the importance of harnessing technology and artificial intelligence to bridge global inequality, as well as a roadmap to fight climate change. He said it was important to pay heed to the Global South's concerns, as it bears “the brunt of global uncertainties and tension”, a reference to how the developing world looks at unilateral sanctions as well as food, fertilizer and energy security. Mr. Modi spent most of his time in bilateral meetings and held talks with U.K. Prime Minister Rishi Sunak, French President Emmanuel Macron, German Chancellor Olaf Scholz, Japan Prime Minister Fumio Kishida and Ms. Meloni. He also met with Ukraine President Volodymyr Zelenskyy, who was a special invitee, and after the photo-op with all the leaders, he spent a few minutes with U.S. President Biden.

He released a less cordial photo of his exchange with Canadian Prime Minister Justin Trudeau, reflecting the poor state of bilateral ties, but the G-7 outreach gave him the opportunity to meet global leaders and set priorities for his new term in office.

What is the future of G-7?

The G-7 is increasingly under attack for being an elitist, non-inclusive group, that doesn't include three of the world's top 10 economies, China, India and Brazil, or representation from the rest of the world, like the G-20 does, for example. In addition, the G-7, which has not increased its membership (in fact, it decreased it, by dropping Russia in 2014), is increasingly being challenged by a grouping like BRICS, that has now doubled its size from the original Brazil-Russia-India-China-South Africa grouping to include other countries and energy majors like the UAE, Saudi Arabia, Iran, as well as Egypt and Ethiopia. That the G-7 has been unable to change the course of Russia's invasion of Ukraine, or stop Israel's devastating bombardment of Gaza, or deterred China from its inroads into global connectivity and infrastructure and economic influence, is raising more questions about its relevance.

It remains to be seen how the G-7, which may have a different composition of leaders, given impending elections in the U.K. and the U.S., stands up to the challenge to re-invent itself as an effective grouping. It will next convene for the annual summit in Canada's Alberta region in 2025; the question is whether India will continue to accept a spot on its margins.



Way forward: Prime Minister Narendra Modi with United Kingdom Prime Minister Rishi Sunak at the G-7 Outreach Summit, in Apulia on June 14, 2024.

Where does India stand with respect to G-7?

Leaders of the Group of Seven, the U.S., Canada, Germany, France, Japan, the U.K. and Italy, met in Italy's Apulia region from June 13-15, along with the European Union leadership.

What was the G-7 summit hoping to achieve?

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

- **India is not only a key member of the Global South, and has hosted the “Voice of Global South” conference since 2023, it is also a member of the G-20 troika, along with Brazil and South Africa.**
- **Besides, Prime Minister Modi is a central figure at such outreaches, though India is not a member of the G-7.**

Saurabh Pandey UPSC



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

Is it an important platform for India?

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Saurabh Pandey CSE

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An ancient centre of learning

Nalanda University

Years-long efforts to re-establish the 'Mahavihara', known as the first international residential school in the world and home for learned monks and teachers, from Nagarijuna to Aryabhata, came to fruition last week as Prime Minister Narendra Modi inaugurated a specially-designed new campus in Bihar

Sreeparna Chakrabarty

“Learning is being here,” calls out the rejuvenated Nalanda University, situated besides the picturesque Rajgir hills, about 90 km east of Patna in Bihar. An apt description for a place which is known as the first international residential school in the world, established roughly 500 years before the famed Oxford University. Prime Minister Narendra Modi inaugurated a new campus of the varsity on June 19.

Although its history goes back to the times of the Buddha, the 'Nalanda Mahavihara', as it was known then, was founded in the 5th century CE by Emperor Kumaragupta, and it flourished for the next 700 years, promoting a syncretic learning experience.

The first residential university of the world was sustained by the conscientiousness of the learned monks and teachers, which included masters such as Nagarjuna, Aryabhata and Dharmakirti. At its peak, it is believed to have possessed 2,000 teachers and 10,000 students.

Chinese travellers Hsien-Tsang, who wrote detailed accounts about the university and was a student there himself for five years, says in his memoirs that there was a rigorous oral entrance test for students who wished to enrol and only about 20% qualified. The subjects that were taught at Nalanda included Buddhist scriptures (of both Mahayana and Hinayana schools), philosophy, theology, metaphysics, logic, grammar, astronomy and medicine.

The varsity attracted scholars to its campus from places as distant as China, Korea, Japan, Tibet, Mongolia, Sri Lanka, and South East Asia. Those scholars have left records about the ambience, architecture, and learning at Nalanda, as well as about the profound knowledge of Nalanda teachers. The most detailed accounts have come from Chinese scholars.

The ruins of the seat of learning were first rediscovered in 1812 by Scottish surveyor Francis Buchanan-Hamilton. Later, in 1861, it was officially identified as the ancient



PHOTO CREDIT: PTI

university by Sir Alexander Cunningham. It was in March 2006, while addressing a joint session of Bihar State Legislative Assembly, that the late former President, Dr. A.P.J. Abdul Kalam, proposed the revival of the ancient university.

The ruins of the university had till then been a mere fascinating subject for historians and archaeologists.

Concurring ideas came simultaneously seeking the re-establishment of Nalanda: from the Singapore government; the leaders of 16-member states of the East Asia Summit (EAS) in January 2007 in the Philippines; and from the fourth East Asia Summit, in October 2009 in Thailand, according to the University website. Parliament of India passed the Nalanda University Act, 2010, and in September 2014, the first batch of students were enrolled.

Master plan

In total, 17 countries other than India – Australia, Bangladesh, Bhutan, Brunei, Cambodia, China, Indonesia, Laos, Mauritius, Myanmar, New Zealand, Portugal, Singapore, South Korea, Sri Lanka, Thailand and Vietnam – have helped set up the University. Ambassadors of these countries

attended the inauguration of the campus by Mr. Modi.

In 2013, the master plan for the campus, proposed by renowned architect B.V. Doshi's Vastu Shilpa Consultants, was chosen after an international competition. Built at an initial cost of ₹1,800 crore (\$210 million) and spread over 485 acres, it is a large carbon footprint-free Net-zero campus. The design and architectural elements of the new campus are inspired by the original monasteries and buildings at the Nalanda Mahavihara. It includes over 100 acres of water bodies (Kamal Sagar ponds), an on-grid solar plant, a domestic and drinking water treatment plant, and a water recycling plant as well as over 100 acres of green cover. The University also has a 250-capacity Yoga Center, a state-of-the-art auditorium, library, an archival center and a fully equipped sports complex.

The university's Visitor is the President of India. The chancellor and chairperson of the governing board is Prof. Arvind Panagariya. The Vice-Chancellor is Prof. Abhay Kumar Singh. The varsity offers Post Graduate and Doctoral programmes in Buddhist studies, philosophy and comparative religions; languages and literature;

ecology and environmental studies; sustainable development and environment; and, international relations and peace studies. At present, students from over 20 countries are enrolled in various courses.

The university admitted its first batch of 15 students in 2014 to the School of Historical Studies and the School of Ecology and Environmental Studies. Nobel prize winning economist Amartya Sen, who had been associated with the project since 2007, was the first Chancellor and the then President, Pranab Mukherjee, the first Visitor.

Beginning of the decline

The university has also seen its fair share of controversies since its inception, notably the appointment of Gopa Sabharwal, a former Reader in sociology at a Delhi University college, to the post of Vice-Chancellor. Prof. Sen later recused himself from continuing as the Chancellor for a second term. He was succeeded by former Singapore Foreign Minister George Yeo, who also left citing concerns about autonomy and political interference in academic matters.

The other wrangle is the narrative

surrounding the decline of the university. While the dominant account is that it was destroyed by Turkish invader Bakhtiyar Khilji around 1200 AD, some experts claim that the varsity saw a natural decay coinciding with the decline of Buddhism in the region. “The reality is that there is no historical source that talks about Bakhtiyar Khilji destroying Nalanda,” says Namit Arora, author of the book *Indians: A Brief History of a Civilization*.

“Forty years after Khilji's campaign, a Persian account by Minhaj al-Siraj speaks of Khilji's destruction of a monastery and the killing of its monks. But this was not Nalanda. Scholars have firmly identified this monastery as Odantapuri, 12 km from Nalanda. It was described as located inside a fortified city (now at Bihar Sharif), a political and economic centre, and hence deemed a military target. There is no record of Khilji ever going to Nalanda, which had little political or economic allure, nor was it a thriving centre of religion at the time,” he told *The Hindu*.

“For over a century, Nalanda had suffered and dwindled owing to funding cuts, followed by active persecution by the Brahminical kings of the Sena dynasty. Many of its monks had fled south long before Khilji. Rather than a dramatic final end, Nalanda continued its long phase of decay and depopulation for decades after Khilji's death (1206). Nalanda was in fact still limping along in 1234-36, supported by King Buddasena of Boddh Gaya, when Dharmasvamin, a monk from Tibet studied there and wrote about it,” he added.

Demands have also been raised in both the Bihar Assembly and the Rajya Sabha to change the name of Bakhtiyarpur Railway station, which is just 60 km away from the varsity.

Bihar Chief Minister Nitish Kumar has, though, dismissed these demands, saying Bakhtiyarpur was his birthplace. “When an Act on Nalanda University was tabled in Parliament, an MP had said the destroyer of the famed varsity had stationed his camp in Bakhtiyarpur. Now, a man born in the same place is rebuilding Nalanda University,” Mr. Kumar said in 2021.

THE GIST

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Nalanda University

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Study reveals how human gut reacts to intact fibrous foods

Researchers have delineated how diets either low or high in fiber can shape the metabolic landscape of the small intestines, according to their study involving 10 volunteers fed various diets. The findings demystify the complex digestive processes that break down fiber-rich foods as they travel through the gut, and show those foods support the release of a gut hormone named PYY that suppresses appetite. The research suggests that a fibrous food's shape isn't as important in evoking this hormone response.

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Bacterial proteins keep cold-blooded worms alive

Cold-blooded Antarctic marine worms depend on two genera of bacteria to produce cryoprotective proteins that act like biological antifreeze to help them survive the harsh polar waters, a new study finds. Proteomic examinations showed that bacterially-derived cold-shock proteins and ice-binding proteins were present at nearly the same level as the worms' own self-made proteins, supporting the hypothesis of a phyllosymbiotic relationship.

- **Phylosymbiosis**
- **Cold-blooded Antarctic marine worms depend on two genera of bacteria to produce cryoprotective proteins that act like biological antifreeze to help them survive the harsh polar waters.**
- **Proteomic examinations showed that bacterially-derived cold-shock proteins and ice-binding proteins were present at nearly the same level as the worms' own self-made proteins, supporting the hypothesis of a phylosymbiotic relationship.**

- **Phylosymbiosis is first and foremost a significant association between host phylogenetic relationships and host-associated microbial community relationships wherein 'phylo' refers to the host clade and 'symbiosis' refers to the microbial community in or on the host.**
- **A clade, in biology, is a group of organisms that consists of a common ancestor and all of its descendants.**



Question Corner

Self-medication

Do wild chimpanzees seek out medicinal plants to treat illness and injuries?

A new study has found that chimpanzees appear to consume plants with medicinal properties to treat their ailments. The researchers combined behavioural observations of wild chimpanzees (*Pan troglodytes*) with pharmacological testing of the potentially medicinal plants they eat. They monitored the behaviour and health of 51 chimpanzees in the Budongo Central Forest Reserve in Uganda. They collected plant extracts from 13 species of trees and herbs in the reserve

that they suspected the chimpanzees might be using to self-medicate, and tested them for their anti-inflammatory and antibiotic properties. They found that 88% of the plant extracts inhibited bacterial growth, while 33% had anti-inflammatory properties. The researchers observed a male Chimpanzee with an injured hand seek out and eat fern leaves, which may have helped reduce pain and swelling. The results suggest that chimpanzees seek out specific plants for their medicinal effects.

Readers may send their questions / answers to questioncorner@thehindu.co.in

chimpanzees

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- The researchers observed a male Chimpanzee with an injured hand seek out and eat fern leaves, which may have helped reduce pain and swelling.



Rotavirus vaccine: tortured data analyses raise false safety alarm

Two other self-controlled case series studies published in July 2020 and January 2021 also did not find Bharat Biotech's Rotavac vaccine to be associated with increased risk of intussusception after any dose

R. Prasad

Slamming the recently published paper by Dr. Jacob Pullyel from the International Institute of Health Management Research, New Delhi, on rotavirus vaccine safety, microbiologist Dr. Gagandeep Kang says: "If you do 20 different analyses, one of them will appear significant. This is truly cherry picking data, cherry picking analysis, changing the data around, adjusting the data, not using the whole data in order to find something [that shows the vaccine is not safe]." Dr. Kang was the principal investigator of the rotavirus vaccine trials and the corresponding author of the 2020 paper in *The New England Journal of Medicine*, the data of which was used by Dr. Pullyel for his reanalysis.

Dr. Kang's study was a post-licensure, hospital-based, active surveillance study carried out in 27 hospitals across 10 States in India. For the study, 589 infants 28 to 365 days of age who were admitted to hospitals due to intussusception (where a part of the intestine slides into an adjacent part of the intestine) and met certain criteria were recruited as study participants. The main objective was to monitor Bharat Biotech's rotavirus vaccine (Rotavac) for any increased risk of intussusception after any dose of the vaccine.

Three doses of the vaccine are administered at 6, 10, and 14 weeks of age. The vaccine was introduced into the universal immunisation programme in a few States in 2016 and across India in 2019.

Active surveillance

Since the phase-3 trial with only 6,799 participants

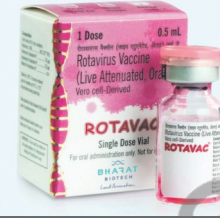
No safety issues with Rotavac vaccine

Active surveillance of hospitalised cases of intussusception was necessary as the phase-3 trial was not powered to pick such cases

The 2020 NEJM study was a post-licensure, hospital-based, active surveillance study carried out in 27 hospitals across 10 States in India

The study used the self-controlled case series method to assess the risk of intussusception after vaccine administration

No increased risk of intussusception due to vaccination was found during the risk periods and in the case-controlled study



Dr. Jacob Pullyel's study arbitrarily shortened the period of observation from one year to six months and found significant risk of intussusception in the high-risk period

Contrary to studies done globally and the CDC guidelines, Dr. Pullyel's study considered 21 days after any dose of the vaccine as the high-risk window

By excluding the unvaccinated, Dr. Pullyel's study found an increased risk of intussusception after the third dose of the vaccine. A meta-analysis had found more intussusception cases after the first dose

was not powered to pick up cases of intussusception, there was active surveillance of hospitalised cases of intussusception. The NEJM study used the self-controlled case series method to assess the risk of intussusception after vaccine administration. The relative risk was calculated by comparing the incidence in three risk windows – one-seven days, 8-21 days, and 1-21 days after each dose of vaccine – with the incidence in all other observational non-risk periods for each case patient.

A case-controlled study was also done to see if there is a difference in the rate of risk among vaccinated and non-vaccinated. There was no increased risk of intussusception due to vaccination during the risk periods and in the case-controlled study. Two other self-controlled case series studies analysing the safety of the Rotavac vaccine in infants in India and published in the journal *Vaccine* in July

2020, and January 2021 also did not find the vaccine to be associated with an increased risk of intussusception after any dose.

While the NEJM study restricted the analysis to 365 days in order to look at the risk more carefully, Dr. Pullyel shortened the period of observation to six months and found 59 cases in the high-risk periods and 90 cases in the low-risk window. Based on this, Dr. Pullyel concluded that the "risk of intussusception with the rotavirus vaccine was significantly higher in the high-risk period". The premise for restricting the period of observation to six months is that intussusception peaks around seven months in the unvaccinated.

"No, it peaks anywhere between 6-15 months. Paediatric intussusception is generally seen around 10-12 months depending on which country you are in. It is towards the end of the first year of life that you see the most number of cases," says Dr. Kang. "The distri-

bution of all cases of intussusception in infants who are vaccinated in our study show the cases going up and staying high for a long time. It certainly doesn't stop at seven months." With nearly 55 cases, intussusception cases peaked at 31 weeks as per the NEJM study and remained high at 35-42 cases per week between 22 and 37 weeks, and 10-15 cases per week between 46 and 51 weeks.

"What we are seeing is a pattern of intussusception due to vaccination coming to hospital is no different from the natural pattern of intussusception coming to hospital. There is no peaking," says Dr. Kang. Data shows cases of intussusception after each dose, and many more cases after the third dose but no peak. Explaining the reason for more cases seen after the third dose, Dr. Kang says it is because children are getting into the age when natural intussusception is increasing.

"One month after the

third dose is when we have more cases anyway, whether vaccinated or unvaccinated," she says.

Based on the premise that susceptibility to adverse events need not be highest immediately after vaccination, Dr. Pullyel had considered 21 days after any dose of the vaccine as the high-risk window. But across the world, published data show that if there is a risk with rotavirus vaccine it will happen within three weeks after the child gets a vaccine dose. As per CDC, "intussusception from rotavirus vaccination usually occurs within a week of receiving a dose of vaccine".

Increased risk

In another analysis, Dr. Pullyel excluded the unvaccinated and found an increased risk of intussusception after the third dose of the vaccine.

"In the U.S., Australia, the U.K and other countries where they actually found increased risk of intussusception following vaccination, unlike our study of Indian children, the risk is usually in the first week after the first dose. You don't get it after the second or third dose. A study in Brazil found a slight increase after the second dose."

A meta-analysis of 10 self-controlled case series studies found the relative risks for intussusception were highest after the first dose and far lower after the second and third doses.

Importantly, 0.5 billion doses of Rotavac have been used globally to date. Developed countries with good AEFI reporting would have surely picked any increased cases of intussusception, particularly as it was known that rotavirus vaccines can cause more intussusception.



Saurabh Pandey
Editor-in-Chief
CSE

FROM BARRISTER TO TOPIC, PALLADIUM

The rotavirus vaccine

- The rotavirus vaccine is a vaccine used to protect against rotavirus infections, which are the leading cause of severe diarrhea among young children.
- Rotavirus spreads easily among infants and young children. The virus can cause severe watery diarrhea, vomiting, fever, and abdominal pain.

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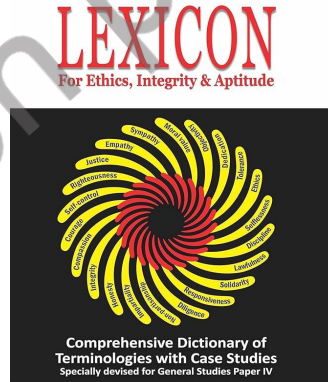
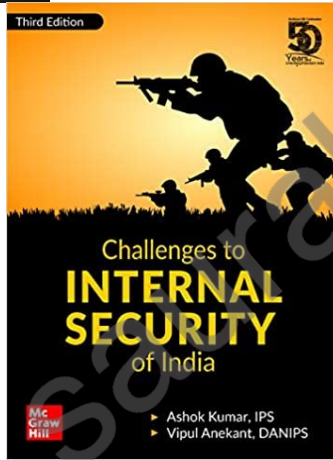
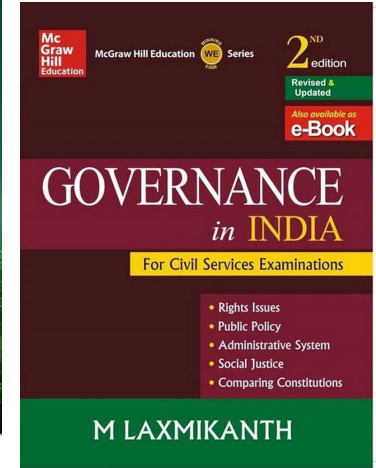
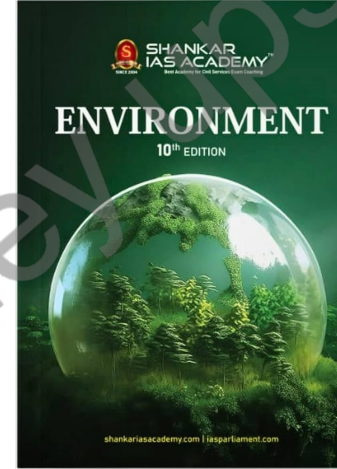
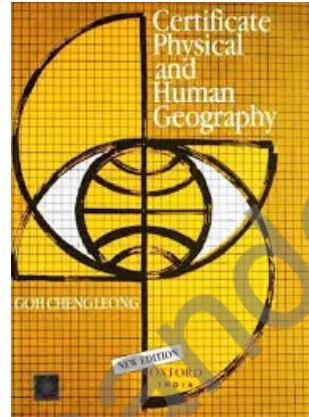
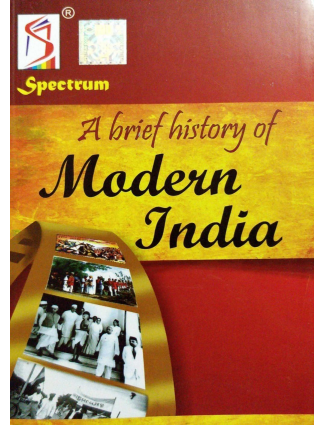
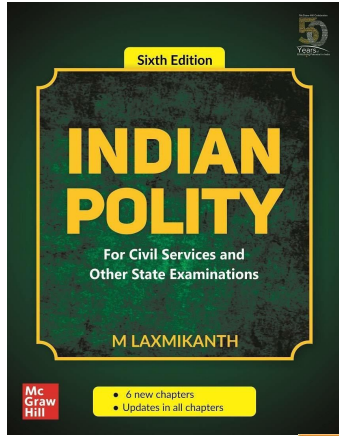
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Periodical cicada emergence disrupts food webs

The periodical mass emergence of cicadas in eastern North American forests can "rewire" forest food webs and initiate a cascade of impacts that propagates throughout the food chain, as per a study that quantified effects of the 2021 brood X cicada emergence. The study found that when insect-eating birds have prey in the form of cicadas and thus shift their focus away from their usual prey – leaf-eating caterpillars – the caterpillars feast more heavily upon the leaves of oak saplings, doubling insect leaf damage.

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The cicadas are a superfamily, the Cicadoidea, of insects in the order

Hemiptera.



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X 10th october 2...

States as per Article 244(2).

What are Scheduled Areas?

- Scheduled Areas cover 11.3% of India's land area, and have been notified in 10 States: Andhra Pradesh, Telangana, Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra, and Himachal Pradesh

How are Scheduled Areas governed?

- The President of India notifies India's Scheduled Areas. States with Scheduled Areas need to constitute a Tribal Advisory Council with up to 20 ST members.
- They will advise the Governor on matters referred to them regarding ST welfare.
- The Governor will then submit a report every year to the President regarding the administration of Scheduled Areas.

- The national government can give directions to the State regarding the administration of Scheduled Areas.
- The Governor can repeal or amend any law enacted by Parliament and the State Legislative Assembly in its application to the Scheduled Area of that State.

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X 7TH DECEMBE...

Garba dance of Gujarat makes it to UNESCO list

Sreeparna Chakrabarty
NEW DELHI

Gujarat's traditional dance form "Garba" was on Wednesday included in the list of Intangible Cultural Heritage by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

The popular dance form is the 15th cultural item from India to make it to the UNESCO list. Kolkata's Durga Puja was the last one added two years ago.

The inclusion has been made under the provisions of the 2003 Convention for the Safeguarding of Intangible Cultural Heritage. The international cultural body described the 'Garba' as a ritualistic and devotional dance performed in India.

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'Garba' dance is making the world sick

By Sreeparna Chakrabarty
New Delhi
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Que-3 With reference to exercise 'Mitra Shakti', consider the following statements

- Between India and Nepal.
- The aim of the exercise is to jointly rehearse sub-conventional operations under Chapter VII of the United Nations Charter, which authorises the Security Council to take enforcement measures, including the use of military force, to address threats to international peace and security.
- "Exercise MITRA SHAKTI-2023" recently commenced in Goa.

How many of the above statements are correct?

- Only one
- Only two
- All three
- None

CURRENT AFFAIRS BY SAURABH PANDEY SIR

Ans 3- (a)

- "Exercise MITRA SHAKTI-2023" recently commenced in Aunah (Pune).
- Between India and Sri Lanka.

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Ministry of Defence

12th BRICS summit

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The Constituent Assembly debated whether fundamental rights including this one could be suspended or limited during an Emergency. The Article cannot be suspended except during the period of Emergency.

Can High Courts be approached in cases of violation of fundamental rights?

- Both the High Courts and the Supreme Court can be approached for violation or enactment of fundamental rights through five kinds of writs:
- Habeas corpus (related to personal liberty in cases of illegal detentions and wrongful arrests)
- Mandamus — directing public officials, governments, courts to perform a statutory duty;
- Quo warrant — to show by what warrant is a person holding public office;

Prohibition — directing judicial or quasi-judicial authorities to stop proceedings which it has no jurisdiction for; and

Certiorari — re-examination of an order given by judicial, quasi-judicial or administrative authorities.

In civil or criminal matters, the first remedy available to an aggrieved person is that of trial courts, followed by an appeal in the High Court and then the Supreme Court.

When it comes to violation of fundamental rights, an individual can approach the High Court under Article 226 or the Supreme Court directly under Article 32.

Article 226, however, is not a fundamental right like Article 32.

12th BRICS summit

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Que-2 Consider the following statements

- Article 244, pertaining to the administration of Scheduled and Tribal Areas, is the single most important constitutional provision for STs.
- Articles 244(1) provides for the application of Fifth Schedule provisions to Scheduled Areas notified in any State other than Assam, Meghalaya, Tripura, and Mizoram, the Sixth Schedule applies to these states as per Article 244(2).
- The Prime Minister of India notifies India's Scheduled Areas.

How many of the above statements are correct?

- Only one
- Only two
- All three
- None

Ans (b)

The President of India notifies India's Scheduled Areas.

Scheduled Areas cover 11.3% of India's land area, and have been notified in 10 States: Andhra Pradesh, Telangana, Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra and Himachal Pradesh. In 2015, Kerala proposed to notify 2,133 habitations, five gram panchayats and two wards in five districts. It awaits the Indian government's approval.

- The President of India notifies India's Scheduled Areas. States with Scheduled Areas need to constitute a Tribal Advisory Council with up to 20 ST members. They will advise the Governor on matters referred to them regarding ST welfare. The Governor will then submit a report every year to the President regarding the administration of Scheduled Areas.
- The national government can give directions to the State regarding the administration of Scheduled Areas. The Governor can repeal or amend any law enacted by Parliament and the State Legislative Assembly in its application to the Scheduled Area of that State. The Governor can also make regulations for a Scheduled Area, especially to prohibit or restrict the transfer of land by or among members of the STs, and regulate the allotment of land to STs and money-lending to STs.

India World Opinion Sports e-Paper

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Ethics vs privilege committee

- Objective: It oversees the moral and ethical conduct of members and examines cases of misconduct referred to it.
- Appointment of members in Lok Sabha: The members of the Ethics Committee are appointed by the Speaker for a period of one year.

Procedure for complaints

- Any person can complain against a Member through another Lok Sabha MP, along with evidence of the alleged misconduct, and an affidavit stating that the complaint is not "false, frivolous, or vexatious".
- If the Member himself complains, the affidavit is not needed.
- The Speaker can refer to the Committee any complaint against an MP.
- The Committee does not entertain complaints based only on media reports or on matters that are sub-judice.
- The Committee makes a prima facie inquiry before deciding to examine a complaint. It makes its recommendations after evaluating the complaint.
- The Rules (for example, the Rules of Procedure and Conduct of Business in the Lok Sabha) applicable to the Committee of Privileges also apply to the ethics panel.
- An allegation of corruption against an MP can be sent to either body, but usually more serious accusations go to the Privileges Committee.
- The mandate of the Privileges Committee is to safeguard the "freedom, authority, and dignity of Parliament".
- These privileges are enjoyed by individual Members as well as the

House as a whole.

- An MP can be examined for breach of privilege; a non-MP too can be accused of breach of privilege for actions that attack the authority and

Santiniketan finds its place on UNESCO's World Heritage List

World body makes announcement on Sunday. Manu's ruins, named by Tagore, has been reportedly Bengal's Cultural Ministry says it's important heritage in human cases

By India Desk

Santiniketan, a town established by Nobel laureate Rabindranath Tagore, has been added to UNESCO's World Heritage List on Sunday. The town, located in West Bengal, is known for its unique blend of Indian and Western architecture and its role in the development of modern Indian education.



The UNESCO World Heritage Committee, which meets annually in Paris, has decided to include Santiniketan in its list of World Heritage Sites. The town, founded by Rabindranath Tagore in 1901, is a unique blend of Indian and Western architecture and is known for its role in the development of modern Indian education. The town is a testament to Tagore's vision of a new Indian culture that would be a synthesis of the best of both worlds.

Santiniketan, a town established by Nobel laureate Rabindranath Tagore, made it to the UNESCO's World Heritage List on Sunday.

Located in West Bengal's Birbhum district, Santiniketan, which means "abode of peace", started taking shape in 1901 and is the place where Tagore laid the foundations of Visva-Bharati University

EU chief promises a plan of action as migrants flock to island

Ursula von der Leyen, along with Italian PM Giorgia Meloni, visits Lampedusa where more than 2000 people have arrived this week. EU leaders' meeting has arrived in Italy this year, almost double the figure by the corresponding period in 2022.

By Reuters

Continues

The European Commission President Ursula von der Leyen and Italian Prime Minister Giorgia Meloni visited the island of Lampedusa, which is struggling with a surge in migrant arrivals, on Sunday. The two leaders are part of a high-level mission to assess the situation on the ground and discuss ways to manage the influx of migrants.



Making heads (clockwise from top left) von der Leyen and Meloni during their visit to Lampedusa.

The plan includes using EU funds to support local agencies and to help migrants find jobs. The EU is also working to improve the conditions of the island's reception centers and to provide better support for the local population.

von der Leyen said she will continue to work with Meloni to find a way to manage the influx of migrants. She also said that the EU is committed to supporting the Italian government in its efforts to deal with the crisis.

ceramics and glasses, greases, metallurgical powders, polymers and other uses.

How many of the above statements are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Que-2 With reference to Parliaments special sessions, consider the following statements

- There is specific provision in the Constitution that deals with special sessions.
- Article 352, which deals with the proclamation of Emergency, refers to a 'special sitting' of the House, this clause was added through the 44th Amendment Act in 1978, which included safeguards against the Emergency.
- The Question Hour was suspended during the session.

How many of the above statements are correct?

- a) Only one
- b) Only two
- c) All three
- d) None



Que-3 Consider the following statements about Sacred Ensembles of the Hoysala

- This includes five temples in Karnataka, has been recently inscribed on the UNESCO's World Heritage List.
- The Hoysala Temples, built in the 12th and 13th centuries by the Hoysala kings, are dedicated to Shiva and Vishnu.
- The temples became targets of plundered and destruction by the Delhi Sultanate army of Ala-ud-din Khilji in the early 14th century and another Delhi Sultanate army of Sultan Muhammad bin Tughluq in 1326 AD.

How many of the above statements are correct?

- a) Only one
- b) Only two
- c) All three
- d) None



Que-4 Consider the following statements about SHREYAS scheme

- It comprises 4 central sector sub-schemes.
- The objective of the Scheme is to provide coaching of good quality for economically disadvantaged Scheduled Castes (SCs) and Other Backward Classes (OBCs) candidates to enable them appear in competitive and entrance examinations.
- The ceiling of the total family income under the scheme is 2 lakhs per annum and 3500 slots are allotted per annum.

How many of the above statements are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Que-5 Consider the following statements about Women's Reservation Bill

- The Constitution (One Hundred and Twenty-Eighth Amendment) Bill, 2023, seeking to reserve 33% of seats in Lok Sabha and state Assemblies for women.



Que-5 With reference to Shumang Leela, consider the following statements

- Shumang Leela is a traditional form of theatre in Tripura.
- In this the roles of women are all played by men, called Nupi Shabis.
- It is performed in an open courtyard surrounded by spectators on all four sides.

Which of the following given above is/are correct

- a) 1 and 2 only b) 1 only
c) 1, 2 and 3 d) 2 and 3 only

Ans: (d)

- Shumang Leela is a traditional form of theatre in Manipur.
- In the case of women's theatre groups, the roles of men are played by women.
- Shumang Leela translates to "courtyards performance".
- Today, Shumang Leela is of two types: Nupa Shumang Leela, performed only by men, and Nupi Shumang Leela, performed only by women.

Que-6 Consider the following statements about Red Sanders also called Red Sandalwood

- It is a species found in the southern tropical dry deciduous forest of Telangana.
- The tree reaches an average height of 10 to 15 metres.
- The species is listed as 'Endangered' in the International Union for Conservation of Nature and falls in Appendix II of CITES.

Which of the following given above is/are correct

- a) 1 only b) 1 and 3 only
c) 1, 2 and 3 d) 2 and 3 only

Ans: (d)

- It is a species found in the southern tropical dry deciduous forest of Andhra Pradesh (AP).
- CITES (shorter name for the Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as the Washington Convention).
- In India, it has been enlisted under Schedule IV of the Wildlife (Protection) Act, 1972.
- The heartwood of Red Sanders is in demand in the domestic and international markets for making

furniture, handicrafts and musical instruments in China and Japan. The red dye obtained from the wood is used as a colouring agent in the textiles, medicine and food industries.

Que-7 Consider the following statements about Compressed Biogas (CBG) and compressed natural gas (CNG)

- Chemically, CBG is the same as CNG — both are compressed methane — and has the same calorific value.
- CNG is a by-product of petroleum, CBG can be produced from any biomass, be it crop residue, cattle dung, sugarcane press mud, municipal wet waste or effluents from a sewage treatment plant.
- CBG cannot be transported through cylinders or pipelines to retail outlets.

Which of the following given above is/are correct

- a) 1 and 2 only b) 3 only
c) 1, 2 and 3 d) 2 and 3 only

Que-8 Finance Minister announced 500 new 'waste to wealth' plants under Galvanizing Organic Bio-Agro Resources Dhan scheme (GOBARdhan) in the Union Budget 2023. Consider the following statements about this

- The new GOBARdhan scheme is an upgrade and an expansion of the old one of the same name, launched in 2018 by the Department of Drinking Water and Sanitation.
- This scheme limited itself to cluster or community-level biogas plants, for instance, for Anganwadis or farms.
- Compressed biogas (CBG) was never a part of the initial scheme launched in 2018 because it is very different from biogas in terms of utilisation and constituents.

Which of the following given above is/are correct

- a) 2 only b) 1 and 3 only
c) 1, 2 and 3 d) 2 and 3 only

c) 1, 2 and 3 d) 3 only

Ans: (b)

- In the union budget of FY 2023-24, it is announced to launch a mission to eliminate sickle cell anemia by 2047.

Que-7 Lamu Archipelago, recently in News, belongs to which country

- a) Somalia
b) Malaysia
c) Indonesia
d) Kenya

Ans: (d)

- The Lamu Archipelago is located in the Indian Ocean close to the northern coast of Kenya, to which it belongs. The islands lie between the towns of Lamu and Kiunga, near the Coast Province. It is a part of Lamu District.

Que-8 Consider the following statements about "Operation Sadbhavana", recently in News

- Launched by an Indian Army.
- For development of Jammu and Kashmir.

Some of the objectives achieved through Operation Sadbhavana are national interfaith tours, women's empowerment, employment generation, education, and

development activities geared towards nation-building.

Which of the following given above is/are correct

- a) 1 and 2 only b) 1 and 3 only
c) 1, 2 and 3 d) 2 only

Ans: (b)

- For development of Ladakh.
- The Indian Army is organising multiple welfare activities, such as running schools and infrastructure development projects, as part of "Operation Sadbhavana" in the Union Territory of Ladakh.

Que-1 Consider the following statements

- A spy balloon is literally a gas-filled balloon that is flying quite high in the sky, more or less where we fly commercial airplanes.
- Disadvantage that low Earth orbit satellites have is that they are continually moving around the Earth.
- Geosynchronous orbit satellite has the disadvantage that it's harder to see things clearly when you're very, very far away.

Which of the following given above is/are correct

- a) 1 and 2 only b) 1 and 3 only
c) 1, 2 and 3 d) 3 only

Ans: (c)

- The disadvantage these low Earth orbit satellites have is that they are continually moving around the Earth.

of what we call persistence, allowing satellites to capture images continuously.

Que-2 With reference to Paris Club, consider the following statements

- The Paris Club is a group of mostly western creditor countries.
- It grew from a 1956 meeting in which Brazil agreed to meet its public creditors in Paris.
- Their objective is to find sustainable debt-relief solutions for countries that are unable to repay their bilateral loans.

Which of the following given above is/are correct

- a) 2 only b) 1 and 3 only
c) 1, 2 and 3 d) 2 and 3 only

Ans: (b)

- It grew from a 1956 meeting in which

Exchange traded fund

- An exchange-traded fund (ETF) is a pooled investment security that can be bought and sold like an individual stock.
- ETFs can be structured to track anything from the price of a commodity to a large and diverse collection of securities.
- ETFs can even be designed to track specific investment strategies.

- ETF share prices fluctuate all day as the ETF is bought and sold; this is different from mutual funds, which only trade once a day after the market closes.
- ETFs offer low expense ratios and fewer broker commissions than buying the stocks individually.
- An ETF must be registered with the Securities and Exchange Commission.

Pros and Cons of Exchange-Traded Funds

 <p>Lower costs</p> <p>Diversification and risk management</p> <p>Tax benefits</p> <p>Easy to trade</p>	 <p>Potentially higher costs</p> <p>Limited control</p> <p>Tracking error</p>
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BIMSTEC WHAT YOU SHOULD KNOW

Stands for The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation

7 MEMBER COUNTRIES

Founded in 1997 through Bangkok Declaration

Accounts for 20% of the world population

Estimated GDP of \$2.7 trillion

Most populous the world's traded goods cross the Bay every year

Key focus areas: Trade, technology, energy, transport.




DELIMITATION COMMISSION

DELIMITATION COMMISSION

- Delimitation literally means the act or process of fixing limits or boundaries of territorial constituencies in a country or a province having a legislative body. The job of delimitation is assigned to a high power body. Such a body is known as Delimitation Commission or a Boundary Commission
- In India, such Delimitation Commissions have been constituted 4 times - in 1952 under the Delimitation Commission Act, 1952, in 1963 under Delimitation Commission Act, 1962, in 1973 under Delimitation Act, 1972 and in 2002 under Delimitation Act, 2002.

- The Delimitation Commission in India is a high power body whose orders have the force of law and cannot be called in question before any court. These orders come into force on a date to be specified by the President of India in this behalf.
- The copies of its orders are laid before the House of the People and the State Legislative Assembly concerned, but no modifications are permissible therein by them.



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productivity, uphold good health and prevent poverty. The second set consists of policies to reduce inequality and promote economic security at older ages in a fiscally sustainable manner, considering pensions and health care. While many older persons are in excellent health or economically active stages, others live with ailments or are in poverty. Public spending in most countries has not been sufficient to cover the growing demand for long-term care, the analysis points out.

CURRENT AFFAIRS BY SAURABH PANDEY SIR

Question 5 With reference to Doppler radar network, consider the following statements

- It is named after Christian Doppler, the physicist who first proposed the concept of the Doppler effect.
 - It is a system of multiple radar stations that work together to provide comprehensive coverage of a specific area.
 - The entire stretch of India will be covered under the Doppler Weather Radar Network to better predict extreme weather events more accurately.
- Which of the following given above is/are correct
- a) 1 and 2 only b) 1 only
c) 1, 2 and 3 d) 2 and 3 only

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- It is named after Christian Doppler, the physicist who first proposed the concept of the Doppler effect. The Doppler effect is the change in frequency or wavelength of a wave (such as sound or light) as it approaches or moves away from an observer.
- What is a Doppler radar network?
A Doppler radar network is a system of multiple radar stations that work together to provide comprehensive coverage of a specific area. The system uses the Doppler effect to detect and track moving objects, such as weather systems, aircraft, and vehicles.
- How does a Doppler radar network work?
Each station in the network includes a radio transmitter, which sends out a microwave signal, and a radar receiver, which detects the reflected signal. The transmitter and receiver are typically located at the same site, but they can also be separated by a significant distance. The radar signal reflects off any moving objects in its path and the change in frequency of the signal due to the Doppler effect is used to determine the speed and direction of the moving object.
- What are the uses of a Doppler radar network?
Doppler radar networks are widely used for weather forecasting and severe weather warning, tracking of aircraft and vehicles, and also used in meteorology and atmospheric sciences. These radar networks provide detailed information about storm systems, including the location, size, and movement of thunderstorms, tornadoes, and other severe weather events.

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Question 6 Consider the following statements about Army Day

- India celebrates Army Day on January 15 every year.
 - The Army Day is celebrated every year to honour Cariappa and the defence forces.
 - 75th Army Day was held in Hyderabad this year.
- Which of the following given above is/are correct
- a) 1 and 2 only b) 1 and 3 only
c) 1, 2 and 3 d) 2 and 3 only

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- (d) In 1997 Bangkok Declaration launched a modest grouping (of Bangladesh, India, Sri Lanka and Thailand), with the acronym, BIST-EC.
- Originally formed as BIST-EC (Bangladesh, India, Sri Lanka and Thailand Economic Cooperation) in 1997, it became BIMST-EC after Myanmar joined, and BIMSTEC in 2004, with the inclusion of Nepal and Bhutan. This unique set of five countries from South Asia and two from Southeast Asia are parents to an institution with an unwieldy name but lofty ambitions.

6- (a)

- The portal ensures end-to-end coverage of all the linked schemes.
- Anyone can apply for a loan.

7- (b)

- Any serving or retired three-star officer from either of the three services, below 62 years on the date of projected appointment, would be eligible to be elevated as the CDS and will superannuate at the age of 65. Earlier, the post was only open for four-star generals.

8- (c)

- The Chief of Defence Staff is principally responsible for getting the armed forces better integrated than operating in silos as has been the case for decades.
- The job includes the creation of new military commands which integrate the Army, Air Force, and Navy to fight together.
- According to the government, the CDS acts as the Principal Military Adviser to the Defence Minister only on tri-services matters. The three service chiefs will continue to advise the Defence Minister exclusively on the matters concerning their respective services.
- The CDS will not hold any military command, including over the three service chiefs.
- As the Permanent Chairman of the Chief of Staff Committee, the CDS brings about jointness in operation, logistics, transport, training, support services, communications, repairs and maintenance of the three services.



Target Mains -2024/25 -

Q Signing agreement like RELOS shows indian "all alignment " foreign policy. Discuss

Q RELOS जैसे समझौते पर हस्ताक्षर करना भारतीय "सभी संरेखण" विदेश नीति को दर्शाता है। चर्चा करना

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