

# SIFICATI & The Indian EXPRESS FINANCIAL EXPRESS



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# "If you tell the truth, you don't have to remember anything." - Mark Twain



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we're not making a

"We're not making a trade deal if you're going to be threwing around wea-pons and maybe nuclear weapons." Mr. Trump said he told the leaders of both

The Prime Minister

which country suffered the losses. Congress leader says country has the right to know the truth **Fishermen** arrest lays bare uneasy The Illindu Bureau

**Delhi-Dhaka ties** NEW DEB.00 The Congress on Sa-unday attacked the Contre over U.S. Tosident Donald Trump's and time in the par one year, Banglastesh has datamed todian fishermer

which policymakers view as a growing "absence of on New understanding" between his Delhi and Ohaka. 's PAGE 3

Contre over U.S. Provident Donald Trumpia latent statement that "five investment that a five intermediate the statement of Police arrest five for shooting dead gangster in Patna BURNAVA PATHA The West Bengal Police and Bihar Police, in a joint spontium, arrested five persons from Rolkata in connection with the murder of shot down. Congress MP Rahul Gandhi, Leader of the Op-

position in the Lok Sabha, indicated that his party was likely to push for answ-ers from Prime Minister gangster Chandan Rumar Mishro in Potna, is PAGE 3

Stress test

#### YSRCP MP arrested in liquor scam case

44

VIJAVAWADA After seven hours of grilling in the multi-crore liquor scam, the special trousligation feet (SIT) police arrested Y5R Congress Party (VSRCP) teader and Bajampet MP PV Midhum Buddy to PAGE 2

Trump sues WSJ over article about Epstein relations

WARHINGTON U.S. President Donald Trump evied media magnete Rupert Murdoch and The Wolf Street recornal for an innat \$10 billion war publishing an article any his Granalship with Joffrey Equippers in Policial 2.2

ee Planes were being shor out of the air. Leburgh first fetts were altern down.... India and Pakistan we 100 100 going at it, and they were back and forth, and it was printed bigger and bigger, and we got it solved through trade DONALD TRUMP

Nurendra Modi on this in-tase in the Monsoon See, the conflict with trade sion of Parliament, which begins on Monday. "Morill, what is the Truth of the fee jets? The class and entegorical" country has a right to know," Mr. Gandhi said in a that himther. post on X.

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INDIA BLOC QUESTIONS

laterally as per established the baue. Mr. Trump was speak-ing at a dinner with Repu-blican Senators at the White House when he reprocedures, Pureign Secre tary Vikram Misri said or point on X. Congress communica-bioux chief Jairam Ramesh aid that this was the "34th time" Mr. Trump had June 17



#### Centre nearly doubles PSU dividends since 2020, thanks to coal, oil firms Minor girl in

Odisha critical the past five years above that five fisel-related PSUs accounted for 42% of the learn, is owned by ONGC, and not directly by the demic is still very much in rules, every Central PSU T.C.A. Sharad Rashavan NEW DILLIO after being Dividend surge place, but it is not pro-gressing as fast as it was in-tually hoped," the official told The Hindu. "At the same time, many PSUs are must pay a minimum an-nual dividend of 30% of its Profit After Tax (PAT) or 4% and not directly by the governmismt. The rotal dividends from non-banking PSUs have also grown samsis-tently since the COVID-19 pandemin. The govern-ment collected 129,558 crore as dividends from set ablaze The chart shows the Carrier's divident rearies have PSUs as finithed frame \$10,000 arms in PYUS to \$75,017 source in PYUS Over the past five years. total dividenda the powern-ment has collected since the financial year 2020-21. <text><text><text><text><text><text> the Centre has nearly dou-bled the dividends it has Intridonale from 6 funitralated CPSEs III Distances from the real received from public soc-tor undertakings (PSUs) to These companies - Goal India Ltd. Oil & Natural Gas India Ld, Ol & Naural Gas Corporation (ONIC), Indian Ol Corporation (ONIC), Indian Performanto (ONIC), Indian Performanto (ONIC), Indian Cerebratica (ONIC), Idah creec, et 223% of the trait E Jakh error divi-dends the Cernite received from mon-banking Paths 2024-25. The data alse show that the two directly owned pu-blic sector of marketing companies (OMICs) E02 100,000 
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## Krishnadas Raiagopal NEW DELIN

The Supreme Court will hear on Tuesday a Presi-dential Reference under

Key question

ner of exercise of powers by the President under Ar-licle 201," the reference dated May D, the last work-

ing day of former CJI Sanjiv Khanna, has asked. The President's move to

The President's move to seek clarity under the top court's advisory jarisetic-tion arises from an April 8 judgment by a Supreme Court Bench of Justices J.B. Pardiwala and R. Mahade van on a petition filed by the Tamil Nadu govern-

Review auestions This references actives front an April 8 held that a Dovernor could not indefinitely delay decision on a lidit What the reference seeks: Gevenne when a full is 



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dential Hebrerne under Article 143 of the Constitu-tion adding if the court can "impose" timelines and prescribe the manner of conduct of Covernois a and with State IIIIs sent to them for assent or re-served for consideration. A. Constitution Rendo Comprising Chief Jaitto of India (62) H. K. Gavat and India (62) H. K. Gavat and A. S. Chandurkar will ment challenging the Go-vernor's delay in clearing 10 re-passed Bills, and his out the assent of and A.S. Chandurkar will Governor". "Are decisions of the Goand A.A. Chambursar with hear the matter. Broadly, the Presidential Reference has asked whether judicial orders can dictate by what time and in what manner the subsequent action to re-serve them for considera-tion by the President. vernor and the President under Articles 200 and The two-judge Bench had ruled that the Gover-nor's action was illegal. 201, respectively, justicia-ble at a stage prior to even the bill in ca and in what manner the President and Greenion should function under Ar-ticles 200 (which covers the process of grant of as-sent by Governors to State Wills) and 201 (when Bills are reserved by Governors for Presidential assent) of the Constitution. This had led to the default ing a law? Is it permissible for the courts to undertake cancellation of the Presi-dent's decision to assent to one of the 10 hills, while rejudicial adjudication over the contents of a Bill, in one of the 10 Bills, while re-jecting aven and not con-sidering two others. The verdict, authored hy junitice Pardiwala, had invoked Article 142 of the Constitution to deem that all 10 Bills had got assent. The reference has now sough the court's opinion on the very "contines and scope" of Article 142. any manner, before it betial reference qu

that reference queried. It said that the "concept of desined assent" of the President and the Gover-nor, Direduced in the judgment, was alien to the indgment, was alien to the constitutional scheme, and worked to fundaminitally circumscribe the power of the President and Gover-nors. Key question "In the absence of any con-situitionally prescribed time limit or manner of as-ercles of powers by a Go-wriner, can time limits he imposed and manner of es-ercles of powers be pre-scribed through judical orders inglese timelines and man-ner of execute of manner. Questions scope "Can the Constitutional powers of the President/ Governors be substituted by a judicial order exercis-

the President and Gover-nors. Vice-President jagdeop Dhanker had called Article 42 a "nuclear mixafle against democratic forces", In his judgment, justice Paddwala had esplained that Article 42 was ining Article 1427 is Article 142 limited to essiters of procedural law or does it extend to issuing direcextend to issuing direc-tions construct to a incom-sistent with existing sub-stantive or precedural provisions of the fonatti-tion?" it aked... Indirectly questioning the wilding of the "deemed" assoin, the rele-rence has aked whiether a law made by a state Legi-batrate could seen "he convolved unity to do complet justice in public interest for the people of Tamil Nadu. the people of fundi Nadu. The reference has also touched on the basics of Article 200, asking the court to clarify the consti-national options before a Governor when a Nill as presented to bin under Ar-ticle 200.

# Cong. seeks clarity over Trump's remarks on jets

U.S. President says five jets were shot down during the India-Pakistan conflict without specifying which country suffered the losses; Congress leader says country has the right to know the truth

#### The Hindu Bureau NEW DELHI

he Congress on Saturday attacked the Centre over U.S. President Donald Trump's latest statement that "five jets were shot down" during the India-Pakistan conflict that followed Operation Sindoor in May.

Mr. Trump repeated his earlier claims about the U.S. role in the ceasefire, which the Centre has consistently denied. In his comments made on Friday evening in Washington, Mr. Trump did not specify which country's jets were shot down.

Congress MP Rahul Gandhi, Leader of the Opposition in the Lok Sabha, indicated that his party was likely to push for answers from Prime Minister Planes were being shot out of the air... I think five jets were shot down... India and Pakistan were going at it, and they were back and forth, and it was getting bigger and bigger, and we got it solved through trade

DONALD TRUMP U.S. President

Narendra Modi on this issue in the Monsoon Session of Parliament, which begins on Monday.

"Modiji, what is the truth of the five jets? The country has a right to know," Mr. Gandhi said in a post on X.

Congress communications chief Jairam Ramesh said that this was the "24th time" Mr. Trump had



claimed to have stopped the conflict with trade threats, and demanded that Mr. Modi make a "clear and categorical" statement in Parliament on the issue.

Mr. Trump was speaking at a dinner with Republican Senators at the White House when he referred to the India-Pakistan clash, amongst a list of global conflicts he claimed to have stopped.

"We're not making a trade deal if you're going to be throwing around weapons and maybe nuclear weapons," Mr. Trump said he told the leaders of both countries.

The Ministry of External Affairs did not respond to Mr. Trump's latest remarks. Pakistan's military had claimed to have shot down several Indian jets during Operation Sindoor on May 7.

The Prime Minister "clearly conveyed to President Trump" that the conflict was wound down bilaterally as per established procedures, Foreign Secretary Vikram Misri said on June 17.

INDIA BLOC QUESTIONS » PAGE 4

# 1. Trump's Controversial Statement

- U.S. President Donald Trump claimed that five jets were shot down during the India-Pakistan conflict post Operation Sindoora (May).
- He did not specify which side suffered the losses.
- He added that the issue was resolved "through trade."

# 2. Congress' Reaction

- Rahul Gandhi, Congress MP, demanded the truth be shared with the Indian public, stating:
  - "The country has the right to know."
  - Question posed to PM Narendra Modi.
- Jairam Ramesh, Congress communication chief, emphasized:
  - This was the 24th time Trump claimed to have stopped the conflict between India and Pakistan.

# 3. Government of India's Response

- The Ministry of External Affairs (MEA) has not responded to the statement.
- Foreign Secretary Vikram Misri said on June 17 that:
  - PM Modi told Trump the conflict was "wound down bilaterally as per established procedures."

# 4. Pakistan's Claim

Pakistan had claimed shooting down several Indian jets during Operation Sindoora on May 7.

# 5. Trump's Context

- Statement was made during dinner with **Republican Senators** at the **White House**.
- Warned both nations about nuclear escalation and trade consequences.

# Centre nearly doubles PSU dividends since 2020, thanks to coal, oil firms

#### T.C.A. Sharad Raghavan NEW DELHI

Over the past five years, the Centre has nearly doubled the dividends it has received from public sector undertakings (PSUs) to ₹74,000 crore, with an analysis by The Hindu showing it relies heavily on a few oil, gas, and coal companies for a large chunk of these dividends.

The analysis excluded dividends from the Reserve Bank of India and the nationalised banks.

The analysis of company-wise dividend data from the Department of Investment and Public Asset Management (DIPAM) for



the past five years shows that five fuel-related PSUs accounted for 42% of the total dividends the government has collected since the financial year 2020-21. These companies - Coal India Ltd, Oil & Natural Gas Corporation (ONGC), Indian Oil Corporation (IOC), Bharat Petroleum Corporation (BPCL), and Gail (India) - contributed ₹1.27 lakh crore, or 42.3% of the total ₹3 lakh crore dividends the Centre received from non-banking PSUs between 2020-21 and 2024-25.

The data also show that the two directly owned public sector oil marketing companies (OMCs) - IOC



Dividend surge

The chart shows the Centre's dividend receipts from PSUs nearly doubled from ₹39,558 crore in FY21 to ₹74,017 crore in FY25



Source: Department of Investment and Public Asset Management

and BPCL - together saw a 255% increase in their dividend payouts to the government since 2022-23 and a 65% decrease in oil

prices. However, they only passed on a 2% decrease in petrol prices to the public. The third public sector OMC, Hindustan Petro-

leum, is owned by ONGC, and not directly by the government.

The total dividends from non-banking PSUs have also grown consistently since the COVID-19 pandemic. The government collected ₹39,558 crore as dividends from these companies in 2020-21, which almost doubled to ₹74,017 crore by 2024-25.

According to sources in the government, this is due to a "calibrated" approach to balance revenues from disinvestments and dividends.

"The government's disinvestment policy announced during the pan-

demic is still very much in place, but it is not progressing as fast as it was initially hoped," the official told The Hindu. "At the same time, many PSUs are turning profitable and so the government is maximising the dividends it can earn from them."

However, since then, enhancing dividends has also become a part of official policy.

An office memorandum sent out by DIPAM in November 2024 laid out new rules for how much dividends these companies must pay their shareholders, the largest of which is the Government of India. According to the new

Profit After Tax (PAT) or 4% of its net worth, whichever is higher. In fact, the government has pushed these PSUs to pay dividends much higher than this mandatory amount. "The minimum dividend as indicated in para 5.1 above is only a minimum benchmark," it said. "The CPSEs [Central Public Sector Enterprises] are

advised to strive paying

higher dividend taking into

account relevant factors

such as profitability, capex

requirements with due lev-

eraging, cash reserves and

rules, every Central PSU

must pay a minimum an-

nual dividend of 30% of its

net worth."

# 1. Doubling of PSU Dividends (2020–2025)

- The Centre's dividend receipts from non-banking PSUs grew from ₹39,558 crore (FY21) to ₹74,017 crore (FY25).
- The data excludes dividends from **RBI and nationalised banks**.

# 2. Major Contributors: Fuel-Related PSUs

- 5 fuel-related PSUs contributed ₹1.27 lakh crore, accounting for 42.3% of total ₹3 lakh crore dividends between FY21–FY25.
  - These PSUs include:
    - Coal India Ltd
    - ONGC
    - IOC
    - BPCL
    - GAIL (India)

# 3. Dividend Surge by Oil Marketing Companies (OMCs)

- IOC and BPCL saw a 255% rise in dividend payouts since 2022–23 despite a 65% fall in oil prices.
- Hindustan Petroleum, owned by ONGC, also contributed dividends indirectly.

# 4. Post-COVID Strategy & Disinvestment Policy

- Government adopted a "calibrated" approach balancing dividends and disinvestment revenues post-COVID.
- Memo by DIPAM (Nov 2024):
  - Mandated **minimum dividend** of:
    - 30% of Profit After Tax (PAT) or
    - 4% of net worth, whichever is higher.

# Economic Facts:

- Dividends are a major part of **non-tax revenue** for the Centre.
- Shift from disinvestment to dividend maximisation due to slow progress in asset sales.
- Shows fiscal pressure management through internal resources.

# Political/Administrative Insight:

- DIPAM (Department of Investment and Public Asset Management) under the Finance Ministry is central in investment and dividend policy for PSUs.
- Post-COVID recovery strategy highlights policy shift in revenue collection.

# Sectoral Importance:

- Focused on energy and resource PSUs (coal, oil, gas).
- Reflects dependency on strategic sectors for public finance management.

# Governance/Policy Perspective:

- Highlights corporate governance mandates in CPSEs (Central Public Sector Enterprises).
- Shows Government's dual role as regulator and majority shareholder.

- Q. Consider the following statements regarding PSU dividends and the Government of India's revenue policy:
- 1. Since 2020-21, five fuel-related CPSEs have accounted for more than 40% of the total dividend receipts from non-banking PSUs.
- The Government mandates every Central PSU to pay a minimum dividend of 50% of its net profit or 4% of its net worth, whichever is higher.
- The recent DIPAM policy emphasizes balancing dividend income with disinvestment to manage fiscal pressures.

# Which of the above statements is/are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 only
- D. 1, 2 and 3

# Top court to hear Article 143 reference on President and Governor's powers on July 22

Review questions

#### Krishnadas Rajagopal NEW DELHI

The Supreme Court will hear on Tuesday a Presidential Reference under Article 143 of the Constitution asking if the court can "impose" timelines and tel Articie 142 prescribe the manner of conduct of Governors and the President while dealing with State Bills sent to them for assent or reserved for consideration. A Constitution Bench comprising Chief Justice of India (CJI) B.R. Gavai and Justices Surva Kant, Vikram Nath, P.S. Narasimha, and A.S. Chandurkar will hear the matter. Broadly, the Presidential Reference has asked whether judicial orders can dictate by what time and in what manner the President and Governors should function under Articles 200 (which covers the process of grant of assent by Governors to State Bills) and 201 (when Bills are reserved by Governors for Presidential assent) of the Constitution. Constitution to deem that Key question all 10 Bills had got assent. "In the absence of any consought the court's opinion stitutionally prescribed time limit or manner of exon the very "contours and ercise of powers by a Goscope" of Article 142. vernor, can time limits be imposed and manner of ex-Questions scope ercise of powers be pre-"Can the Constitutional scribed through judicial orpowers of the President/ ders? Can judicial orders Governors be substituted impose timelines and manby a judicial order exercisner of exercise of powers ing Article 142? Is Article 142 limited to matters of by the President under Article 201," the reference procedural law or does it dated May 13, the last workextend to issuing direcing day of former CJI Saniiv tions contrary to or incon-Khanna, has asked. sistent with existing sub-The President's move to stantive or procedural provisions of the Constituseek clarity under the top court's advisory jurisdiction?" it asked. tion arises from an April 8 Indirectly questioning judgment by a Supreme the validity of the Court Bench of Justices J.B. "deemed" assent, the refe-

Pardiwala and R. Mahade-

van on a petition filed by

the Tamil Nadu govern- lature could even "be con-

The reference arises from an April 8 judgment by the SC which held that a Governor could not indefinitely delay decision on a Bill What the reference seeks: . The options before a Governor when a Bill is . The top court's opinion on presented to him under the very 'contours and scope' Article 203 · Validity of a law being # Validity of a two-jurge in force without the assent of Bench's judgment on the Governor 'webstantial questions of law'

Governor".

ment challenging the Governor's delay in clearing 10 re-passed Bills, and his subsequent action to reserve them for consideration by the President. The two-judge Bench had ruled that the Governor's action was illegal. This had led to the default cancellation of the President's decision to assent to one of the 10 Bills, while rejecting seven and not considering two others. The verdict, authored by Justice Pardiwala, had invoked Article 142 of the

rence has asked whether a

law made by a State Legis-

The reference has now nors. against forces".

vernor and the President under Articles 200 and 201, respectively, justiciable at a stage prior to even the Bill in question becoming a law? Is it permissible for the courts to undertake judicial adjudication over the contents of a Bill, in any manner, before it becomes law?\* the Presidential reference queried. It said that the "concept of deemed assent" of the President and the Governor, introduced in the judgment, was alien to the constitutional scheme, and worked to fundamentally circumscribe the power of the President and Gover-Vice-President Jagdeep Dhankar had called Article 142 a "nuclear missile democratic

sidered a law in force with-

out the assent of the

"Are decisions of the Go-

In his judgment, Justice Pardiwala had explained that Article 142 was invoked only to do complete justice in public interest for the people of Tamil Nadu. The reference has also touched on the basics of Article 200, asking the court to clarify the constitutional options before a Governor when a Bill is presented to him under Article 200.

# 1. Background of the Case

- The Supreme Court will hear a Presidential Reference under Article 143 of the Constitution on July 22, 2025.
- The reference seeks clarity on:
  - Whether the court can impose timelines on the President and Governors for action on State Bills.
  - The constitutional limits of Article 142, which allows the SC to pass decrees to do "complete justice".

# 2. Judicial Context

- The matter arose after an **April 8 judgment** where a two-judge SC bench:
  - Held that the Governor's delay in assenting to re-passed Bills was illegal.
  - Directed the **President to decide** on 10 Bills passed by the Tamil Nadu Assembly.
  - The President gave assent to 7 Bills, withheld on 1, and kept 2 pending.

# 3. Core Legal Questions

- Can the constitutional powers of the President and Governors under Article 200 and 201 be substituted or controlled by judicial orders?
- Is it legally valid for a State Legislature to enact a law without the Governor's assent if delayed indefinitely?

# 4. Article 143 Reference

- Presidential Reference by CJI D.Y. Chandrachud's bench will consider:
  - Validity of earlier SC ruling under Article 142 on "deemed assent".
  - The manner of exercise of powers under Article 200 and 201.
  - Whether such powers can be judicially regulated.

# 5. Vice President's Remark

 VP Dhankhar called Article 142 a "nuclear missile against democratic forces" — highlighting concern over judicial overreach.

- Article 143: Allows the President to seek SC's advisory opinion on important legal questions.
- Article 142: Empowers SC to pass any decree necessary for complete justice.
- Article 200 & 201: Relate to Governor's role in assent or reservation of Bills.

# **Judicial Review and Separation of Powers**

- The issue explores the balance between the judiciary and executive in law-making.
- Raises debate on judicial activism vs. legislative supremacy.

# Governance & Federalism

- Governor's actions in non-assenting to State Bills often spark Centre–State tensions.
- Questions over whether such delays undermine democratic process.

Q. Consider the following statements regarding the powers of the President and Governors under Articles 200, 201, and 143:

- Article 143 empowers the President to seek the Supreme Court's advisory opinion on any question of law or fact.
- 2. Article 142 allows the President to issue directions to the judiciary to ensure complete justice.
- **3.** Under Article 200, a Governor can either give assent, withhold assent, or reserve a Bill for the President's consideration.

# Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

#### South

in the next the

Mr.

Bengaluru set to get

five new civic bodies

In the net: Hajampet MP PV, Mulhun Rodi office in Veayneedda on Saturday, a N. NKI

Reddy, however,

said that the case was poli-ically motivated and that he was falsely implicated. The SIT officials grilled the MP, who appeared be-fore them for the second time on Saturday, on float-

tions - Central, North, Rast, tions - Central, North, Last, West, and Joath corpora-tions, of varying sizes in terms of area, population, population density, pro-lected property tax poten-tial of these compositions. Trying to limit the var-

tance in revence genera-tion potential among the

proposed corporations, and ensuring that the least

number of assembly con-stituencies are split bei-ween corporations, seems

guided the

to have

odity on his way to the little

ing of new distillery firms,

collection of kickbacks from traders, depositing of money into bla companies,

and links with the accused. "I will fight legally over the false case," Mr. Reddy told the media before

The Hindu Bureau

The Tirumala Tirupati De-vasiliananis (TTD), an in-dependent trust that man-ages varians temployees suspended four employees

on Naturday, on the charge es of following faiths other than flinduism. The suspended em-ployees were identified as b. Ellear, Depusy Exercutive Kngineer, X. Kosi, a staff

nurse at BIRRD Hospital, M. Premavati, pharmaciat

Premavati, pharmaciat

The Hindu Bureau

A grind and a seven hours of the average hour of the average of the average gates and the average average average of the average of the

The MP was charged

with playing a key role in the scam. He had conspired with

the other accused to divert money collected from the distillery companies, it was

K.V. Aditya Bharadwai

Karnataka government la-sued a draft northeation of the boundaries of the pre-posed five municipal cor-porations carved out of the

Greater Bengaluru Author-ity limits of 712 sq. km inviting objections over the next 30 days. This comes

after Governor Thiaswat-chand Geblor approved the proposal on Saturday.

The draft splits the civic limits into five corpora-

fter seven hours of

**YSRCP MP Midhun Reddy** 

THE HINDU

#### IN BREEF



#### U.K. fighter jet to fly out soon from Kerala; repairs complete

The maintenance work in the grounder 1948 fighter jet of the keyal Air Porce, U.K., has reportedly been completed at the Thirtwanianthapia and International Airport In Thirtwanianthapia and International Airport In manufactured by Lackbeet Marith is expected to return to its hase station in the U.K. by July 31 or 23, astiget to the charance from the Centre, The combail jet made an emergency landing at the stippert on june 14.

#### Karnataka BJP MLA grilled over murder of rowdy-sheeter

Four days after a realtor-turned-rowdy was hacked to death. BJP MLA Byrathi Basavaraj, who has been named as an accused, appeared before the Bengaluru police for questioning on the hengaturu police for questioning on Strucky, Pive sampects have been arreated for the marder of Shivaprakash, alias Biklu Shiva, while the prime accused is on the run. Grilled his almost four bours, Mr. Basavaraj denied his role in the murcher. The MLA shall this he was asked to appear for questioning again on Wednesday.

#### NIA chargesheets top CPI (Maoist) leader under UAPA

The National Investigation Agency (NIA) chargesheeted a senior leader of the hanned Communic Party of India (Maioti Stor actively being involved in a conspiracy to wage war against Government of India. The anyphenometary chargesheet was filed before the NIA Special Court in Hyderabal. anning C.P. Maideen alias art in Hyderabad, nording C.P. Mot Birish, under various provisi one of the Unlawfu Activities (Prevention) Act, 1967, and the Indian Penal Code (IPC).

Making a splash

Red alert in two districts of Kerala amid heavy rainfall

#### The Hindu Burcau

Most parts of Revala witnessed a sarge in monoron activity in the past two days, faulted by strong westerities in the lower tro-posphere level. The strong weather conditions are m-perclud to continue on handay as well for northern and central parts of Kerala. The India Meteorologi cal Department (IMD) is sized a red alert for Kannu stud a red afert for Kannus and Kumragod, warning of estreme heavy rainfall, and an crange alert for Koshikede, Wayanad, Ma-lappuran, Thristour, Palak-kad, Bruckulam, and Isluk-ki on Kunday, where very heavy rainfal is filedy.



Hotsling the poser live a taking part in the 20th A.P. Sub-Juntor and Junior Aquatic Championship 2033 that began at the mu

#### New TB skin test by Kerala govt. offers | IISER partners with Kerala Police to simple, accurate way to detect disease

Maya Health authorities in Kera-Health authorities in Kere Intradermal test salled 57 TH for detecting and treat-ing subsectional TD infection treatment times to be a set of the sale of the sale of the same of the sale of the sale of the sale of the time the same of the sale of the sale of the time the same of the sale of the sale of the time the sale of the sale of the sale of the time the sale of the sale of the sale of the time the sale of the sale of the sale of the time the sale of the sale of the sale of the time the sale of the sale of the sale of the time the sale of the sale of the sale of the time the sale of the sale of the sale of the time the sale of the sale of the sale of the time the sale of the sale of the sale of the time the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the time the sale of the sale of the sale of the sale of the time the sale of the sale of the sale of the sale of the time the sale of the time the sale of the sale of the sale of the sale of the time the sale of the time the sale of the time the sale of the time the sale of the time t a have introduced a new

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POINT AND A MARKET A MARKET A MARKET FOR THE AND AND A THE THE AND A THE AND A SHARE A MARKET A MARKET AND A THE AND A THE AND A MARKET A MA



group to 30.3% in the 58years-plus age group. Since 2021, Kersla has been using the blood test Interferon Gamuna Release

required estimative labora-tory support and it had a Researchers at the Indian waiting period too. Institute of Science Educa-Cy-Till is a highly speciftion and Besearch (BSER). accurate and user-ndly skin test, wherein

tion and Benearch (INER), Thir uwananthapuram, are working on developing Ar-utificial totelligence-driven crime monitoring and ana-lysis tools in partnership with the Kenala Pelice, ac triendly skin terr, wherein 0.1 mi dose of M. tubercu-louis-specific, antigenue are immer forware. An indura-tion for railsed aread of 8 mm immer forware and a star-tion for railsed aread of 8 mm the skin within 40-72 hours indicates TB mierchos. Cy/TB will be offored in the skin will be offored in the skin will be offored in the skin within the fat hours in aome diritics and in all dialysis contract. The test is prepriorable mognitude.

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The Hindu Dureau



with the Kerala Politice, are centriling to a report pre-tabilitied at the EMB convector Statustage. The partnership was between the means at Values in Theoremain again and the Thiruscanathapurane the developments that pre-tabilities are the second the second that the term Science of USRB and the in-telligence withing to the report presented by the second th

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erstanding (Moth with the Kerala government's Additional Skill Acquisition Programme to develop skilled human resources in stata actornes. It had also entered into

been step, and the start up ecosystem. The action of finta Relates has received fund-in the tast received fund-in then the superinduction for the start of the start for the start of the start for the start of the start develop Al-based ap-proaches for secure com-munication in s0-assisted udge networks. edge networks.

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emits





A. Const Innervative selections A sult of phase bracks is tool on identified cracked portions of the highway the plaster, setupped, association

tunday, July 20, 2025

NHAI officials said that, at present, the highway between Krishnagiri and Walajapot (Ranipet dia-trict) in Tamil Nadu, a dis-tance of 148 km, is main-tained by Larsen & Toubro on hebalf of NHA1 m a 30year agreement, signed ov-

spots, Eraivankadu village in Vellore and Kannigapu-ram village near Ambar in Tirupattur on the stretch, have been taken up for the alass bead layer work. At Erstvankadu, 1.2 km has been haid with a glass bead layer, whereas two km of the strength in Kannigaria ram has the new layer. The

An part noise phote makesowe of the sup-tries attractic about the dotter only orice every decade, only orice every decade, indiana particle of the sup-chaining particle of the tradition on the stretch. "The tradition of the stretch, which the taken up as the complete relay of the outre stretch between Waltash and Performance of the new particle of the stretch stretches of the stretch included the stretches of the stretches of the stretches of the inclusion of the stretches of the glass head layer sticks bet ween two layers of the bit UT-M for NHAL, the glass bead roll is a lengthy layer that contains small particles of glass beads. Each glass bead layer measures



one metrs wide and 0.25 mm in height. The cold of glass baseds is laid on iden-lified eracked portions of the carriageway like plas-ter. On top of *k*, a fush coat of bitumen, with a coat of bitumen, with a coat of plasmen, with a metro *R*-maximized without metro. *R*-maximized without plasmen, without the standard standard metro. *R*-maximized without the metro. *R*-maximized without the metro. Maintenance. As per norms, the com-

work is nearing completion. NHAI officials said the

umen on the carriage as a glas. Thus, it helps to prewent any cracks on the sur-lace of the binamen carria-geous. Such prevention of cracks helps to avoid the creation of potholes during monsoon, resulting in waterlogging and acci-dents. On the other hand, glass head technology en-sures longer shelf life of bitumen stretches on key



TTD suspends four

'non-Hindu' staffers

alsong some individuals and incidents that hap-pened at that time in the Stanfer Theorem pened at that time in the article," he told mediaper-sons on the sidelines of a meeting on 'Peace, Unity and National Develop mant' organisad by the Gournest for Gormiunity Co-operation. "You can read a to understand 4. There is nothing new in the article." he said.

The SIT would produce Mr. Reddy (Accused No. 4) in the ACB Special Court in

chargedneet filed Meanwhile, the CDD per-sonnel filed the chargesh-cet in the Anti-Corruption Bureau (ACB) Special Court in Vigawaida. The police also men-tioned involvement of 40 secured, including officers of the State Beverages Car-tion and Excise to the care. Twelve neurons fluid so

Twelve persons had so far been arreated in the case. Meanwhile, the SIT

has summoned former De-puty CM and former Excluse Minister K. Narayana Bwa-

at BIRRD Hospital, and G. Asamtha, working in 20 Ap-urveda. Pharmacy. Ten-days ago, another serior unficial was suspended for the same violation. "The employees the not follow the institutiony code of conduct and a tend irresponsibly while per-formant their during as error.

forming their duties as em-ployees working in a Hindu

religious organisation," the

management said. The action was taken

based on a report by the Vi-glance Department.

my on Monday

Vijayawada on Sunday

Chargesheet filed

In his speech at the meeting, Mr. Tharacer said nation comes first to his mind. Parties are a means to make the nation better. "Whichever party you be than to, the objective of that party is to create a bet-ter findle in the own way. Now, parties have every victor or disarres abave every right to disagree about the best way of doing that," he and ct.

Match. He said that a lot of peo-ple were critical of him be-cause of the stance that he had taken supporting the On the survey that projected him as the best suit-ed to become the Chief Mied to became the Chief Mi-mister of Korala, which he had shared on the social media platform X resently, Mr. Tharcor said that it was not done by him. "I had only shared it." he said. armed forces and the Un-ton government on Opera-tion Sindoor, "But I will stand my ground because it is the right thing for the



# New TB skin test by Kerala govt. offers simple, accurate way to detect disease

## <u>C. Maya</u> THIRUVANANTHAPURAM

Health authorities in Kerala have introduced a new intradermal test called Cy-TB for detecting and treating tuberculosis (TB) infection following the prioritisation of latent TB infection treatment under the National TB Elimination Programme (NTEP).

TB infection is different from active TB disease. A person with TB infection harbours the organism causing TB infection (*Mycobacterium tuberculosis*) in the body. But the organism remains dormant or inactive in the body and the person neither has any TB symptoms nor is he contagious. If left untreated, 5-10% of them will progress to developing active TB disease when the body's immune system weakens. This could happen within weeks of acquiring the infection or maybe years.

Α community-based cross-sectional study among adults in Thiruvananthapuram district in 2023 had reported that 20.5% of the adult population have tuberculosis infection. The study tested whole blood samples of 396 adults for TB infection and found that the prevalence of TB infection increased with age, ranging from 11.5% in the 18-35 age



The State currently uses Interferon Gamma Release Assay (IGRA) test for detection.

group to 30.3% in the 58years-plus age group.

Since 2021, Kerala has been using the blood test Interferon Gamma Release Assay for detecting TB infection. However, this test required extensive laboratory support and it had a waiting period too.

Cy-TB is a highly specific, accurate and userfriendly skin test, wherein 0.1 ml dose of M. tuberculosis-specific antigens are injected into the skin in the inner forearm. An induration (a raised area) of 5 mm or more which develops on the skin within 48-72 hours indicates TB infection.

Cy-TB will be offered in district TB centres, taluk hospitals, at the block level in some districts and in all dialysis centres. The test is currently available in major private hospitals.

# 1. New Cy-TB Test Introduced

- Kerala health authorities introduced Cy-TB, a new intradermal skin test for detecting latent TB infection.
- Part of the National TB Elimination Programme (NTEP).

## 2. Difference Between TB Infection & TB Disease

- TB Infection: Person harbours Mycobacterium tuberculosis, but remains dormant/inactive.
- The person has no symptoms and is not contagious.
- 5-10% of those with latent infection may progress to active TB if immunity weakens.

# 3. Cy-TB Test Details

- · Mechanism:
  - 0.1 ml of *M. tuberculosis*-specific antigens are injected into inner forearm.
  - A raised area (induration) of ≥5 mm within 48–72 hours indicates TB infection.
- Advantages:
  - User-friendly, highly specific, and more accessible than earlier methods.
- Implementation:
  - Available in district TB centres, taluk hospitals, block level, dialysis centres, and major private hospitals.

# 4. Comparison with Existing Test

- Earlier, Kerala used Interferon Gamma Release Assay (IGRA) since 2021.
  - IGRA is a **blood test** needing lab support and a waiting period.
- Cy-TB is seen as a simpler and more scalable alternative.

# 5. Prevalence Study

- Thiruvananthapuram study (2023):
  - 20.5% of adults had TB infection.
  - Prevalence rises with age: from 11.5% (18–35 yrs) to 30.3% (58+ yrs).
  - Based on testing of **396 blood samples**.

# **Global TB statistics**





# Types of Drug-Resistant TB

# Multidrug-Resistant TB (MDR-TB)

TB Bacteria resistant to at least isoniazid and rifampicin.

# Extensively Drug-Resistant TB (XDR-TB)

TB bacteria resistant to isoniazid, rifampin, fluoroguinolone, and second-line injectables.

Fatigue

# Government Strategies to end TB

P

National Tuberculosis Elimination Program (NTEP): Aims to

eradicate TB in India by 2025.

erculosis (TB) community

**Engagement Initiatives** 

like the Pradhan

**Mantri TB Mukt Bharat** Abhiyan

**Project Axshya Plus** involves contact tracing. testing, and managing latent TB infections.

## **Ni-kshay Mitras**

active TB.

**TB** Preventive

individuals at high

risk of developing

Therapy to

encourage public involvement in TB care and awareness.

**Eliminating TB** UN aims to end the TB epidemic by 2030.India aims to eliminate TB by 2025.







 It is a curable disease. Treatment depends on whether it is drug-resistant or simple tuberculosis.



# **BPaLM Regimen for MDR-TB**

- It consists of a four-drug combination
   Bedaquiline, Pretomanid, Linezolid and Moxifloxacin.
- It is a **highly effective** and **shorter** treatment option than the previous MDR-TB treatment procedure.

# Q. Consider the following statements regarding the new Cy-TB test introduced by Kerala:

- 1. The Cy-TB test is used for detecting active tuberculosis cases only.
- 2. It involves the intradermal injection of Mycobacterium tuberculosis-specific antigens.
- 3. A positive Cy-TB test shows a raised skin reaction (induration) within 48–72 hours.
- 4. The test requires extensive lab support and a long waiting time, similar to the IGRA test.

# Which of the statements given above is/are correct?

- A. 1 and 4 only
- B. 2 and 3 only
- C. 1, 2 and 4 only
- D. 2, 3 and 4 only



## 'Open to debate in House on Operation Sindoor'

Opposition insists on PM's response on Operation Sindoor and after-effects during Monsoon Session

85 killed while

trying to reach aid sites in Gaza

INSIDE

DEBLAL-BALAH At loast 85 Palestiniams wer killed while trying to reach aid at torations across Gass on Sunday, the territory's Health Ministry latel. The largest full was in numberer Case, where 75 Patentinians years killed white trying to reach aid, the Ministry ackled. Some with ain. natisf course in the second of the crowd. is PAGE 14

#### **YSRCP MP sent to iudicial** remand until August 1

VIJAVANIAINA The Anti-Corruption Runeau Special Court in Vijayawala on Bunday and YBM Congress Party lander and Reampot MP PV, Midhun Reddy to judicial entand till August 1 in the alleged multi-crere liquer scan case. Following the order, the Samual Investigation Team nersonnol began the process of Inflorg Mr. Hidhun Heddy to the Batamahandravaram Central Prison arend bahr security is ended in

#### Syria truce holds after clashes that left 1.000 dead

OWEIDA Calm returned to southern Syria's Sweida province on Sunday, after a week of sectarian violence between Disze fighters and rival groups that killed reary than 1,000 people. A ceasofire announced in Saturday approared to lee iolding after earlier parts failed to and fighting betwee the long time routs the Druze and the Bedouin that spiralist to draw in the Islamist-led control to make an



that any debate on the sub-ject had to be held within the lad-down rules and precedures. Opposition parties, meanwhile, indicted that Penne Miniter Marenafa Modi greak on Operation Sindor and U.S. President Consist Tump's repeated claims that iss hid bro-kered peace between India sised that "reyown (rules)" and "perangran (conven-tions)" are important for the government. The Minister made it clear that the final call on discussions in Parliament would for taken by the Bu-siness Advisory Committered peace between India



Minister says any debate on the subject should

be held within laid-down rules and procedures

Solding the stage: Union Munchers J.P. Nackla and Nires Ripp with athens after the all party meeting on Sanday alread of the Mericani

teen of the Lok Sabha and the Raya halha. The Haas e of Failmanni will have and failing during the sector. On the Opposition's de-mand for M. Modits make

Prime Minister always re-mains in Parliament, but the Prime Minister does not remain in the House all the time." He said Cabinet Ministers were always pre-sent in both Mouses to res-

halgom incident have not been listed, he said. An argument reportedly truke out during the meet-ing, when Opposition lead-ers from Maharashtra – Supriya Sale of the Nationalist Congress Party Obarad Pawar), and Arvind Sawant of the Shiv Se-na (URT) - Ragged the on-going language debate in the State, accusing the Centre of trying to impose Hindi. At this point, a Lok Jarobakti Party diam Vilao Jarobakti Party (Barn Vilas) MP Int back at them, accus-ing the Opposition parties of Largeting Findl-speaking migrant workers from Ut-tar Pradesh and Bihar.

Kailash Manasarovar Yatra giving a new impetus to ties, says Chinese envoy

#### NEW DELTI

China is prepared to dis-class "refining border man-agement and control rules" to resolve limites around its dispatied boun-dary with India after the four-your military stand-off-ended at the Line of Actual Control. GAG, Chinese Ambassador to India Xu Pelhong said on Runday. In extension China is premared to dis-He expressed optimism that the revival of the Kal-lash Manasarovar Yatra lash Manasarovai Yatra would "inject impense" to ties and that direct flights would be launched seen. Rejecting criticiam of China's support to Pakistan during Operation Sindow, Mr. Xu said that bilateral Mr. Su said that bilateral ties were not targeted at a third country. He warned that comments by Parlia-mentary Affaits Minister Kiren Rijlju and other in-dian officials supporting the Dalai Lama's statement in his successor could Nepal Ministry im his successor civild came friction within India-china bilateral ties. In written responses to questions posed by The Hindu, the Mr. Xu pointed to a flurry of high-level vi-aits from India to Shanghai Commercian Completion for the Stanghai Commercian Completion (Completion).

Cooperation Organisation (SCO) meetings over the past month as proof of im-proving ites. They include visits by Defence Minister Rajnath Singh, National Se-curity Adviser Allt Deval, and External Affairs Minis-ter 8. Jaisburtkar, Mr. Nu noted the possibility of noted the possibility of prime Mitoture Narendra Modi travelling to China he to Born and September 1, which would be hin frare visit atocs the Galwan clashes. "In the not stage, China is willing to maintain com-munication with Infla-monication with Infla-monication with Infla-minitary diatomete, and in military diatomete.

AT A GROOM

China is willing to maintain communication with India through diplomatic and military channels. and, in the spirit of equal consultation and mutual security, further refine the border area

- Statist management and control rules. secas treachieve sustainable peace and tranquillity in the border areas Linese Antennalise in Irolin 100

the spirit of equal consulta-tion and matual and equal security, further refine the their positions but "should avoid bringing bilateral conflicts" to discussions, in accartey, numer rentie the border area management, and control rules and strengthen confidence building measures, to as to achieve austainable pears and tranquility in the hor-der areas," Mr. Xu said. a reference to India-Pakie tan templorus, Asked about the statement of India's Deputy Chief of the Army Staff, Lieutenant General Rabul R. Singh, about China's support to Pakistan during Operation Sindoor in May, Mr. Na said that China Pakatan ties did nor

"target any third party". In his comments, Licutesant-General singh had suggest ed that China had "used due neighbour (Pakistan to cause pain" to India, is the manner of a "bor the manner of a "bor-rowed knife." While side-stepping

another question abou whether China's trilateral of work for the resumption of direct flights," he added. While the Defense Miwith other countries in South Asia - including a re-cent China-Bangladeah-Panister had visited Beijing and heid bilantral talks, to-dia had said that the SCO Defence Ministers musting kustan initiative on trade, and a China-Pakistan-Afghanistan initiative on in-frastructure - were a way fulled to find consensus as of "cutting india out" of the SAARC region, Mr. Xu said that India was welone country - referring to Pakiotan - had held up the language on terrorism in a proposed joint statement. The Chinese Ambassador come to join any of the in-itiatives. He claimed that in The Chinese Ambaanador did not respond to a specif-ic query about why the SCO had not included in-dats senseens over the Pa-halgam terror attack, pointing instead to an 800 "code of conduct" that members could express the past 12 years since the launch of China's Belt and aument of china's beit and Road builative, which in-dia has refused to join, traile between China and South Asian countries "doubled from less than \$100 billion to about \$200 billion?

4 44 4

ARRITE THE

discuss all aspects of Oper-ation Sindoor. At least four questions that he had bled in connection with the Pa-The Congress, however, maintained that it is the Prime Minister's moral responsibility to give a state-ment in Parliament on key issues. "We hope that the PM will fulfil his moral du-PMI will fulfit his meeral day for, "Compress Deputy Land-er in the Lock Solthan Gaurae the end of the meeting. He warrough that if the govern-ment failed to answer the raised about the SIR and the filtectitic Commission. It would case a shundow of the filtectitic Commission. It would case a shundow of due psil process and future elections. More merets Commandia

At least four questions filed in connection with the

pond to the issues or cerning their Ministries.

Pull fairness

At the monthly, according ing to sources, Communist Party of India (Marxist) Parliamentary Party leader John Brittas questioned the

V-P CALLS FOR BORHOMIE



Saffron wave

## The Hindu Bureau

### Union Parliamentary Af-fairs Minister Kinen Rijija on Sunday said over 100 MPs hast already signed a notice to bring a motion in metrics to bring a motion in Parliament for the removal of Justice Yashwant Varma of the Allahabad High Court, which is the mini-

mum support required for tabling the impeachment mercire in the Lak Sabha. the Raiya Sabha. The mo-tion is likely to be tabled in the Lower Hosine.

mercine in the Lak kadha. "The signature lease-clard is under way and it has crossed. Hoo already." Mr. Rijiu told presspersons after the all-party meeting. He said that the Businsis Advisory Committee will decide when the motion is invest.

A motion for a judge's removal has to be signed \* M (2000000)



#### by no fewer than 100 MPs a fire in March. In the Lok Sabha and 30 in A committee of three High Court judges appoint-ed by then-Chief Justice of

India Sanjiy Khanna before his retirement had indicted him, the former Chief Jas-tice of India had referred the matter to President Droupadi Murmu and Prime Minister Narenthra Modi, recommending Jus-tice Varma's removal after Recommended removal Recommended removal Wads of half-burnt curren-ey notes were discovered at the outbours of then Pullii High Conet judge las-lice Varma by emergency nervice providers following distant and dentities.



country Manager, Willing Exception of an interesting over the

says PM Oli

Pending motion On Saturday, Balya Sabba member John Brittas of the way. However, the date and the detailed schedules of the visit are yet to be Communist Party of India (Marsist) and the CPTs P

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lay, dias to the origning Kar

(Marsiss) and the CPTs F. Sandosh Kumar had Bagged the Oppissition's pending impeachment motion against Justice shektur Yadav of the Alia-hubad tigh Court for his al-leged commonal remarks, earlier to use a test of fire nalised," Foreign Ministry spokesperson Lok Baha-dur Chhetri said. dur Chherri said. However, sources at the Prime Minister's office said he will embark on his visit on September 16, and the leged communal remarka, saying it was a test of Par-lament's commitment to the constitutional value of socularism.

visit will be short this time PULL REPORT

#### Steader, NY 71, 1997

THE HENDE SCIENCE

# Mental fatigue can trick the brain into taking the easy way out

Then sedenary work can keel estaneting when sustained for hours together. This exhaustion is called cognitive faigue and builds up with continuous effort to maintain focus on daily rasks. While cognitive fatigate affects our performance and focus, a new study has found that it also influences decision-making by making one prefer easier tasks

#### Municipal Problem

A this a long day at work, 3's succer to they an the couch there the the gyrs, iccollegener social multi-wise over tracking share the advantation because a book. Our exhausted brains favour same table, over II - according to a two male in the Journel of Neuroscience those tasks offse hover beautits. Town submitty work can list exhausting often maturised for houses together. This eshaustion is called regulative finight and builds up with conditioners effort to maintain forth our daily tasks. While cognitive fatigue affects nor performance and forms, the new thirdy has found that it also influences

mach has found that it dale influences instances mainly by noting and profile "Towards of the additional profile "Towards of the date of the lead subset of work, "Vision Coll or the oliver Heplate Science of Noticities and the lead subset of the statig and, "Me all have a subjection register insid attracts" The stress data provides a manufacture and the lead subset of the statig and, "Me all have a subjection register insid attracts" The stress data provides a manufacture influences: respects influences."

Basely could be summer of the ball. up to cognitive fatigue, and how does it affect decisions about exercise further To prover these quarthets, researchet recented healthy vehaniours is represent

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properties and a from the notice and a spiral as decision advance (from effect as and a spiral as decision advance (from effect based on the lower of finitiations). "The Life of the spiral as a spiral of the spiral as the spiral finite spiral as a spiral spiral spiral indexing an annual spiral spiral spiral modeling unstructions and compatible follows indexing unstructions and compatible follows the chain and the spiral spira restative of the Setting of Allowing and any distance of piepoint brain stgions that are arrive during a task. At participants performed the working memory task and reported. task seem more durageding frast when a



Feeling hittgard, (NRI invitated the ... teening tadqueet, MMI enrouted the downloaning problems of control offPPCs, located just behind the Southead, was activated, in line with its instantised with MMI south when enrouted the reflect enterine insula was active when the A big strongth of this study is that it Brade commontivity looking exection todates . enterine transfe low active when the participants made that choices. This regime angles whether the other incentral does a task to worth the reward. As previous studies from Dr. Che's group, the incude performing a depend task while operating a depend task while operating a depend task while AND DESCRIPTION OF THE PARTY OF person was report. The mean-three also reported a personal the mean-three day participants personal the hard taken reported their personal that hard taken reported their personal three days of the term wear been any resolution of the term as people perime data we mean three takes taken three data we taken taken the falges taken three picks weater takes taken the weather substances of the Packing harder is the main war extended to outcaring cognitive effort. "This is out correct working model of where effort is evaluated in the brain. The where entry is well-added in the first, case inside receives input of fargue resulting from weaking trainery racio from first differ, and of heigher resulting from physical safe from the noder cortex, and

their components that particle mass. It will be a set of the set of the study, append "When the study are the study, apped on a the set of the mass of the set of the set of the mass of the set of the set of the mass of the set of the set of the mass of the set of the set of the mass of the set of the set of the mass of the set of the set of the mass of the set of the set of the mass of the set its. Walking, which makazani congentitive farigese on retain longer time scalar top-to da facarti in its research, norsketed, "Sine are short to the and long-total furgase

effects related 160x are seguilated capacities restroof after a signific of despity" Casa cognitis digits at distance effort Based choices the say take? "We report that cognitive brights, and take report that cognitive brights, and take bars with the service protony takin, making participative forgets, and take plential casi insparing into effort." The Oblive add, to service strength, there are be automatic participative strength, show the a subset supering the strength of the strength takes used to be able to be an additional take insparing instance of the strength attemption of the strength of the strength of the subset states in constally estimated.

Time for a break Cognitive fatigue to a commune systemum of sump neurological and psychiastic conditions. Futients who have authinod stocks and these suffering from multiple eckerwsia, cheora: farigase syndrome. electronic, concerning and echangebornic Approximation, analysis, and echangebornic have reperiod monital linkpass. Not the way hadgee reasolitoris in theme sounditione is provely defined. The new study is a step providy definition. The recent study is a step source is interpret with the message integers to submittaining here is obvious different and because multiling with the basis. And whether the study of the basis must be able to be a start of the basis must be able to be able to be able to be here or the basis of the start of the basis must be able to be able to be able to be must be able to be able to be able to be must be able to be able to be able to be must be able to be able to be able to be must be able to able to be able to able to be able to able to be able to able to be able to able to be able

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BIG SHOT



straty and desply pandwing make and here, which can privad to weight not the blatesta and firms ng charactery and quality insums 4817

#### WHAT IS IT?

#### Moon Day: remembering the leap

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# Moon Day: remembering the leap

#### The Hindu Bureau



International Moon Day is celebrated every year on July 20 to commemorate humankind's first landing on the moon by the Apollo 11

mission in 1969. The UN General Assembly formally recognised this date in 2021, following a proposal recommended by the Committee on the Peaceful Uses of Outer Space (COPUOS). The commemoration also aims to highlight the collective progress of all nations in exploring the moon.

On the day, activities like public events, sky-gazing, educational outreach, and science competitions are organised worldwide to inspire curiosity and foster interest in space science, especially among the youth. According to the UN, International Moon Day also serves to promote sustainable practices in space, international cooperation, peaceful exploration, and the responsible use of lunar resources.

There have been minor criticisms related to the chosen date. Some commentators have noted that while the Apollo 11 lunar module landed on July 20, Armstrong's first step technically occurred at 2:56 UTC on July 21. This ambiguity has occasionally prompted debate over whether July 21 is more accurate to commemorate. There is also



An aircraft passes in front of the moon; the red glow is attributable to smoke particles from North American wildfires, a day ahead of the full supermoon on August 18, 2024. REUTERS

occasional commentary questioning whether the date, rooted in an American achievement, fully encompasses the international spirit intended by the UN, more so since other nations have contributed significantly to lunar exploration.

Despite these discussions, July 20 remains globally recognised for now as the date humankind first leapt beyond the earth.





# **1. International Moon Day: Introduction**

- Celebrated every year on July 20.
- Commemorates the first human landing on the Moon via Apollo 11 mission in 1969.
- Formally recognized by the United Nations General Assembly (UNGA) in 2021.

# 2. UN Involvement

- Date proposed by the Committee on the Peaceful Uses of Outer Space (COPUOS).
- Focus: Collective achievements in lunar exploration by all nations.

# 3. Objectives of International Moon Day

- Public awareness and youth engagement:
  - Events: Public sky-gazing, educational outreach, science competitions.
  - Aimed at inspiring curiosity in **space science**, especially among youth.

- Sustainable space practices:
  - Emphasizes:
    - Peaceful use of outer space.
    - International cooperation.
    - Sustainable lunar resource management.

# 4. Criticisms and Debates

- Date controversy:
  - Armstrong's first step on Moon: 2:56 UTC on July 21, not July 20.
  - This leads to debate whether July 21 is more accurate to celebrate.
- Geopolitical viewpoint:
  - Critics argue that choosing July 20 (a US-centric milestone) may undercut the global spirit intended by the UN.
  - Other nations have also made significant contributions to lunar missions (e.g., USSR, China, India).

Dimension	Related Facts		
Historical	Apollo 11 launched by NASA; Neil Armstrong's first step on Moon in 1969.		
Geographical	Moon is Earth's only natural satellite; ~384,400 km away from Earth.		
Political	UNGA resolution to observe Moon Day emphasizes peaceful space cooperation.		
Scientific	First manned Moon landing via Saturn V rocket by USA.		
Social	Inspires global youth interest in astronomy and STEM education.		
International	UN's COPUOS promotes space governance, non-militarization of Moon.		

Apollo 11	1969	Armstrong, Aldrin, Collins	First Moon landing	Major success – Armstrong & Aldrin walked on Moon
Apollo 12	1969	Conrad, Gordon, Bean	Precision Moon landing	Success – landed near Surveyor 3; returned Moon rocks
Apollo 13	1970	Lovell, Swigert, Haise	Intended Moon landing	<b>Failure</b> – oxygen tank exploded; crew returned safely
Apollo 14	1971	Shepard, Roosa, Mitchell	Moon landing	Success – landed at Fra Mauro; conducted Moonwalks
Apollo 15	1971	Scott, Worden, Irwin	First use of Lunar Rover	Success – explored Hadley Rille area
Apollo 16	1972	Young, Mattingly, Duke	Moon landing	Success – explored lunar highlands
Apollo 17	1972	Cernan, Evans, Schmitt	Final Moon landing	Success – longest Moon stay, first scientist on Moon

The Peregrine lunar lander is expected to touch down on 23 February

Successful landings: 
US manned Apollo missions 1969-72
US Surveyor 1966-68 © USSR Luna 1966-76
China Chang'e 2013-20 © India Chandrayaan 2023

Planned touchdown






#### Q. Consider the following statements regarding International Moon Day:

- 1. It was officially recognized by the United Nations General Assembly in 2021.
- 2. The date July 20 marks the exact time of Neil Armstrong's first step on the Moon.
- 3. The celebration aims to promote peaceful and sustainable use of outer space.

#### Which of the above statements is/are correct?

- A) 1 and 2 only
- B) 1 and 3 only
- C) 2 and 3 only
- D) 1, 2 and 3

#### Monday, July 21, 2025 ORIPAN

#### SCIENCE

#### Mental fatigue can trick the brain into taking the easy way out

Even sedentary work can feel exhausting when sustained for hours together. This exhaustion is called cognitive fatigue and builds up with continuous effort to maintain focus on daily tasks. While cognitive fatigue affects our performance and focus, a new study has found that it also influences decision-making by making one prefer easier tasks

#### Sheetal Potdar

fter a long day at work, it's easier to flop on the couch than hit the gym. Scrolling over social media wins over reading a book. Our exhausted brains favour easier tasks, even if - according to a new study in the Journal of Neuroscience those tasks offer fewer benefits. Even sedentary work can feel exhausting when sustained for hours. travether. This exhaustion is called cognitive fatigue and builds up with continuous effort to maintain focus on daily tasks. While cognitive fatigue affects our performance and focus, the new study has found that it also influences decision-making by making one prefer ensier tasks.

"Everybody has different capacities for work," Vikram Chib of the Johns Hopkins School of Medicine and the lead author of the study said. "We all have a subjective sense of effort - what you may find easy, I might find difficult." The study also provides a neurobiological model to explore how fatigue can influence everyday decisions.

#### 'Brally cool'

But first, how does sustained effort build up to cognitive fatigue, and how does it. affect decisions about exerting further effort?

To answer these questions, researchers recruited healthy volunteers to repeatedly perform a working memory task. These individuals focused on a screen flashing different letters one by one. In the easy version of the task, they had to recall if the current letter matched the preceding one. As the task got harder, volunteers had to recall if the current letter matched with those displayed anywhere between two to six letters prior. After performing the harder tasks many times in a row, participants reported feeling fatigaed. Next, the participants were offered two

choices: easy version of the task for less money or difficult version of the task for more money. Fatigued participants chose the easy option even if it meant earning less money, whereas they opted for harder tasks for more money when they were rested. "It was really cool to see something we

expected but was never quantified before. that fatigue actually influenced the participants' choices," Dr. Chib said. While the participants made their choices, the researchers tracked their brain activity using functional magnetic resonance imaging (fMRD. This noninvasive technique allows scientists to phipoint brain regions that are active during a task. As participants performed the working memory task and reported



Hental fatigue can directly change the value of some effort, making the task seem more demanding than if a person was rested. How this involvem some

feeling fatigued, fMRI revealed the dorsolateral prefrontal cortex (dIPEC), located just behind the forehead, was activated, in line with its understood role. fMRI scans also revealed the right anterior insula was active when the participants made their choices. This region judges whether the effort required for a task is worth the reward. In previous studies from Dr. Chib's group, the insula had been found to estimate the effort of performing a physical task while physically fatigued.

#### Pushing harder

In this study, the role of the insula was extended to evaluating cognitive effort. "This is our current working model of where effort is evaluated in the brain. The insula receives input of fatigue resulting from working memory tasks from the diPFC and of fatigue resulting from physical tasks from the motor cortex, and it guides decisions about future effort based on the level of fatigue," Dr. Chib certained.

"A big strength of this study is that it finds connectivity linking exertion to choice," Antonius Wiehler, a researcher studying motivation and cognitive fatigue at the Paris Brain Institute, said. Indeed, Dr. Chib and his team found that signals from the dIPFC representing fatigue influenced the neural activity of the insula. This meant fatigue directly changed the value of effort, making the task seem more demanding than when a

A big strength of this study is that it finds connectivity linking exertion to choice ANTONICS WIEHLER

Parls Robin Incide

person was rested. The researchers also reported a pecultar observation: while participants reported feeling fatigued as they performed the hard tasks repeatedly, their performance didn't dip. The researchers interpreted this to mean that as people performed harder tasks, the fatigue made them pick easier tasks rather than compromise their performance. Dr. Wiehler, who wasn't part of the study, agreed: "When the stakes are high and the benefits are clear, such as in this study, people can still use cognitive resources despite needing elevated effort. However, when benefits are uncertain or subjective, like in market decisions, the increased cost leads to behavioural changes."

We have all experienced this in our daily lives: when a deadline looms, we push ourselves harder to finish a task at hand despite needing more effort. The study also opens new questions.

Dr. Wiehler, who induces cognitive fatigue on much longer time scales (up to six hours) in his research, wondered, "How are short-term and long-term fatigue

effects related? How are cognitive capacities restored after a night of sleep?" Can cognitive fatigue influence effort-based choices for any task? "We have a new study coming up where we report that comitive fatiator, as induced here with the working memory tasks, makes participants choose even a physical task requiring less effort," Dr. Chib said. In other words, there may be a neurobiological reason to avoid the gym when one is mentally exhausted.

#### Time for a break

Cognitive fatigue is a common symptom of many neurological and psychiatric conditions. Patients who have suffered stroke and those suffering from multiple sclerosis, chronic fatigue syndrome, depression, anxiety, and schizophrenia have reported mental fatigue. Yet the way fatigue manifests in these conditions is poorly defined. The new study is a step towards developing ways to manage fatigue by understanding how it affects effort and decision-making in the brain. How can we mold fatigue skewing our daily decisions? Dr. Chib advised being "mindful about taking breaks. While we haven't directly tested it, reframing tasks can also help." The next time you catch yourself making a poor but easy choice while mentally tired, you know it's time for a break.

(Shornal Postdar has a PhD in neuroscience and works as a science writer. sheetaidpordar@gmail.com)

THE GIST

Volunteen in a study had two choices: an easy version of a tank for less money or a difficult writion for more Fatiguid participants china the many option even if it. meant earning lass, wherea twy opted for funder tasks for more money when they were rested.

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Cagnitive firtigue is a symptom of many neurological conditions. We For way faligue manifests here is poorly defined. The new study is a step towards developing ways to manage fatigue by undestanding heat it affects effort and

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#### 1. Core Idea

- Mental fatigue, even without physical exertion, can influence the brain's decision-making by pushing it towards easier, low-effort options.
- This condition, termed cognitive fatigue, affects performance, focus, and choice preference.

#### 2. Cognitive Fatigue: Definition and Characteristics

- Occurs due to continuous mental effort required to focus on tasks for long hours.
- Even sedentary work can trigger fatigue.
- Results in a **subjective sense of effort**: tasks feel harder and more draining.
- Makes one choose easier alternatives over effortful or rewarding ones.

#### 3. Key Findings from the Study

- Published in the Journal of Neuroscience.
- Method:
  - Participants were given tasks with different difficulty levels and had to choose between easier tasks with less reward or harder tasks with more reward.
  - A functional MRI (fMRI) was used to track brain activity.

Oberen estimation est

#### Observations:

- Fatigued individuals were more likely to choose easier options.
- Decision-making centers in the brain (particularly the anterior insula and dorsal prefrontal cortex) showed altered activity under fatigue.
- The fatigue distorted the brain's internal model of effort, making tasks seem harder than they
  objectively were.

#### 4. Neurological Insight

- Activity in the anterior insula (linked to internal sensations and emotional awareness) plays a critical role.
- Brain misinterprets mental fatigue as actual physical effort, leading to skewed decision-making.
- Fatigue results in **reduced connectivity** between regions linked to reward, control, and motivation.

#### E Implications of the Eindings





## **FUNCTIONS OF THE BRAIN**



#### 5. Implications of the Findings

- Relevant for professions requiring long mental focus (e.g., air traffic controllers, coders, researchers).
- Could inform workplace productivity, mental health, and task allocation strategies.
- Explains common real-life behavior: choosing Netflix over exercise after a mentally draining day.
- Cognitive fatigue is **not just laziness**, but a neurological response to sustained mental demand.

#### PARENTS, SCHOOLS GRAPPLE WITH DIGITAL OVERLOAD AMONG YOUNG ADULTS Slipping grades, social withdrawal, aggression: How screens affect children

#### **SOPHIYA MATHEW** NEW DELHI, JULY 20

A 12-YEAR-OLD boy, once active in sports and school, began retreating into himself - skipping meals, ignoring friends while spending nights glued to a glowing screen.

Anine-year-old, overwhelmed when his phone was taken away, picked up a kitchen knife and slashed his arm.

A 19-year-old boy, who spent over 12 hours a day gaming, developed a spinal deformity so severe that he lost control of his bladder and had to undergo complex corrective surgery. These real-life cases, shared

by child psychologists and school heads, reflect just a fraction of a larger problem. In hospital wards and counselling rooms across Delhi, more children are presenting with issues that trace back to the same source - the screen.

The Indian Express speaks to school heads, experts and children themselves on the gravity of the crisis and how it can be managed.

#### 'Look for the signs'

According to Aniali Kharbanda, Principal, N K Bargodia Public School in Dwarka, it usually starts with slipping grades. "The children then withdraw from social spaces, there is a loss of interest in participating in school activities, and their behaviour changes."

However, the drop in grades, she explains, is rarely the problem - more often, it's a symptom.

Take the case of the 12-yearold whose struggles began long before his report card reflected them. He had stopped waking

up for school, his appetite reduced, and he withdrew from friends and sports. Nights were spent in front of a screen.

When his parents brought him to Sir Ganga Ram Hospital. the diagnosis was clear: "emerging depressive features strongly linked to excessive screen use". Treatment involved parental training, cognitive behavioural therapy "to address negative

thought patterns", a fixed digital curfew, and routines to restore sleep. "Gradually, with better sleep and reduced screen exposure.

his mood and energy levels improved, as did his school engagement," says Dr Bhavna Barmi, senior child psychologist at

Fortis Escort Heart Institute. At the same clinic, parents of a 15-year-old girl, who was a class topper once, rushed to seek help. Their daughter was into "late-night video streaming and chatting"-until 3 or 4 am-but it soon disrupted her sleep cycle

entirely. She became irritable, disengaged, and began experiencing auditory hallucinations. Doctors diagnosed her with

chronic insomnia induced by prolonged screen exposure. which had altered melatonin production and impacted her cognitive and emotional regulation. She was prescribed behavioural sleep therapy, short-term pharmacological support, and

sessions to address academic anxiety and social isolation. Other real-life instances highlight the severity of the problem and what could happen if it's left unchecked - like in the case of this nine-year-old boy.

He regularly spent three to four hours unsupervised on a

phone, flew into uncontrollable rage when it was taken away. In a moment of distress, he found a kitchen knife and slashed his arm.

His actions, doctors say, were classified as a form of behavioural addiction, mirroring withdrawal-like symptoms -- "emotional dysregulation, impaired impulse control, and agitation".

He was rushed to the emergency room at Dr Ram Manohar Lohia Hospital and later referred to the child psychiatry department, Finally, gradual device weaning, therapy to build frustration tolerance, and counselling for his parents helped address the issue.

In a similar case, a Class 4 child in Dwarka began throwing violent tantrums and using abusive language after being left unsupervised - his mother was often preoccupied with filming YouTube reels. The child, doctors

say, had to be hospitalised and shifted to a new school. The most alarming case from

this year involved a 19-year-old who had been addicted to mobile gaming for more than a year. He spent over 12 hours a day on his phone, playing games like Battlegrounds Mobile India. He became sedentary, socially withdrawn, and over time developed kypho-scoliosis, a spinal deformity, worsened by undiagnosed spinal tuberculosis.

By the time he was brought to the Indian Spinal Injuries Centre, he had lost bladder control and could barely walk. Doctors performed a complex spinal surgery involving navigation, decompression, and implant stabilisation.

"They were able to reverse. his bladder dysfunction and re-



schools chairperson and former

principal of Springdales School.

"Many use it as a teaching and

learning device. Before Covid.

there were very stringent meas-

ures in place in schools. Phones

dangers. She recalls an incident

from Springdales a few years ago.

was held at the school for her.

"She stood up before her class-

mates and shared her story: she

had been digitally bullied, her

images morphed and circulated

overnight - it takes time, and

Court, responding to a PIL, issued

a set of directives for managing

smartphone use in schools. It

tion and responsible access.

ecosystems inside schools."

of a teenage girl being bullied.

But she acknowledges the

A mock parliament session

were confiscated."

without consent."

store partial mobility within days," says Dr Barmi.

Research from around the world also points to similar issues with screen addiction among children. According to an international

study published in June, in the medical Journal JAMA, researchers analysed screen use among 4,285 children from 10 years of age in the United States: they screened them for compulsive use and distress when denied devices.

The study found that by the age of 14, those with high addictive behaviour were two or three times more likely to have suicidal thoughts. It also found a direct link between "high and increasing addictive screen use trajectories" with "suicidal behaviours and ideation and worse mental health".

screens in classrooms. "Banning phones makes no

sense at all," says Dr Ameeta Mulla Wattal, DLF Foundation

epaper.indianexpress.com

should not be barred from carrying smartphones, but schools must regulate their use - encouraging safe deposit systems at entry and prohibiting devices from disrupting classrooms, school discipline, or being used in common areas and vehicles. "Schools must educate stu-

dents on responsible online behaviour, digital manners, and the ethical use of smartphones. Students must be counselled that high levels of screen-time and social media engagement can lead to anxiety, diminished attention spans and cyber-bullying," the court stated.

While smartphones could be permitted for safety and coordination, their use for entertainment or recreational purposes should be explicitly disallowed, the order further read.

Following this, the Directorate of Education in April issued a circular to all government school heads, directing them to begin drafting institution-level smartphone usage policies. The circular acknowledged that no formal provision for managing smartphones existed in government schools.

A vice-principal of a Delhi "She had the strength to open government school, who is up," Wattal says. "That kind of drafting the policy in her school. honesty doesn't happen says her staff agreed to allow only basic keypad phones trust. We have to build those enough for emergencies. "There have been several cases of mis-In February, the Delhi High use," the vice-principal adds.

> Children, too, have acknowledged the seriousness of the problem.

stopped short of imposing a ban, In 2022, twins Samaya and instead urging institutions to Samhara Chauhan, who study in strike a balance between regula-Class XII at Pushp Vihar's Arnity International School, launched an Students, the court said, anti-bullying initiative after see-

ing how mental health and cyberbullying are major concerns in their peer groups, "We realised the intensity of the issue and formed a team of four for an antibullying project," says Samaya.

In 2023, their initiative evolved into PLANY - a campaign focused on girl child education, Al in classrooms, and online safety. "From the data we collected, we found that maximum cyberbullying happens in international servers on Discord (a social platform)," they say. "Strangers befriend kids and share pictures, memes..."

According to the twins, dedicated lockers for phones, structured time windows for digital use, and clear policies that promote equitable tech access without deepening the digital divide can help solve the crisis.

#### Expert speak

Dr Nitin Verma, Director (Paediatrics) at Madhukar Rainbow Children's Hospital in South Delhi, says he has seen a worrying rise in suicide attempt cases in recent years among school-going children - many of them directly linked to screen addiction issues.

"We have seen at least three or four such cases in recent months," he says. "The Covid pandemic made even younger children dependent on screens. Since classrooms have switched to a hybrid model, there are no concrete guidelines on what needs to be done."

What troubles him most is the lack of adult supervision. "In almost 60% of cases, the child is unsupervised. Most families are nuclear... grandparents are involved in very few cases," he

#### adds.

He has also observed an alarming spike in obesity and emotional distress among children aged 8 to 16, both of which he links to prolonged screen exposure. "Screen usage is rampant. And when children as young as two years are exposed to screens - whether a television, tablet, or laptop -- it significantly raises the risk of Autism Spectrum Disorder," he adds.

The entry of Artificial Intelligence (AI) hasn't helped matters. "AI has impacted students, leading to more smartphone usage," says Pavan Duggal, a leading cyber law expert.

He cites cases of teens caught in hallucinated interactions and blurred digital boundaries - like a boy who recently asked ChatGPT how to manage his relationships. Online trends are also deep-

ening the problem. "Young teens had been mindlessly sharing their photos for the Ghibli trend," he says, referring to AI mimicking Japan's famous Studio Ghibli style of animation.

He also highlights a sharp rise in cyberbullying, trolling, stalking, and online harassment though most cases, he says, go unreported. The silence is often rooted in stigma and fear.

"Most people who seek help don't want to officially report the incident. Some youngsters even run anonymous confession pages on social media, which can create serious issues," Duggal says.

Principal Kharbanda sums up the issue: "Children pick up more than we realise," she says. "It's not just what they watch

- it's what they start becoming... at the cost of our neglect."





#### 1. Core Issue

- Children are facing emotional, behavioral, and academic decline due to excessive particularly through mobile phones and gaming.
- Manifestations include:
  - Slipping grades,
  - Aggression and self-harm,
  - Social withdrawal,
  - Poor sleep and appetite,
  - Cognitive and emotional dysregulation.

#### 2. Real-Life Cases Highlighted

- 12-year-old boy became aggressive and self-harmed when phone was taken away.
- 19-year-old with 12+ hours daily gaming developed bladder dysfunction and was hospitalized.
- 15-year-old girl began missing classes and developed auditory hallucinations.
- Several children required psychiatric help, therapy, and medications.

#### 3. Clinical and Psychological Insight

- Doctors' observations:
  - Screen addiction can result in:
    - Depressive features,
    - Cognitive distortions,
    - Mood and energy issues,
    - Impaired social behavior.
- Excessive screen time linked to:
  - Attention problems,
  - Academic decline,
  - Addiction-like withdrawal symptoms,
  - Increased impulsivity and emotional dysregulation.

#### 4. Research-Based Evidence

- Journal JAMA Pediatrics (US):
  - Studied 2.8k children aged 8–12.
  - Found direct correlation between **screen use** and:
    - Distress,
    - Depression,
    - Self-harm,
    - Suicidal ideation.
- Digital well-being survey:
  - High levels of screen time/social media linked to:
    - Anxiety,
    - Diminished attention,
    - Cyberbullying.

#### **5. Institutional and Government Responses**

- Delhi High Court (Feb 2024):
  - Urged formal anti-smartphone rules in schools.
  - Called for ethical use and digital manners to be taught.
- PLAN initiative:
  - Combats cyberbullying and raises awareness.
- Al Use Concern:
  - AI like ChatGPT used for harmful interactions.
  - Risks of hallucinations and **blurring digital reality**.

#### 6. Need for Policy and Governance

- Need to:
  - Create boundaries on screen time.
  - Distinguish educational vs. recreational screen use.
  - Frame comprehensive digital well-being policy in schools.

#### 🧠 1. Awareness First

- Track your screen time using apps like:
  - Digital Wellbeing (Android)
  - Screen Time (iOS)
  - Forest, RescueTime, Moment
- Identify most-used apps and time-wasting patterns.

#### 📵 2. Set Limits & Goals

- Use in-built tools to set daily screen limits.
- Fix no-screen zones (like bedrooms or dining tables).
- Define "screen-free" hours (e.g., 8–10 AM or 8–9 PM).

#### **3. Use the Pomodoro Technique**

- 25 min focused work  $\rightarrow$  5 min break (no screen during break).
- After 4 rounds, take a longer 15–30 min break (preferably offline).

#### 🜿 4. Replace Screen Habits

Screen Habit	Replace with
Scrolling Instagram	Reading a book or listening to music
YouTube binge	Walking or gardening
Video games	Sports, chess, or board games

#### 🖑 6. Use Tech to Fight Tech

- Turn off non-essential notifications.
- Set grayscale mode to make your phone less appealing.
- Uninstall unnecessary or addictive apps.
- Use apps like AppBlock, FocusMe, Freedom.

#### ⊨ 7. Improve Sleep Hygiene

- Avoid screens 1 hour before bed.
- Read a physical book or listen to soft music to wind down.



#### Money making money even while one is asleep

As Albert Einstein said, "compound interest is the eighth wonder of the world," if one is patient enough, he can witness how his money makes money for him, even while he is sleeping

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ogo, Benjamin Franklin,	ates interest, and the chain	mind waiting for 30 days,	monthly SIP transforms in
the first Postmaster-Gener-	goes on and on.	let's find out why.	to more than a 73 crore is
al of the United States and	This way, you make a gl-	20000000000000	40 years.
author of the book Poor Ri-	gortic ksp from your origi-	Money doubles	That's the reason all fo
chard's Alminick, echood	nal invested amount. Not	On day one, God gives you	naticial experts advise in
this concept saying, "Mo-	just this, the beauty of the	71, it doubles to 72 on the	to start saving right from
ney makes money. "And	compound effect is that	second day, to \$4 on the	the first salary, so that, by
the money that money	you need not work hard for	third day. Likewise, it dou-	the time you netire, you
makes, makes money."	it, as even if you are sleep-	bles to \$512 on the 10th	would have saved enough
Parther, highlighting its	ing, your invested money	stay. Your patience is being	and your money would
potential of exponential	will alwrith work and keep	tested here.	have worked for you even
wealth creation in the long	on generating money for	In a similar doubling	when you users alsoping.
run, famous physicist Ai-	you.	strangy, your money be-	If you need more me
bert Einstein said, "com-	You need to give time	comes 706,384 on the 15th	ney, just step up your SII
pound interest is the	for k and just be patient.	day. Time is the secret;	amount of \$1,000 per
eighth wonder of the	Consistency is the key.	time begets money.	month by just 10% every
world."	Let's imagine this scena-	On day 20, it would be	yeat, witness the magic
Though the plurase "the	tio. God winhes to give a	25,24,288, which is way	and enjoy your retirement
compound effect" existed	boon and places two cheic-	less from the first choice.	life comfortably and wor
for aeous, especially in	es before you. First - He	But walk, we have 10 more	ry-free. Start saving early-
mathematics, it became	will clear all your debts in-	days. On day 24, it would	Othe weiter is an NISM #
quite popular in the realm	manthy, say £35,00,000.	have doubled to	CRISIL-complete Health
of finance, productivity	Second - He will gree	tool with no brackWorking 1885.	Manageri

#### 1. Core Idea

- The article emphasizes the power of compounding, termed as the "eighth wonder of the world" by Albert Einstein.
- If one starts investing early and remains consistent, money starts earning money, even when the person is asleep.

#### 2. Concept of Compounding

- Compounding: Like a snowball effect where earnings generate more earnings over time.
- Example: Interest earned on a principal amount is reinvested, and interest is earned on that as well.
- It grows **exponentially**, not linearly.

#### 3. Illustrative Example: Doubling Strategy

- If ₹1 is doubled every day for 30 days, final amount = ₹53.68 crore.
  - Day 1: ₹1
  - Day 10: ₹512
  - Day 20: ₹5.24 lakh
  - Day 30: ₹53.68 crore
- Teaches the importance of patience and consistency in investing.

#### 4. Two Types of Investors

- One who chooses ₹1 doubling daily.
- Another who chooses ₹1 lakh instantly.
- Most people would choose ₹1 lakh upfront due to lack of awareness and immediate gratification bias.

### 5. SIP Investment (Real-Life Case Study)

- A young woman starts **₹1,000 SIP per month**.
- Assuming 12% CAGR, after:
  - 10 years: ₹2.1 lakh
  - 20 years: ₹9.8 lakh
  - 30 years: ₹29 lakh (approx.)
- Shows long-term power of regular and disciplined investing.

#### SIP Growth Projection (₹10,000/month for 30 years)

CAGR (Annual Return)	Total Investment (₹)	Estimated Maturity Value (₹)
8%	₹36,00,000	₹1,41,00,000+
10%	₹36,00,000	₹2,27,00,000+
12%	₹36,00,000	₹3,50,00,000+
15%	₹36,00,000	₹6,29,00,000+

# Word of the day

#### Forswear:

agree to give up or do without

Synonyms: avoid, withdraw, deny

**Usage:** He decided to forswear junk food to stay healthy

Pronunciation: newsth.live/forswearpro

International Phonetic Alphabet: /fɔrswεr/

# Thank you guys.

## How to learn Current affairs For RAS Exam



Step	Activity	Details/Examples	Frequency
1	Read a Standard Newspaper	The Hindu, Indian Express (National), Rajasthan Patrika (State)	Daily
2	Use Monthly Magazines	Vision IAS, Yojana, Kurukshetra, Rajasthan Current Ghatna Chakra	Monthly
3	Watch Reliable Current Affairs Videos	YouTube channels like Class24 etc	Daily
4	Refer Rajasthan-Specific Content	Government schemes, budget, census, policies, and reports related to Rajasthan	Weekly
5	Make Notes	Make short, concise handwritten or digital notes under headings (e.g., Polity, Eco)	Ongoing
6	Use MCQs for Practice	Solve current affairs-based MCQs from monthly magazines or online portals	Weekly
7	Revise in Intervals	Weekly + Monthly + Prelims-oriented revision via mock tests	Weekly/Monthly
8	Join Test Series	Enroll in RAS-specific current affairs test series (Prelims + Mains)	Monthly
9	Use Government Sources	PIB, Rajasthan Government Portal, Press Releases, Raj. Yearbook	As needed
10	Analyze Previous Year Papers	Identify patterns, recurring themes (e.g., government schemes, awards, bills)	Monthly

Exam Stage	Topics Covered	RAS Trend (Last 5 Years)	Resources & Tips
Prelims	National + International News, Rajasthan State- specific events, Government Schemes, Economy, Polity, Science & Tech	~18–23% Qs from Current Affairs with "Easy– Moderate" difficulty	Daily CA from sources like <i>The Hindu,</i> PIb, monthly compilations
	Rajasthan initiatives (e.g. Rajasthan GK/Qs)	High weightage (20–30 Qs) from state-specific events	Follow <i>Rajasthan gazette,</i> rasonly
Mains GS-III	National/Global issues, Economy policies, IR, Public Governance	Significant emphasis— questions drawn from recent schemes & global events.	Monthly CA synopses; detailed answer practice

#### 🔍 Key Topics (Last 5 Years)

- 1. COVID-era initiatives Health schemes, economic relaunch packages
- 2. Agriculture & MSP reforms Farm bills, procurement policies
- 3. Rajasthan projects Polavaram, water works, solar parks
- 4. Geopolitics Afghanistan exit, Ukraine war, Indo-Pacific strategies
- 5. Economic reforms GST updates, RBI measures, monetary policy
- 6. Environment & Climate Yamuna pollution, clean energy targets
- 7. Cyber/Tech issues Al regulation, data privacy
- 8. Governance & ethics Court rulings, constitutional controversies
- 9. Science & Space Missions like Chandrayaan/Apollo updates
- 10. State Elections & Issues Rajasthan-specific elections, local scandals

#### RAS Prelims: Last Year's Sample MCQs

- 1. Which Indian State launched the "Chief Minister Solar Rooftop Scheme" in 2024?
  - A) Gujarat
  - B) Rajasthan
  - C) Haryana
  - D) Maharashtra

- The Reserve Bank of India's Monetary Policy Committee (MPC) decided to: (September 2024)
- A) Reduce repo rate
- B) Keep the repo rate unchanged
- C) Increase the repo rate
- D) Switch to a flexible inflation target

#### • "Project Mausam" is an Indian Government initiative aimed at:

- A) Himalayan conservation
- B) Silk Road revival
- C) Maritime heritage promotion
- D) Desert ecology restoration

# Which country hosted the 2024 BRICS Summit? A) Russia B) India C) China D) South Africa

#### • The "Fit India Freedom Run" campaign was launched to commemorate:

- A) Gandhi's birth anniversary
- B) 75 years of Indian independence
- C) Women's Day
- D) National Sports Day

# Which novel coronavirus variant was declared a WHO "Variant of Concern" in 2024? A) XBB.1.16 B) BA.2.86 C) EG.5 (Eris)

D) BF.7

- Which Indian airport was certified as the world's first "Single Use Plastic—free" airport in 2024?
- A) Indira Gandhi International (Delhi)
- B) Chhatrapati Shivaji Maharaj (Mumbai)
- C) Kempegowda International (Bengaluru)
- D) Rajiv Gandhi International (Hyderabad)

#### • In 2024, India signed the "Dubai-Mumbai Air Services Agreement" to:

- A) Open new flight routes
- B) Launch a cargo corridor
- C) Enable fifth freedom rights to carriers
- D) Waive visa requirements

Component	What to Do	Why It Matters
1. Understand the Question	<ul> <li>Identify keywords (e.g., Discuss, Analyze, Critically evaluate)- Break it into parts</li> </ul>	- Avoid deviating from the demand of the question
2. Introduction	<ul> <li>Define key terms- Mention context or background (1–2 lines)</li> </ul>	- Sets clarity and relevance for the answer
3. Body	<ul> <li>Use structured points (bullet or paragraph)- Add subheadings- Support with facts, examples, and data- Use diagrams, flowcharts, maps where needed</li> </ul>	<ul> <li>Main content area; scoring depends on balance, depth &amp; presentation</li> </ul>
4. Analysis	<ul> <li>Add cause-effect, pros-cons, implications, stakeholders, etc Use multidimensional perspectives (Social, Political, Economic, Environmental)</li> </ul>	- Shows depth of understanding & critical thinking
5. Value Addition	<ul> <li>Include: Govt. schemes Committees SC Judgments</li> <li>International examples</li> </ul>	- Differentiates your answer with enrichment
6. Conclusion	<ul> <li>Summarize briefly- Suggest a balanced way forward or solution</li> </ul>	- Leaves a positive and forward-looking impression
7. Language & Tone	<ul> <li>Use simple, precise language- Maintain objectivity- Avoid jargon unless necessary</li> </ul>	- Improves readability and examiner's impression
8. Presentation	<ul> <li>Underline keywords- Use spacing, neat handwriting- Maintain uniform structure throughout</li> </ul>	<ul> <li>Good presentation can increase marks even with similar content</li> </ul>
9. Time Management	<ul> <li>Spend ~7 minutes for 10-marker and ~11 minutes for 15- marker questions</li> </ul>	- Helps complete the paper in time
10. Practice & Feedback	<ul> <li>Write 2–3 answers daily- Get them evaluated- Learn from topper copies</li> </ul>	- Practice is the only way to improve consistently

#### Q. Discuss the role of cooperative federalism in India's COVID-19 management.

Section	Content
Introduction	Define cooperative federalism; brief on pandemic as a policy challenge
Body	<ul> <li>Coordination between Centre and States</li> <li>GST compensation issue</li> <li>Health as State subject</li> <li>Use of Disaster Mgmt Act</li> <li>Examples from Kerala, Maharashtra</li> </ul>
Analysis	Advantages & limitations Centre-State tensions Future implications
Conclusion	Need to strengthen federal spirit for better crisis handling

Section	Content
Introduction	Transparency and accountability are essential pillars of good governance. They ensure responsible administration, citizen trust, and effective public service delivery.
Main Body	Importance of Transparency: Increases public trust in government institutions Enables informed citizen participation Reduces corruptionImportance of Accountability: Holds officials answerable for their actions Promotes ethical conduct Enhances efficiency in service delivery
Examples	<ul> <li>RTI Act, 2005: Empowered citizens to access government records</li> <li>Lokayukta in Rajasthan: Investigates corruption in state government</li> <li>Digital Rajasthan: e-Mitra for transparent service delivery</li> </ul>
Way Forward	<ul> <li>Strengthen institutional mechanisms like Lokpal, CAG</li> <li>Use of technology for real- time audits</li> <li>Training for ethical governance among officials</li> </ul>
Conclusion	Transparency and accountability are not optional but necessary to ensure democracy, development, and dignity in Rajasthan's governance framework.

#### 3 things to follow

 Daily CA
 Monthly Rasonly magazine
 Writing practice if required

