

Daily Current Affairs



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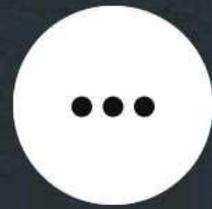


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**10 Questions
test related to
this class**

Don't educate
your children
to be *Rich.*
Educate them
to be *Happy.*
So when
they grow up
they will know
the value of things
not the price.



More like this 

INDIA bloc -1, BJP - 1

The National Conference-Congress alliance has secured a majority in Jammu & Kashmir, while the BJP has retained power in Haryana



Jammu & Kashmir

	Seats	Vote share
NC+	49	37%
BJP	29	25.6%
JKPDP	3	9%
IND	7	17%
Others	2	12%

NC+: NC: 42 (23.4%) | INC: 6 (12%) | JKNPP: 0 (1.2%) | CPI(M): 1 (0.6%)

Long wait: NC vice-president Omar Abdullah celebrating his party's victory at his residence in Srinagar.

IMRAN NISSAR



Haryana

	Seats	Vote share
BJP	48	39.9%
INC+	37	39.3%
JJP+	0	1%
INLD+	2	6%
Others	3	13.8%

INC+: INC: 37 (39.1%) | CPI(M): 0 (0.2%)

JJP+: JJP: 0 (0.9%) | ASP: 0 (0.1%)

INLD+: INLD: 2 (4.1%) | BSP: 0 (1.8%)

New term: Haryana CM Nayab Singh Saini offers prayers after winning from Ladwa. PTI

PSLV C-37 rocket body re-enters the earth's atmosphere: ISRO

The Hindu Bureau

BENGALURU

The Indian Space Research Organisation (ISRO) said that the upper stage of the Polar Satellite Launch Vehicle C-37 (PSLV C-37 mission) re-entered the earth's atmosphere on Sunday.

The PSLV-C37 mission was launched on February 15, 2017, with Cartosat-2D as the main payload along with another 103 satellites as co-passengers, namely INS-1A, INS-1B, Al-Farabi 1, BGUSAT, DIDO-2, Nayif 1, PEASS, 88 Flock-3p satellites, and 8 Lemur-2 satellites. The space agency created history as it was the first mission to launch 104 satellites with a single vehicle. After injecting the satellites and passivation, the upper stage (PS4) was left at an orbit of approximately 470x494 km.

"It was regularly tracked by U.S. Space Command (USSPACECOM) as an object with NORAD id 42052. Its orbital altitude slowly decayed, primarily due to atmospheric drag effects,"

ISRO said on Tuesday.

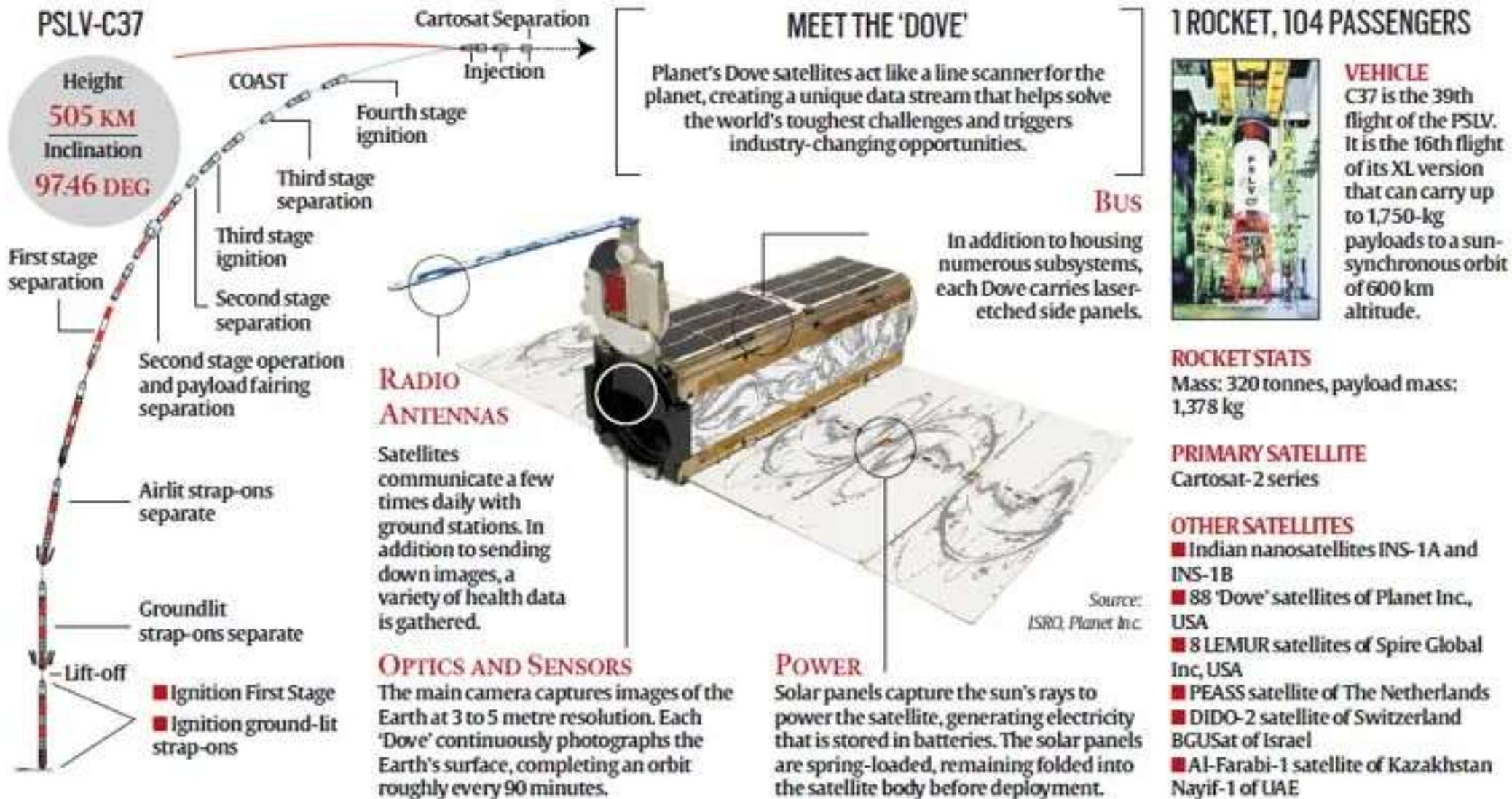
Since September, ISRO System for Safe and Sustainable Space Operations Management (IS4OM) regularly monitored the orbital decay as part of its regular activities and predicted re-entry into the atmosphere in the first week of October. "The orbit had decayed to a size of 134x148 km, as of October 6, 2024. As per USSPACECOM prediction, the re-entry took place on Sunday at 15:49 UTC while IS4OM prediction showed that re-entry would occur on Sunday at 15:48:25 UTC. The impact point is in the North Atlantic Ocean," ISRO said.

Debris mitigation

The atmospheric re-entry of the rocket body is fully compliant with the international debris mitigation guidelines, in particular, the guideline of Inter-Agency Space Debris Coordination Committee that recommends limiting the post-mission orbital life of a defunct object in Low-Earth orbit to 25 years.

Record-breaking launch bid focussed on efficiency and costs

Carrying many satellites on a single mission does not involve a technological leap beyond the ability to engineer satellite slots on board



- **Re-entry of PSLV-C37 Rocket Body**

- The upper stage of the Polar Satellite Launch Vehicle C-37 (PSLV C-37) re-entered Earth's atmosphere on Sunday.
- The PSLV-C37 mission was initially launched on February 15, 2017, carrying Cartosat-2D as the primary payload and 103 other satellites.
- It set a record for launching 104 satellites with a single rocket.

- **Monitoring and Prediction**

- The ISRO System for Safe and Sustainable Space Operations Management (IS4OM) had been monitoring the orbital decay since September 2024.
- The orbit reduced to a size of 134x148 km as of October 6, 2024.
- The re-entry was predicted to take place on October 6 at around 15:48:25 UTC, with the impact point in the North Atlantic Ocean.

1. Debris Mitigation

1. The re-entry complies with international debris mitigation guidelines, which recommend a post-mission orbital life of less than 25 years for objects in low-Earth orbit.
2. The upper stage's altitude decayed due to atmospheric drag.

- Which of the following statements is correct about the PSLV-C37 mission?
 - 1.The mission was launched in 2024 and carried only one satellite.
 - 2.The re-entry took place in the Indian Ocean.
 - 3.The PSLV-C37 mission set a record by launching 104 satellites with a single rocket.
 - 4.The orbital decay of the rocket body was not monitored.

Machine learning pioneers win Physics Nobel

Vasudevan Mukunth

CHENNAI

The 2024 Nobel Prize in Physics has been awarded to John Hopfield and Geoffrey Hinton “for foundational discoveries and inventions that enable machine learning with artificial neural networks”, the Royal Swedish Academy of Sciences announced on Tuesday.

While many areas of research have used machine learning (ML) models and artificial neural networks (ANNs) to process data, these terms have entered the household, thanks to the explosion of chat AI apps, including ChatGPT.

The work of this year’s laureates concerns the theoretical foundations of ma-

chines that can learn without humans teaching them and can use their knowledge to answer questions. ANNs are collections of neurons, or more broadly nodes capable of processing data, connected in specific ways. In a recurrent neural network, information can flow both ways.

Recurrent networks

Professor Hopfield, of Princeton University in the U.S., is credited with developing the Hopfield network, a type of recurrent neural network. Its neurons learn and process information based on Hebbian learning – an idea in neuropsychology that if one neuron repeatedly triggers a second, the connection between the two



Professor John Hopfield, left, and Professor Geoffrey Hinton. AP

becomes stronger.

The rules of a Hopfield network are based on the physics of a group of atoms, each producing its own small magnetic field. The processes the network performs to complete an incomplete pattern or to denoise an image are the same ones that, by analogy, would reduce the total energy of the magnetic atoms. “In his 1982 paper,

Hopfield asked a basic question about the ability of a large collection of simple neurons to form computational tasks as a spontaneous collective or emergent phenomenon,” Spenta Wadia, founding director of the International Centre for Theoretical Sciences, Bengaluru, said.

“He analysed this in a model system which included biological ingre-

dients. The paper laid the foundation of the use of statistical physics methods and ideas in neural circuit modelling.”

Professor Hinton, of the University of Toronto, and his peers adapted another network called the Boltzmann machine to perform cognitive tasks, building on the principles of the Hopfield network, among others.

He made a breakthrough in the 2000s by developing a learning algorithm for a modified ANN called a restricted Boltzmann machine (RBM). A layer of neurons could be trained as an RBM and multiple layers could be stacked, creating the first ANNs capable of deep learning.

Godfather of AI who now warns of its risks shares physics Nobel

John J Hopfield and Geoffrey E Hinton were awarded the Nobel Prize in physics Tuesday for discoveries that helped computers learn more in the way the human brain does, providing the building blocks for developments in artificial intelligence.

The award is an acknowledgment of AI's growing significance in the way people live and work. With its ability to quickly make sense of vast amounts of data, machine learning that uses artificial neural networks already has a major role in scientific research, the Nobel committee said, including in physics, where it is used for the creation of "new materials with specific properties".

The breakthroughs of Hopfield and Hinton "stand on the foundations of physical science", the committee said on the social platform X. "They have showed a completely new way for us to use

A WIN FOR MACHINE LEARNING

➤ **Geoffrey Hinton**, who works at Univ of Toronto, **helped develop a technique in 80s known as backpropagation** that was instrumental in training machines how to 'learn'



➤ **John Hopfield**, professor emeritus at Princeton Univ, **created an associative memory** that can store and reconstruct images and other types of patterns in data



➤ Hinton's team used a neural network to **win ImageNet computer vision competition in 2012**. It spawned a flurry of copycats, giving birth to the rise of modern AI

➤ He **quit his job at Google last year** to be able to more easily speak about the dangers of the technology he had pioneered

“It's going to be wonderful in many respects. But **we also have to worry about... possible bad consequences**, particularly the threat of these things getting out of control — **Geoffrey Hinton**

computers to aid and to guide us to tackle many of the challenges our society face.”

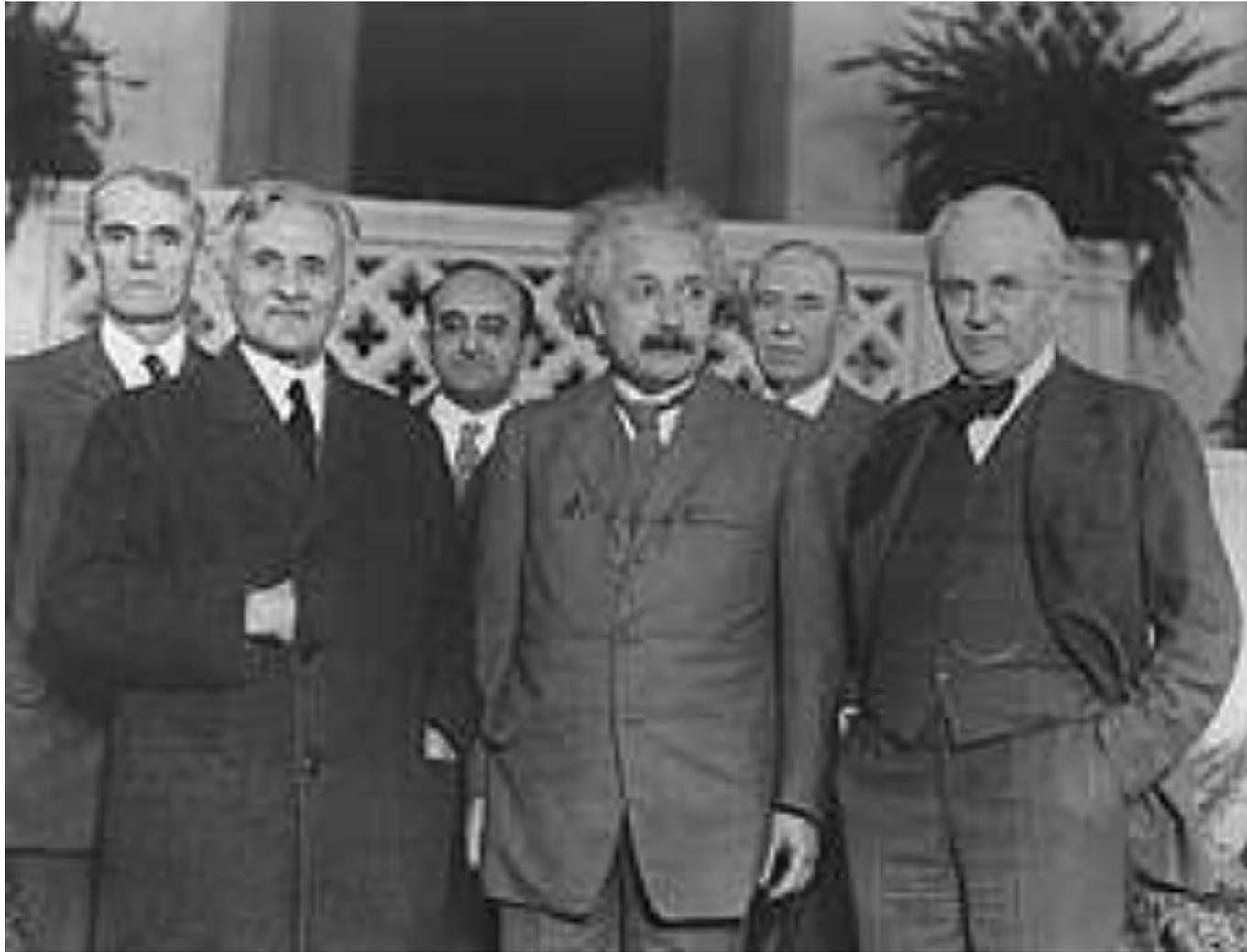
Journalists took turns asking Hinton, who has been called the 'godfather of AI', questions about his work, and he expressed worries over machine learning and said it would have an extraordinary influence on society.

“It will be comparable with the Industrial Revolution,” he said. “Instead of exceeding people in physical strength, it's going to exceed people in intellectual ability. We have no experience of what it's like to have things smarter than us.” NYT

► **Turing Award, P 28**

- **The first Nobel Prize in Physics was awarded to German physicist Wilhelm Röntgen in recognition of the extraordinary services he rendered by the discovery of X-rays**

Awarded for	Outstanding contributions to mankind in the field of physics
Location	Stockholm , Sweden
Presented by	Royal Swedish Academy of Sciences
Reward(s)	11 million Swedish kronor (2023) ^[1]
First awarded	1901
Last awarded	2024
Most recently awarded to	John Hopfield and Geoffrey Hinton
Most awards	John Bardeen (2)





Wilhelm Röntgen
(1845–1923), the first
recipient of the Nobel
Prize in Physics



- **Nobel Prize in Physics 2024**

- John J. Hopfield and Geoffrey E. Hinton were awarded the Nobel Prize in Physics for their discoveries that contributed to AI and machine learning.
- Their work has enabled computers to learn in a way similar to the human brain.

- **Significance of Their Contributions**

- Hopfield developed an associative memory model that helps store and reconstruct patterns in data.
- Hinton played a major role in developing the backpropagation technique in the 1980s, which is crucial for training AI systems.
- Hinton's team also won the ImageNet competition in 2012, boosting the development of modern AI.

- **AI's Growing Role and Potential Risks**
- The Nobel committee acknowledged AI's impact on scientific research and daily life.
- While AI has significant benefits, Hinton, known as the "godfather of AI," has warned about the potential risks, especially if AI systems go out of control.
- He even left his job at Google to focus on discussing AI's dangers.

- **Future Implications**

- The breakthroughs are expected to have an impact comparable to the Industrial Revolution.
- The Nobel committee highlighted that their discoveries stand on the foundations of physical science and offer new ways to tackle societal challenges.

- Which of the following statements is correct regarding the 2024 Nobel Prize in Physics?

1. Geoffrey E. Hinton and John J. Hopfield were awarded for their work in quantum mechanics.

2. John J. Hopfield created an associative memory model that helps in pattern recognition in data.

3. The prize recognized contributions specifically in the field of chemistry, focusing on AI's biological applications.

4. Geoffrey E. Hinton did not warn about any potential risks related to AI development.

India has eliminated trachoma, says WHO

Hindu Shalan Paropadai NEW DELHI

The World Health Organisation (WHO) has announced that India has successfully eliminated trachoma, a bacterial infection that affects the eyes, as a public health problem. The WHO, based in Geneva, Switzerland, announced the news on Tuesday. India is the first country in the Southeast Asia Region to reach this public health milestone. "With great pleasure, I congratulate the Government of India on achieving the elimination of trachoma as a public health problem. India's success is due to the strong leadership of its Government and the commitment of ophthalmologists and other cadres of health-care workers. They worked together with partners to ensure effective surveillance, diagnosis and management of active trachoma," Mr. Waz said.

Accused in R.G. Kar rape and murder claims innocence

The chargesheet filed by the CBI on Monday lists 11 pieces of evidence against the lone accused in the case, including recovery of his DNA samples from the body of the murdered doctor

Shiv Sahay Singh BOKARO

A day after the Central Bureau of Investigation (CBI) filed a chargesheet against him in the murder of a doctor at the R.G. Kar Medical College and Hospital in Kolkata, the accused, Sanjay Roy, on Tuesday claimed innocence before a city court. "I have something to say. If I am not allowed to speak, all blame will be put on me. I have not done anything. I am innocent. I don't know anything about the case," he told the court where he was produced. The chargesheet filed by the CBI lists 11 pieces of evidence against him, including 11 DNA samples from the body of the victim. Mr. Roy, a civic police volunteer, was arrested by the Kolkata Police, hours after the body of the doctor



The accused was arrested by the Kolkata police hours after the body was found in the seminar room of the hospital. His arrest

was found in the seminar room of the hospital. The chargesheet contains charges of rape and murder against the accused under Sections 49, 50, 302B of the Bharatiya Nyaya Samhita. According to sources, the CBI has brought charges against the accused based on evidence, including CCTV footage where he is seen near the scene of

R.G. Kar senior doctors tender resignation

KOLKATA

As resident doctors continue their hunger strike across Kolkata, over 40 senior doctors of R.G. Kar Medical College and Hospital, including professors and heads of departments, signed a mass resignation letter on Tuesday in a show of support to agitating junior doctors. Reacting to the mass resignation, West Bengal Governor C.V. Ananda Bose said the West Bengal government will issue an apology to the people of the State. "If there is a responsible government in West Bengal, make amends and apologise," Mr. Bose said.

Bengal govt. sets up SIT to probe rape and murder of minor

The Hindu Bureau KOLKATA

The West Bengal government has constituted a Special Investigation Team (SIT) to probe into the alleged rape and murder of a nine-year-old girl at Jaynagar in West Bengal. The team will under the supervision of the Police of Barasat police district. Violence erupted at Jaynagar on Tuesday after people took out a procession with the body of the minor that was brought home on Tuesday. Villagers attacked a police vehicle with several stones and bricks. The sub-divisional Police Officer (SDPO) of Barasat reached the area on receiving information that stones were being thrown at police vehicles. Angry villagers also held protests around the SDPO. Jaynagar in West Bengal's South 24 Parganas has been on the boil since Oc-

The Calcutta High Court questioned the lack of infrastructure at Central govt. hospitals

The Calcutta High Court questioned the lack of infrastructure at Central government hospitals. The court, headed by Justice S.K. Das, directed the Union Health Ministry to improve the infrastructure of Central government hospitals in the State. The court also directed the Union Health Ministry to provide ambulance services to patients who had to travel long distances to reach hospitals. The court also directed the Union Health Ministry to provide medical facilities to patients who are unable to afford the cost of treatment. The court also directed the Union Health Ministry to provide medical facilities to patients who are unable to afford the cost of treatment.

Mindfulness India Summit scheduled for Oct. 17-18

The Hindu Bureau MUMBAI

The third edition of the annual Mindfulness India Summit will be held in Mumbai on October 17 and 18. The summit aims to equip leaders and professionals with essential strategies to create healthier, more empathetic work environments. Organised by the Mindful Science Centre and led by global mindfulness expert Marish Feld, the summit will explore the topics of mindfulness, emotional intelligence, and neuroplasticity. Supported by the Confederation of Indian Industry (CII) and with The Mindful Science Centre as the partner, the summit will bring together over 30 international experts in these fields. Keynote speakers include renowned figures such as Sara Lazar and Chris Germer from Harvard Medical School, and were informed that the facilities were unavailable at the nearby AHSB unit.

India makes pledge of \$300 million for WHO programme

Hindu Shalan Paropadai NEW DELHI

India, the sixth largest global contributor of core funding to the World Health Organisation (WHO), has now committed to give more than \$300 million for the organisation's core programme of work from 2025 to 2028. The biggest chunk of \$250 million will be spent on the Centre of Excellence for Traditional Medicine. So far WHO has received contribution pledge of over \$2.3 billion towards a \$7.1 billion funding gap. Over the next four years, WHO has the mandate to use these funds to save at least 40 million lives through various programmes, such as increasing the number of vaccines delivered to priority countries, supporting 85 countries in enhancing and employing 3.2 million health workers, and producing 400 health products per year. India has committed the largest amount of funds so

far in southeast Asia. Apart from the traditional health-care Centre, \$26 million is being given for a new programme for WHO's regional office, \$10 million for digital health, and \$4.6 million for thematic funding. "Health for all" "The funds being sought are not additional resources, but those needed by the organisation for its core work, to deliver on its mandate to promote, protect and protect health and well-being for all," WHO's regional office said in a statement. It added that countries in WHO's South-East Asia Region and key partner organisations have pledged over \$245 million in financing for the organisation's core programme of work from 2025 to 2028. "Indonesia and Bhutan committed to provide a pledge amount in the coming weeks," WHO said, adding that the investment round will see several countries named in the coming days. Over 20 people are being questioned in the case, a police officer said.

Ahmedabad police probe GST fraud case; 5 held

The Hindu Bureau NEW DELHI

The Ahmedabad Crime Branch on Monday registered a first information report against several persons and entities after getting a complaint from the Central GST authorities over an alleged scam of floating bogus input tax credits with an intent to defraud the government by getting bogus input tax credit through fraudulent transactions. After the registration of the FIR, the Crime Branch, along with Gujarat Revenue and Economic Offences Wing, searched 14 locations across the State, including in Ahmedabad, Junagadh, Surat, Khejadi, and Bhavnagar, it said in a statement. Five people were arrested, including The Hindu's Gujarat correspondent Mahesh Langhe. Mr. Langhe's name is not mentioned in the FIR. A company where his family member is a partner has been named in the complaint. Over 20 people are being questioned in the case, a police officer said.

At film awards, Murmu calls for women-led development

The Hindu Bureau NEW DELHI

President Droupadi Murmu on Tuesday gave away the 79th National Film Awards to the winners in various categories. Veteran actor Mithun Chakrabarty was honoured with the Dadasaheb Phalke Lifetime Achievement Award for 2023. Speaking on the occasion, Mr. Murmu said 45 of the 85 awardees were women. She called for more efforts to create women-led development in the film industry. "I believe that film and social media are a great tool to bring about a change in society," she said. Information & Broadcast Minister Ashwini Vaishnaw, and Union Minister of State, Murugan were present. The best feature film award went to *Aatman* (The Play), a Malayalam film directed by Anand Bharathi and Best Comedy Film to *Apna Ghar*, directed by Ashwini Vaishnaw. Shetty got the award for the best male actor in a leading role for his performance in *Kantara* (Kanna-



The President presents the award for the best female actor in a lead role to Nishita Mishra in New Delhi on Tuesday. (www.presidentofindia.gov.in)

da). The award for the best actor in a leading role went to Nishita Mishra for her portrayal in *Thiruchirambalur* (Tamil) and Manasi Parekh for *Kutch Express* (Gujarati). The best director award went to Sanjay B. Barjaya for the Hindi film *Chandigarh*. Some of the other award winners included *Brath* (Tamil) for Best Film in Animation, Visual Effects, Gaming & Comic category, *Kantara* for Best Popular Film Producing Talent, *Kantara* for Best Music Director (Background Music) award for *Chandigarh*, *Chandigarh* for Best Book on Cinema.

Rajnath, German counterpart discuss defence trade ties

The Hindu Bureau NEW DELHI

Ahead of German Chancellor Olaf Scholz's visit to India later this month, Defence Minister Rajnath Singh and his counterpart Boris Pistorius discussed ways to further strengthen defence industrial collaboration and support the growth of the defence resilience in a telephonic conversation on Tuesday. Mr. Scholz's visit for inter-governmental consultations, scheduled in the second half of the month, come amid the much-awaited decision on the qualifying bids in the Indian Navy's multi-billion dollar deal for six conventional submarines in which the German company THALES (ThyssenKrupp Marine Systems) is competing with the US firm General Dynamics. "They briefly reviewed the ongoing defence cooperation activities including exercises in the air and on the ground," the Ministers discussed ways to further strengthen the defence industrial collaboration and enhance supply chain resilience," a Ministry statement said on the telephonic conversation. The two ministers also discussed maritime deal under Project 75I, estimated upwards of \$4,000 crore. It has crossed a major milestone with the completion of Field Evaluation Trials (FET) to check the compatibility of the two bids received. While an Indian Navy board visited the THES shipyard in March for the FET, the evaluation of Navantia's offer was conducted in the last week of June, as reported by The Hindu earlier. The staff evaluation is in progress, a defence official said, without elaborating on the timeline.



Rajnath Singh

THIRUCROSSWORD 14301 (Set by Anurag) 14 Surrounded by 10, then injured like (8) 15 Couple touring Paris endlessly (4) 16 Frodo's Jewel's love for musical instrument (5) 18 Some South African's robe is damaged (4) 19 Governor continued after stretch (6) 21 Praise "European Union record is extra ordinary at first" (6) 22 mixed maiden's ring and love note in shed (8) 26 Half of Canada is able to dance (6) 27 Furnily, Amir cuts in producing nail cutter (10) 28 Codes East Correct (9) Down 1 Snow income from manufacturing live measure (10) 2 A songed creature runs out in slaughterhouse (4) 3 Storage containers for swimming apparel (6) 4 Wrong maps in unscripted itself (4) 5 Covering last battle, but for corrected text for opera (8) 6 General turned tap on, not off (8) 7 Leading artist in Apache roles (4) 8 To some extent, wooden seat is thick (5) 9 Exaggerated and said, "Fishnet first" (10) 17 Cube, then made fruit of fagus tree (8) 18 Starter containing alcoholic drink with a pinch of nutmeg in air (8) 20 One gangster chief is a Greek god (4) 21 Find officer returning with tea mole (6) 22 Faced available in some ailments (4) 25 Horrible ads cover one stage (4)

SUDOKU 2 5 1 8 5 3 1 2 4 9 1 4 9 1 3 1 2 9 1 6 1 9 2 5 8 1 4 7 1 5 7 DIFFICULTY RATING: ★★★★★

FAITH Destroyer of anguish In his Mukundamala, Kalasekara Azhvar calls upon his tongue, ears, eyes, legs, nose, head and mind to serve Lord Narayana. He urges his tongue to sing the praises of Kesava. The name Kesava has many meanings. Significantly, it means One who destroys Kithava (anguish). Yama, the one who controls maraka, says: 'Antyopā nārtho devatā kēśavaḥ' (Mishra Azhavar). Here he refers to Kesava as Kēśava, the One who gets rid of kitha. Had the atran who arrived at Yamaloka worshipped Kesava, would they be there, at the gates of hell? In giving a pratna a body, the aim of the Lord is to help the atma eventually attain liberation, said Akkarakudamirindhi in a discourse. That we misuse our Bava in pursuing impermanent things, and end up being reborn. When he was in his mother's womb, Prahlada heard sage Narada telling his mother about Lord Narayana. Narada's words became etched in his mind, and Hiranyakasipu could not erase thoughts of the Lord from Prahlada's mind. While a Prahlada is rare, surely, we can liberate ourselves with proper use of our senses. That is what Kalasekara Azhavar points out in his Mukundamala verse. Explaining a verse in Tirandadipodi Azhavar's Thirumudala, commentator Peria Vachan Pillai says that even assuming we take many births and live for 100 years in each birth, our problems in all these lives put together is not equal to the ordeal of remaining in the cramped space of a mother's womb for 10 months. We need not go through this again, if we surrender to the Lord.

India has eliminated trachoma, says WHO

Bindu Shajan Perappadan
NEW DELHI

The World Health Organization (WHO) has now recognised that India has successfully eliminated trachoma, a bacterial infection that affects the eyes, as a public health problem.

In a citation shared by Saima Wazed, Regional Director, WHO South-East Asia, on Tuesday, the UN health body announced that India is the third country in the Southeast Asia Region to reach this public health milestone. "With great pleasure, I congratulate the Government of India on achieving the elimination of trachoma as a public health problem. India's success is due to the strong leadership of its Government and the commitment of ophthalmologists and other cadres of healthcare workers. They worked together with partners to ensure effective surveillance, diagnosis and management of active trachoma," Ms. Wazed said.

Stages of trachoma



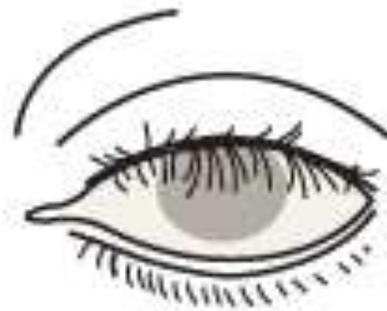
1.

Infection caused by Chlamydia bacterium causes inflammation and thickens the upper eyelid



2.

Scarring of the eyelid pulls the eyelashes into the eye



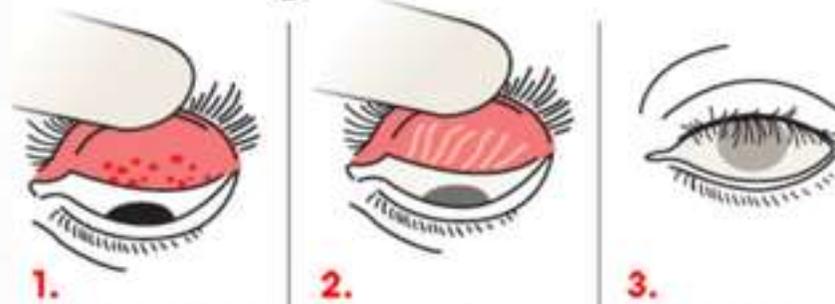
3.

The eyelashes scratch the cornea and continue to infect and damage the eye, which can lead to blindness

TRACHOMA

Trachoma is the **leading infectious cause of blindness worldwide**. It is caused by infection with the bacterium **Chlamydia trachomatis**. Infection **spreads through personal contact** (via hands, clothes or bedding) and by **flies** that have been in contact with discharge from the eyes or nose of an infected person.

Stages of Trachoma



1. Infection caused by Chlamydia bacterium causes inflammation and thickens the upper eyelid.
2. Repeated infections lead to scarring of the eyelid. The scars often appear as white lines, which pull the eyelashes into the eye.
3. Eyelashes scratch the cornea and continue to infect and damage the eye which can lead to blindness.

Symptoms:

- Mild itching and irritation of the eyes and eyelids
- Mucus/Pus Discharge
- Eyelids swelling
- Light sensitive
- Eye pain

Risk Factors:

- Poverty (Trachoma is primarily a disease of extremely poor populations in developing countries).
- Poor sanitation
- Crowded living conditions

Neglected Tropical Diseases (NTDs)



Helminth NTDs:

Taeniasis/
Cysticercosis
Guinea worm disease
Echinococcosis
Foodborne
trematodiasis
Lymphatic filariasis
Soil-transmitted
helminthiasis
Schistosomiasis
Onchocerciasis



Protozoan NTDS:

Chagas Disease
Leishmaniasis
Human African
Trypanosomiasis



Fungal NTDs:

Mycetoma,
chromoblas-
tomycosis and other
deep **mycoses**



Viral NTDs:

Rabies Dengue &
Chikungunya



Bacterial NTDs:

Buruli Ulcer Leprosy
Trachoma Yaws



Non-infectious diseases or conditions

Snakebite envenoming



Ectoparasitic NTDS

Scabies and other
ectoparasites

Mindfulness India Summit scheduled for Oct. 17-18

The Hindu Bureau

MUMBAI

The third edition of the annual Mindfulness India Summit will be held in Mumbai on October 17 and 18. The summit aims to equip leaders and professionals with essential strategies to create healthier, more empathetic work environments.

Organised by the Mindful Science Centre and led by global mindfulness expert Manish Behl, the summit will explore the topics of mindfulness, emotional intelligence, and neuroscience. Supported by the Confederation of Indian Industry (CII) and with *The Hindu* as media partner, the summit will bring together over 30 international experts in these fields.

Keynote speakers include renowned figures such as Sara Lazar and Chris Germer from Harvard Medical School, Emma Seppälä from Yale University, and U.K. politician Chris Ruane.

India makes pledge of \$300 million for WHO programme

Bindu Shajan Perappadan
NEW DELHI

India, the sixth largest global contributor of core funding to the World Health Organisation (WHO), has now committed to give more than \$300 million for the organisation's core programme of work from 2025 to 2028. The biggest chunk of \$250 million will be spent on the Centre of Excellence for Traditional Medicine.

So far, WHO has received contribution pledges for over \$2.2 billion towards a \$7.1 billion funding gap.

Over the next four years, WHO has the mandate to use these funds to save at least 40 million lives through various programmes, such as increasing the number of vaccines delivered to priority countries, supporting 55 countries in educating and employing 3.2 million health workers, and prequalifying 400 health products per year.

India has committed the largest amount of funds so

far in southeast Asia. Apart from the traditional medicine centre, \$38 million is being given for a new premises for WHO's regional office, \$10 million for digital health, and \$4.6 million for thematic funding.

'Health for all'

"The funds being sought are not additional resources, but those needed by the organisation for its core work, to deliver on its mandate to promote, provide and protect health and well-being for all," WHO's regional office said in a statement. It added that countries in WHO's South-East Asia Region and key partner organisations have pledged over \$345 million in financing for the organisation's core programme of work from 2025 to 2028.

"Indonesia and Bhutan committed to provide a pledge amount in the coming weeks," WHO said, adding that this investment round will see several events this year, culminating in a grand pledging ceremony in November on the sidelines of the G-20 summit in Brazil.

- **India's Pledge to WHO**

- India has pledged over \$300 million to the World Health Organization (WHO) for its core programme from 2025 to 2028.
- The largest portion, \$250 million, will fund the Centre of Excellence for Traditional Medicine in Southeast Asia.

- **Funding Allocation**

- Apart from the traditional medicine centre, \$38 million is for a new regional office, \$10 million for digital health, and \$4.6 million for thematic funding.

- **WHO's Funding Gap**

- WHO has received pledges totaling \$2.2 billion against a funding gap of \$7.1 billion for its upcoming work programme.

1.Expected Impact

1. The funds aim to save at least 40 million lives, boost vaccine delivery, support 55 countries in training 3.2 million health workers, and prequalify 400 health products annually.

2.Global Support

1. Other countries, including Indonesia and Bhutan, are expected to contribute in the coming weeks.
2. A grand pledging ceremony will occur alongside the G-20 summit in Brazil.

- Which of the following statements is correct regarding India's contribution to the WHO?
 - 1.The pledge is for \$300 million covering 2023-2026.
 - 2.The majority of the funds will go to digital health initiatives.
 - 3.WHO aims to use these funds to save at least 40 million lives over four years.
 - 4.The pledging ceremony will take place in India.

VIENTIANE

Myanmar to send representative to ASEAN for first time in three years



Myanmar will send a Foreign Ministry official as its representative to the Association of South East Asian Nations (ASEAN) summit in Vientiane for the first time in three years, as the junta struggles to quell a civil war. ASEAN had barred Myanmar's junta leaders from its summits in the wake of their February 2021 coup. AFP

COLOMBO

Sri Lanka orders new investigation into 2019 Easter Sunday bombings



Sri Lanka's new government announced a probe on Tuesday into the 2019 Easter bombings that killed 279 people, saying that previous investigations had failed to identify other culprits responsible for the country's worst-ever attack on civilians. There were multiple narratives doing the rounds after the attack. AFP

MOSCOW

Russia claims to have captured two more villages in eastern Ukraine



Russian forces have captured two more villages in eastern Ukraine, the Defense Ministry said on Tuesday, as Moscow's troops continue their steady advance in the region and towards Pokrovsk. Russian units "liberated" the villages of Zoryanka and Zolota Hvozia in the Donetsk region, the ministry said in a statement. AFP

DHAKA

Reforms before polls, says Yunus while refusing to give a time frame



Bangladesh's interim leader Muhammad Yunus refused to give a timeframe for polls after the ouster of his predecessor, saying in an interview that reforms are needed before polls. "If you say, 'Reforms', we are ready to hold the election. But it would be wrong to hold the election first," he said. AFP

'Israel has taken out Nasrallah's successors'

Reuters

Israeli forces have killed the would-be successors of late Hezbollah leader Hassan Nasrallah, Israeli Prime Minister Benjamin Netanyahu said, without naming them. "We have degraded Hezbollah's capabilities. We took out thousands of terrorists, including Nasrallah himself and Nasrallah's replacements, and the replacement of the replacement of the replacement," Mr. Netanyahu said. He did not identify by name Nasrallah's replacement but he claimed Israeli had killed, Hashem Safieddine is believed to be Nasrallah's potential successor.

Israel expands invasion of Lebanon, Hezbollah warns of more rocket hits

Hezbollah's acting leader Naim Qassem vows to make it impossible for Israelis to return to villages in the north, while also threatening to displace even more residents; Netanyahu promises to fight a 'sacred war' until the militias are defeated

Agence France Press

Israel ramped up its ground offensive against Hezbollah along Lebanon's southern coast on Tuesday, deploying more troops and urging civilians near the Mediterranean to evacuate. The Iran-backed Hezbollah said it had fired rockets at the Israeli city of Haifa, after the Israeli military reported 86 projectiles crossing from Lebanon. The latest escalation followed Prime Minister Benjamin Netanyahu's call for a "sacred war" until



Clean up residents in an apartment building in northern Israel's Haifa, after the Israeli military reported 86 projectiles crossing from Lebanon. Hezbollah and Hamas also opened a front in support of its Palestinian ally, Hamas, following the decision to attack it in Disney on October 7, 2023.

While battling Hamas in Gaza, Israel has vowed to secure its northern border with Lebanon to allow tens of thousands of Israeli displaced by Hezbollah's cross-border fire to return home. Both Hamas and Hezbollah have pledged to help against Israel, and on Tuesday Hezbollah's deputy chief Naim Qassem said the group would make it impossible for Israelis to return to the north. He also said even more Israelis will be displaced as the militant group extends its rocket fire deeper into Israel. Mr. Qassem, the acting leader of Hezbollah, said

its military capabilities are still intact and that it has replaced all of its senior commanders after weeks of heavy Israeli airstrikes across large parts of Lebanon, including targeted strikes that killed much of its top command. He also said Israeli forces have not been able to advance after launching a ground incursion into Lebanon, but Israel launched a wave of strikes against Hezbollah strongholds in Lebanon on September 23, leaving at least 1,100 people dead since then and forcing more than a million to flee.

Don't want to be part of anyone's political agenda: Argentina

Kallid Bhattacharjee

Argentina is not willing to be a part of BRICS as it does not want to be part of any political agenda, visiting Foreign Minister Horacio Mendizábal said here on Tuesday. In an interaction organised by the Observer Research Foundation (ORF), Mr. Mendizábal called BRICS a "very good idea" but said that Argentina is not willing to be a member of the outfit.

Visiting Foreign Minister says explanation for staying away from the BRICS grouping

While appreciating the economic and commercial scope of BRICS, Mr. Mendizábal remained non-committal about the overall premise of the grouping.

Talks with Jadhavkar she met External Affairs Minister Dr. S. Jaishankar on Tuesday and the two led Argentina and India delegation during the 7th India-Argentina Joint Commission Meeting (JCM).

"Concluded a productive and wide-ranging 7th India-Argentina JCM along with Foreign Minister Dharma Manjhi today in New Delhi. Took stock of our bilateral ties including in trade, space, nuclear, rail-ways, agriculture, fisheries, health, AYUSH, and people-to-people and defence ties. Also exchanged views on regional and global issues and our cooperation in multilateral fora," Dr. Jaishankar said after the meeting.



Common ground: Horacio Mendizábal and S. Jaishankar at the 7th India-Argentina Joint Commission Meeting in New Delhi. ORF

Surviving scarcity



A drone view shows goats eating from a pile of discarded vegetables delivered by an NGO in Chile to farm animals in water scarce areas, at 'El Océano' zone, on the outskirts of Santiago. AP/Reuters

New book says Trump spoke to Putin 7 times since leaving office

Associated Press

Donald Trump has had as many as seven private phone calls with Vladimir Putin since leaving office and secretly sent the Russian president COVID-19 test machines during the height of the pandemic, Bob Woodward reported in his new book, War. The revelations were made in the famed Watergate reporter's latest book, which also details President Joe Biden's frustrations with Israeli Prime Minister Benjamin Netanyahu and Saudi Crown Prince Mohammed bin Salman's assortment of burner phones. Steven Cheung, Mr. Trump's communications director, denied the accounts in the book. "None of these made up stories by Bob Woodward are true and are the work of a truly delusional and deranged man who suffers from a de-

bilating case of Trump Derangement Syndrome," Mr. Cheung said in a statement. Mr. Woodward reports that Mr. Trump asked an aide to leave his office at his Florida resort, Mar-a-Lago, so that the former president could have a private call with Mr. Putin in early 2024. The aide, whom Mr. Woodward does not name, said there have been multiple calls between Mr. Trump and Mr. Putin since Trump left office, perhaps as many as seven in that period, according to the book. Mr. Trump's relationship with Mr. Putin has been scrutinised since his 2016 campaign for president, when the then-candidate privately called on Russia to find and make public missing emails deleted by Hillary Clinton, his Democratic opponent. "Russia, if you are listening, I hope you are able to find the 30,000 emails that



Bob Woodward reveals in his book Donald Trump sent Vladimir Putin COVID-19 testing kits during the pandemic. (AP/Reuters)

are missing," he said. U.S. intelligence agencies later determined that Russia had meddled in the 2016 election to help Mr. Trump, though an investigation by special counsel Robert Mueller found no conspiracy between the Trump team and Russia. In 2018, Mr. Trump publicly questioned that finding following an inspection by Mr. Putin in Helsinki. In recent years, Mr. Trump has criticised U.S.

support for Ukraine as it fights off Russia's invasion. He has said Ukraine should have made concessions to Mr. Putin before Russia invaded in 2022. He also previously touted his good relations with Mr. Putin and called the Russian leader "pretty smart" for invading Ukraine. Mr. Woodward also reports that Mr. Trump sent Mr. Putin COVID-19 test machines for his personal use as the virus began spreading in 2020.

The book does not specify when the machines were sent but describes it as being when the virus spread rapidly through Russia. It was previously reported that Trump's administration in May 2020 sent ventilators and other equipment to several countries, including Russia. One of Mr. Trump's longest-term allies, South Carolina Sen. Lindsey Graham, blamed Mr. Trump's ongoing false claims that the 2020 election was rigged to a call of personal interest to the book. Mr. Biden said the book, Mr. Biden said he felt, in Mr. Woodward's account, that Mr. Netanyahu had been lying to him regularly. With Mr. Netanyahu "continuing to say he was going to kill every last member of Hamas," Mr. Woodward wrote, "Biden had told him that was impossible, threatening both privately and publicly to withhold offensive U.S. weapons shipment."

No negotiation with Russia without Ukraine, says Harris

Sriram Lakshman

Vice-President Kamala Harris said she would not, as President, negotiate laterally with Vladimir Putin without Ukraine president and discussed her own ownership during a TV interview with CBS on Tuesday. This is the second in a spate of planned interviews for the Democratic presidential candidate, who is engaged in a limited media blitz this week, less than a month from the November election.



Kamala Harris

"There will be no auction in ending that war without Ukraine and the UN Charter participating in what that success looks like," Ms. Harris said. Bill Whitler, the host of 60 Minutes, she said that if her real, Republican candidate Donald Trump, were currently the President, Mr. Putin would be "sitting in Kyiv". Asked if she would support an expansion of the North Atlantic Treaty Organization (NATO) to include Ukraine, she said it would be decided "if and when that point was reached."

Having surprised many last month by declaring she was a gun owner, Ms. Harris, on Monday, provided more details, revealing that the gun she owned was a Glock, a semi-automatic pistol. "Yes, of course I have," she said, laughing, when asked if she had ever fired it. "...At a firing range," she added. Ms. Harris linked owning a gun to having worked in law enforcement in an interview last month with Oprah Win-

frey. Ms. Harris said anyone breaking into her house would get shot. The Vice President, who supports an assault weapon ban, has been trying to reach out to moderates and Republicans, who are more hawkish on gun rights. Ms. Harris side-stepped a question on whether the U.S., despite giving billions in aid to Israel, had any sway over Israeli Prime Minister Benjamin Netanyahu. "We are not going to stop pursuing what is necessary for the United States to be clear about where we stand on the need for this war to end," she said.

On the question of whether Mr. Netanyahu could be considered a close ally, she said the question was whether the American people and Israeli people had a close alliance, which she said they did. Defending her shifts in position — such as becoming more in favour of clamping down on illegal immigration — Ms. Harris suggested she had changed her position after canvassing American opinions and was seeking "common ground".

New book says Trump spoke to Putin 7 times since leaving office

Associated Press

WASHINGTON DC

Donald Trump has had as many as seven private phone calls with Vladimir Putin since leaving office and secretly sent the Russian president COVID-19 test machines during the height of the pandemic, Bob Woodward reported in his new book, *War*.

The revelations were made in the famed Watergate reporter's latest book, which also details President Joe Biden's frustrations with Israeli Prime Minister Benjamin Netanyahu and Saudi Crown Prince Mohammed bin Salman's assortment of burner phones.

Steven Cheung, Mr. Trump's communications director, denied the accounts in the book. "None of these made up stories by Bob Woodward are true and are the work of a truly demented and deranged man who suffers from a de-

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Mr. Trump's relationship with Mr. Putin has been scrutinised since his 2016 campaign for President, when the then-candidate memorably called on Russia to find and make public missing emails deleted by Hillary Clinton, his Democratic opponent. "Russia, if you are listening, I hope you are able to find the 30,000 emails that



Bob Woodward reveals in his book Donald Trump sent Vladimir Putin COVID-19 testing kits during the pandemic. FILE PHOTO

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U.S. intelligence agencies later determined that Russia had meddled in the 2016 election to help Mr. Trump, though an investigation by special counsel Robert Mueller found no conspiracy between the Trump team and Russia. In 2018, Mr. Trump publicly questioned that finding following an in-person meeting with Mr. Putin in Helsinki.

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support for Ukraine as it fights off Russia's invasion. He has said Ukraine should have made concessions to Mr. Putin before Russia invaded in 2022. He also previously touted his good relationship with Mr. Putin and called the Russian leader "pretty smart" for invading Ukraine.

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One of Mr. Trump's longest-term allies, South Carolina Sen. Lindsey Graham, blamed Mr. Trump's ongoing false claims that the 2020 election was rigged to a cult of personality in which the former President's enconcement at Mar-a-Lago and circle of aides and advisers "constantly feed this narrative," according to the book.

The weekend after Russia invaded Ukraine, Ms. Graham was with Mr. Trump at Mar-a-Lago, which the senator characterised as "a little bit like going to North Korea." Ms. Graham added that "everybody stands up and claps

every time Trump comes in."

The book also details Mr. Biden's complicated relationship with Mr. Netanyahu as well as private moments when the President has been fed up with him over the Gaza war.

Mr. Biden's "frustrations and distrust" of Mr. Netanyahu "erupted" this past spring, Mr. Woodward writes. The President privately unleashed a profanity-laden tirade, calling him a "son of a bitch" and a "bad f--- guy," according to the book. Mr. Biden said he felt, in Mr. Woodward's accounting, that Mr. Netanyahu "had been lying to him regularly." With Mr. Netanyahu "continuing to say he was going to kill every last member of Hamas." Mr. Woodward wrote, "Biden had told him that was impossible, threatening both privately and publicly to withhold offensive U.S. weapons shipment."

- **Revelations in Bob Woodward's Book:**
- Bob Woodward's latest book "War" reveals that Donald Trump has had seven private phone calls with Vladimir Putin since leaving office.
- The book also details how Trump secretly sent COVID-19 test machines to Russia during the height of the pandemic.

- **Details of the Conversations:**

- Trump reportedly asked an aide to leave his Mar-a-Lago office to make a private call with Putin in early 2024.
- The book indicates these calls occurred amid Russia's ongoing war in Ukraine, with Trump suggesting that Ukraine should have made concessions to Putin.

- **Political Controversies:**

- Trump's relationship with Putin has been under scrutiny since his 2016 campaign, especially after Russian interference allegations in the U.S. elections.
- The book also discusses Trump's alleged comments regarding the 2020 election being rigged, and his frustration with various leaders.

1. Reactions and Criticism:

1. Steven Cheung, Trump's communications director, dismissed Woodward's claims as "made-up stories."
2. The book also depicts frustrations of President Joe Biden with Israeli Prime Minister Benjamin Netanyahu over the Gaza conflict.

BACK PAGE, P4
Nobel for pioneers
in machine learning

COMPANIES, P4
Margins to hit 22% in
3-4 years: Tata Tech MD

INTERNATIONAL, P18
Proposal to boost online
search competition in US

NEW DELHI, WEDNESDAY, OCTOBER 9, 2024

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READ TO LEAD

FE BEST BANKS AWARDS

Indian regulators doing 'world-class job': FM

Balance between over- and under-lending creates "Best Banks"

FE BUREAU
Mumbai, October 8

FINANCE MINISTER NIRMALA Sitharaman on Tuesday put up a strong defence of India's financial regulators, saying they have brought "greater transparency into the system," with a "world-class job" that puts them on a par with the best in the world.

In a fireside chat with *Financial Express* before the award ceremony at the FE Best Banks Awards in Mumbai on Tuesday, Sitharaman stressed that her government won't specifically target any banks, but said "there's a lot to be learned from the best banks which are doing it so well."

"I'm not against any kind of open banking, review or anything like that, but we have to be extremely cautious about what we do," Sitharaman said, citing the "rapidly growing" Indian market, banks and the insurance sector.

The minister also called upon banks to strike a prudent balance between over- and under-lending, and about their high-risk, long-term funding of infrastructure and other projects, for which there are designated lenders like National Bank for Financial

Infrastructure and Development (NBFID). "Over-lending means the risk of insolvency. Under-lending, on the other hand, affects growth and economic growth. Banks will have to do the right balance between the two... The right balance of lending to create profits, while keeping costs low, is what creates the best banks," she said.

Asked to comment on a report that the government's plan to hold general elections and amend the constitution, she said the government is "not in a hurry" to do so, but is "open to it" if it helps the economy. She also said the government is "not in a hurry" to do so, but is "open to it" if it helps the economy.

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Finance minister Nirmala Sitharaman and The Indian Express Group's executive director Arant Goenka with the winners of the FE Best Banks Awards in Mumbai on Tuesday.

WINNERS LIST ON PAGE 4

NON-FOOD CREDIT, WHICH GREW 15-16% IN 2023-24, HAS SUSTAINED THAT RATE IN JAN-JULY THIS YEAR AS WELL

WITH A BILLION BANK ACCOUNTS, A BILLION MOBILES & A BILLION DIGITAL IDENTITIES, DEVELOPMENT CAN TRULY BE DEMOCRATISED

CPI, WPI BASKETS DON'T SEEM TO HAVE MUCH OF A COMMONNESS... CPI INCLUDES SOME ITEMS WITH NO CONTEMPORARY VALUE

NIRMALA SITHARAMAN, FINANCE MINISTER

7.90%
Offer for Limited Period
FOR 444 DAYS FD

SEBI MANDATES DUE DILIGENCE FOR AIFs TO CURB MISUSE

THE SECURITIES AND Exchange Board of India on Tuesday issued guidelines directing investors in AIFs to exercise due diligence to comply with the prevention of circumvention of regulations and over-investing of funds.

HYUNDAI IPO NEXT WEEK; PRICE LIKELY AT ₹1,845-1,960

HYUNDAI MOTOR (HONG KONG) will open next week for subscriptions and will likely be priced at ₹1,845-1,960 per share, sources said on Tuesday, reports Reuters.

EXPLAINER: Why SCO remains relevant for India

BJP retains Haryana for historic third term

National Conference steers INDIA bloc to victory in J&K polls

HANUJI C O & LIZ HATHEW
New Delhi, October 8

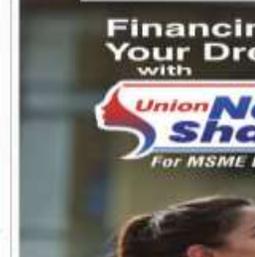
IF A WEEK is a long time in politics, a day can also shape perceptions — and larger political outcomes. Tuesday was such a day for the BJP, four months after it suffered a setback in Lok Sabha elections losing seats in several north Indian states and prompting the Congress and the Opposition to rejoice and celebrate, the ruling party created history in Haryana registering a second victory that would give it a third term in power.

It also improved its tally in Jammu and Kashmir and, more importantly, its government at the Centre claimed credit for ensuring that the elections were held and an elected UT Assembly was in place — its power severely limited — for the first time since the state was split and its special status abrogated.

The verdict holds multiple messages and has political implications. The Congress hoped a victory in Haryana would have strengthened the



NARENDRA HOODA, BJP MINISTER
"ONCE THE PEOPLE THROW OUT THE CONGRESS, THEY DO NOT LET IT COME BACK. THEY PUT 'NO ENTRY' BOARDS FOR CONGRESS... IT IS A PARTY THAT ALWAYS THOUGHT POWER WAS ITS BIRTHRIGHT."



Continued on Page 7

GIC weighs \$5-bn Greenko sale

MANUEL BAIJORN, ELFIE CHEW & RAJU KALESH
October 8

GIC IS CONSIDERING options for its \$5-billion stake in India's Greenko Energy Holdings, including a possible sale that could be worth around \$5 billion, people familiar with the matter said.

The Singaporean sovereign wealth fund is in initial discussions with financial advisers to help evaluate a full or partial sale of its holding in Greenko, the people said, asking not to be identified because the matter is private. A deal could value the renewable energy firm at

GREEN ENERGY BET

Prospective investors include sovereign wealth funds, sovereign wealth funds and other energy companies, the people said. Considerations are profitability and GIC may

about \$20 billion, they said. Prospective investors include sovereign wealth funds, sovereign wealth funds and other energy companies, the people said. Considerations are profitability and GIC may

decide not to pursue a sale, the people said. Greenko, which has other backers including Abu Dhabi Investment Authority, Jeevan AIG, and Japanese financial group Orix, may also seek to raise funds in the coming months to help its growth, another person said.

A representative for GIC declined to comment. When asked about GIC's plans, Orix also declined to comment on its involvement in the deal, without elaborating.

Greenko has 7.3 gigawatts of installed capacity across wind, solar and hydro across 15 states in India. Last year, it raised \$700 million from GIC, AIG, Orix and other energy companies to invest in pumped storage projects.

—BLOOMBERG

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US okays sale of torpedoes worth \$175m to India

TIMES NEWS NETWORK

New Delhi: The United States govt has approved a proposed sale of 53 MK-54 lightweight torpedoes worth \$175 million to India for the multi-mission MH-60R Seahawk helicopters being inducted by the Indian Navy.

The Biden administration's notification to the US Congress on Monday said the sale will support Washington's foreign policy and national security objectives by helping to strengthen the bilateral strategic relationship and improving the security of major defence partner India, which "continues to be an important force for political stability, peace, and economic progress in the Indo-Pacific and South Asia regions".

"The proposed sale will improve India's capability to meet current and future threats by increasing the size of its anti-submarine weapons stockpile for its MH-60R helicopters," it said.



Navy officers said the induction of Seahawks (in pic) represents a 'significant capability jump' in detecting and destroying enemy submarines prowling in the IOR

India & Germany discuss boosting def-industrial ties

India and Germany Tuesday discussed measures to further strengthen their defence-industrial collaboration and enhance supply chain resilience.

The two sides reviewed ongoing bilateral defence cooperation activities.

SOUTH ASIA REGIONS

"The proposed sale will improve India's capability to meet current and future threats by increasing the size of its anti-submarine weapons stockpile for its MH-60R helicopters," it said.

The Navy in March had commissioned its first squadron of six submarine-hunting MH-60R Seahawk helicopters, armed with Hellfire missiles, MK-54 torpedoes, and precision-kill rockets, at INS Garuda in Kochi, as was then reported by TOI.

By next year, India is slated to induct all the 24 heavy-duty Seahawks, which are also equipped with multi-mode radars and night-vision devices, under the Rs 15,157 crore (\$2.13 billion) contract inked with the US in Feb 2020.

Navy officers say the induction of Seahawks, which operate from decks of aircraft carriers and other frontline warships, represents a "significant capability jump" in detecting and destroying enemy submarines prowling in the Indian Ocean Region.

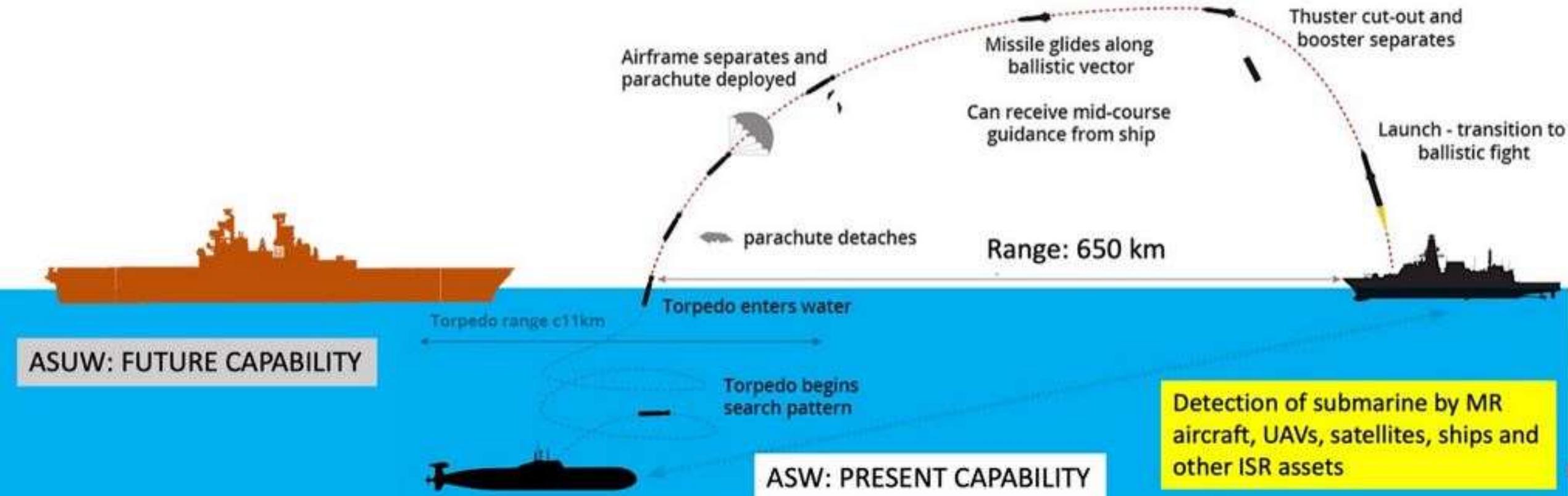
discussed measures to further strengthen their defence-industrial collaboration and enhance supply chain resilience.

The two sides reviewed ongoing bilateral defence cooperation activities, including exercises in the air and maritime domains, during a telephonic conversation between defence minister Rajnath Singh and his German counterpart Boris Pistorius.

"The two ministers planned to meet in the near future to give concrete shape to the defence engagements and joint projects," an official said.

As part of its overall policy to bolster defence-strategic cooperation, Germany has speeded up clearances and simplified the licensing regime for military sales to India, which include lifting restrictions on the sale of small arms and their spare parts. Germany is keen to step up ties with India in areas ranging from arms sales and joint production of advanced military hardware like submarines to military interoperability in Indo-Pacific. TNN

Supersonic Missile Assisted Release of Torpedo (SMART) CONOPS



Hypersonic travel to take off in 2025

A hypersonic jet capable of flying from London to New York in just one hour, compared to the current 7-8 hour flight, is set for its first test flight in 2025. Developed by Venus Aerospace, the jet will reach speeds of up to Mach 6 (3,600mph/5,795km/h), six times the speed of sound. According to reports, the project is powered by the Venus Detonation Ramjet 2000 lb Thrust Engine (VDR2), designed to achieve hypersonic flight.

In partnership with aerospace company Velontra, Venus Aerospace plans to revolutionise air travel by using conventional jet engines for takeoff before switching to rocket propulsion at higher altitudes. Passengers will witness views of Earth's curvature, although the jet won't technically reach space.

For Indian travellers, this technology could transform long-haul flights, making international trips to the UK or US as swift as a domestic journey – potentially putting jet lag to rest! Agencies



ANDHRA PRADESH GOVT
Naidu to hold talks
with leaders at meet
NEWS • PAGE 8



CLAIMED CONTINUED IN LEBANON
2 killed as
Hezbollah
rockets hit
Israel
WORLD • PAGE 14



COUNTRY'S LARGEST
Hyundai unveils IPO
of ₹27,870 crore
NEWS • PAGE 13



MENTAL HEALTH IN FOCUS
Transform the
workplace into
supportive space
Success must not be tied
to brutal work culture
EDITORIAL • PAGE 4



ENGLAND'S NO. 1
Root overhauls Cook's
tally of Test runs
SPORT • PAGE 16

INSIDE



Samsung protest
Opposition slams
T.N. government

CHENNAI
Opposition leaders on Wednesday criticised the DMK government after the Tamil Nadu Police arrested employees of the Samsung Electronics facility who have been in strike demanding reinstatement of their leader arrested on Tuesday.



CSIS clears deals
for MQ-9B drones
and submarines

NEW DELHI
The Cabinet Committee on Security on Wednesday approved two high profile deals for the purchase of 31 MQ-9B High Altitude Long Endurance Unmanned Aerial Vehicles from General Atomics of the U.S. and indigenous construction of two nuclear attack submarines. NEWS

Karnataka HC
acquits 3 in 2012
conspiracy case

BENGALURU
The Karnataka High Court on Wednesday acquitted three persons, including a Pakistan national, from the charges of indulging in unlawful activities in the 2012 terror conspiracy case, citing a procedural flaw in the sanction for prosecution granted by the state. NEWS

3 killed as police,
protesters clash
in Pakistan

PESHAWAR
At least three people were killed in clashes on Wednesday between Pakistani police and supporters of a rights group advocating for the Pakistan ethnic minority, engaged by a government ban imposed on the organisation they seek. local officials said. NEWS



Elon Musk's X is
restored in Brazil
after suspension

SAO PAULO
Internet service providers began restoring access to the social media platform X after it was suspended on Wednesday after it remained inaccessible for more than a month following a clash between its owner, Elon Musk, and a judge on the country's highest court. NEWS

Leaders race to form govts. in J&K, Haryana

Hectic political activities begin; BJP, which received additional support from three Independents, likely to form government in Haryana after October 12; NC-Congress alliance likely to declare J&K's next CM in two days; NC legislature party meeting today; Omar says first business of new Cabinet must be to pass resolution on restoration of Statehood

Poozanda Ashu
BENGALURU/CHENNAI
A day after the Assembly election results were announced, the leaders of the winning parties — the BJP in Haryana and the National Conference-Congress alliance in Jammu and Kashmir — were engaged in hectic political activities.



Feroz Khan Noon and Omar Abdullah in Srinagar a day after the election victory in J&K. Anil Shah congratulates incumbent Haryana CM Haryana Singh Sarda, in Delhi on Wednesday. ANS/ANUS/IN

Several BJP leaders from Haryana, including incumbent Chief Minister Nayab Singh Sarda who is likely to retain his position, headed to New Delhi to meet Prime Minister Narendra Modi and other top leaders. The new government is expected to take charge after October 12, since the Dusara festival is over.

The BJP is also considering the option of appointing two Deputy Chief Ministers, as was done in Rajasthan and Madhya Pradesh, the source added. "There were no discussions on any other issues," Haryana BJP president Mohan Lal Badotra told correspondents in the national capital. In response to queries about the new Chief Minister, he said: "After Dusara, whenever the party decides, we will let you know."

In Srinagar, J&K Pradesh Congress Committee president Feroz Khan Noon visited the house of NC president Feroz Khan Noon and vice president Omar Abdullah.

"We visited Dr. Abdullah and those and congratulated them on their victory. An official discussion will take place after the meeting with the legislative members and alliance partners," he Kara said. "The NC will hold its legislative party meeting on Thursday and will meet with its allies in the Congress on Friday." "In the meeting of the alliance partners, a governance model will be decided," he said.

The first business of the new Cabinet must be to pass a resolution demanding the restoration of Statehood for J&K, Mr. Abdullah said. "We will at the same time keep the conversation alive on Article 370. We are not going to fool the people by promising something we cannot deliver immediately," he said, adding that the NC has low expectations for the restoration of Article 370 by the current BJP government at the Centre. "We expect a regime change in New Delhi and a serious engagement on restoring Article 370," he said. Mr. Abdullah said the new government would give a voice to the represented regions, particularly Jammu, where his party has fewer elected representatives.

Garba night



Festive special: Revellers clad in festive wear dance at a garba event during Navratri on the outskirts of Ahmedabad on Wednesday. AP

RBI holds rate at 6.5%, opens door for cut

Lalitendu Mishra
MUMBAI
The Reserve Bank of India on Wednesday maintained its benchmark interest rate at 6.5% for the 10th successive monetary policy review since April 2023, but opened the door for a rate cut in the near future by shifting its policy stance to "neutral".

The status quo on interest rates was approved by five out of six members of the Monetary Policy Committee which met for three days starting October 7.

"The change of policy stance from "withdrawal of accommodation" to "neutral" was unanimously agreed upon by the committee.

FULL REPORT
PAGE 7

Ratan Tata, a titan of Indian industry, takes his final bow

The Hindu Bureau
MUMBAI
Tata Group's chairman emeritus and veteran industrialist Ratan Naval Tata passed away at the Breach Candy Hospital in Mumbai late on Wednesday evening. He was 96.

"It is with deep sorrow that we announce the peaceful passing of our beloved Ratan," his family said in a statement. "We his brothers, sisters, and family take solace and comfort in outpouring love and respect from all who admired him. While he is no longer with us in person, his legacy of humility, generosity and purpose will continue to inspire future generations," the family said. Mr. Tata is survived by his younger brother Jitendra and Neel and stepmother Simone.

Prime Minister Narendra Modi paid rich tributes to Mr. Tata, describing him as a visionary business leader and an extraordinary human being. "One of the most unique aspects of Shri Ratan Tata Ji was his passion towards creating big and giving back. He was at the forefront of championing causes like education, healthcare, sanitation, animal welfare, to name a few," he said on X.

In a statement, Tata Sons Chairman N. Chandrababu Naidu said, "It is with a profound sense of loss that we bid farewell to Mr. Ratan Naval Tata, a truly exceptional leader whose immeasurable contributions have shaped not only the Tata Group but also the very fabric of our nation." The company extended the death, with Leader of the Opposition in the Lok Sabha Rahul Gandhi saying Mr. Tata was a man with a vision who had left a lasting mark on both business and philanthropy.

Baker, Jumper, Hassabis share Nobel in Chemistry for tools to design proteins and predict structures

Yasudevao Mohantra
CHENNAI

The 2024 Nobel Prize for Chemistry was shared by David Baker "for computational protein design" along with Demis Hassabis and John Jumper "for protein structure prediction," the Royal Swedish Academy of Sciences announced on Wednesday.

'designer' proteins intended for specific applications.

John Jumper, a former chair of the chemistry Nobel Committee, called the variety of proteins developed by Mr. Baker et al. to be "absolutely mind-blowing" and that "it seems that you can almost construct any type of protein with this technology."

Mr. Hassabis and Mr. Jumper received the other half of the prize for their work in developing an artificial intelligence model called AlphaFold 2 that could predict the structure of millions of proteins.

Human scientists had done that for only around 1,7 lakh proteins until then, although the same structures and patterns therein were used to train AlphaFold.



Glory moment: (From left) David Baker, John Jumper and Demis Hassabis, the recipients of Nobel Prize for Chemistry, 2024. AP



RATAN NAVAL TATA
1927-2024

He was also called in the Tata Group, was its chairman from 1990 to 2022, when he handed over the baton to Cyrus Mistry. Following Mr. Mistry's ouster in 2016, he again assumed the position of interim chairman. He handed over the reins to Mr. Chandrababu, who was appointed chairman of Tata Sons in February 2017.

Though Mr. Tata had retired, he had a firm grip on the group as well as Tata Trusts, which owns over 67% stake in Tata Sons, the holding company.

It was J.R.D. Tata who identified his talent and chose him as his successor in 1990. In the initial years, Mr. Tata had to face steep resistance from several agents who had operational control over large companies. Mr. Tata caused them to be by the mid-1990s. Then he focused on putting the house in order and subsequently went global with the acquisition of Tetley, Jaguar, Land Rover, and Corus Steel.

Baker, Jumper, Hassabis share Nobel in Chemistry for tools to design proteins and predict structures

Vasudevan Mukunth

CHENNAI

The 2024 Nobel Prize for Chemistry was shared by David Baker “for computational protein design” along with Demis Hassabis and John Jumper “for protein structure prediction,” the Royal Swedish Academy of Sciences announced on Wednesday.

Heiner Linke, chair of the Nobel Committee for Chemistry, said the award honoured research that connected the sequence of amino acids that make up a protein and the protein’s structure.

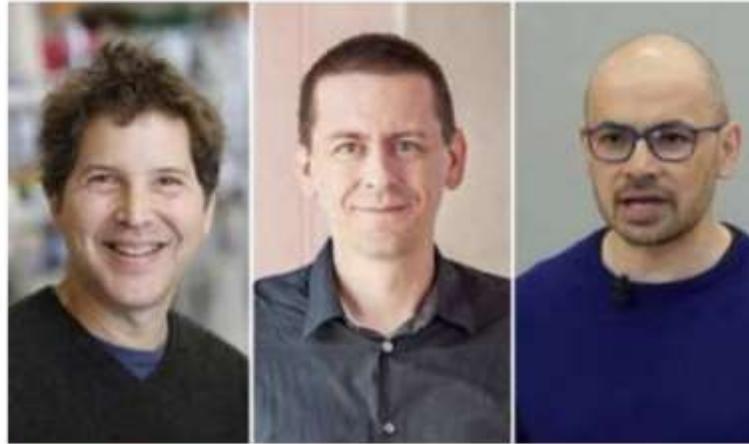
Mr. Baker led a team that in 2003 designed a new protein using bespoke software methods. They and others have since refined these methods to be able to point the way to

‘designer’ proteins intended for specific applications.

Johan Åqvist, a former chair of the chemistry Nobel Committee, called the variety of proteins developed by Mr. Baker *et al.* to be “absolutely mind-blowing” and that “it seems that you can almost construct any type of protein with this technology”.

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Glory moment: (From left) David Baker, John Jumper and Demis Hassabis, the recipients of Nobel Prize for Chemistry, 2024. AP

“Four years ago in 2020, Demis Hassabis and John Jumper managed to crack the code. With skillful use of artificial intelligence, they made it possible to predict the complex structure of essentially any known protein in nature,” Mr. Linke said.

The Nobel Prize for Mr. Hassabis and Mr. Jumper

comes relatively quickly after the corresponding work, around four to six years.

Unusual pattern

There is usually a gap of a few decades between the work and the prize because the former does not immediately prove to be of “greatest benefit to human-

kind” – a criterion for winning.

For example, John Goodenough shared the 2019 chemistry prize for his work on lithium-ion batteries in 1970s.

John Nash, Jr. won part of the Nobel Memorial Prize in Economic Sciences in 1994 for work he had done in the 1950s.

The chemistry prize this year also continues a relatively new tradition in this category of the prize going to non-chemists – although 1981 chemistry laureate Roald Hoffmann has interpreted this to be a mark of chemistry’s “far and influential reach”.

Mr. Baker works at the University of Washington in Seattle and Mr. Hassabis and Mr. Jumper work at Google DeepMind in London.

THE WINNERS

David Baker, 62, is a professor at University of Washington



Demis Hassabis, 48, is the CEO of Google DeepMind



John Jumper, 39, is senior research scientist at Google DeepMind



■ Half the prize was awarded to Baker for 'computational protein design'

■ The other half was shared by Hassabis & Jumper 'for protein structure prediction'

■ Hassabis & Jumper utilised AI to predict the structure of almost all known proteins

■ Baker learned how to master life's building blocks and create entirely new proteins

The prize for chemistry is worth 11 million Swedish crowns or \$1.1 million

- The first Nobel Prize in Chemistry was awarded in 1901 to Jacobus Henricus van 't Hoff, of the Netherlands, "for his discovery of the laws of chemical dynamics and osmotic pressure in solutions". From 1901 to 2023, the award has been bestowed on a total of 192 individuals.
- As of 2022 only eight women had won the prize: Marie Curie, her daughter Irène Joliot-Curie, Dorothy Hodgkin (1964), Ada Yonath (2009), Frances Arnold (2018), Emmanuelle Charpentier and Jennifer Doudna (2020), and Carolyn R. Bertozzi (2022).

Awarded for	Outstanding contributions in chemistry
Location	Stockholm , Sweden
Presented by	Royal Swedish Academy of Sciences
Reward(s)	11 million SEK (2024) ^[1]
First awarded	1901
Last awarded	2024
Currently held by	David Baker , Demis Hassabis and John M. Jumper (2024)
Most awards	Frederick Sanger and Karl Barry Sharpless (2)

- **2024 Nobel Prize in Chemistry**
- Awarded to David Baker, Demis Hassabis, and John Jumper.
- Recognized for "computational protein design" and "protein structure prediction."

- **Significance of Their Work**

- David Baker led a team that developed new methods to design proteins using software.
- Their work enables the creation of "designer" proteins for specific applications.
- Hassabis and Jumper were recognized for using AI to predict the structure of millions of proteins, especially through their model AlphaFold 2.

- **Comments from Experts**

- Johan Åqvist praised the technology as "mind-blowing," allowing for the construction of almost any protein type.
- Heiner Linke from the Nobel Committee highlighted the research's impact on understanding amino acid sequences and protein structures.

1. Contextual Information

1. The prize came relatively quickly (4-6 years after the work was done), which is uncommon for Nobel Prizes.
2. The award highlights the increasing role of AI and non-traditional chemistry research in advancing the field.

- Which of the following statements is true regarding the 2024 Nobel Prize in Chemistry?
 - 1.The award was given for developing a vaccine for COVID-19.
 - 2.David Baker, Demis Hassabis, and John Jumper were recognized for work related to AI-based protein prediction.
 - 3.The Nobel Prize was awarded 20 years after the original work was completed.
 - 4.AlphaFold 2 is a model that predicts the structure of planets, not proteins.

Ratan Tata, a titan of Indian industry, takes his final bow

The Hindu Bureau
MUMBAI

Tata Group's chairman emeritus and veteran industrialist Ratan Naval Tata passed away at the Breach Candy Hospital in Mumbai late on Wednesday evening. He was 86.

"It is with deep sorrow that we announce the peaceful passing of our beloved Ratan," his family said in a statement.

"We his brothers, sisters, and family take solace and comfort in outpouring of love and respect from all who admired him. While he is no longer with us in person, his legacy of humility, generosity and purpose will continue to inspire future generations," the family said. Mr. Tata is survived by his younger brothers Jimmy and Noel and stepmother Simone.

Prime Minister Narendra Modi paid rich tributes to Mr. Tata, describing him as a visionary business leader and an extraordinary human being. "One of the most unique aspects of Shri Ratan Tata Ji was his passion towards dreaming big and giving back. He was at the forefront of championing causes like education, healthcare, sanitation, animal welfare to name a few," he said on X.

In a statement, Tata Sons Chairman N. Chandrasekaran said, "It is with a profound sense of loss that we bid farewell to Mr. Ratan Naval Tata, a truly uncommon leader whose immeasurable contributions have shaped not only the Tata Group but also the very fabric of our nation."

The Congress condoled the death, with Leader of the Opposition in the Lok Sabha Rahul Gandhi saying Mr. Tata was a man with a vision who had left a lasting mark on both business and philanthropy.



RATAN NAVAL TATA
1937 - 2024

RNT, as he was called in the Tata Group, was its chairman from 1990 to 2012, when he handed over the baton to Cyrus Mistry. Following Mr. Mistry's ouster in 2016, he again assumed the position of interim chairman. He handed over the reins to Mr. Chandrasekaran, who was appointed chairman of Tata Sons in February 2017.

Though Mr. Tata had retired, he had a firm grip on the group as well as Tata Trusts, which owns over 67% stake in Tata Sons, the holding company.

It was J.R.D. Tata who identified his talent and chose him as his successor in 1990. In the initial years, Mr. Tata had to face steep resistance from several sa-traps who had operational control over large companies. Mr. Tata eased them out by the mid-1990s. Then he focused on putting the house in order and subsequently went global with the acquisition of Tetley, Jaguar, Land Rover, and Corus Steel.

It was he who made the Tata an international company and enhanced the stature of the group. He was polite to talk to but tough while dealing with issues and his opponents.

Post-retirement, he nurtured dozens of start-ups and invested in them through his company RNT Associates.

Architect Of Revamped House Of Tatas

Dec 28, 1937 | Ratan Tata is born to Soonoo & Naval Tata in Mumbai

1940 | Attends Campion and Cathedral & John Connon schools in Mumbai, and Bishop Cotton in Shimla. **Zubin Mehta**, Ashok Birla (Yash Birla's father), **Rahul Bajaj**, Dinshaw Pandole (who owned Duke's) and Yusuf Hamied of Cipla were **Tata's classmates**



1962 | Gets a degree in architecture from Cornell University, US. Works with Jones & Emmons in Los Angeles. Rejects a job offer from IBM & joins Tata Group as an assistant in Tata Industries

1971 | Appointed director-in-charge of National Radio and Electronics Company (NELCO)

1981 | **Succeeds JRD Tata** as chairman of Tata Industries

1986 | Named Air India chairman

1988 | Appointed chairman of Sir Ratan Tata Trust (one of the two main Trusts that own a stake in Tata Sons)

March 25, 1991 | Becomes **Tata Sons chairman**

1995 | Named chairman of Sir Dorabji Tata Trust (another key shareholder of Tata Sons)

2000 | Tata receives Padma Bhushan award

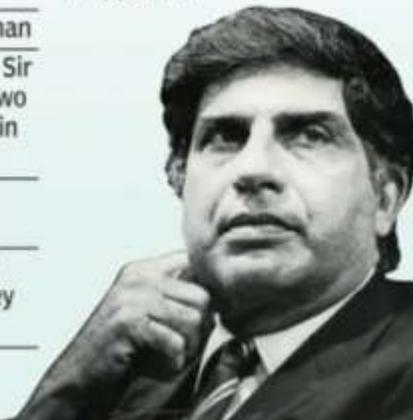


JRD & Ratan Tata pay homage to Rajiv Gandhi on May 23, 1991

2008 | Tata is honoured with Padma Vibhushan

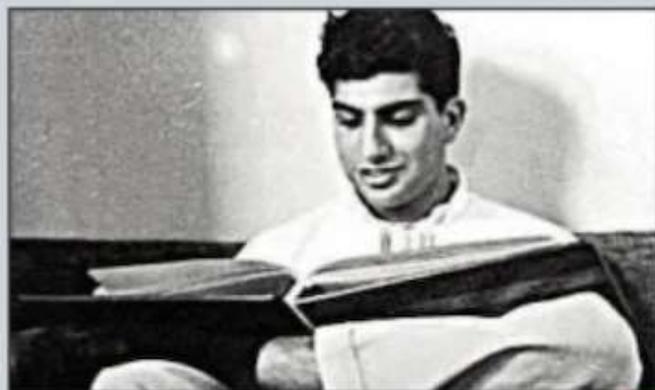
Dec 28, 2012 | **Steps down** as Tata Sons chairman on turning 75. Becomes chairman emeritus

Oct 2016 | Tata takes over as chairman again after Cyrus Mistry's ouster. Remains in top role till N Chandrasekaran is appointed



FROM THE FAMILY ALBUM

Ratan Tata with grandmother
Navajbai, father Naval and
half-brother Noel



▲ With his younger brother
Jimmy (R) & family pet in 1945
◀ During his days at Cornell,
where he studied architecture

RATAN NAVAL TATA



First visit to Telco plant in Jamshedpur in early '60s



Ratan Tata with JRD at the space shuttle factory in US



Relearning a lost skill after retirement: But he couldn't play with both hands, he said in an Insta post in 2021

OVER 60 DEALS IN 21-YEAR STINT

BIG & BOLD BETS

\$13bn | Tata Steel buys **Corus**, Europe's second-largest steelmaker (2007)

\$2.3bn | Tata Motors acquires **Jaguar-Land Rover** (2008)

\$1bn | Tata Chemicals buys US's **General Chemicals** (2008)

\$512mn | TCS buys **Citigroup Global Services** (2008)

\$440mn | Tata Global purchases **Tetley** (2000)



➤ The pace of acquisitions grew dramatically – from **five** in 1991-2003 to **seven** in 2004 & **17** in 2005, **36** between 2006-10

HOW A GLOBAL GIANT WAS BUILT

Tata Group's turnover
(in \$ billion)

4

When Tata took over in 1991... 8k

100

...when he retired in 2012

5L

Tata Group's market cap
(in Rs cr)

165

Today

35L

FIVE REVIVAL MOVES

- 1 Introduced retirement policy to get younger blood
- 2 Tightened HQ's grip, made group cos pay royalty to use Tata brand
- 3 Entered new biz—telecom, finance, cars
- 4 Made signature global acquisitions
- 5 Creative destruction: Indica (first indigenous car, Nano, Ginger (budget hotel))

NEW-AGE BETS

➤ RNT's first startup investment
| **Snapdeal** (2014)



Other big startups he backed over the years

Lenskart	CarDekho	Ola
Paytm	Upstox	FirstCry
Major startups exited		
FirstCry	Lenskart	Paytm

Source: Tracxn

IN BRIEF



Missing jawan found dead in J&K's Anantnag forest area

An Army jawan was found dead on Wednesday, a day after he went missing in a forest area of Anantnag's Kobernag area. An Army spokesman said a joint counter-terrorist operation was launched by the Army along with the J&K Police in the Karwan forest of Kobernag on October 8 and continued overnight as one soldier of the Territorial Army was reported missing. Official sources said two jawanas on a rescue were reported missing on Tuesday evening. One jawan returned safely. The body of the missing soldier was recovered on Wednesday morning from the forest area, officials said. The Army could not immediately confirm the cause of death. An official said an investigation was under way to establish the circumstances under which the soldier went missing. The deceased soldier was identified as Hiral Akhmad Bhat, a resident of Madhwanpora, Nowgong, Anantnag.

₹4,400 cr. for border roads in Punjab, Rajasthan approved

The Union Cabinet on Wednesday approved construction of 2,300 km of roads in the border areas of Rajasthan and Punjab at an investment of ₹4,400 crore. "This decision will have a major impact on the road and telecom connectivity, and facilities of water supply, health and education. It will also enhance rural livelihoods, ease travel, and ensure connectivity of those areas with the rest of the highway network," a government press statement said.

Former chief of Delhi AIIMS P. Venugopal passes away

The Hindu Bureau NEW DELHI

Dr. P. Venugopal, former Director of the All India Institute of Medical Science (AIIMS) and a pioneer of cardiac surgery, who conducted India's first heart transplant and led over 50,000 heart surgeries in his career, passed away on Tuesday. He was 82. He was cremated on Wednesday at the Lodhi Road Crematorium here at 4 p.m. He, a Padma Bhushan awardee, is survived by his wife, Priya Kakkar, and daughter, Salansha Parnagipalli. He published his memoirs, Heartfelt, jointly with his wife in 2023. As a leading surgeon, Venugopal introduced many advanced concepts in cardiac surgery from the western world to India.

BJP distances itself from party leader's U.S. polls meet

Shantanu Mishra NEW DELHI

Prime Minister Narendra Modi may have avoided meeting both candidates, Vice-President Kamala Harris and former President Donald Trump, in the U.S. election during his recent visit, but the poll, due in less than a month, has created a controversy with the BJP.

On Wednesday, the BJP's foreign affairs cell in charge, Vijay Chaudhary, took to social media platform X to state that an online event being organised by Delhi BJP leader Vijay Jolly and hostess Shaikh Kumar, chairperson of the Republican Hindu Core Unit USA, had nothing to do with the party, and that the BJP was not supporting or opposing any candidate in the fray.

₹1.5 lakh cr. for border roads in Punjab, Rajasthan approved

The Union Cabinet on Wednesday approved construction of 2,300 km of roads in the border areas of Rajasthan and Punjab at an investment of ₹1,500 crore. "This decision will have a major impact on the road and telecom connectivity, and facilities of water supply, health and education. It will also enhance rural livelihoods, ease travel, and ensure connectivity of those areas with the rest of the highway network," a government press statement said.

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Modi to hold bilateral talks with leaders of ASEAN-India summit

Relations with ASEAN a central pillar of Act East Policy and Indo-Pacific Vision, says External Affairs Ministry announcing the PM's two-day visit

Kailash Bhatnagar NEW DELHI

Prime Minister Narendra Modi will hold bilateral talks with ASEAN leaders on Thursday and Friday to attend the 21st ASEAN-India and the 10th East Asia Summits.

The annual events are crucial as they are being held against the backdrop of fast developments in Myanmar where ethnic armed organisations are battling the military junta of the country, creating hurdles for regional connectivity and security.

India is marking a decade of the Act East Policy this year. Relations with ASEAN as a central pillar of the Act East Policy and Indo-Pacific Vision, said External Affairs Minister on Thursday announcing the visit.

Mr. Modi will reach the Laotian capital Vientiane on Thursday and will hold bilateral meetings with leaders of the ASEAN countries after attending the ASEAN-India summit in the afternoon.



Major event: The ASEAN summit is crucial as it comes at a time when India's neighbour Myanmar is going through a crisis.

Laos is the current chair of ASEAN and Mr. Modi will meet Australian Prime Minister Anthony Albanese.

The events in Laos will be the first diplomatic engagement with the new Prime Minister Shigeru Ishiba, who took charge on October 1. During his stay in Vientiane, Mr. Modi will witness the Lao classical dance of the Ramayana. The ancient Indian classic is celebrated as Phra Lak Phra Lam (Phra Lakshman Phra Ram) and it is one of the several adaptations of the classic in Southeast Asia.

CCS clears deals for 31 MQ-9B drones and submarines

Dinakar Prati NEW DELHI

The Cabinet Committee on Security on Wednesday approved two high-profile deals for the purchase of 31 MQ-9B High Altitude Long Endurance (HALE) Unmanned Aerial Vehicles (UAV) from General Atomics of the U.S. and indigenous construction of two nuclear attack submarines (SSNs).

The MQ-9B HALE UAVs are for the three services, as confirmed by two official sources.

Approval from CCS is the final step and the MQ-9B deal now awaits formal conclusion. As part of the deal, General Atomics is scheduled to establish a production line at Visakhapatnam in end-August joining INE Ashanti, which was commissioned into service in 2016.

The SSNs are a critical requirement for the Navy as they give unlimited endurance to perform a variety of tasks, their endurance only limited by that of the crew.

India has in the past leased two SSNs from Russia and a third SSN which has been contracted to be completed to join service in another two or three years after some delay.



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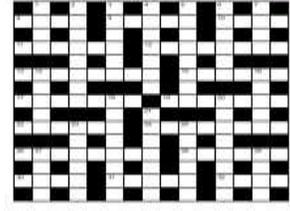
Force, is estimated to cost \$3.99 billion.

India has already indigenous manufactured nuclear-powered ballistic missile submarine (SSBN) and the SSN project will be a follow-on to that.

India is also in the process of procuring a variety of tasks, their endurance only limited by that of the crew.

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THE CROSSWORD 14302



- Across
1 Wrongly okay knock out (4)
2 Some sort of machine in party, possibly (5)
3 Cereal that's pretense to some extent (5)
11 Starting of financial institution as company's big failure (5)
12 Urge free to be arranged for asylum seekers (8)

13 Relatively expensive south Indian breakfast dish with right portion of ketchup (8)

- 14 Alcohol still built around middle of October (8)
15 Rise for this type of comedian (5-2)
16 Press, for example, adopts hundred and fifty for health check-up (7)
22 As one English boy in it locals not having beer... (2,4)
24 Contracts necessary manufactured in absence of air (8)
25 Support for expert without political leanings (8)
26 Female monitor progresses to some extent (6)
28 Reason from admiring public under examination, at first (4)
29 30x3 lake diamonds using winding tapes (8)
32 Gas obtained from north eastern Ontario (4)
Down
1 Litter found in rejected paotiba sauce (6)
2 War coins arranged for boatman (8)
3 Couple in ship performing duties (2,4)
4 Ghosts in the liquor cabinet? (7)
5 Toys and activities in recent times (2,2,4)
6 French university girl is economical (5)
7 Sports damaged ancient tin to missing (4)
8 One who sets rules for president (5)
16 Rib, a sort of bone with dexterosures (5)
18 Crocheted Uncle takes an extra-curricular (5)
19 Unaware and usually ranting about nothing (6)
21 Put on clothes again in repetition (7)
23 Living things reappear around China by end of autumn (8)
25 Implication goes from small spiral dwelling (6)
27 Right time for anger (4)
28 Male leaves spilled champagne in store (4)

SUDOKU

9x9 Sudoku grid with numbers 1-9 in some cells.

DIFFICULTY RATING: ★☆☆☆☆

Two smaller 4x4 and 6x6 Sudoku grids.

FAITH

Serving God and Acharyas

When we do aradhana to Lord Narayana, our Acharyas are pleased. In an effort to find gods converted into service to Acharyas, Kalesharya is a word that has deep significance in the Vedavedic tradition. It goes beyond service to Bhagawan on this earth alone. It extends to Sri Vaikuntha too. For Sri Vaishnavas, serving the Lord is not just a means to moksha, but continues in Sri Vaikuntha. The kalesharya that we do for Him is parama purushartha, and Kashiya B. Devarajan in a discourse. It is our precursor who leads us to the Lord. That is why serving Acharyas is important.

A classic example of devotion to his Acharya is seen in the case of Madhuranth Acharya. In his Karmam Sutra, he prays only his Acharya - Nammacharya. He does not praise God. A similar devotion to his preceptor is seen in the case of Vaduga Nambi. Once when Lord Ranganatha was out on a procession, Vaduga Nambi was being hauled with for Ramanujacharya. He said caring for his God, namely Ramanujacharya, was more important than having darshan of Lord Ranganatha. On another occasion, Ramanujacharya was leaving for a pilgrim centre. He asked Vaduga Nambi to pack the deities that he (Ramanujacharya) worshipped every day. When they arrived at the destination, Ramanuja discovered that Vaduga Nambi had packed Ramanuja's sandals along with the deities. A shocked Ramanuja questioned him about why he had committed such a grave offence. Vaduga Nambi replied that he had packed Ramanuja's sandals, were in a way inferior to Ramanuja's deities so great was Nambi's devotion to Ramanuja.

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Dinakar Peri

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Approval from CCS is the final step and the MQ-9B deal now awaits formal conclusion. As part of the deal, General Atomics is scheduled to establish a Global Maintenance, Repair and Overhaul (MRO) facility in India which would count towards offset obligations.

As reported by *The Hindu* earlier in end-July, the Defence Acquisition Council (DAC) chaired by Mr. Singh had approved amendments to the MQ-9B deal related to indigenous content and related aspects.

The deal for 31 MQ-9B UAVs, 15 Sea Guardians for the Indian Navy and 16 Sky Guardians, eight each for the Indian Army and Air



Force, is estimated to cost \$3.99 billion.

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Force, is estimated to cost \$3.99 billion.

India has already indigenously manufactured nuclear-powered ballistic missile submarines (SSBN) and the SSN project will be a follow-on to that.

India's second SSBN, *INS Arighaat*, was commissioned into service at Visakhapatnam in end-August joining *INS Arihant*, which was commissioned into service in 2016.

The SSNs are a critical requirement for the Navy as they give unlimited endurance to perform a variety of tasks, their endurance only limited by that of the crew.

India has in the past leased two SSNs from Russia and a third SSN which has been contracted is expected to join service in another two or three years after some delay.

- The Cabinet Committee on Security (CCS) approved the purchase of 31 MQ-9B High Altitude Long Endurance (HALE) UAVs and construction of two nuclear attack submarines (SSNs).
- The drones will be used by the Army, Navy, and Air Force.

- **Details of the Drone Deal**

- MQ-9B UAVs, including 15 Sea Guardians for the Navy and 16 Sky Guardians for the Army and Air Force.
- The total cost for the drones is estimated at \$3.99 billion.

- **Indigenous Submarine Efforts**

- The submarine construction is a follow-up to the indigenous SSBN program, with India's second SSBN, INS Arighaat, joining the fleet recently.
- India has leased SSNs from Russia in the past and is working towards developing its own capabilities.

- **Offset Obligations and Local Development**
- General Atomics will establish a Global Maintenance, Repair and Overhaul (MRO) facility in India to meet offset requirements.
- Recent amendments to the drone deal include increased indigenous content.

Hyundai unveils India's largest IPO

The IPO of ₹27,870 crore consists of an offer for sale for 14.2 crore equity shares by the promoter and has no fresh issues. The price band was fixed between ₹1,865 and ₹1,960 apiece. Bids will be open between October 15 and October 17

Ashokamithran T.
MUMBAI

Hundai Motor India Ltd. (HMIL) announced India's largest ever initial public offer (IPO) of ₹27,870 crore on Wednesday. Bids for the IPO will be open between October 15 and October 17.

The IPO consists of an offer for sale for 14.2 crore equity shares by the promoter and involves no fresh issue of share. The proceeds of the offer will be received by the promoter firm. The price band has been fixed between ₹1,865 and ₹1,960 a share.



Hyundai Motor India's MD Unsoo Kim and COO Tarun Garg during the press conference on Wednesday. PTI

The IPO will dilute 17.5% of the promoter shareholding. This will further increase to 25% in the next three to five years, to comply with the minimum

public shareholding norms of the Securities and Exchange Board of India (SEBI), the company said.

Increase in price of inputs, and dependence on

limited number of suppliers are key risk factors, according to the prospectus. The share of parts sourced from outside India has increased to 19% in Q1 2024-25, from about 17.55% in 2022.

HMIL is the second largest automobile company in India with a market share of 15% in Q1 this year, after Maruti Suzuki, which has the largest market share of 41%, according to its Red Herring Prospectus.

"We are the largest exporter on a cumulative basis since the last two decades. So we have a double engine growth; domestic

and foreign," said Tarun Garg, chief operating officer, HMIL. Hyundai has plans to introduce three new electric vehicles in the current financial year.

This is among the world's first automobile IPOs in about two decades, HMIL's top brass said. If successful, this would be the largest ever IPO in the Indian market, eclipsing the ₹21,000 crore raised by the Life Insurance Corporation of India in 2022. Paytm, with a ₹18,300 crore offering in 2021, and Coal India's ₹15,000 crore IPO in 2010, were the other large share sales.

Founded	29 December 1967; 56 years ago
Founder	Chung Ju-yung
Headquarters	Seoul , South Korea
Area served	Worldwide
Key people	Chung Eui-sun (Executive Chairman) Chang Jae-hoon (president and CEO) Jose Muñoz (COO) SangYup Lee (Chief Designer)
Production output	▼ 4,858,000 units (2016) ^[1]
Revenue	▲ ₩117.61 trillion (2021) ^[2]
Operating income	▲ ₩6.68 trillion (2021) ^[2]
Net income	▲ ₩5.69 trillion (2021) ^[2]
Total assets	▲ ₩233.95 trillion (2021) ^[2]
Total equity	▲ ₩82.61 trillion (2021) ^[2]
Owners	Hyundai Mobis (21%) National Pension Service (9%) Chung Mong-koo (5%) Chung Eui-sun (3%) ^[3]
Number of employees	104,731 (2013) ^[4]

- **IPO Announcement**

- Hyundai Motor India Ltd. (HMIL) announced India's largest initial public offering (IPO) worth ₹27,870 crores.
- The IPO consists entirely of an offer for sale of 14.2 crore equity shares by the promoter, with no fresh issue of shares.
- The price band is set between ₹1,865 and ₹1,960 per share, with bids open from October 15 to October 17.

- **Impact on Promoter Shareholding**

- The IPO will dilute the promoter's shareholding by 17.5%.
- This is expected to increase to 25% in the next three to five years to meet SEBI's minimum public shareholding norms.

- **Risk Factors and Market Position**

- The company's dependence on imported parts increased to 19% in Q1 2024-25 from 17.55% in 2022.
- HMIL is the second-largest automobile company in India, holding a 15% market share in Q1, behind Maruti Suzuki.

1.Global Context and Future Plans

1. This IPO is one of the world's largest automobile IPOs in nearly two decades.
2. Hyundai plans to launch three new electric vehicles in the current financial year.

- Which of the following is true about Hyundai Motor India Ltd.'s recent IPO announcement?
 - 1.The IPO includes both fresh issues and an offer for sale.
 - 2.The IPO will reduce the promoter's shareholding by 25% immediately.
 - 3.Hyundai Motor India plans to launch three new electric vehicles this financial year.
 - 4.The company has the largest market share in India's automobile sector.

RBI enhances transaction limits on UPI 123, UPI Lite

The Hindu Bureau

MUMBAI

To encourage wider adoption of the Unified Payments Interface (UPI), the RBI on Thursday announced an increase in transaction limits on UPI123 and UPI Lite.

Currently, the per-transaction limit in UPI123Pay is capped at ₹5,000.

To widen use-cases, the RBI, in consultation with stakeholders, has decided to enhance the per-transaction limit to ₹10,000.

The RBI also decided to enhance the per-transaction limit on UPI Lite from ₹500 to ₹1,000, and the overall wallet limit from ₹2,000 to ₹5,000.

The banking regulator



has also decided to introduce 'beneficiary account name look-up facility' for Real Time Gross Settlement System (RTGS) and National Electronic Funds Transfer (NEFT) in line with payment systems like UPI and IMPS, providing an option to the remitter to verify the name of the beneficiary before initiating a payment transaction.

IOA announces dates for National Games

The Indian Olympic Association (IOA) has announced that the 38th National Games will be held in Uttarakhand from January 28 to February 14 next year. The decision is subject to the approval of the IOA General Assembly, scheduled to meet on October 25. “We are thrilled to bring the National Games to Uttarakhand, a State that has shown remarkable enthusiasm and commitment to hosting the prestigious event,” said IOA president P.T. Usha.

The way Indians eat is best for Earth: WWF report

Vishwa.Mohan
@timesofindia.com

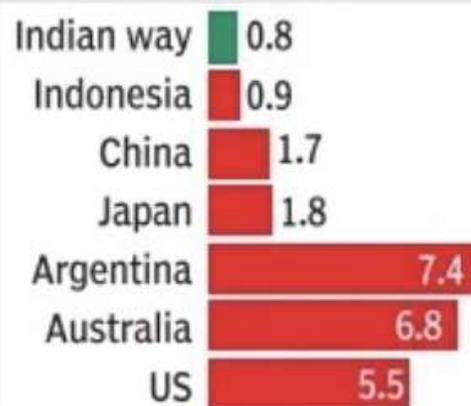
New Delhi: WWF's Living Planet Report, released on Wednesday, calls India's food consumption pattern as most sustainable among big economies (G20 countries).

It would be least climate-damaging for Earth to support food production by 2050 if all countries adopt India's pattern, the report says. Argentina, Australia and USA are worst on this count.

"If everyone in the world adopted the current food consumption patterns of the world's major economies by 2050, we exceed the 1.5-degree Celsius climate (warming limit) target for food-

HOW GREEN IS MY PLATE

How many 'Earths' does the world need to support food production by 2050?



related greenhouse gas emissions by 263% and require one to seven Earths to support us," it says, making special mention of India's millet mission.

► **India model, P 15**

'With India model, world will need less than 1 earth'

► **Continued from P 1**

If all countries adopt the current consumption patterns of India, the world would need 'less than one earth' (0.84) by 2050 to support food production, the report says. It points out that the Indian scenario is marginally lower than the planetary climate boundary for food, indicating the maximum amount of greenhouse gas emissions that food systems can emit to stay within 1.5-degree Celsius of warming limit.

In contrast, the world will need the highest 7.4 Earths if

it adopts the consumption patterns of Argentina. It means Argentina has the worst system on a sustainable benchmark, followed by Australia (6.8), USA (5.5), Brazil (5.2), France (5), Italy (4.6), Canada (4.5) and the UK (3.9). Among the better ones, Indonesia (0.9) figures only after India (0.84) and ahead of China (1.7), Japan (1.8) and Saudi Arabia (2).

The report also appreciated India's ongoing efforts to promote climate-resilient millets, saying National Millet Campaign is designed to increase national consumption of this ancient grain.

NEW DELHI, THURSDAY, OCTOBER 25, 2024 WWW.FINANCIALEXPRESS.COM

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READ TO LEAD

IN THE NEWS

RATAN TATA IN INTENSIVE CARE

RATAN TATA, CHAIRMAN emeritus of one of India's biggest conglomerates, has been in critical condition in intensive care at a Mumbai hospital, close sources with direct knowledge of the matter told Reuters on Wednesday. The source, one of them close to the Tata family, said he had direct knowledge of his medical condition, but did not give further details on the nature of the illness.

FH: 'ARBITRARY' EU CARBON TAX WON'T DERAIL FTA TALKS

While the world looks on with interest in the post-policy price movement, the main intention is to change course from the arbitrariness of the policy stance from what kind of communication to avoid setting the stage for the first interest rate cut in two years. Many sources expect the rate cut to come as early as December this year. Bond and equity markets were affected. The monetary policy committee (MPC) had to vote on the benchmark repo rate on Oct 24, the day Wednesday, with one abstention.

STRIKE ENTERS 2ND MONTH; SAMSUNG MULLS MOVE

SAMSUNG ELECTRONICS, part of all of manufacturing operations out of India, has been in a state of limbo since the strike entered its second month. The company has been in a state of limbo since the strike entered its second month. The company has been in a state of limbo since the strike entered its second month.

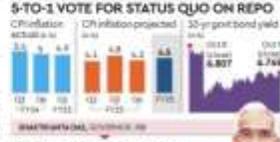
EXPLAINER: Why fair returns for farmers are elusive

Consumer affairs secretary, Hrishikesh Mishra said on Wednesday that the ministry has initiated a class action against the company by sending notices to all dealers.

RBI KEEPS RATES UNCHANGED, BUT SOFTENS STANCE TO NEUTRAL

Higher but not longer position India as production hub

Precursor for first rate cut in four years, say experts



WHAT HAPPENED: THE REVEALING AND DIRECTED INFLATION GROWTH BALANCE HAVE CREATED CONDITIONS FOR A CHANGE IN STANCE.

THE UNDISPUTED: HOWEVER, COMMITTEE UNDERESTIMATED IT WILL NOT BE APPROPRIATE TO TALK OF THING OF RATE CUT.

Member Nagesh Kumar voting to keep the repo rate unchanged. The change to neutral was a watershed decision. The committee said that both growth and inflation are well aligned. Though the trajectory of the repo rate has been slow and steady, bank growth and inflation projections have been underpinned. The committee is expected that the inflation will remain elevated in the near term due to adverse base effect, but will be likely to ease as the base effect due to strong base effect, adequate buffer and good conditions for all banking.

Das warns NBFCs on non-compliance

Das warns NBFCs on non-compliance. The Reserve Bank of India (RBI) has issued a warning to Non-Banking Financial Companies (NBFCs) regarding their compliance with the RBI's directives.

RBI'S DOWNSIDE LIMITS FOR RETAIL TO UP, UP LIFT WOODCOCK IN 2024

RETAIL RATE CUTS INEVITABLE: PANKAJ KUMAR

Hyundai IPO to position India as production hub

Hyundai IPO to position India as production hub. The IPO will help Hyundai Motor Company, the parent of Hyundai Motor India, to raise funds for its expansion in India.

Indian bonds to enter FTSE Russell index from Sept '25

Indian bonds to enter FTSE Russell index from Sept '25. The FTSE Russell index will include Indian government bonds starting from September 2025.

BUMPY RIDE AHEAD

Consumer Affairs Secretary Hrishikesh Mishra said on Wednesday that the ministry has initiated a class action against the company by sending notices to all dealers.

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Sharp 65% fall in number of startups launched this year

Heightened scrutiny on business models a challenge too

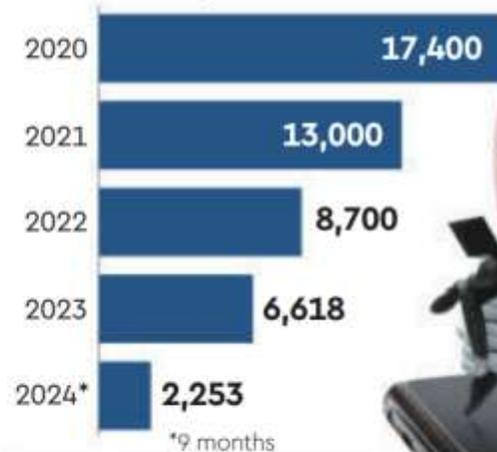
URVI MALVANIA
Mumbai, October 9

THE NUMBER OF Indian startups launched in 2024 has declined nearly 65% compared to last year, according to data provided by Tracxn. While there has been a declining trend for startup launches since 2021, this is the sharpest year-on-year drop witnessed by the Indian startup ecosystem over the past 10 years.

This, experts say, is a combination of risk averseness among both investors and potential entrepreneurs, and the lack of a strong niche for innovation. "Various global and local factors could have led to this decline. There is an ongoing funding winter, which along with the economic uncertainty, geopolitical tensions and rising interest rates have

FUNDING WINTER CONTINUES

No. of startups launched



■ Lack of areas for innovation has compounded the slowdown in startup launches

■ Innovations largely confined to niche areas such as AI, R&D and space-tech

■ These domains require specialised expertise, limiting the number of potential founders

made it significantly harder to obtain growth funding," Neha Singh, co-founder and CEO, Tracxn said.

With just three months left, experts say the trend is likely to continue as investors maintain caution.

The cautiousness shown by investors, leading to the absence of significant growth funding, has in

turn made entrepreneurs take a backfoot when it comes to launching new ventures. "One of the reasons could be increased risk averseness among potential entrepreneurs," Vivek Soni, partner and national leader of PE Services, EY India, said, adding that given the funding winter, people may be in a wait-and-watch

mode, accumulating capital and experience in the meantime.

"The startup space has also been hindered by a lack of novel, scalable solutions. Recent innovations have been largely confined to niche areas such as AI and R&D and space-tech," Vishal Agarwal, partner, **Grant Thornton** Bharat, said.

Word of the day

Comity:

a state or atmosphere of harmony or mutual civility and respect

Usage: *There is a lack of comity between the political parties.*

Pronunciations: newsth.live/comitypro

International Phonetic

Alphabet: /'kɒmɪti/

A group of people are clapping in a dimly lit room. The focus is on the hands and forearms of several individuals, some wearing suits. The background is blurred, showing more people and a window with light coming through. The overall mood is celebratory and professional.

Thank you
guys.
