

November - 11

TNPSC BITS

- ❖ Para-archer Sheetal Devi, from Jammu and Kashmir, became the first Indian para-athlete selected for an able-bodied international event, the Asia Cup 2025 Stage 3 in Jeddah, Saudi Arabia.
- ❖ Himachal Pradesh received the “People First Integration Award” from the Ministry of Electronics and Information Technology (MeitY).
- ❖ Indian chess player Raahul V. S. became the country’s 91st Grandmaster after winning the 6th ASEAN Individual Championship.
- ❖ Fujian, China’s 3rd and first indigenously designed and built aircraft carrier has officially entered service after extensive sea trials.
- ❖ The 8th edition of the Namdapha Butterfly Festival will be organised at the Namdapha National Park & Tiger Reserve (NNP & TR) in Miao, Arunachal Pradesh.

TAMIL NADU NEWS

Residential Rooftop Solar Installation in Tamil Nadu



Residential Rooftop Solar Installation in Tamil Nadu

- ✓ The installation of rooftop solar as rooftop solar energy systems in Tamils annual electricity demand is 1.55%, 8.07% in Kerala, 6.43 in Gujarat.
- ✓ The installed rooftop solar capacity, Gujarat.
- ✓ Total installed rooftop solar capacity is 1.13 GW in Tamil Nadu, 1.44 GW, 5.84 GW, Gujarat.
- ✓ National schemes such as PM Surya Ghar and Kisan Urja Suraksha Utthan Mahabhiyan (KUSUM-C) offer up to 60% subsidies and concession on loans for households and farmers.
- ✓ For 1 kW of rooftop solar, the system can generate about 5 units per day, averaging 150 units per month.



- ❖ The installation of residential rooftop solar energy systems in Tamil Nadu remains low.
- ❖ The penetration of rooftop solar as a percentage of annual electricity demand is 1.55% in Tamil Nadu, 8.07% in Kerala, and 6.43% in Gujarat.



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NATIONAL NEWS

Mihir Rajesh Shah vs State of Maharashtra

RECENT JUDGEMENTS

The Supreme Court ruled that arrest grounds must be given in writing to the accused at least two hours before being produced for remand; otherwise, the arrest is illegal

Supreme Court of India

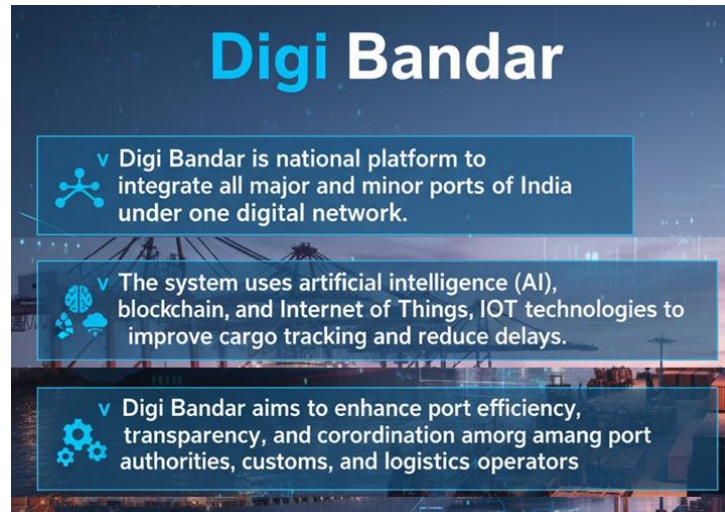
Mihir Rajesh Shah vs State of Maharashtra

- ❖ The Supreme Court in Mihir Rajesh Shah vs State of Maharashtra ruled that failure to provide written grounds of arrest makes the arrest illegal.
- ❖ Written grounds must be furnished at least two hours before producing the accused before a magistrate.
- ❖ The information must be given in a language the arrested person understands.
- ❖ The judgment upholds Articles 21 and 22(1) of the Constitution, guaranteeing personal liberty and the right to be informed of arrest grounds.
- ❖ The ruling applies to all offences, including those under the Bharatiya Nyaya Sanhita (BNS).

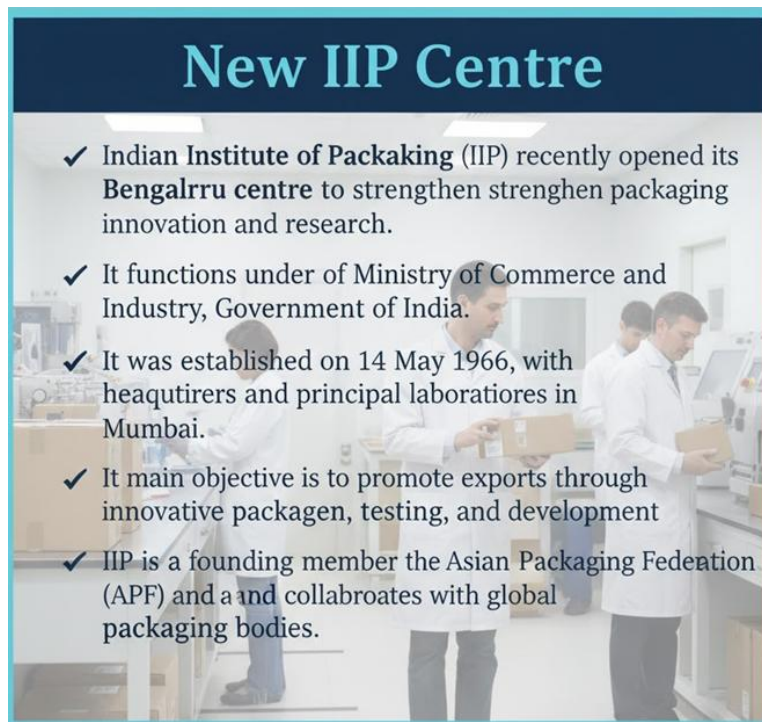
Digi Bandar

- ❖ India launched “Digi Bandar,” a national framework to make all ports data-driven, AI-enabled, and interconnected.

- ❖ The system uses artificial intelligence (AI), blockchain, and Internet of Things (IoT) technologies to improve cargo tracking and reduce delays.
- ❖ Digi Bandar aims to enhance port efficiency, transparency, and coordination among port authorities, customs, and logistics operators.



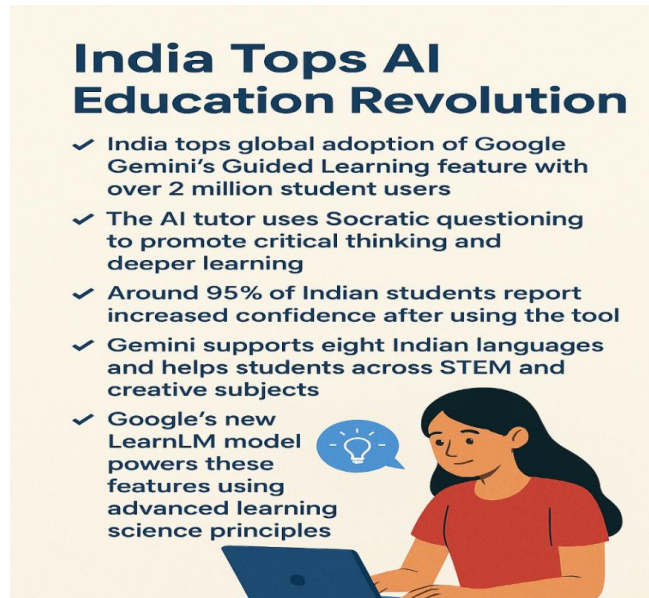
New IIP Centre



- ❖ Indian Institute of Packaging (IIP) recently opened its Bengaluru centre to strengthen packaging innovation and research.
- ❖ It functions under the Ministry of Commerce and Industry, Government of India.

- ❖ It was established on 14 May 1966, with headquarters and principal laboratories in Mumbai.
- ❖ The main objective is to promote exports through innovative package design, testing, and development.
- ❖ IIP is a founding member of the Asian Packaging Federation (APF) and collaborates with global packaging bodies.

India Tops AI Education Revolution



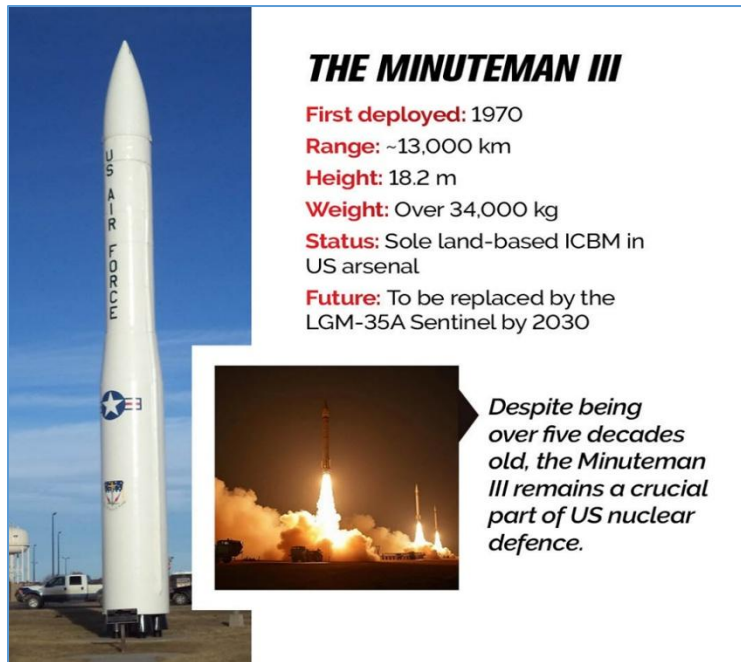
- ❖ India tops global adoption of Google Gemini's Guided Learning feature with over 2 million student users.
- ❖ The AI tutor uses Socratic questioning to promote critical thinking and deeper learning.
- ❖ Around 95% of Indian students report increased confidence after using the tool.
- ❖ Gemini supports eight Indian languages and helps students across STEM and creative subjects.
- ❖ Google's new LearnLM model powers these features using advanced learning science principles.

INTERNATIONAL NEWS

Minuteman III

- ❖ The United States has tested the Minuteman III intercontinental ballistic missile (ICBM) from California to a Pacific test site covering 6,700 kilometers.

- ❖ The missile has a range of over 10,000 kilometers.
- ❖ The U.S. and Russia together possess over 10,600 nuclear warheads, while China's arsenal has grown to about 600 warheads.



SCIENCE AND TECHNOLOGY NEWS

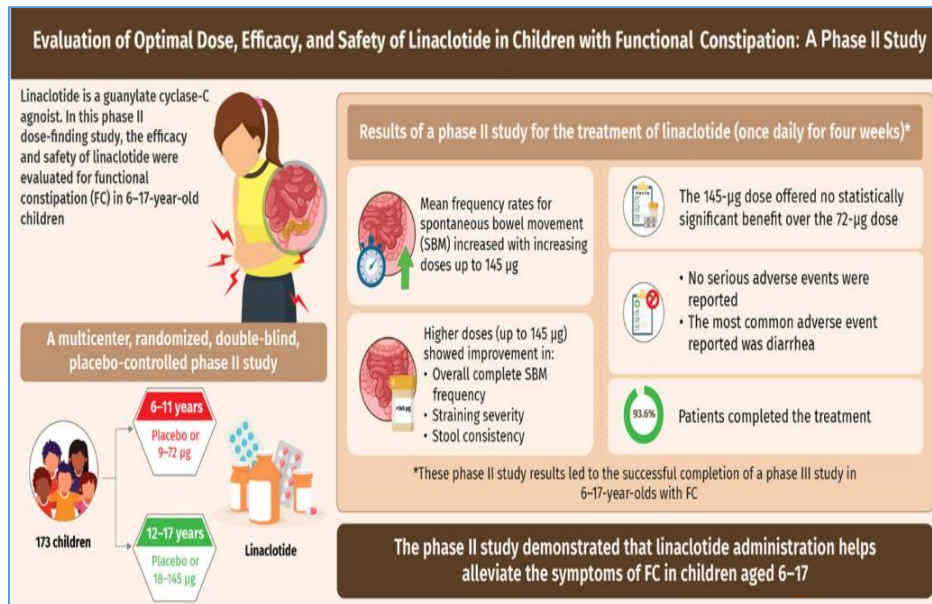
Generic Leukemia Drug - Dasatinib



- ❖ Alembic Pharmaceuticals HAS received final approval from the US Food and Drug Administration (USFDA) for its generic Dasatinib tablets.

- ❖ Dasatinib tablets are used to treat Philadelphia chromosome-positive chronic myeloid leukemia and acute lymphoblastic leukemia in adults and children.
- ❖ Dasatinib is indicated for patients resistant or intolerant to prior therapy, including Imatinib, in chronic, accelerated, or blast phases of leukemia.

First Pediatric IBS-C Drug - Linzess



- ❖ The USFDA has approved Linzess (Linaclotide) for children aged seven years and older with irritable bowel syndrome with constipation (IBS-C).
- ❖ This marks the first FDA-approved treatment for paediatric patients with IBS-C.
- ❖ Linzess improves bowel movement frequency and reduces abdominal pain in affected children.
- ❖ Linzess is not approved for children under two years of age due to the risk of severe dehydration.

Strongest Geomagnetic Storm 2025

- ❖ NASA confirmed that Earth is experiencing its strongest geomagnetic storm of the year, classified as a G5 event.
- ❖ The storm was triggered by multiple solar eruptions called coronal mass ejections (CMEs) that merged into a large plasma wave before reaching Earth.
- ❖ The event caused widespread aurora sightings across northern Europe, Canada, the United States, and the United Kingdom.

- ❖ Scientists observed a sharp drop in the Disturbance Storm Time (Dst) index, indicating high geomagnetic activity.
- ❖ The storm disrupted satellite communications, GPS systems, and power grids, similar to the 2003 “Halloween Storms.”



ENVIRONMENT NEWS

Ibis in Thoothukudi Salt Pans



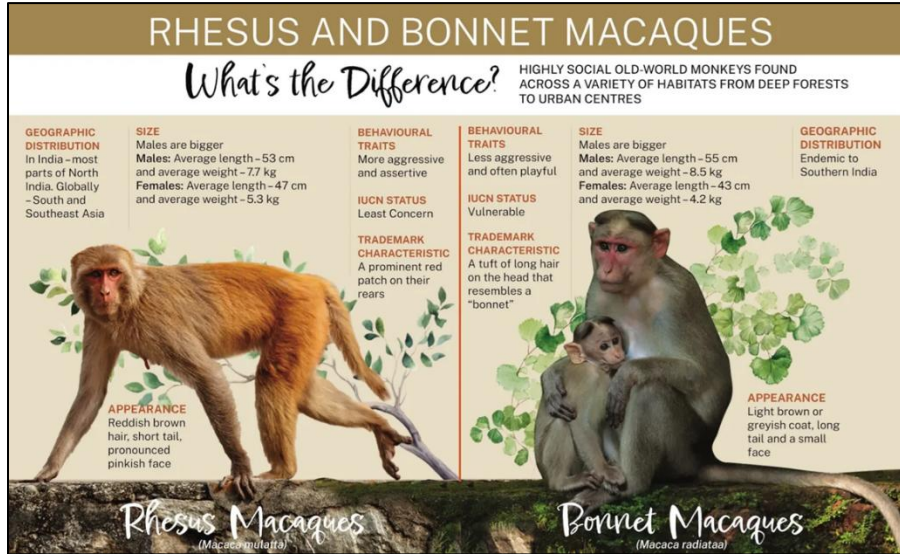
- ❖ A flock of Black-headed Ibis (*Threskiornis melanocephalus*) was spotted in the salt pans of Thoothukudi, Tamil Nadu.
- ❖ The Black-headed Ibis is classified as a Near Threatened species by the IUCN.
- ❖ These birds feed on fish, insects, amphibians, and small aquatic creatures in wetlands and riverbanks.
- ❖ Salt pans provide a critical habitat for migratory and resident birds during the northeast monsoon season.

New Forest Protection Fund



- ❖ India will join the Tropical Forest Forever Facility (TFFF) as an observer ahead of COP 30.
- ❖ The TFFF offers a budget-neutral nature financing model, paying \$4 per hectare of forest protected annually.
- ❖ Investor contributions are managed by the Tropical Forest Investment Fund (TFIF) to fund emerging market bonds and avoid fossil fuels.
- ❖ Brazil, Indonesia, Norway, Colombia, the Netherlands, and Portugal have committed financial support to the fund.
- ❖ India has reduced its GDP emission intensity by 36% from 2005 to 2020 and achieved 50% non-fossil installed power capacity.
- ❖ Between 2005 and 2021, India's forest and tree cover expansion created an additional carbon sink of 2.29 billion tonnes of CO₂ equivalent.

Rhesus Macaque Conservation



- ❖ The standing committee of the National Board for Wildlife has recommended reinstating the Rhesus Macaque under Schedule II of the Wildlife (Protection) Act, 1972.
- ❖ Reinstating Schedule II will restore statutory protection and regulate scientific management of the species.
- ❖ The move aims to prevent illegal capture, cruelty, and exploitation of the macaques.
- ❖ Six states, including Madhya Pradesh, Gujarat, Uttarakhand, West Bengal, Himachal Pradesh, and Arunachal Pradesh, support the recommendation.
- ❖ Other states opposed the proposal, citing that the species is not threatened, and for conflict management reasons.
- ❖ Site-specific management and conservation plans are to be prepared by divisional forest officers and deputy conservators of forests.

Three-Year Global Heat Peak – 2023/2025

- ❖ The World Meteorological Organisation (WMO) confirmed 2023–2025 as the hottest three-year period ever recorded.
- ❖ Global temperatures during this period averaged 1.4°C above pre-industrial levels.
- ❖ Arctic sea ice reached its lowest winter extent while Antarctic ice remained below average.
- ❖ Sea-level rise accelerated from 2.1 millimetres per year in the 1990s to 4.1 millimetres annually since 2016.

- ❖ Glacier loss from 2023–2024 reached 450 gigatonnes, contributing 1.2 millimetres to sea-level rise.
- ❖ Carbon dioxide (CO₂) concentration reached 423.9 parts per million in 2024, a 53% increase from pre-industrial times.



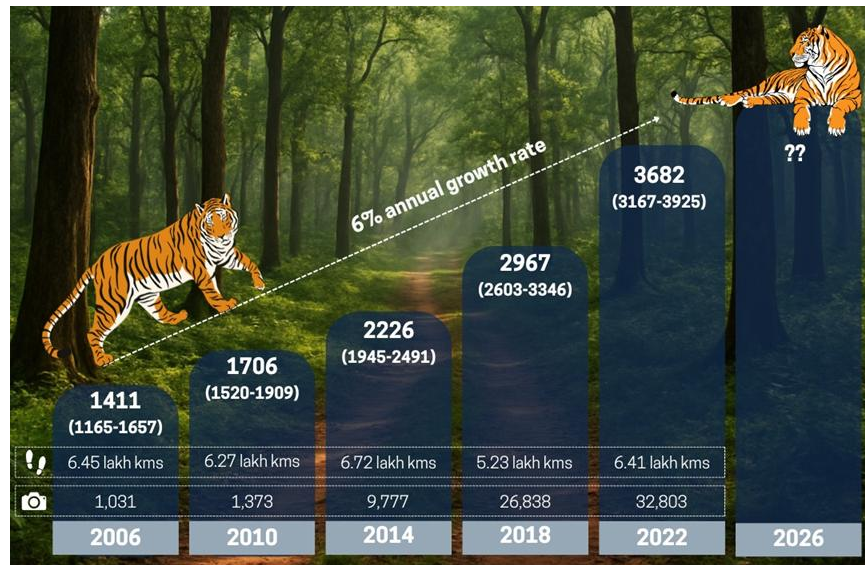
New Butterfly Species in Siang Valley



- ❖ Six butterfly species were recorded for the first time in India from the Siang Valley of Arunachal Pradesh.

- ❖ The species are Litin Onyx (*Horaga takanamii*), Tibetan Junglequeen (*Stichophthalma neumogeni renqingduojie*), and Tibetan Duke (*Euthalia zhaxidunzhui*), along with three others earlier known only from Laos, Vietnam, and southeastern Tibet.
- ❖ The findings highlight an ecological link between Tibet's Yarlung Tsangpo River and India's Brahmaputra basin.

Tiger Census 2026



- ❖ India has begun preparations for the All-India Tiger Estimation (AITE) 2026, the world's largest wildlife survey.
- ❖ The last estimation in 2022 recorded 3,682 tigers, forming about 75% of the global wild tiger population.
- ❖ Karnataka ranked second among Indian states with 563 tigers recorded in 2022.
- ❖ The survey covers over 400,000 square kilometres of forest across more than 20 states in three phases.

REPORTS AND INDICES

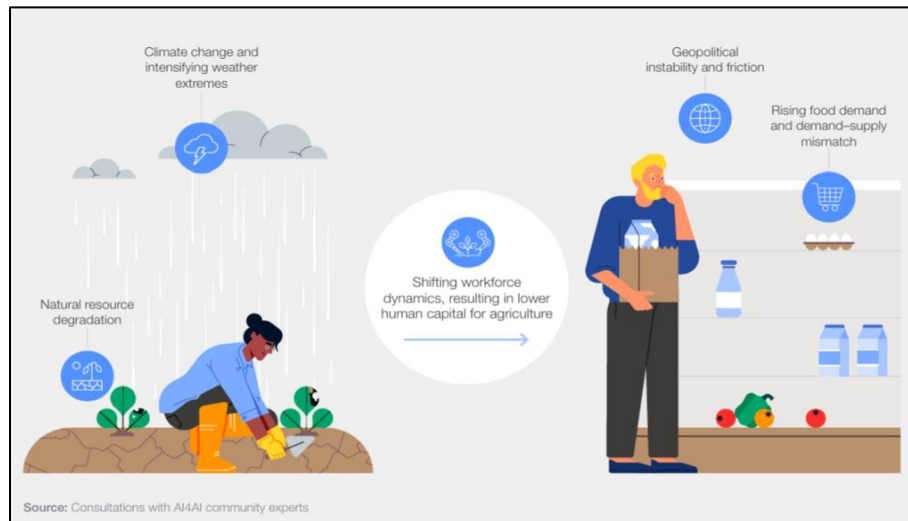
Most Indebted Countries in 2025

- ❖ Japan holds the world's highest debt-to-GDP ratio at 222.2 per cent.
- ❖ Sudan follows closely in second place with 222.1 per cent.
- ❖ It is followed by Singapore (175.6), Greece (146.7), and Bahrain (142.5).

- ❖ The largest global economy, the US, ranks eighth globally with a high debt-to-GDP ratio of 125 per cent.
- ❖ China and India have public debt ratios of 96.3 per cent and 81.4 per cent, respectively,

Rank	Country	Debt-to-GDP Ratio (%)
1	Japan	229.6
2	Sudan	221.5
3	Singapore	175.6
4	Greece	146.7
5	Bahrain	142.5
6	Italy	136.8
7	Maldives	131.8
8	United States	125
9	Senegal	122.9
10	France	116.5

World Economic Forum Report 2025



- ❖ The World Economic Forum (WEF) released a report titled “Shaping the Deep-Tech Revolution in Agriculture.”
- ❖ The report was prepared under the WEF AI for Agriculture Initiative (AI4AI).
- ❖ The report warns that staple crop yields may drop by 24% by 2100 without emission cuts.
- ❖ Agriculture currently uses 70% of freshwater, and 71% of aquifers are overused.

- ❖ About one-third of global soils are degraded, and 90% of topsoil may be damaged by 2050.

STATES' NEWS

Policy for Paid Menstrual Leave – Karnataka



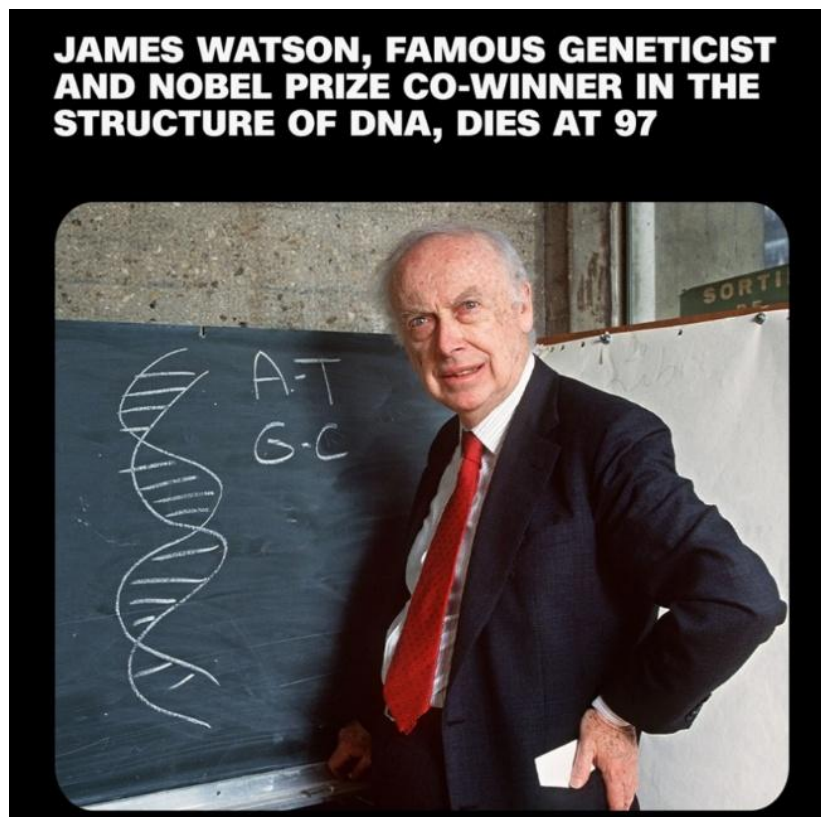
- ❖ Karnataka has become the first state in India to grant one day of paid menstrual leave per month for women employees.
- ❖ The policy covers both government and private sector employees, amounting to 12 days of leave per year.
- ❖ Odisha and Bihar have similar policies only for government employees, while Kerala has implemented it in universities.

PERSONALITIES, AWARDS, AND EVENTS

James Watson

- ❖ James Dewey Watson, the American molecular biologist, passed away.

- ❖ He was credited as the co-discoverer of the double-helix structure of deoxyribonucleic acid (DNA) alongside Francis Crick.
- ❖ Watson, Crick, and Maurice Wilkins shared the 1962 Nobel Prize in Physiology or Medicine for their discovery.
- ❖ Later, he became Chancellor of Cold Spring Harbor Laboratory and contributed to the Human Genome Project, sequencing the six billion base pairs of his own DNA in 2008.
- ❖ He authored the book 'The Double Helix and taught' at Harvard University, influencing generations of geneticists.



IMPORTANT DAYS

World Radiography and Radiology Day 2025 - November 08

- ❖ This day aims to raise the global awareness about the role of radiology and radiographers in healthcare.
- ❖ The day was first celebrated in 2007 by the International Society of Radiographers and Radiological Technologists.
- ❖ It commemorates the discovery of X-rays by Wilhelm Conrad Roentgen on 8 November 1895.



- ❖ The theme for 2025 is “Radiographers: Seeing the Unseen.”

INTERNATIONAL DAY OF RADIOLOGY

X-ray, a step forward in modern medicine, was discovered on Nov 8 in 1895 by Wilhelm Roentgen

Roentgen discovered X-rays while experimenting with cathode radiation

Found that X-ray passed through human tissue, leaving bones and metal visible

Breast Imaging is the main theme of the day for 2016

The first X-Ray was of his wife Bertha's hand

The infographic features a portrait of Wilhelm Roentgen on the right and a small X-ray image of a hand with a ring on the bottom right.

