

Daily Current Affairs 19 May 2025

ISRO Forms Probe Panel

• Indian Space Research Organisation (ISRO) has formed a committee to investigate the incident in which a PSLV rocket failed to place the Earth observation satellite, EOS-09, into its intended orbit.



- ISRO Chairman V Narayanan said that the committee held several rounds of discussions yesterday to identify the cause. ISRO failed to place its Earth observation satellite in orbit after the Polar Satellite Launch Vehicle (PSLV-C61) rocket developed a fault minutes after launch from Sriharikota.
- Dr Narayanan said the rocket is a four-stage vehicle. **The first two stages were completed successfully.** However, an anomaly was observed in the third stage, and the mission could not be accomplished, he said.
- After a 22-hour countdown, the rocket lifted off as planned at 5.59 am yesterday, and all systems were functioning normally until a point. Responding to a query, Dr Narayanan said, ISRO will proceed with its upcoming launches. He said the space agency has planned one mission every month this year.





International Museum Day

International Museum Day is being celebrated. The day is celebrated annually to raise awareness about museums as a vital means of cultural exchange, cultural enrichment, and fostering mutual understanding, cooperation, and peace. This year's theme for International Museum Day is Future of Museums in Rapidly Changing Communities.







To all ASI Museum and Monuments today

- To increase public engagement with India's cultural heritage, the Archaeological Survey of India (ASI) has announced free entry for the public to all ASI monuments and museums across the country.
- The **ASI has opened its 52 site museums** and all ticketed monuments to the public without charge, aiming to encourage broader public participation. This initiative offers a unique opportunity to explore these priceless collections, many of which are vital to understanding India's rich cultural and historical legacy.



- Visitors at the National Museum in New Delhi shared their experiences. International Museum Day underscores the importance of museums in preserving cultural heritage, promoting education, and fostering dialogue between communities and generations.
- Having a Pan India reach with 3,698 protected monuments and sites, and 52 museums, ASI's 26 sites are in UNESCO's World Heritage highlighting ASI's commitment in preserving and celebrating the nation's rich historical legacy and architectural marvels.

NASA's GRAIL Mission

- Recent findings from NASA's GRAIL mission have revealed differences between the Moon's two hemispheres. The study indicates that the nearside of the Moon, which faces Earth, is geologically distinct from the far side. This discovery sheds light on the Moon's formation and internal structure.
- The **Gravity Recovery and Interior Laboratory** (GRAIL) mission aimed to map the Moon's gravitational field. Launched in 2011, it consisted of two twin

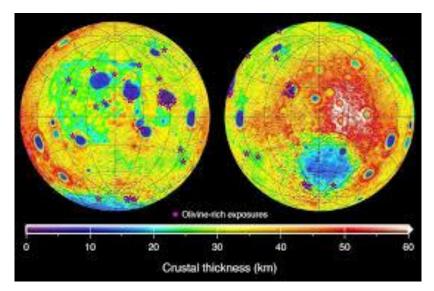
spacecraft named Ebb and Flow. They **orbited the Moon and collected data** on its gravity by measuring the distance between them. This innovative technique provided unprecedented vital information about the Moon's interior.



- Differences Between the Nearside and Farside : The nearside features large, dark plains known as "mare," formed from ancient volcanic activity. In contrast, the far side is rugged and mountainous. The nearside's mantle is warmer due to the accumulation of radioactive elements like thorium and titanium, which generate heat as they decay.
- The Moon's mantle constitutes about 80% of its mass and contains minerals similar to those found in Earth's mantle. GRAIL's data revealed that the nearside's mantle is 100 to 200°C hotter than the farside. This temperature difference is attributed to the Moon's volcanic history and the gravitational influence of Earth.



• **Tidal deformation occurs due to the gravitational pull** of Earth on the Moon. This effect causes differences in the Moon's shape and behaviour during its orbit. The gravitational mapping from GRAIL supports the idea that ancient volcanic activity influenced the current geological features observed.



- GRAIL also identified mass concentrations, or mascons, beneath the Moon's surface. These areas exhibit strong gravitational pull and are remnants of ancient asteroid impacts. About mascons helps scientists comprehend the geological history of the Moon and its impacts on other celestial bodies.
- The **GRAIL mission included educational components such as MoonKAM**, which allowed students to capture images of the Moon. This initiative aimed to inspire the next generation of scientists and engineers. The mission concluded with the intentional impact of Ebb and Flow on the lunar surface

Pushkar Kumbh Returns To Keshav Prayag After 12 Years

• After a 12-year wait, the Pushkar Kumbh has commenced at Keshav Prayag in Mana village, Chamoli district, Uttarakhand. Rooted in ancient Vaishnavite traditions, the event coincides with the entry of planet Jupiter into the Gemini sign, a rare celestial occurrence. Thousands of devotees, particularly from South India, have gathered at the sacred confluence of the Alaknanda and Saraswati rivers for spiritual rituals and blessings.



- **Pushkar Kumbh began on May 16, 2025, in Keshav Prayag**, marking its return after 12 years. The district administration has taken special steps to manage the influx of devotees and improve pilgrimage infrastructure.
- A religious congregation held when Jupiter (Guru) enters the Gemini (Mithun) zodiac sign, every 12 years. Celebrated at Keshav Prayag, the confluence of Alaknanda and Saraswati rivers in Mana village, Chamoli.



- It is primarily attended by followers of the Vaishnavite tradition, especially from South India. Mana village is associated with Maharishi Ved Vyas, the revered sage who composed the Mahabharata. It is also believed that notable South Indian scholars Ramanujacharya and Madhvacharya received divine knowledge from Goddess Saraswati at this location.
- Considered an auspicious event for bathing and offering prayers at a holy river confluence.



- Believed to bring spiritual merit (Punya) to participants.
- Strengthens cultural and spiritual bonds between North and South Indian traditions.

Rajon Ki Baoli Stepwell

- Conservation project was completed for Rajon ki Baoli, a 16th-century stepwell in Mehrauli Archaeological Park, New Delhi. This project was led by the Archaeological Survey of India (ASI) in partnership with the World Monuments Fund India (WMFI) and the TCS Foundation.
- The initiative is part of a broader effort to **restore traditional water systems** in India. It aligns with the **Climate Heritage Initiative, emphasising sustainable** water management in the context of climate change.



Rajon ki Baoli was constructed around 1506 during the Lodi dynasty. It exemplifies the architectural and engineering prowess of the time. The stepwell served dual purposes – storing water and providing shade to travellers. Its intricate design features elegant arched colonnades and ornate stucco medallions, showcasing the artistic skills of the era. The structure spans 1,610 square metres and descends to a depth of 13.4 metres.



• The conservation project involved multiple steps. Initial activities included cleaning and desilting the stepwell. Structural repairs were made to ensure the integrity of the site. Water quality improvements were also crucial. Traditional materials such as lime plaster and mortar were used to maintain the original character of Rajon ki Baoli. The restoration was guided by historical records to preserve its authenticity.



• The ASI and its partners placed a strong emphasis on community involvement. Local communities were engaged to encourage awareness of the cultural and ecological significance of the stepwell. Educational programmes were developed to promote understanding and appreciation of the site. Participatory conservation activities were designed to ensure the long-term care and maintenance of Rajon ki Baoli.

- This conservation effort marks the necessity of restoring traditional water systems. These **systems offer sustainable solutions for water management**, especially in the face of climate change. The successful restoration of Rajon ki Baoli serves as a model for similar initiatives across India. It showcases how historical structures can be revitalised to meet contemporary needs while preserving cultural heritage.
- **Rajon ki Baoli is now open to the public.** The restoration has revitalised the site, making it accessible for educational and cultural activities. Visitors can appreciate its **historical significance and architectural beauty**. The project stands as a testament to the importance of preserving cultural heritage in modern society.

Yala Glacier Declared 'Dead'

- Yala Glacier in Nepal, once a crucial site for glaciological training and cryosphere research in the Hindu Kush Himalayas (HKH), has now been officially declared "dead" — marking a significant and symbolic loss in the global climate crisis. On May 12, 2025, scientists, local communities, and monks gathered in Langtang, Nepal, to hold a poignant memorial for the glacier, which has retreated dramatically over recent decades.
- This event highlights the severe impact of global warming on Himalayan glaciers, with profound consequences for water security and ecological stability across South Asia.



• Nepal's Yala Glacier in Langtang has officially been declared "dead," making it the first glacier in Asia to receive a memorial plaque. The declaration took place on May 12, 2025, during a poignant ceremony attended by glaciologists and

locals from the **Hindu Kush Himalaya (**HKH) region. This marks a symbolic and scientific moment in the escalating climate crisis, highlighting the rapid pace of glacial retreat due to global warming.

- The Yala Glacier, located in Langtang, Nepal, has lost 66% of its mass and retreated 784 meters since the 1970s.
- A plaque was installed with messages by authors Andri Snaer Magnason and Manjushree Thapa in English, Nepali, and Tibetan. The glacier funeral was attended by over 50 people, including monks, scientists, and locals from Nepal, India, China, and Bhutan.



- Yala Glacier is the third glacier globally to be memorialized in this way, after OK Glacier (Iceland) and Ayoloco Glacier (Mexico).
- Yala Glacier has served as a training site for over 100 glaciologists and provided in-situ data for research.
- It is one of 38 glaciers with detailed measurement records and one of only 7 glaciers in the entire HKH arc with decadal monitoring.
- ICIMOD (International Centre for Integrated Mountain Development) coordinated the ceremony, emphasizing the region-wide impacts of deglaciation.
- Earth's mountain glaciers have lost ~9 trillion tonnes of ice since 1975.
- CO₂ levels recorded at 426 ppm in May 2025, correlating with rising global temperatures. 2025 marks the third consecutive year of below-normal snow cover in the HKH region. Snow persistence in the Ganga basin is 24.1% below normal, the lowest in 23 years, threatening water availability.



Indian Grandmaster R Praggnanandhaa

• In Chess, Indian Grandmaster R Praggnanandhaa won the Superbet Chess Classic in Bucharest, Romania. He triumphed after a tense tiebreak against Alireza Firouzja and Maxime Vachier-Lagrave. All three players were tied at 5.5 points in nine rounds, which led to a three-way playoff. The first two tiebreak games ended in draws.



 The first one was between Praggnanandhaa and Firouzja, which was followed by the game between Vachier-Lagrave and Firouzja. Praggnanandhaa won the third game against Vachier-Lagrave. World Champion D Gukesh finished ninth in the tournament. He scored 4 points and drew his final game with Fabiano Caruana. The next leg of Grand Chess Tour, SuperUnited Rapid & Blitz event will be played in Croatia, starting July 1.

REVIEW QUESTIONS

- 1. EOS-09 Is Launched By
- A. PSLC C 60
- B. PSLV C61
- C. PSLV C62
- D. PSLV C63
 - **ANSWER: B**

2. International Museum Day Celebrated On

- A. 16 may
- B. 17 may
- C. 18 may
- D. 19 may ANSWER: C

3. GRAIL Mission Seen In News Is Launched By

- A. ISRO
- B. JAXA
- C. ESA
- D. NASA

ANSWER: D

4. Pushkar Kumbh Is Marked In

- A. Uttar Pradesh
- B. Uttarakhand
- C. Madhya Pradesh
- D. Rajasthan

ANSWER: B

5. Chenchu Tribe Is Primarily Found In Which Region

- A. Chotanagpur plateau
- B. Nallamalai forest
- C. Himalayas
- D. Aravalli hills

ANSWER: B

6. Indian Army Conducted The Teesta Prahar Exercise In Which State

- A. West Bengal
- B. Odisha
- C. Maharashtra
- D. Sikkim ANSWER: A
- 7. Jute Corporation Of India Comes Under Administrative Control Of Which Ministry
- A. Ministry of Science and Technology
- B. Ministry of Commerce and Industry
- C. Ministry of Textiles
- D. Ministry of Agriculture **ANSWER: C**
- 8. Which City's Metro Railway Has Launched 'Tourist Smart Cards'
- A. Mumbai
- B. Delhi
- C. Chennai
- D. Kolkata
 - **ANSWER: B**
- 9. Rajon Ki Baoli Stepwell Located In
- A. New Delhi
- B. Gurugram
- C. Shimla
- D. Bhopal

ANSWER: A

10. Umiam Lake Seen In The News, Is Located In Which State

- A. West Bengal
- B. Arunachal Pradesh
- C. Sikkim
- D. Meghalaya

ANSWER: D

11. What Is Revised Growth Projection For India In 2026 As Per The UN

- A. 6.1%
- B. 6.2%
- C. 6.3%
- D. 6.4%

ANSWER: D

12. Who Recently Became India's 86th Chess Grandmaster

- A. R. Praggnanandhaa
- B. D. Gukesh
- C. L.R. Srihari
- D. Leon Mendonca ANSWER: C

13. Who Won The ICC Women's Player Of The Month For April 2025

- A. Kathryn Bryce
- B. Mehidy Hasan Miraz
- C. Mithali Raj
- D. Smriti Mandhana ANSWER: A

14. International Day Of Light Is Celebrated Annually On Which Date In May

- A. 16 May
- B. 12 May
- C. 18 May
- D. 17 May ANSWER: A

15. Dhansiri River, Is Tributary Of Which River

- A. Ganga
- B. Brahmaputra
- C. Godavari
- D. Narmada

ANSWER: B

16. Name Of Mobile Based Application Used To Track Anganwadi Centres Across India

- A. NUTRI App
- B. POSHAN Tracker
- C. Mid Day Meal
- D. Nutrition Watch

ANSWER: B

- 17. Baku To Belém Roadmap Was Adopted During Which International Climate Conference
- A. COP27
- B. COP28
- C. COP29
- D. COP30

ANSWER: C

18. What Is India's Rank In The 2025 UNCTAD 'Readiness For Frontier Technologies' Index

- A. 25th
- B. 27th
- C. 36th
- D. 37th

ANSWER: C

- 19. In Which Area Was Operation Nader Launched By Indian Security Forces To Target Terrorists
- A. Pulwama
- B. Tral
- C. Baramulla
- D. Shopian
 - ANSWER: B

SSBCrack EXAMS