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Nataraja Sculpture

The World's tallest 27-foot Nataraja sculpture has been installed at Bharat Mandapam, venue of the G20 Leaders' Summit.

- **Metal -** The Bharat Mandapam Nataraja statue is an ***ashtadhatu (8-metal alloy)*** piece of art.
- **The eight metals –** Copper, zinc and lead with traces of tin, silver, gold and mercury, with iron.
- **Lord Shiva -** The God Shiva evolved from the Vedic deity Rudra.
- **Patronage by Cholas -** Although Shiva was first portrayed in sculpture as Nataraja in the 5th century AD, its present form evolved under the Cholas.
- The design draws inspiration from 3 revered Nataraja idols
    1. The Thillai Nataraja Temple in Chidambaram,
    2. The Uma Maheswarar Temple in Konerirajapuram, and
    3. The Brihadeeswara (Big) Temple, a UNESCO World Heritage Site, in Thanjavur.
- All 3 temples the Bharat Mandapam Nataraja statue is inspired from were originally constructed by the Cholas.

Cholas were peak around the 9th-11th centuries AD, ruled over much of peninsular India.

- **Technique -** The crafting process adopted was the traditional 'lost-wax' casting method, indigenous to the Chola era.
- **Lost wax method -** First, a detailed wax model is made. Then it is covered with a paste made of alluvial soil found on the banks of the Cauvery River.
- After this coating, applied multiple times, has dried, the figure is be exposed to high heat, causing the wax to burn away, leaving a hollow, intricately carved mould.
- This is ultimately filled by molten metal to produce the sculpture.

References

1. The Indian Express | The Lord of Dance
2. The Times of India | Nataraja statue graces Bharat Mandapam

XRISM (X-Ray Imaging and Spectroscopy Mission)

A powerful X-ray observatory is launched along with Japan's SLIM mission.

- **Aim -** To investigate celestial X-ray objects in the Universe with high-throughput imaging and high-resolution spectroscopy.
- These observations will enable in determining the flows of mass and energy, revealing the composition and evolution of celestial objects.
- This mission acts as a semi-replacement for the Hitomi (Astro-H) X-ray observatory, launched in 2016.

  Hitomi was a high-energy astrophysics space observatory, developed by the Japan Aerospace Exploration Agency (JAXA) in collaboration with institutions in Japan, the US, Canada, and Europe.

- **Launch Vehicle -** The H-IIA rocket that launched the SLIM Japan's moon mission also carried the XRISM.
- **Agency -** NASA (National Aeronautics and Space Administration) and JAXA (Japan Aerospace Exploration Agency).

References

1. The Indian Express | X-ray telescope
2. NASA | XRISM
3. JAXA | XRISM
4. Sky and Telescope | XRISM

Central Empowered Committee (CEC)

The Supreme Court recently hands over its green watchdog committee, the Central Empowered Committee (CEC) to the Environment Ministry.

- **Setup -** It was set up in 2002, and reconstituted in 2008 by the Supreme Court.
- It served as a watchdog for issues pertaining to environmental conservation and compliance.
- **Recent notification -** Instead of an ad hoc body, CEC should be instituted as a permanent statutory body on environmental issues under the administrative control of the Environmental ministry.
- The notification completely removes non-governmental members from the committee.

  The current CEC is chaired by retired IAS officer and includes retired Forest service officers and lawyer and naturalist.

- In the revised structure all (chairperson, a member secretary and three expert members) will now be civil servants appointed by the Ministry of Environment Forest and Climate Change (MoEFCC).
- **The chairperson**
  - A minimum of 25 years of experience in environmental, forestry, or wildlife fields or substantial administrative expertise in government.
  - **Term -** 3 years.

- **The member secretary**
  - He must hold a rank not lower than deputy inspector general or director in the government and
  - Possess at least 12 years of experience in environmental, forestry, or wildlife matters.
- **The 3 expert members** - One each from the environment, forest, and wildlife sectors, should have a minimum of 20 years of expertise.
- The committee will report to the ministry, instead of the SC.
- The ministry will fund the committee;
- The provision of having 2 NGOs in the committee has been done away with

References

1. The Indian Express | Central Empowered Committee
2. The Hindustan Times | Govt to nominate all members of top panel
3. The Times of India | Environment ministry sets up new panel

Dark Patterns

Department of Consumer Affairs seeks public comments on Draft Guidelines for Prevention and Regulation of Dark Patterns recently.

- A dark pattern is a user interface that has been carefully crafted to trick users into doing things, such as buying overpriced insurance with their purchase or signing up for recurring bills.
- Dark patterns are also known as Deceptive Patterns.
- Dark patterns in turn benefit the company or platform employing the designs.
- **Examples -** Sponsored video ads scattered between reels and stories in Instagram that users originally opted to view, pop-ups and thumbnails of other videos in the final seconds of a video in YouTube.
- By using them, digital platforms take away a user's right to full information about the services they are using, and reduce their control over their browsing experience.

Types of dark patterns

Dark Patterns	Purpose
False urgency	Falsely stating or implying the sense of urgency.
Basket Sneaking	Inclusion of additional items at the time of checkout without the consent of the user.
Confirm shaming	Using a phrase, video, audio or any other means to create a sense of fear or shame or ridicule or guilt in the mind of the user.
Forced action	Forces a user into taking an action that would require the user to buy any additional goods.
Subscription Trap	The process of making cancellation of a paid subscription impossible or a complex.
Interface Interference	The design element that manipulates the user interface.

Bait and Switch	The practice of advertising a particular outcome based on the user's action.
Drip pricing	The practice whereby-elements of prices are not revealed upfront.
Disguised advertisement	The practice of posing, masking advertisements as other types of content such as user generated content or new articles or false advertisements.
Nagging	The practice in which users face an overload of requests, information, options, or interruptions; unrelated to the intended purchase of goods or services, which disrupts the intended transaction.

References

1. PIB | Draft Guidelines for Prevention of Dark Patterns
2. The Hindu | Centre to stop sites from weaving 'dark patterns'

Visible Line Emission Coronagraph (VELC)

Aditya-L1 has been successfully launched from the Satish Dhawan Space Research Centre in Sriharikota recently carried the VELC payload.

- The Aditya-L1 mission (first Sun mission from India) carried by the Polar Satellite Launch Vehicle (PSLV)-C57 rocket is equipped with seven payloads.
- Among these, the Visible Line Emission Coronagraph (VELC) is the primary payload that Aditya-L1 will use to focus on the Sun's Corona.
- **Landing Point -** Aditya-L1 will be placed in a halo orbit around Lagrangian Point 1 (L1), which is 1.5 million kilometers from Earth in the direction of the Sun.
- **Aim –** It will create a total solar eclipse continuously since it will be positioned at L1, providing an unobstructed view of the Sun.
- **Built by –** Indian Institute of Astrophysics (IIA).

Coronagraph of Aditya-L1 will send 1,440 images of sun a day.

- VELC has the capability to capture images of the solar corona closer to the Sun's disc than any other solar space observatory.
- This allows it to observe the Sun as if it were a solar eclipse, enabling the study of the corona and its characteristics, including its origin and the source of coronal mass ejections.

References

1. The Hindustan Times | What is the purpose of VELC?
2. IIA | VELC
3. The Hindu | Coronagraph of Aditya-L1



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