# PM opens 'COSMOS-Mysuru', billed as India's first LED dome planetarium

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## News

During his Karnataka visit, Prime Minister Narendra Modi on Friday, 13 November 2026 opened 'COSMOS-Mysuru', described as India's first LED dome planetarium, on the University of Mysore campus at the foothills of Chamundi Hills, Mysuru. It was built by the Indian Institute of Astrophysics (IIA), Bengaluru. Its 15-metre tilted dome is made of about 6,150 panels carrying about 4.2 crore (42 million) LEDs; IIA says the display has true 8K resolution. Unlike projector-based planetariums, each LED panel can be controlled in real time. Before the opening, IIA had run four years of astronomy outreach in Mysuru, mostly in Kannada – more than 170 activities reaching about 45,000 people; the complex will also have exhibition halls, an astronomy museum, a lecture hall, classrooms and training labs (IIA). Its Sky Theatre screens astronomy shows, including an original film on Mysuru's historical links with astronomy, in Kannada, English and Hindi. According to IIA, the ₹116-crore project was funded from Union Finance Minister Nirmala Sitharaman's MPLADS funds, the Department of Science and Technology, the Department of Atomic Energy and the Office of the Principal Scientific Adviser, and executed under an MoU with the University of Mysore. Sitharaman, Karnataka Chief Minister D.K. Shivakumar and other dignitaries attended.

## Key facts for the exam

| Point | Details |
|---|---|
| **Date, place** | 13 Nov 2026 – University of Mysore campus, Chamundi Hills foothills |
| **Opened by** | PM Narendra Modi |
| **Built by** | Indian Institute of Astrophysics (IIA), Bengaluru |
| **Dome** | 15-m tilted dome; about 6,150 panels |
| **LEDs / display** | About 42 million LEDs; true 8K (IIA) |
| **Languages** | Kannada, English, Hindi |
| **Cost** | ₹116 crore (IIA) |
| **Funding** | Sitharaman's MPLADS, DST, DAE, Office of PSA |
| **Attended** | Nirmala Sitharaman, CM D.K. Shivakumar |

## Background

- Planetarium: a theatre that shows the sky on the inside of a dome. Most use opto-mechanical or digital projectors (Chennai's Birla Planetarium has a hybrid projection system – DT Next). At COSMOS-Mysuru the dome itself is an LED screen, so no projector is needed and each panel can be controlled in real time.
- Science: an LED (light-emitting diode) is a semiconductor p-n junction device. When current flows in forward bias, electrons and holes recombine and emit light – electroluminescence. It uses less power and lasts longer than a filament bulb. Akasaki, Amano and Nakamura won the 2014 Nobel Prize in Physics for the blue LED.
- History: the University of Mysore was founded on 27 July 1916 through the efforts of Maharaja Nalvadi Krishnaraja Wadiyar IV of the princely state of Mysore and Diwan Sir M. Visvesvaraya. The sixth-oldest university in India, its website calls it, in a sense, the first university in the country established outside the limits of British India.
- Polity: the Members of Parliament Local Area Development Scheme (MPLADS) is run by the Union Ministry of Statistics and Programme Implementation (MoSPI). Each MP is entitled to ₹5 crore a year, released in two instalments of ₹2.5 crore (PIB). Nirmala Sitharaman is a Rajya Sabha member from Karnataka.
- Astronomy: a planetarium dome shows the celestial sphere. The Sun's apparent yearly path on it is the ecliptic, tilted about 23.5° to the celestial equator; the 12 zodiac signs lie along it.

**Tamil Nadu link:** Chennai's B.M. Birla Planetarium at Kotturpuram was opened on 11 May 1988 by President R. Venkataraman; it stands on the campus of the Periyar Science and Technology Centre, run by the Tamil Nadu Science and Technology Centre (TNSTC). There are also planetariums at Tiruchirappalli and Coimbatore. IIA, which built COSMOS, also runs the Kodaikanal Solar Observatory (Dindigul district) and the Vainu Bappu Observatory at Kavalur (Tirupattur district).

## Frequently asked questions

### What is this news about?

During his Karnataka visit, Prime Minister Narendra Modi on Friday, 13 November 2026 opened 'COSMOS-Mysuru', described as India's first LED dome planetarium, on the University of Mysore campus at the foothills of Chamundi Hills, Mysuru.

**What are the key facts to remember for the exam?**

Date, place: 13 Nov 2026 – University of Mysore campus, Chamundi Hills foothills; Opened by: PM Narendra Modi; Built by: Indian Institute of Astrophysics (IIA), Bengaluru; Dome: 15-m tilted dome; about 6,150 panels.

**What is the background to this news?**

Planetarium: a theatre that shows the sky on the inside of a dome. Most use opto-mechanical or digital projectors (Chennai's Birla Planetarium has a hybrid projection system – DT Next).

## Practice questions (with answers)

**1. Which Union ministry administers the Members of Parliament Local Area Development Scheme (MPLADS)?**

**A)** Finance

**B)** Parliamentary Affairs

**C) Statistics (MoSPI)**

**D)** Rural Development

**Answer: C** – Explanation: MoSPI – the Statistics and Programme Implementation Ministry. Each MP gets ₹5 crore a year, in two instalments of ₹2.5 crore.

**2. LEDs emit light through which physical phenomenon?**

**A) Electroluminescence**

**B)** Incandescence

**C)** Photoelectric effect

**D)** Radioactivity

**Answer: A** – Explanation: Electroluminescence – electrons and holes recombine at a p-n junction and give out light. A filament bulb glows by incandescence.

**3. Chennai's B.M. Birla Planetarium at Kotturpuram stands on the campus of which science centre?**

**A)** Anna Science Centre

**B)** Nehru Science Centre

**C)** Science City

**D) Periyar Sci & Tech Centre**

**Answer: D** – Explanation: The Periyar Science and Technology Centre, run by TNSTC; the planetarium opened in 1988. Nehru Science Centre is in Mumbai, Science City in Kolkata.

**4. The University of Mysore (1916), home to COSMOS, holds which distinction?**

**A)** First women's university

**B) First outside British India**

**C)** First open university

**D)** First in South India

**Answer: B** – Explanation: Founded 27 July 1916 by Krishnaraja Wadiyar IV and Diwan M. Visvesvaraya; India's sixth-oldest. Madras University dates from 1857.

**5. A planetarium dome shows the celestial sphere. What is the Sun's apparent yearly path on it called?**

**A)** Celestial equator

**B)** Meridian

**C) Ecliptic**

**D)** Horizon

**Answer: C** – Explanation: The ecliptic – tilted about 23.5° to the celestial equator; the 12 zodiac signs lie along it. Eclipses occur near it, hence the name.

**Sources:** DD News, 13 Nov 2026; IIA – COSMOS project page (iiap.res.in/outreach/cosmos); Deccan Chronicle, 13 Nov 2026; PIB / MoSPI MPLADS guidelines; University of Mysore (uni-mysore.ac.in); Tamil Nadu Science and Technology Centre – tnstc.gov.in (Birla Planetarium); DT Next. © Shanmugam IAS Academy.