

# Daily Current Affairs 01 January 2024

# 16<sup>th</sup> Finance Commission

- The Centre has constituted the **Sixteenth Finance Commission**. Former NITI Aayog Vice Chairman, **Dr Arvind Panagariya** who is a Professor at Columbia University, will be the Chairman of the 16th Finance Commission.
- **Ministry of Finance** in a statement said that IAS officer Ritvik Ranjanam Pandey will be the secretary of the Commission.



- The Commission will make recommendations in matters including the distribution between the Union and the States of the net proceeds of taxes and measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State.
- The Commission may review the present arrangements on financing Disaster Management initiatives, with reference to the funds constituted under the **Disaster Management Act, 2005** and make appropriate recommendations thereon.
- The Finance Commission has been requested to make its report available by 31st of October, 2025 covering a period of five years commencing on the 1st of April, 2026.

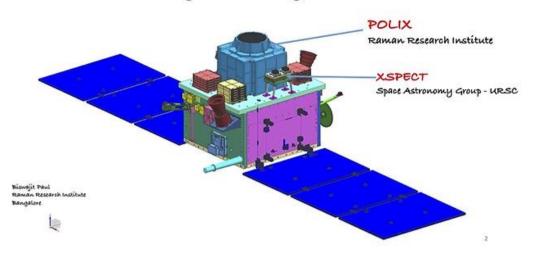
# X-ray Polarimeter Satellite

- ISRO's PSLV-C58 has launched XPOSAT Satellite into an Eastward low inclination orbit on January 01, 2024 09:10 Hrs IST.
- The **PSLV Orbital Experimental Module-3** (POEM-3) experiment will be executed meeting the objective of 10 identified payloads, supplied by ISRO and IN-SPACe.
- XPoSat (X-ray Polarimeter Satellite) is the first dedicated scientific satellite from ISRO to carry out research in space-based polarisation measurements of Xray emission from celestial sources. The Satellite configuration is modified from the IMS-2 bus platform.



- The Configuration of the mainframe systems are derived based on the heritage of IRS satellites. It carries two payloads namely POLIX (Polarimeter Instrument in X-rays) and XSPECT (X-ray Spectroscopy and Timing).
- **POLIX is realized by Raman Research Institute and XSPECT** is by Space Astronomy Group of URSC.
- To measure polarisation of X-rays in the energy band 8-30keV emanating from about 50 potential cosmic sources through Thomson Scattering by POLIX payload.
- To carry out long term spectral and temporal studies of cosmic X-ray sources in the energy band 0.8-15keV by XSPECT payload.

# X-ray Polarimetry Satellite



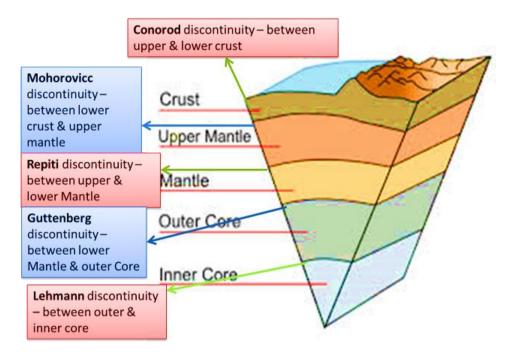
- To carry out polarisation and spectroscopic measurements of X-ray emissions from cosmic sources by POLIX and XSPECT payloads respectively in the common energy band.
- Following The Launch Of XPoSat, India Has Become The Second Country In The World After The United States To Send A Specialised Astronomy Observatory To Study Black Holes And Neutron Stars In Our Galaxy. The Mission Life Of The Primary Payload XPoSat Is About Five Years.
- The **10 Other Payloads** Are From Takeme2space, LBS Institute Technology For Women, K J Somaiya Institute Of Technology, Inspecity Space Labs Private Ltd, Dhruva Space Private Ltd, Bellatrix Aerospace Private Ltd (Two Payloads) And Three Payloads From The ISRO.

# Mengxiang Sets Sail For Earth's Mantle Exploration

- China has introduced its groundbreaking ocean drilling vessel, Mengxiang, signifying a pivotal moment in scientific exploration. Developed by the China Geological Survey in collaboration with 150 research institutes and companies, the vessel is named "dream" in Chinese, reflecting its ambitious mission.
- The **Mengxiang aims to penetrate Earth's crust** and delve into the mysteries of the mantle, marking humanity's inaugural foray into this uncharted territory.
- Weighing an impressive 33,000 tonnes and stretching 179 meters (590 feet),
   Mengxiang is a colossal ship with exceptional capabilities.



- It boasts a range of 15,000 nautical miles and can operate for 120 days per port call. Engineered to withstand powerful tropical cyclones, it stands as a testament to advancements in deep-sea drilling technology.
- The vessel's drilling prowess is unmatched, with the capacity to reach depths of **11,000 meters below the sea's surface**.
- Traditionally confined to the Earth's crust, scientific exploration now eyes the mantle, a crucial layer connecting the surface to the core.
- The Mengxiang seeks to breach the Mohorovicic discontinuity, or Moho, the final frontier for human exploration into the mantle. While American scientists have pursued this goal since the 1960s, Mengxiang's cutting-edge technology represents a new chapter in the quest for understanding Earth's structure.
- Mengxiang recently underwent trials, primarily focusing on its **propulsion** system.
- However, the details of its core drilling operations remain shrouded in mystery. Overcoming challenges, such as high temperatures and pressures beyond 7,000 meters, poses a significant hurdle, as acknowledged by experts like Wan Buyan, a leading figure in seabed engineering.



# **Argentina Rejects BRICS Membership**

- Argentine President Javier Milei has officially declined the invitation to join the BRICS (Brazil, Russia, India, China, South Africa) grouping of major emerging economies.
- The rejection was conveyed through letters sent to BRICS leaders, solidifying Argentina's decision to abstain from the bloc.
- The libertarian outsider, who assumed office recently after a significant electoral victory over traditional political parties, had pledged during his campaign not to align Argentina with BRICS.
- President Milei's rejection was grounded in the assertion that Argentina's membership was "not considered appropriate at this time."



- The letters emphasized a departure from the foreign policy approach of the previous administration, indicating a comprehensive review of decisions made earlier.
- The president highlighted that his **geopolitical alignment prioritizes** ties with the United States and Israel, eschewing alliances with communist nations.
- Although Milei had initially expressed intentions to sever ties with major trading partners like China and Brazil, his tone has become more conciliatory since taking office.
- This move underscores the **evolving nature of Argentina's foreign policy** under the new leadership.
- The rejection of BRICS membership aligns with Milei's commitment to a distinct geopolitical trajectory for the nation.

# CRC Samba Jammu

- In a historic event, the Lt. Governor Shri Manoj Sinha of the Union Territory of Jammu & Kashmir unveiled the commemorative plaque, officially inaugurating the Composite Regional Centre (CRC) for Skill Development, Rehabilitation & Empowerment of Persons with Disabilities (Divyangjan) in Samba – Jammu.
- This momentous occasion signifies a significant stride towards inclusivity and empowerment for individuals with disabilities in the region.



Lt. Governor Inaugurated CRC Samba-Jammu for Person With Disabilities

• The inauguration ceremony, held at Second Extension, Gandhi Nagar, Green Belt Jammu-180004, witnessed the convergence of esteemed dignitaries, government officials, and representatives from the disability community.

- The presence of key figures underscored the importance of this initiative in fostering an inclusive society.
- The CRC Samba Jammu, an initiative by the Department of Empowerment of Persons with Disabilities, Ministry of Social Justice & Empowerment, Govt. of India, aims to provide comprehensive support, skill development, and rehabilitation services. The overarching goal is to empower individuals with disabilities and facilitate their seamless integration into mainstream society.
- "The CRC is a testament to our commitment to creating an environment where
  persons with disabilities can thrive." The center is not only poised to offer
  essential services but also serves as a hub for skill development, promoting
  self-reliance and empowerment.
- The commitment to providing top-notch services and creating a supportive environment for persons with disabilities was evident during the tour.

# **REVIEW QUESTIONS**

- 1. Chairman Of 16<sup>th</sup> Finance Commission
- A. Dr Arvind Panagariya
- B. Dr Sanjay Aggarwal
- C. Dr Ankit Panagariya
- D. Dr Sohail Hussain ANSWER: A

#### 2. X-ray Polarimeter Satellite Launched By

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

### **ANSWER: B**

- 3. Ocean Drilling Vessel Mengxiang Belongs To
- A. China
- B. Japan
- C. Russia
- D. India

#### **ANSWER: A**

- 4. In Which Summit Will The Official Announcement Of The Submarine Tourism Project Take Place
- A. Kumbh Mela Summit
- B. Vibrant Gujarat Global Summit
- C. Tourism Innovation Summit
- D. National Tourism Day ANSWER: B

#### 5. Who Recently Rejects BRICS Membership

- A. Argentina
- B. Egypt
- C. Ethiopia
- D. Saudi Arabia
  - ANSWER: A
- 6. Who Is Chairperson Of Special Committee To Examine Need For A Separate Competition Law For Digital Companies
- A. Manoj Govil
- B. Ashwini Vaishnaw
- C. Nirmala Sitharaman
- D. Ramesh Chand ANSWER: A
- 7. Which Institution Constituted A Taskforce To Examine Impact Of Digital Personal Data Protection Act On Insurance Sector
- A. Ministry of Electronics and IT
- B. IRDAI
- C. RBI
- D. SEBI
  - ANSWER: B

- 8. "Gram Manchitra" Application, Recently Launched, Is Associated With
- A. Geographic Information System
- B. Cultural Archive
- C. Educational Resource
- D. Vaccination Reminder ANSWER: A
- 9. Impatiens Karuppusamyi Which Was Seen In News, Belongs To Which Species
- A. Fish
- B. Plant
- C. Bird
- D. Spider

#### **ANSWER: B**

#### 10. Ravi Bishnoi, Who Was Seen In News, Plays Which Sports

- A. Cricket
- B. T<mark>enn</mark>is
- C. Squash
- D. Chess ANSWER: A

#### 11. 'TRIPS Agreement' Is Associated With Which Institution

- A. WTO
- B. UNICEF
- C. IMF
- D. WEF

#### ANSWER: A

#### 12. Which Union Ministry Is Associated With Unique Disability ID Project

- A. Ministry of Health and Family Welfare
- B. Ministry of Social Justice and Empowerment
- C. Ministry of Women and Child Development
- D. Ministry of Finance

#### **ANSWER: B**

# 13. First Country In World To Be Officially Validated By WHO For Eliminating Kala Azar As A Public Health Problem

- A. India
- B. USA
- C. Indonesia
- D. Bangladesh ANSWER: D
- 14. International Institute For Unification Of Private Law. UNIDROIT Is Based At Which City
- A. Geneva
- B. Paris
- C. Rome
- D. Washington DC

### ANSWER: C

- 15. DRDO Aeronautical Test Range, That Makes News Frequently, Is Located Near Which City
- A. Secunderabad
- B. Chitradurga
- C. Bhubaneshwar
- D. Jodhpur

**ANSWER: B** 

#### 16.Gabon Which Was Seen In The News, Is Located In Which Region

- A. Africa
- B. Europe
- C. Australia
- D. Asia

### ANSWER: A

#### 17. What Is AIRAWAT That Is Recently Making News

- A. Submarine
- B. Al Supercomputer
- C. 5G-enabled Drone
- D. Recently Discovered Exoplanet ANSWER: B

## 18. Recently Launched My iGOT & VIKAS Are Related To Which Government Initiative

- A. Digital India
- B. Skill India Mission
- C. Mission Karmayogi
- D. Rashtriya Uchchatar Shiksha Abhiyan ANSWER: C

### 19. Venue Of 26<sup>th</sup> National Integration And Youth Leadership Camp

- A. Lucknow
- B. Itanagar
- C. Nagpur
- D. Bengaluru

#### **ANSWER: B**

### 20. Which Strait Is Also Known As Gate Of Tears In Arabic

- A. Bab al-Mandeb
- B. Strait of Hormuz
- C. Bass strait
- D. Strait of Johor

**ANSWER: A**