Announcement of Opportunity for Chandrayaan-3 Data

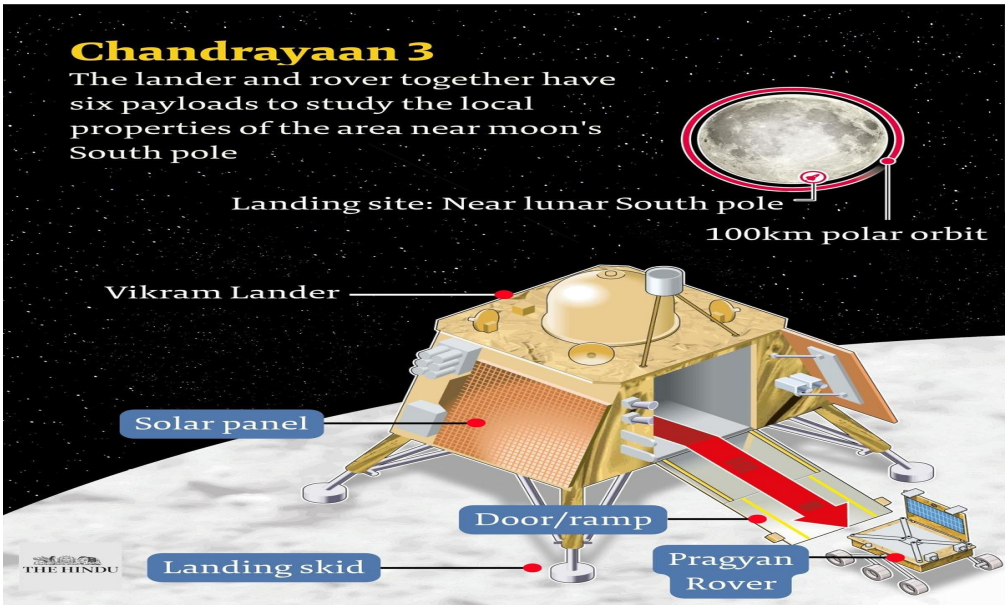
Prelims – *Current events of National and International importance| Science & technology.*

Why in News?

Recently, ISRO issued an Announcement of Opportunity (AO) for scientific analysis and utilisation of data from all experiments of Chandrayaan-3 lander and rover.

- **Chandrayaan-3** – It is the **world's first mission to soft-land** near **the lunar South Pole.**
- It was launched in 2023 from the Satish Dhawan Space Centre in Sriharikota.
- Components of Chandrayan 3 - It consists of an indigenous lander module, a propulsion module and a rover with an objective of developing and demonstrating new technologies required for inter-planetary missions.

To know more about Chandrayan 3, click here.



- **Data Collected –** Scientific payloads gathered data on several aspects of the lunar environment.
- **Thermal Properties –** The ChaSTE (Chandra's Surface Thermophysical Experiment) payload recorded the temperature profile of the Moon's topsoil, extending from the surface down to a depth of 10 cm.
- **Elemental and Mineral Composition –** The LIBS (Laser-Induced Breakdown Spectroscope) and APXS (Alpha Particle X-ray Spectrometer) on the Pragyan rover

analysed the chemical composition of the lunar surface.
- It confirmed the presence of elements such as sulphur, iron, aluminium, calcium, chromium, titanium, manganese, silicon, and oxygen near the landing site.
- **Lunar Seismic Activity –** Instrument for Lunar Seismic Activity on the Vikram lander recorded seismic signals, including over 250 seismic events
- **Near-Surface Plasma –** Radio Anatomy of Moon Bound Hypersensitive ionosphere and Atmosphere-Langmuir Probe measured the density of plasma (ions and electrons) near the lunar surface and its variations over time.
- **Announcement of Opportunity (AO) -** ISRO issued the AO to enhance the scientific outcome of the Chandrayaan-3 mission by involving the national scientific community in data analysis.
- **Objective** - To enable scientific analysis and utilisation of data from all experiments conducted by the Chandrayaan-3 lander and rover.
- **Eligibility –** It is open to all faculty and researchers from recognised academia, research institutions, universities, colleges and government organisations of India.

Reference

[The Hindu| Study of Chandrayaan-3 Lander Data]