

First Test Flight of **Gaganyaan**



**Today's
Topic**



**Bathukamma
Festival**



**Storm
Z Squad**



**इसरो के
आगामी मिशन**

☎ 94250-68121, 98939-29541, 91110-10991 to get your queries answered fast.

www.kautilyaacademy.com



1

- ISRO will launch a test spacecraft from Sriharikota space centre on October 21.
- Testing of unmanned flight for the Gaganyaan mission will begin.
The purpose of the flight of the test vehicle (TV-D1) is to test the crew module.
- The mission to send astronauts to space for the first time is expected to be completed in 2025.
- ISRO will also test the effectiveness of the Crew Escape System which is an important part of the "Gaganyaan" mission.
- In the Gaganyaan project, the human crew will travel 400 km.
It is envisioned to demonstrate human spaceflight capability by launching into orbit landing in Indian waters and returning safely to Earth.

Bathukamma Festival



3

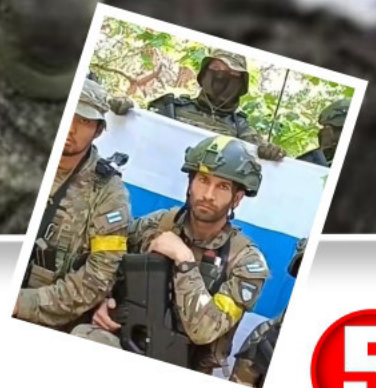
☎ 94250-68121, 98939-29541, 91110-10991 to get your queries answered fast.

www.kautilyaacademy.com |



- Bathukamma, a nine-day annual festival of flowers, is celebrated throughout Telangana. It is a colourful floral festival traditionally celebrated by women with beautiful local flowers.
- This festival is celebrated with the onset of monsoon (in southern India).
- During this festival, along with sufficient water, bright colourful flowers also grow in the ponds.
- Local flowers like 'Gunuka,' 'Tangedu,' 'Banti,' and 'Nandi-varadhanam' are used.
- The festival starts a week before 'Saddula Bathukamma' (the grand finale of Bathukamma festival) and is celebrated two days before Dussehra.
- It begins each year on Bhadrapada Amavasya according to the Telugu version of the Hindu calendar and continues for nine days of Navratri.
- During the entire week, women make 'Boddemma' (an earthly idol of Gauri i.e. Maa Durga) along with Bathukamma and immerse it in the pond.
- The tradition of this festival helps in strengthening the ponds and maintaining water conservation.
- Strengthens the coordination between humans, earth and water resources with purposeful rituals.

Storm Z Squad



5

☎ 94250-68121, 98939-29541, 91110-10991 to get your queries answered fast.

www.kautilyaacademy.com |



- Russia is sending them to the border with Ukraine.
- This includes drunkards, criminals and punished soldiers etc.
- There are 100 to 150 soldiers in a unit.
- At least five groups have been deployed.
- Russia is sending them to dangerous parts of the attack.

ISRO's Upcoming Missions



7

☎ 94250-68121, 98939-29541, 91110-10991 to get your queries answered fast.

www.koultiyaacademy.com |



- Indian space agency ISRO is continuously increasing its stature in the field of space.
- PM Narendra Modi set new targets for scientists while reviewing the preparations for the Gaganyaan mission.
- Prime Minister Narendra Modi directed ISRO to set up an indigenous space station by 2035 and land an Indian on the Moon by 2040.
- Reviewed the preparations for the 'Gaganyaan Mission' and set a target to send India's first manned mission to space in 2025.
- Chaired the meeting to assess the 'progress of Gaganyaan Mission' and chart the future of Indian space exploration.
- A critical test of the module, called the Crew Escape System Test Vehicle, is scheduled for October 21, 2023.
- DoS will create a roadmap for Moon exploration, which will include a series of Chandrayaan missions, the development of a new generation launch vehicle, the construction of a new launch pad, the establishment of human-centric laboratories and related technologies.

- It also called on scientists to work toward interplanetary missions, including a spacecraft to orbit Venus and a spacecraft to land on Mars.
- A 2019 proposal for a Venus-orbiting spacecraft said it would carry 12 payloads, including a thermal camera, mass spectrometer and a cloud-monitoring camera.
- The International Space Station (ISS), jointly developed and maintained by the United States, Russia, Canada, Japan and European agencies, is the largest space station but is expected to close by 2030 due to rising costs and disagreements between partner countries.
- China's 'Tiangong' is the only other space station, which has a capacity of only 6 astronauts and is only about 40% of the size of the ISS.
- The first indication of a sustainable manned program and establishment of a space station was given in 2019 by then ISRO chief K. Sivan had given it. He said the Indian space station is likely to be very small, built by combining a few modules similar to the existing crew module. It weighs only 20 tons, compared to the International Space Station's 450 tons and the Chinese Tiangong Space Station's 100 tons.

- Space stations and moon missions involving the US and Russia were a product of the space race, while future space stations will need to follow a different template. This will require extensive testing which is likely to cost high.
- The technology that enabled the Apollo missions [which landed American astronauts on the Moon] would not meet current standards. As seen in the Gaganyaan mission,
- there are many ground tests for each stage and this is what makes the mission expensive.