GOVERNMENT OF INDIA DEPARTMENT OF SPACE

RAJYA SABHA

UNSTARRED QUESTION NO. 1413

TO BE ANSWERED ON THURSDAY, JULY 31, 2025

GAGANYAAN MISSION AND VIKSIT BHARAT

1413. SMT. DARSHANA SINGH:

Will the PRIME MINISTER be pleased to state:

- (a) the current status of Gaganyaan mission, major phases completed so far and the expected date of human space flight;
- (b) the details of training location, duration, progress and readiness level of astronauts selected for the mission, whether there is representation from various States including Uttar Pradesh; and
- (c) the potential contribution of this mission in the context of the long-term national goal of Gaganyaan programme and 'Viksit Bharat @ 2047'?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

(a) The following is the current status & key milestones achieved in Gaganyaan Programme:

New Developments

i. **Human Rated Launch Vehicle (HLVM3):** Development and ground testing completed.

- ii. **Orbital Module:** Propulsion systems for Crew Module and Service Module developed and tested. ECLSS engineering model realized.
- iii. Crew Escape System (CES): 5 types of motors developed and static tested.
- iv. **Infrastructure established:** Orbital Module Preparation Facility, Gaganyaan Control Centre, Gaganyaan Control facility, Crew training facility, Second Launch pad modifications.
- v. **Precursor Missions:** A Test Vehicle developed for validating CES and flight tested in TV-D1.
- vi. **Flight Operations and Communication Network:** Ground network configuration finalized. IDRSS-1 feeder stations and terrestrial links established.
- vii. **Crew Recovery Operations:** Recovery assets finalized. Recovery Plan worked out.

First Uncrewed Mission (G1): C32-G stage and CES motors realised. HS200 Motors and CES Fore end up to Crew Module Jettisoning Motor stacked. Crew Module and Service module structure realised. Crew Module Phase-1 checks completed.

- (b) ISRO has selected first batch of Gaganyatris from a pool of qualified test pilots from Indian Air Force. These four selected Gaganyatris are from various states including Uttar Pradesh. They have successfully undergone Generic space flight training at Gagarin Cosmonaut Training Centre (GCTC), Russia between February 2020 to March 2021. Currently, they are undergoing Gaganyaan mission specific training at Astronaut Training Facility (ATF) commissioned at Bengaluru. Gaganyaan Mission specific training is divided into 3 Semesters, two of which are successfully completed. Gaganyatris will commence 3rd semester training shortly.
- (c) Gaganyaan is the first step towards implementation of sustained human spaceflight programme for India. After proving the basic capabilities for human space activities under Gaganyaan Programme, India's own space station, Bharatiya Antariksh Station (BAS) will be established. BAS will have the potential to synergize national capabilities towards innovations and advanced technology areas such as pharmaceuticals, biotechnology, health and agriculture. This will also enable collaboration with other space agencies as a 'contributing partner' in future.
