### GOVERNMENT OF INDIA DEPARTMENT OF SPACE

### LOK SABHA

### **UNSTARRED QUESTION NO. 3482**

## TO BE ANSWERED ON WEDNESDAY, MARCH 17, 2021 PRIVATE STARTUPS

#### 3482. SHRI DUSHYANT SINGH:

Will the PRIME MINISTER be pleased to state:

- (a) whether ISRO is collaborating with Private Startups for its

  Human Space Programme and if so, the details of the companies
  that have shown interest in collaborating with ISRO;
- (b) whether ISRO is providing any financial and technical help for these Startups and if so, the details thereof and if not, the reasons therefor;
- (c) the programmes under the Human Space Initiative and the details of the programmes in which these companies are allowed to participate;
- (d) the current status of Human Space Programme Gaganyaan and its details thereof;
- (e) whether the Government can achieve the proposed target of sending man to Space by 75<sup>th</sup> Independence day and if so, the details thereof and if not the reasons therefor; and
- (f) whether ISRO has begun preliminary work to send man to the moon, if so, the details thereof and if not reasons therefor?

#### **ANSWER**

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

- (a) No Sir, ISRO is not collaborating with Private start-ups for its Human Space programme as of now.
- (b) & (c)

Do not arise.

- (d) The current status of Gaganyaan programme is as follows:
  - i. The preliminary design of Gaganyaan system is completed. Vikas engine (L110) qualification tests and cryogenic engine (C25) qualification tests commenced. Solid booster (S200), Crew escape system and parachute tests planned in 2021. Hardware realization is in advanced stage for ground test and first unmanned mission.
  - ii. A National level Gaganyaan Advisory Council (GAC) with representatives from all stake holders has been constituted for planning and coordination.
  - iii. Interagency certification board constituted for Human Rating certification of Gaganyaan mission.
  - iv. As part of national and international collaboration,
    Memorandum of Understanding (MoU) and contracts
    signed with Indian Air force, DRDO laboratories,
    Academic institutions, M/S JSC Glavkosmos, Russia, NRC
    Canada, and INCAS Romania.

- v. Crew screening and selection completed, Generic space flight training in Russia in progress. Indian leg of training will commence from May/June 2021.
- vi. Indian Navy is identified as lead agency for overall recovery operations.
- (e) Due to COVID pandemic and subsequent budgetary guidelines, programmatic milestones of Gaganyaan Programme are reassessed and are as follows;

First unmanned flight : December 2021

Second unmanned flight: 2022-23

Manned flight : After successful completion of the

above two flights

ISRO is making all efforts to make up the schedule delays due to COVID.

(f) No Sir, ISRO has not begun preliminary work to send man to the moon. The scope of current approved Gaganyaan programme is to demonstrate human spaceflight capability to LEO and safe return of crew.

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