

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

**LOK SABHA
UNSTARRED QUESTION NO.153**

TO BE ANSWERED ON WEDNESDAY, NOVEMBER 16, 2016

MARS ORBIT MISSION

153 DR. THOKCHOM MEINYA:

Will the PRIME MINISTER be pleased to state:

- (a) the main purpose of Mangalyaan;**
- (b) whether ISRO has achieved the target of Mangalyaan;**
- (c) if so, the details thereof;**
- (d) whether ISRO has successfully used the cryogenic technology in this mission; and**
- (e) if so, the details thereof ?**

ANSWER

**MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG &
PENSIONS AND IN THE PRIME MINISTER'S OFFICE**

(DR. JITENDRA SINGH):

- (a) Mars Orbiter Mission (MOM), popularly known as Mangalyaan is India's first interplanetary mission. The main purpose of Mangalyaan, as a technology demonstration mission, is to demonstrate India's capability to insert MOM in Martian orbit and operating Mars Orbiter spacecraft for 6 months.**
- (b) Yes Madam.**

(c) The significant achievements of MOM include:

- Mars orbiter spacecraft has been successfully inserted into elliptical orbit around Mars on September 24, 2014. It has completed 25 months in its orbit around Mars and is presently functioning satisfactorily.**
- Scientific payloads onboard MOM continues to provide valuable data of Mars surface and its atmosphere. Mars Color Camera has captured more than 500 images of the Martian surface.**
- It has provided excellent opportunities in planetary research for the scientific community of the country. Archived data was released on 24.Sep.2016 for free download for scientific research. It has witnessed more than 1500 downloads and about 40 GB data has so far been downloaded.**

(d) No Madam. ISRO did not envisage using cryogenic technology in this mission. The launch requirements of the mission were achieved with the XL variant of India's Polar Satellite Launch Vehicle. However, indigenous cryogenic technology has been realised and demonstrated in GSLV launches.

(e) Does not arise.
