### GOVERNMENT OF INDIA DEPARTMENT OF SPACE

## LOK SABHA UNSTARRED QUESTION NO. 1742

#### **TO BE ANSWERED ON WEDNESDAY, DECEMBER 09, 2015**

#### ASTROSAT

1742. SHRI NANA PATOLE:

SHRI MALLIKARJUN KHARGE: SHRI P.P. CHAUDHARY: SHRI SUNIL KUMAR SINGH: SHRI DILIPKUMAR MANSUKHLAL GANDHI:

Will the PRIME MINISTER be pleased to state:

- (a) whether Indian Space Research Organisation (ISRO) has launched space observatory ASTROSAT for the study of astronomical objects;
- (b) if so, the details thereof;
- (c) whether it is similar to the Hubble Space Telescope of NASA;
- (d) whether ISRO has also launched Satellites of other countries along with this mission, if so, the details thereof; and
- (e) whether it will be used to understand the universe and to study the astronomical phenomenas, 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):

- (b) ASTROSAT was successfully launched onboard Polar Satellite Launch Vehicle, PSLV-C30 on 28<sup>th</sup> September 2015 from Satish Dhawan Space Centre, Sriharikota into a 650 km nearequatorial orbit with 6 degree orbital inclination. ASTROSAT carries five payloads to study the stars and galaxies in ultraviolet, optical and X-ray wavelength bands to enhance our understanding of the universe.
- (c) No Madam. The Hubble Space Telescope is a large space telescope with 230 cm diameter mirror and was launched in a 600 km nearly circular orbit. Hubble's four main instruments observe in the near ultraviolet, visible and near infrared spectra.

Whereas, ASTROSAT has an Ultraviolet telescope with 38 cm diameter mirror and was launched in a 650 km near-equatorial orbit. It carries five astronomy payloads, which carry out imaging, timing and spectral studies in far ultraviolet, near ultraviolet, visible and X-ray wavelengths.

- (d) Yes Madam. Along with ASTROSAT, six satellites from other countries viz., LAPAN-A2 (Indonesia), NLS-14 (Canada) and four identical LEMUR satellites (USA) were launched under the commercial agreement with Antrix Corporation Limited – the commercial arm of ISRO.
- (e) Yes Madam. ASTROSAT will be used to understand the universe and study the astronomical phenomena.

\* \* \* \*