## GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY LOK SABHA UNSTARRED QUESTION NO. 1828

TO BE ANSWERED ON 21.09.2020

## **NEUTRINO OBSERVATORY**

1828. SHRI DILIP SAIKIA: SHRI RAMESH CHANDER KAUSHIK: SHRI Y. DEVENDRAPPA:

Will the PRIME MINISTER be pleased to state:

- (a) whether Government has any proposal to set up Neutrino Observatory in the country;
- (b) If so, the details thereof and the places identified for the purpose; and
- (c) The number of earth observatories set up in the country, State-wise?

## **ANSWER**

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

- (a) Yes Sir.
- (b) India based Neutrino observatory (INO) will observe neutrinos produced in the atmosphere of the Earth. This observation will tell us more about the properties of neutrino particles, whose main source is the Sun and the Earth's atmosphere. The neutrino detector will be a magnetized iron calorimeter, which will be the heaviest one made by any country. The site identified is in Bodi West Hills, in Theni district, Tamil Nadu.
- (c) As per the information provided by the Department of Science and Technology, State-wise number of observatories are as follows::
  - (i) Karnataka Six Astronomical observatories.
  - (ii) Uttarakhand Four Observatories for study of Astronomy & Astrophysics and Atmospheric Studies.

- (iii) Indian Institute of Geomagnetism (IIG) operates 12 strategically located Magnetic Observatories across the country as follows:
  - a) Andhra Pradesh One
  - b) Tamil Nadu One
  - c) Assam One
  - d) Meghalaya One
  - e) Gujarat One
  - f) Maharashtra One
  - g) Rajasthan One
  - h) Jammu & Kashmir One
  - i) Uttar Pradesh One
  - j) Andaman & Nicobar Island (UT) One
  - k) Puducherry (UT) One.

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