

**GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF PHARMACEUTICALS**

RAJYA SABHA
UNSTARRED QUESTION NO. 2737
TO BE ANSWERED ON 25TH MARCH, 2025

Artificial intelligence and block chain in pharmaceutical sector

**2737 Shri G.C. Chandrashekhar:
Shri Ashokrao Shankarrao Chavan:**

Will the Minister of **Chemicals and Fertilizers** be pleased to state:

- (a) whether Government has taken note of the importance of advanced technologies such as artificial intelligence, block chains etc. which can play a major role in boosting the pharmaceutical sector in the country; and
- (b) if so, the details thereof and the various steps taken/proposed to be taken by Government to leverage such technological developments to the sector's advantage in the country?

ANSWER

**THE MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND
FERTILIZERS**

(SMT. ANUPRIYA PATEL)

(a) and (b): The Department of Pharmaceuticals (DoP) has taken steps to promote research and development (R&D) in the sector, including in the areas of artificial intelligence (AI) and machine learning, in the pharmaceutical sector through the Scheme for Promotion of Research and Innovation in the Pharma Medtech sector. Further, the National Institutes of Pharmaceutical Education and Research (NIPER) under the aegis of DoP have introduced topics related to AI and block chain technology in their courses and they provide training to students in AI-based tools to build human resource capacities in these areas for the pharmaceutical sector. In addition, the Department of Biotechnology also supports AI-based research activities in the biotech sector, particularly in the healthcare and agriculture areas, in order to leverage emerging technologies for these sectors. Further, the Pharmaceuticals and Medical Devices Bureau of India under the Department of Pharmaceuticals, with the assistance of the Centre for Development of Advanced Computing, has undertaken a pilot project to evaluate the feasibility of a block-chain-based track-and-trace system for Pradhan Mantri Bhartiya Janaushadhi Pariyojana.
