

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA**

**UNSTARRED QUESTION No. 1153
TO BE ANSWERED ON 14.12.2022**

DEVELOPMENT OF SYSTEMS AGAINST QUANTUM CYBER ATTACK

1153. SHRI K. MURALEEDHARAN:

Will the Minister of **SCIENCE AND TECHNOLOGY** विज्ञान और प्रौद्योगिकी मंत्री be pleased to state:

(a) whether the Government has developed systems capable of withstanding quantum of cyber attacks in its National Mission on Quantum Technologies and Applications announced during the Budget Session 2020-2021;

(b) if so, the details thereof and if not, the reasons and timelines therefor;

(c) whether the Government would consider developing encryption tools that meet cryptographic standards set by the National Institute of Standard and Technology (NIST), USA, if so, the details thereof; and

(d) whether the Government has initiated or intends to initiate diplomatic partnerships with “techno-democracies” to help pool resources and mitigate emerging quantum cyber threats and if so, the details thereof?

ANSWER

**MINISTER OF STATE (INDEPENDENT CHARGE) OF THE
MINISTRY OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES
(DR. JITENDRA SINGH)**

विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान मंत्रालय के राज्य मंत्री (स्वतंत्र प्रभार)
(डॉ. जितेंद्र सिंह)

(a) & (b) **Yes Sir. Government is developing a proposal to initiate National Mission on Quantum Technologies & Applications with the objectives of building capabilities in Quantum Computing, Quantum Communication, Quantum Materials, Quantum Sensing and Metrology. Details of Mission structure and deliverables are yet to be finalized.**

(c) **As of now, there is no proposal to undertake developing encryption tools that meet cryptographic standards set by the National Institute of Standards and Technology (NIST), USA.**

(d) **As of now, there is no proposal to undertake diplomatic partnerships with “techno-democracies” to help pool resources and mitigate emerging quantum cyber threats.**
