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

UNSTARRED QUESTION No. 3969 ANSWERED ON 19/03/2021

PARTICIPATION OF STUDENTS IN S&T

3969. SHRI ARVIND DHARMAPURI:

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

- (a) whether the Government is taking any pro-active steps to increase the participation of students in science and technology;
- (b) if so, the details thereof;
- (c) whether the government organises any competitions related to science and technology at national level to increase the engagement of students in this field; and
- (d) if so, the details thereof?

ANSWER

MINISTER OF HEALTH AND FAMILY WELFARE; MINISTER OF SCIENCE AND TECHNOLOGY; AND MINISTER OF EARTH SCIENCES (DR. HARSH VARDHAN)

स्वास्थ्य और परिवार कल्याण मंत्री, विज्ञान और प्रौद्योगिकी मंत्री और पृथ्वी विज्ञान मंत्री डॉ. हर्ष वर्धन

(a) & (b) Yes, the Department of Science & Technology (DST) is implementing a national program named INSPIRE Awards MANAK (Million Minds Augmenting National Aspiration and Knowledge), previously known as INSPIRE Award Scheme, with the objective to attract young students to study science, pursue research career, promote creative thinking and foster a culture of innovation among them. The Department of Science and Technology (DST) has started a new scheme "Vigyan Jyoti" for girl students of Class 9-12 to encourage them to pursue education and career in science and technology particularly in the areas where women are under represented. The Council of Scientific and Industrial Research (CSIR) has also been engaged in connecting school students with scientists through its "Jigyasa" (student-scientist connect) program. Navodaya Vidyalaya Samiti also organizes Regional Science Congress every year. The Kishore Vaigyanik Protsahan Yojana (KVPY) of the Department of Science and Technology aims to identify students with talent and aptitude for research; help them to realize their academic potential; encourage them to take up research careers in Science, and ensure growth of best scientific minds for research and development in the country. The Department of Biotechnology implements Star College Scheme which aims to improve critical thinking and 'handson' experimental work at undergraduate (College) level in sciences. It is expected to encourage more students to take up higher education in science. Through this scheme, the department identifies colleges with potential for excellence and provides academic and physical infrastructure for achieving excellence in teaching and unique exposure of students to experimental science. Council of Scientific and Industrial Research (CSIR) has been providing doctoral and postdoctoral fellowships to young budding students through its various fellowship programmes such as Junior Research Fellowship-National Eligibility Test, Shyama Prasad Mukherjee Fellowship, Senior Research Fellowship-Direct, Research Associateships and CSIR-National Post

Doctoral Fellowship. The University Grants Commission is implementing various scholarship/ fellowship schemes such as Dr. D.S. Kothari Post Doctoral Fellowship (DSKPDF), Post-Doctoral Fellowship for SC/ST Candidates, Post Doctoral Fellowship for Women, BSR Fellowship for Research (Ph. D), P.G. Scholarship for University Rank Holders, P.G. Scholarship for GATE/GPAT qualified students for pursuing M.Tech/ M.E./ M.Pharm, P.G. Scholarship for Professional Courses for SC/ST candidates, P.G. Indira Gandhi Scholarship for Single Girl Child, "Ishan Uday" Special Scholarship Scheme for North Eastern Region, Maulana Azad National Fellowship for Minority Students, National Fellowship for Students of Other Backward Classes (OBC) and National Fellowship for SC candidates, by providing financial assistance to students/scholars for pursuing higher education. The "Innovation in Science Pursuit for Inspired Research (INSPIRE)" aims to attract, motivate, nurture and train talented and meritorious students to study science subjects and opt for careers in Research and Development (R&D) to build a pipeline of quality human resource, thereby widening the R&D human resource base of the country. The Scheme includes INSPIRE Internship Science Camps, Scholarships for Higher Education (SHE), INSPIRE Fellowship and INSPIRE Faculty Fellowships. The Indian Council of Agricultural Research (ICAR) provides fellowships such as Netaji Subhas-ICAR International Fellowships to support students to pursue doctoral degree in agriculture and allied sciences.

Yes, the INSPIRE Awards MANAK Scheme of Department of Science & (c) & (d) Technology intends to target young students in the age group of 10-15 years and studying in class VI to X. Under INSPIRE Award MANAK scheme, in a financial year, ten (10.0) lakh ideas are targeted out of which, one (1.0) lakh ideas are shortlisted for an initial award of Rs. 10,000/- each. After a three tier competition, the top 60 innovations are selected from the National Level Exhibition for whom incubation support is provided. The Government of India, through the Department of Atomic Energy, Department of Science & Technology, Department of Space, Ministry of Education and Ministry of Earth Sciences, provides organisational and financial support to the National Olympiad programmes in Mathematics, Physics, Chemistry, Biology, Astronomy, Earth Sciences, and Junior Science. The programme comprises of multi-level competitions for secondary and higher secondary level students, culminating in the participation of Indian teams in International Olympiads. The National Council for Science and Technology Communication (NCSTC) under the DST also has two programmes to encourage participation of students in science & technology and competitions at national level to engage them. National Children's Science Congress (NCSC) aims to initiate the process of learning science by doing innovative projects among students. The Initiative in Research and Innovation in STEM (IRIS), is another programme which scouts for students to do research based projects in the field of Science, Technology, Engineering and Mathematics (STEM) education. Council of Scientific and Industrial Research organizes CSIR Innovation Award for School Children in order to enhance creativity amongst school children. Similarly, Indian Council of Agricultural Research (ICAR) also organizes National Level Ag-Tech Hackathon to promote innovation in Farm Mechanisation. Furthermore, National Council of Science Museums (NCSM) organizes competitions at national level related to science and technology viz., National Science Seminar, National Science Drama, Science Fair etc. through its chain of 25 science museums/centres.
