

- Only those employees having longest period of stay at the station are displaced from their place of posting who are to accommodate the employees of Priority Categories.
- Annual transfer process made fully Information Technology enabled. This year all teachers/ employees have applied for their transfers online and transfer orders are also being generated through an automated process. This way full transparency in transfers has been secured.
- To effect the process of annual transfers, the KVS prepared a calendar of activities so that transfer process can be completed in a time bound manner.

Popularization of science among children

†*307. SHRI RAM NATH THAKUR: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) the efforts being made by Government to popularize science among children in the country;
- (b) the number of Centres set up by Government in the State of Bihar to encourage scientific temper among children; and
- (c) the current status of these Centres and how they are proving to be useful in developing a scientific temper among children?

THE MINISTER OF SCIENCE AND TECHNOLOGY (DR. HARSH VARDHAN): (a) Government of India, through its Department of Science & Technology (DST) in the Ministry of Science and Technology, has taken big strides to promote and popularize science among children in the country. In this endeavour, DST has used several mechanisms and has launched numerous schemes, programmes and projects across the entire length and breadth of the country as follows:—

- (1) Innovation in Science Pursuit for Inspired Research (INSPIRE): This Program is being implemented by the Department of Science and Technology since 2008. It comprises of three Schemes and five components viz. INSPIRE Award, INSPIRE Internship, INSPIRE Scholarship, INSPIRE Fellowship and INSPIRE Faculty to cover the age group of 10-32 years and thus promote science as a career among talented students in the country. Through INSPIRE Program, young talented students are being encouraged, motivated and nurtured to study science and to make career in research. The first two components i.e. INSPIRE Award and INSPIRE

†Original notice of the question was received in Hindi.

Internship of the Scheme "Scheme for Early Attraction of Talent for Science (SEATS)" aim to attract talented young children to study science. The INSPIRE Award component picks up very young talented child from the age of 10 years and starts nurturing her/him for an exciting experience with study of science and subsequently scientific research. As a one-time award in school career, every year 2 lakh students from Class VI to Class X (age-group: 10-15 years) are identified and awarded ₹ 5000 per child to prepare an innovative model or project and participate in exhibitions at District, State and National level. Till 2016, approximately 14 lakh such children have been awarded INSPIRE Award. Six National level science project competitions have been conducted in New Delhi with amazing level of enthusiasm among the youth.

In the 2nd component: The INSPIRE Internship, under SEATS of INSPIRE program, provides opportunities every year to about 50,000 students who are among top 1% of their respective School Education Boards and pursuing science stream in Class XI in the school to interact with leading researchers and scientists including Nobel Laureates for experiencing the joy of science and innovations, to attract them to pursue a career in science by organizing Science Camps of 5 days' duration across the country. Since December 2008, more than 1600 Science Camps have been successfully conducted and as many as 3.27 lakh students participated. About 70 Nobel prize winners and more than 15000 Scientists and Academicians have interacted with participants of INSPIRE Science Camps. The scheme has already led to excitements among the targeted youth population.

Scholarship for Higher Education (SHE), an ambitious complement of INSPIRE Program provides 10,000 INSPIRE scholarships to the talented youth of the country based on the academic performance at +2 Board (10+2) examination (top 1%) and pursuing basic and natural sciences at Bachelors and Masters level. This Scholarship includes Mentorships of all such students by way of attaching them with an academic/researcher every year for 2-3 months during vacation. Each INSPIRE Scholarship is valued at ₹ 80,000 per year per student including ₹ 20,000 per year per student as Mentorship cost. Nearly 63,000 students have been offered this scholarship so far.

- (2) Science Express: To spread awareness about science amongst masses, particularly children, DST has been playing an active role and one of the flagship initiatives of this is the Science Express, which has been travelling across the country since October, 2007. It is an innovative science exhibition mounted on a custom-built

16 coach AC train, and has successfully completed 8 phases of journey which included 4 phases as 'Science Express', 3 phases as 'Biodiversity Special' and recently Concluded 'Climate Action Special'. To make learning fun-filled, children are encouraged to participate in activities, games and talks through which they easily understand fundamental concepts of science and mathematics. Science Express also has complementary activities which are conducted in its 'Kids Zone', 'Joy-of-Science Lab', and through events on railway platforms and outreach in schools located nearby. To facilitate this, a team of trained communicators stays on-board during the run of 6-7 months in each phase. This mega outreach program of DST, has travelled more than 150,000 km. across the length and breadth of the country on the Broad-gauge network of Indian Railway and received over 1.56 crore visitors at over 450 halts. In addition, over 4000 article, news items, in newspapers, magazines, journals and huge coverage in electronic and digital media has brought it virtually to every nook & corner of India. It already had 6 entries in Limca Book of Records and in 2016 registered for six more records.

- (3) National Children's Science Congress (NCSC): NCSC was launched in 1992 to encourage and engage school students in the age group 10-17 years in identifying various challenges in their localities/communities and find possible science and technology (S&T) solutions. Each year, about 500,000 students participate at the District level competitions across the country. The selected projects/models are then evaluated at the State level and further at the National level. For the last five years, the winners of the national competitions are also getting a chance to participate at the International level. In 2017, in the Silver Jubilee year of NCSC, it would be the endeavour of DST to engage school students from almost all the districts of the country to participate in this exciting programme. In addition, Initiative for Research and Innovation in Science (IRIS) of DST aligns with National Level Mega Science Competitions. In 2013, IRIS also has attracted lateral entry from winners of many other national competitions and fairs like NCSC, Science Fair by National Council of Science Museums (NCSM), Jawaharlal Nehru Science Fair by National Council of Educational Research and Training (NCERT) and Central Board of Secondary Education (CBSE). Such an alignment has turned IRIS into a truly global initiative. So far about 3000 Project synopses were submitted from across the country.
- (4) Vigyan Prasar, an autonomous institution under DST, is specifically engaged in Science communication/popularisation and has particularly produced several hundred audio-video programmes besides publishing over one thousand popular

booklets to engage children in their pursuit of career in science. For students in rural areas, it conducts popularisation and sensitization workshops on hands-on science for teachers/science communicators/agencies, series of programmes on All India Radio and Doordarshan in major Indian Languages, a countrywide network of science clubs, and so on.

- (5) **India International Science Festival (IISF):** IISF is a mega event supported by Ministry of Science and Technology and Ministry of Earth Sciences in association with Vijnana Bharati which has been successfully held in New Delhi for the second successive year in 2016. This year, the Council for Scientific and Industrial Research (CSIR) was the nodal organization and the venue was National Physical Laboratory (NPL). IISF 2016 saw a conglomeration of different scientific components, with a focus on students and the young scientists, like Science Village (3000 school students from rural background across the country), Young Scientist Conference (with 3000 scientists from various R&D institutions, Mega Science Expo with the participation of all the scientific and R&D institutions across India, India International Science Film Festival, INSPIRE-student innovative projects, NGO Conclave, Unnat Bharat pavilion and so on.
- (6) **Science Exhibition & Fairs:** Science exhibition and Fairs are amongst the most important activities to create and enhance scientific awareness of children; teachers, parents, peoples' representative and common man. Science, Technology, Engineering and Mathematics (STEM) demonstrations under this component of DST comprise of Science Fairs, Melas, static exhibitions, mobile science exhibitions, lecture-demonstrations, interactive media, visits to S&T establishments, hands-on-STEM activities, and so on. These events, whether stationary or mobile, serve to utilize the expertise of resource persons trained by DST in various activities. Different kinds of demonstration are being taken up on a variety of themes like environment, health, science behind miracles, vermin composting, etc. Science in toys, Puppetry, activity stalls where children solve a puzzle or do mathematical games/ activities, ask a good question, design/redesign, spot-the-odd one, draw a future, quizzes, painting and skits and street plays, expose them to science in daily life. These serve to expose students to the scientific concepts and motivate them to take up a career in science. Almost 250 Science fair/Science exhibitions were held in almost all the States in the country in last five years. More than 6 lakhs students, teachers and 20 lakhs general public got benefited.
- (7) **National Council of Educational Research & Training (NCERT),** Ministry of Human Resources Development (MHRD), too has been organizing National Science Exhibition every year since 1971 for school children up to Senior Secondary stage

which also includes high school students in the country. So far, over 40 National Science Exhibition have been organized in different parts of the country. Participating students develop a natural sense of passion towards Science and Mathematics. Further, the Central Board of Secondary Education (CBSE) Science Exhibition provides a medium for popularizing science and increase awareness among the stakeholders about close relationship between science, technology and society. Participation is from approximately 1100 CBSE Schools in country.

- (8) National Council of Science Museum (NCSM) in the Ministry of Culture also organizes Science & Engineering Fair with an objective to popularize science in cities, urban and rural areas for the benefit of students and common man. In addition, NCSM organizes various educational activities *viz.* science exhibitions, science seminars, science camps, popular science lectures, etc. through its chain of 25 Science Museums, Science Centers, Planetaria spread across the country.

(b) National Council for Science Museums (NCSM), Ministry of Culture, has the mandate to establish Science Centres, Science Museums, etc. across the country in collaboration with the respective State/UT Government. In Bihar, NCSM established Sri Krishna Science Centre at Patna which was inaugurated on 14 April 1978. The Centre is functioning under the administrative control of NCSM.

(c) In its endeavour to develop a scientific temperament among children, Sri Krishna Science Centre (SKSC), Patna, Bihar, has been able to attract and engage not only school students but also general visitors including teachers, young entrepreneurs, technicians, etc. All such visitors get immensely benefited through various educational activities *viz.* science exhibitions, science seminars, science camps, popular science lectures, etc., being organized by SKSC throughout the year since its establishment in 1978. For example, in 2015-16, a total of 10, 83,746 visitors have visited SKSC and got enriched by the in-house as well as outreach activities of the Centre.

Closure of schools due to clusterisation

*308. SHRI V. VIJAYASAI REDDY: Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

(a) whether the Central Board of Secondary Education (CBSE) is monitoring the reduction in number of schools across the country caused by clusterisation;

(b) whether it is a fact that CBSE has less Public and Government schools registered with it presently than in 2013-14;