

1	2	3	4
2.	45	Construction of grade separator at Kathipara junction	(i) Nehru statue (ii) MGR statue
3.	45	Construction of pedestrian subway at Alandur	Annadurai statue
4.	46	Krishnagiri - Walajapet section from km. 0 to 148.300	(i) Dr. B.R. Ambedkar statue (ii) MGR statue
5.	45	Tindivanam to Ulundurpet	Annadurai statue
6.	45	Trichy - Dindigul section	MGR statue

Scope for ISRO and NASA

*427. SHRIMATI VASANTHI STANLEY: Will the PRIME MINISTER be pleased to state:

- (a) the scope of two space agencies Indian Space Research Organisation (ISRO) and National Aeronautics and Space Administration (NASA) working together; and
- (b) to what extent the Ministry is successful in accelerating its space programme to enable more students to learn more?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY): (a) Indian Space Research Organisation (ISRO) and National Aeronautics and Space Administration (NASA) are pursuing space cooperation in the areas of earth observation, space science and planetary exploration. As a part of this cooperation, India's Chandrayaan-1 mission had carried two scientific instruments from NASA viz., Moon Mineralogy Mapper and Mini Synthetic Aperture Radar. Currently, cooperation is pursued in oceanographic studies using India's OCEANSAT-2 satellite data and in global precipitation measurement using data from Megha-Tropiques satellite.

ISRO and NASA are exploring possibilities of cooperation in joint realisation of a microwave remote sensing satellite and in deep space navigation support for India's Mars Orbiter Mission.

- (b) The Department of Space has been successful in evolving effective space

programme to enable more students to learn more. Major initiatives towards this include:

- (i) Establishing satellite based Tele-education system to provide satellite based connectivity to enable more students in remote/rural areas to access quality education. Tele-education network rapidly expanded over the years across the country starting from 300 classrooms in 2004 to 56,164 class rooms as on date. The Tele-education programme currently caters to various levels from primary to higher and professional education.
- (ii) Department of Space has undertaken advanced scientific missions for lunar exploration, namely Chandrayaan-1 and Chandrayaan-2; inter planetary exploration, namely Mars Orbiter Mission; satellites for solar coronal studies, namely Aditya and for astronomical observations, namely ASTROSAT. These scientific missions provide challenging opportunities for students to learn more and enthuse them to pursue career in space sciences.
- (iii) To encourage students and faculty to participate in the space programme, Department of Space supports design and development of micro/nano/pico satellites at academia by providing technical guidance, critical infrastructure for testing and launch support. As of now, four satellites, *viz.*, ANUSAT (Anna University), STUDSAT (consortium of Engineering colleges), SRMSat (SRM University) and JUGNU (IIT-Kanpur) built by student community have been launched by ISRO. Development of two more student satellites is under progress.
- (iv) Department of Space has also instituted schemes in select Universities to motivate students with fellowships and laboratory augmentation for conducting experiments in space sciences and applications.

Development of International Airports

*428. SHRI BIRENDRA PRASAD BAISHYA: Will the Minister of CIVIL AVIATION be pleased to state:

- (a) whether Government has made assessment about wide prospects on operationalizing Guwahati International Airport as an International aviation hub among the Southeast Asian, East Asian, Central Asian and North Asian countries including Russia;