## BRICS remote sensing satellite constellation

2040. SHRI AMAR SHANKAR SABLE: Will the PRIME MINISTER be pleased to state:

- (a) whether any progress has been made in technical discussions to realise a virtual constellation of remote sensing satellites provided by space agencies, as part of the BRICS Programme;
  - (b) if so, the details thereof; and
  - (c) the purpose for which such a network can be utilized?

THE MINISTER OF STATE IN THE DEPARTMENT OF SPACE (DR. JITENDRA SINGH): (a) Yes Sir.

- (b) The space agencies of BRICS nations have been negotiating a Framework Agreement to formalize the cooperation on building a 'virtual constellation of remote sensing satellites', made up of satellites contributed by BRICS space agencies. Technical aspects with respect to identifying the satellites and the ground stations for the initial virtual constellation were discussed by the Space Agencies.
- (c) The purpose of the proposed virtual constellation is to get access to satellite remote sensing data, which could be used by the individual BRICS nations for various applications including natural resources management and disaster management.

## Setting up dedicated cells in IITs in collaboration with ISRO

 $2041.\ SHRI\ SAMBHAJI\ CHHATRAPATI:$  Will the PRIME MINISTER be pleased to state:

- (a) whether ISRO has taken an initiative to involve IITs in high-end space technology by pursuing them to setup dedicated cells;
  - (b) if so, the details thereof;
- (c) which are the major research areas in which ISRO desires development of highend technology in collaboration with IITs; and
- (d) whether ISRO would fund the identified projects or IITs themselves would arrange the resource?

THE MINISTER OF STATE IN THE DEPARTMENT OF SPACE (DR. JITENDRA SINGH): (a) Yes, Sir.

- (b) ISRO has set up 5 Space Technology Cells (STCs) at premier institutions like Indian Institute of Technologies (IITs) Bombay, Kanpur, Kharagpur and Madras; Indian Institute of Science (IISc), Bengaluru and Joint Research Programme with Savitribai Phule Pune University (SPPU, Pune) to carry out research activities in the areas of space technology and applications.
- (c) ISRO desires development of high end technology in collaboration with IITs in the areas of Space Science, Space Technology and Space Applications.
  - (d) Yes, Sir. ISRO would fund the identified projects.

## Reasons for change of base year of GDP

2042. KUMARI SELJA: SHRI BINOY VISWAM:

Will the Minister of STATISTICS AND PROGRAMME IMPLEMENTATION be pleased to state:

- (a) whether Government is planning to change the base year for Gross Domestic Product (GDP) calculations on constant prices to 2017-18;
  - (b) if so, the rationale behind selecting 2017-18 as the appropriate base year,
- (c) if not, the details of all the base years being considered, including the rationale for each, thereof; and
- (d) the present base year to determine the GDP and the difficulties faced while calculating the GDP from this base year?

THE MINISTER OF STATE OF THE MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION (SHRI RAO INDERJIT SINGH): (a) to (d) As per the United Nations System of National Accounts (UN SNA)-2008, the member countries are required to revise the base year of their macro-economic indicators like Gross Domestic Product (GDP), Gross Value Added (GVA), Index of Industrial Production (IIP), Consumer Price Index (CPI) etc. periodically, to better capture the structural changes in the economy. The exercise of base year revision of National Accounts is guided by the Advisory Committee on National Accounts Statistics (ACNAS) comprising experts from the Central and State Government, Academia, the Reserve Bank of India (RBI) and other domain specific experts. While selecting