WRITTEN ANSWERS TO STARRED QUESTIONS

World ranking of Indian universities

†*47. DR. SANJAY SINH: Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

(a) whether it is a fact that the whole world recognizes the talent of India, Indians and we are playing a leading role in every developed and developing country;

(b) if so, the status of higher education in the country which is young and talented in comparison to the global scenario;

(c) whether Government has any data about the world ranking of our universities compared to the global scenario of higher education; and

(d) whether Government plans to improve the education level of the country and to bring it at par with the international standards, if so, the details thereof?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT (SHRIMATI SMRITI ZUBIN IRANI): (a) Yes Sir. India has produced scientists, engineers, technologists, doctors, teachers and managers who are in great demand all over the World.

(b) The status of higher education as reflected in the All India Survey of Higher Education for the year 2013-14 is placed at Statement-I (*See* below).

(c) The information regarding world ranking of Indian institutes is at Statement-II (*See* below). As can be seen, the performance of the top Indian institutions has been improving every year in the global rankings.

(d) Government is taking several steps for improving the performance of the higher educational institutions in the Country such as – starting the National Institutional Ranking Framework for benchmarking their performance on objective criteria, Global Initiative for Academic Network (GIAN) for promoting global networks, IMPRINT India for focusing research on socially productive domains, SWAYAM for providing e-learning material using the MOOCs pedagogy, National Digital Library for providing quality reading material for all, campus connect programme for providing high speed internet connectivity to the institutions, Uchhatar Avishkar Abhiyan for promoting industry-relevant innovation. Details of some of these programmes are placed at Statement-III.

†Original notice of the question was received in Hindi.

Statement-I

Key results of the all India survery of Higher Education 2013-14

- Number of universities has gone up to 738 from a meager 20 in 1950. The number of colleges has also registed massive increase from just 500 to as many as 40160. As on date there are 46 Central Universities, 341 State Universities, 226 State private universities and 125 deemed to be universities.
- 10 Universities are exclusively for women, 3 in Rajasthan 2 in Tamil Nadu and 1 each in Andhra Pradesh, Haryana, Karnataka, Maharashtra and Uttarakhand.
- Top 7 States in terms of highest number of colleges in India are Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Tamil Nadu and Madhya Pradesh
- Bangalore district tops in terms of number of colleges with 888 colleges followed by Jaipur with 552 colleges. Top 50 districts have about 36% of colleges.
- College density, *i.e.* the number of colleges per lakh eligible population (population in age group 18-23 years) varies from 6 in Bihar to 60 in Puducherry as compared to All India average of 26.
- Total enrolment in higher education has been estimated to be 31.8 million with 17.4. million boys and 14.4 million girls. Girls constitute 45% of the total enrolment.
- Gross Enrolment Ratio (GER) in Higher Education in India is 22.6 which is calculated for 18-23 years of age group. GER for male population is 23.7 and for females it is 21.4. For Scheduled Castes, it is 17.4 and for Schedule Tribes, it is 12% as compared to the national GER of 22.6.
- Scheduled Cast students constitute 13.2% and Scheduled Tribes students 4.5% of the total enrolment. 32.4% students belong to Other Backward Classes, 4.3% students belong to Muslim Minority and 2% from other Minority Community.
- Total number of foreign students enrolled in higher education is 34,774.
- Foreign students come from 160 different countries from all across the globe. Top 10 countries constitute 64% of the total foreign students enrolled.
- Highest share of foreign students come from the neighboring countries of which Nepal is 21% of the total, followed by Bhutan (7%), Afghanistan (7%), Iran (6%) m Malaysia and Iraq constitute (5%) each and Sudan, Rwanda, Sri Lanka, United

States and UAE, constitutes 4.7%, 3%, 2.9%, 2.5% and 2.3% of foreign students respectively.

- Total number of teachers is 1390612. Out of which more than half about 61% are male teachers and 39% are female teachers.

- Pupil Teacher Ratio (PTR) in Universities and Colleges is 23.

Statement-II

World rankin of Indian Institute

Institute	QS Ranking		
	2013	2014	2015
IISc Bangalore		NA	147
IIT Delhi	222	235	179
IIT Bombay	233	222	202
IIT Madras	313	322	254
IIT Kanpur	295	300	271
IIT Kharagpur	346	324	286
IIT Roorkee	401-410	461-470	391
IIT Guwahati	601-650	551-600	451-460
University of Delhi	441-450	421-430	481-490

The World University rankings

Title	2014-15	2015-16
Indian Institute of Science	276-300	251-300
Indian Institute of Technology Bombay	351-400	351-400
Indian Institute of Technology Delhi	NA	401-500
Indian Institute of Technology Kharagpur	NA	401-500
Indian Institute of Technology Madras	NA	401-500
Panjab University	276-300	501-600
Indian Institute of Technology Roorkee	351-400	501-600

Statement-III

Rashtrirya Uchchatar Shiksha Abhiyan (RUSA)

Rashtrirya Uchchatar Shiksha Abhiyan (RUSA) is a Centrally Sponsored Scheme launched in 2013. It aims at providing strategic funding to eligible State Higher Educational Institutions. The Central funding (in the ratio of 65:35 for general category States and 90:10 for special category States) would be norm based and outcome dependant. During the XII Plan period provision of ₹ 22855 crore has been made for RUSA with the Central share of ₹ 16227 crores and ₹ 6628 as the State share.

Components

1. Creation of new universities through upgradation of existing autonomous colleges and conversion of colleges in a cluster.
2. Creation of new model degree colleges and professional colleges
3. Provide infrastructural support to universities and colleges.
4. Provide faculty recruitment support, faculty improvement programmes and leadership development of educational administrators.
5. In order to enhance Skill Development the existing Central Scheme of Polytechnics has been subsumed within RUSA.
6. Support to reforming, restructuring and building capacity of institutions in participating States.

National Digital Library

The Government has envisaged creation of a National Digital Library with the objective to provide access to the knowledge depository in terms of books, e-learning material, encyclopedia, journals, monographs, reviews, research work and other knowledge material for the benefit of learners /professionals/scholars and other interested people to overcome the constraint of time and finances.

The project for development of NDL has been granted to IIT Kharagpur and a sum of ₹ 9.97 crore has been released in March, 2015 as fir rèches ntent. It has been conceptualized to provide access to the students and scholars even from South Asian Countries.

Unnat Bharat Abhiyan

Ministry of Human Resource Development has launched the Unnat Bharat Abhiyan on 11th November, 2014, with a view to bring a transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India. The Unnat Bharat Abhiyan is conceptualized as a movement to connect institutes of higher education with local communities to address the development challenges of rural India through appropriate technological inventions. The details regarding the Unnat Bharat Abhiyan can be accessed at *http://unnat.iitd.ac.in.*

National Institutional Ranking Framework

Global university rankings are often disputed but they can offer some information to Governments, students, funding agencies and individual institutions/universities to understand where they stand against international benchmarks. Taking into consideration the specificities of the Indian Higher Education system, a need has been felt to establish an independent institutional framework to undertaken the tasks relating to institution/ university rankings and carefully identify the attributes to be adopted for rankings of Indian institutions/universities. Accordingly, National Institutional Ranking Framework has been developed in the Ministry and has been launched on 29th September, 2015.

The Ranking Framework is based on a set of metrics around 5 parameters. These are-

1. Teaching, Learning and Resources
2. Research, Professional Practice and Collaborative Performance
3. Graduation outcome
4. Outreach and Inclusivity
5. Perception

These 5 parameters have further been divided into suitable sub-heads. Suitable weights have been assigned to each head and sub-head. Institutions desirous of participating in the ranking exercise will supply the data in a given format. The data will be uploaded by the Institutions which would be publically visible on the website and should be verifiable. This data to remain in an archive form for the next 3 years to enable easy verification where required.

Impacting Research Innovation and Technology (IMPRINT)

Impacting Research Innovation and Technology (IMPRINT) is a Pan-IIT and IISc joint initiative to develop a (a) New Education Policy, and (b) Roadmap for Research to solve major engineering and technology challenges in ten technology domains as engineering challenges or goalposts relevant to India. The programme is based on the suggestion of Hon'ble Prime Minister to link the research done by institutions of national importance with that of the immediate requirements of the society at large.

Following (10) themes constitute the focus of the IMPRINT India initiative. Each of the initiative is coordinated by one IIT.

1. Health care: IIT Kharagpur
2. Computer Science and ICT: IIT Kharagpur
3. Advance Materials: IIT Kanpur
4. Water Resources and River systems: IIT Kanpur
5. Sustainable Urban Design: IIT Roorkee
6. Defense: IIT Madras
7. Manufacturing: IIT Madras
8. Nano-technology Hardware: IIT Bombay
9. Environmental Science and Climate Change: IISc, Bangalore
10. Energy Security: IIT Bombay

IMPRINT India was launched on 5th November 2015 in Rashtrapati Bhavan auditorium by H.E. President of India.

Global Initiative of Academic Networks (GIAN)

Government of India approved a new program titled Global Initiative of Academic Networks (GIAN) in Higher Education aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence.

In order to garner the best international experience into our systems of education, enable interaction of students and faculty with the best academic and industry experts from all over the world and also share their experiences and expertise to motivate people to work on Indian problems, there is a need for a Scheme of International Summer and Winter Term. During the 'Retreat' of IITs on 29th June, 2014 at Goa, it was decided that "A system of Guest Lectures by internationally and nationally renowned experts would be evolved along with a comprehensive Faculty Development Programme not only for new IITs, IIMs, IISERs but also other institutions in the country. Gian will initially include all IITs, IIMs, Central Universities, IISc Bangalore, IISERs, NITs and IIITs and will subsequently cover good State Universities where the spinoff is vast. GIAN is an evolving scheme which will initially include participation of foreign faculty in institutes as Distinguished/Adjunct/Visiting Faculty/Professor of Practice etc. to participate in delivering short or semester long courses. Other activities will be included in due course. GIAN was launched in IIT Gandhinagar and IIT Kharagpur simultaneously on 30th November, 2015

SWAYAM

SWAYAM is an indigenous (Made in India) IT Platform for hosting the Massive Open Online Courses (MOOCs) with a capacity to revolutionise the education system by providing best quality education using the IT system to the students even in the remotest corner of the Country.

SWAYAM would provide:

1. High quality learning experience using multimedia on anytime, anywhere basis.
2. One-stop web location for interactive e-content for all courses from School to University level.
3. State of the art system that allows easy access, monitoring and certification.
4. Peer group interaction and discussion forum to clarify doubts
5. Hybrid model that adds to the quality of class room teaching

Following types of content shall be prepared with the best teachers in the country, using the multi-media techniques covering the following:

1. Curriculum based course contents covering diverse disciplines such as arts, science, commerce, performing arts, social sciences and humanities subjects, engineering, technology, law, medicine, agriculture etc. in higher education domain (all courses would be certification-ready in their detailed offering)
2. School education (9-12 levels) modules and teacher training as well as teaching and learning aids to children of India to help them learn subjects for better preparedness for competitive examinations for admissions to professional degree programmes
3. Skill based courses which cover both post-higher secondary school skills that are presently the domain of polytechnics as well as industrial skills certified by the sector skill councils of various Ministries

4. Advanced curriculum and professional certification under a unified scheme in higher education domain that can be tailored to meet the demands of choice based credit system (CBCS) currently being implemented in India

5. Curricula and courses that can meet the needs of life-long learners of Indian citizens in India and abroad.

National Mission on Education through Information and Communication Technology (NMEICT)

National Mission on Education through Information and Communication Technology (NMEICT) is under implementation since March, 2009 to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions in any time any where mode. It has two major components:

(a) Providing connectivity, along with provision for access devices to institutions and learners;

(b) Content generation.

NMEICT has made significant progress since its inception particularly in providing connectivity, creating e-content, and coming out with a low cost access device, 403 universities and over 22,026 colleges in the country have been connected. As e-content more then over 1000 courses in various disciplines in engineering and science are getting generated in phase-II of NPTEL. E-content for 77 PG subjects are assigned to be generated by UGC and 87 UG subjects assigned to be generated by the CEC in collaboration with its media Centres. Over 125 virtual labs in 9 Engineering and Science disciplines, comprising about 1000 experiments are currently ready for use and available at one common website. "Talk to a Teacher" program is being deployed successfully for synchronous training of over 80,000 participants. 800+ Spoken Tutorials are available on line also dubbed in 22 Indian Languages modules numbering 3500. Various other projects pertaining to pedagogy and teacher empowerment are in progress.

Technical Education Quality Improvement Programme

In 2002-03, the Government of India with the financial assistance from the World Bank launched Technical Education Quality Improvement Programme (TEQIP) as a long-term Programme of 10-12 years, to be implemented in three phases for systemic transformation of the Technical Education System with focus on Degree level Engineering Education. TEQIP-I commenced in March 2003 and ended in March 2009, covering 127 institutions in 13 States. (TEQIP-II) is presently being implemented in 191 competitively selected engineering institutions (127 State Government funded/aided, 38 private unaided institutions and 26 centrally funded technical institutions) with 30 Centres of Excellence established in these project institutions to improve quality of Technical Education through institutional and systemic reforms. The second phase boosts efforts to prepare more post-graduate students to reduce the shortage of qualified faculty, and to produce more R&D in collaboration with industry with following objectives:

- o Strengthening Institutions to produce high quality engineers for better employability,
- o Scaling-up postgraduate education and demand-driven Research and Development and Innovation,
- o Establishing Centers of Excellence for focused applicable research,
- o Training of faculty for effective Teaching, and
- o Enhancing Institutional and System Management effectiveness.

Further, Planning Commission (now NITI Aayog) and Department of Economic Affairs (DEA) has given its in-principal approval for third-phase of TEQIP, however the in-principal approval from World Bank is awaited. TEQIP-III is proposed to be implemented as a "Central Sector Scheme" which would cover 250 competitively selected State Government aided/ funded and centrally funded technical institutions. In TEQIP-III the main focus would be at Low Income States and Special Category States. It has been also proposed to support Affiliating Technical Universities (ATUs) for academic reforms, learning assessment, examination reforms, student placement and improving data management and administration.

Technical Education in Jharkhand

*48. SHRI SANJIV KUMAR : Will the Minister of SKILL DEVELOPMENT AND ENTREPRENEURSHIP be pleased to state:

(a) what thrust is being given by the Central Government to bolster technical education in Jharkhand; and

(b) whether there are any plans to set up ITIs in Jharkhand in general and in Santhal Paraganas in particular, if not, reasons therefor?

THE MINISTER OF STATE OF THE MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP (SHRI RAJIV PRATAP RUDY): (a) and (b) The technical education and Vocational Training is imparted at various level through ITIs, Polytechnics,