GOVERNMENT OF INDIA
MINISTRY OF HUMAN RESOURCE DEVELOPMENT
DEPARTMENT OF HIGHER EDUCATION

LOK SABHA
UNSTARRED QUESTION NO. 1133
TO BE ANSWERED ON 17.12.2018

Professional Institutes

†1133. SHRIMATI JAYSHREEBEN PATEL:

Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

(a) the number of Universities like Indian Institutes of Technology (IIT), Indian Institutes of Management (IIM), Indian Institutes of Information Technology (IIIT), National Institutes of Technology (NIT) established or operational for providing Higher Education in the country, the number of students studying in the said institutes;

(b) the budgetary allocation made and utilised by these institutes during the last three years, institute-wise;

(c) the details of the action plan made with regard to Principals, Professors, Assistant Professors therein;

(d) the details of the programmes chalked out for the training of the professors, the details of policy to promote research and innovation initiatives along with the details of action plan regarding National Training Agency; and

(e) the details of action plan formulated for reforms in Higher Education under Unnat Bharat Abhiyan?

ANSWER
MINISTER OF STATE IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT

(DR. SATYA PAL SINGH)

(a)   to (d): The reply in respect of like Indian Institutes of Technology (IIT), Indian Institutes of Management (IIM), Indian Institutes of Information Technology (IIIT), National Institutes of Technology (NIT) is given at Annexure-I, II, III and IV respectively.

(e): The reply is given in Annexure-V.

S.No.	Institutes	Plan	Non-Plan	Plan	Non- Plan	Plan
		2015-16		2016-17		2017-18
1	IIT Bombay	186.83	322.35	157.50	345.00	651.45
2	IIT Delhi	155.01	242.00	126.21	285.00	649.00
3	IIT Kanpur	197.50	199.85	161.44	258.00	531.00
4	IIT Kharagpur	230.13	280.00	180.33	315.00	973.19
5	IIT Madras	177.50	240.00	159.92	295.00	705.41
6	IIT Guwahati	165.00	117.15	210.00	150.00	663.00
7	IIT Roorkee	110.00	202.50	97.00	241.47	475.00
8	IIT BHU	100.66	100.00	94.40	132.51	266.00
9	IIT Hyderabad	82.80	0.00	215.75	0.00	361.39
10	IIT Bhubneswar	81.14	0.00	164.08	0.00	377.00
11	IIT Gandhinagar	173.73	0.00	196.75	0.00	257.48
12	IIT Jodhpur	146.25	0.00	250.00	0.00	551.27
13	IIT Indore	142.80	0.00	200.00	0.00	386.44
14	IIT Patna	100.31	0.00	159.97	0.00	242.60
15	IIT Ropar	165.66	0.00	245.67	0.00	459.77
16	IIT Mandi	153.68	0.00	196.38	0.00	363.01
17	IIT Tirupati	18.00	0.00	28.99	0.00	51.30
18	IIT Palakkad	25.00	0.00	43.84	0.00	57.15
19	IIT Jammu	10.00	0.00	59.34	0.00	171.60
20	IIT Bhilai	5.00	0.00	16.00	0.00	43.30
21	IIT Dharwad	5.00	0.00	26.18	0.00	45.86

22	IIT Goa	0.00	0.00	26.18	0.00	25.00
23	IIT (ISM) Dhanbad	0.00	0.00	0.00	0.00	240.00
	Total	**2432.00**	**1703.85**	**3015.93**	**2021.98**	**8547.21**

Number of Students: As per the information available with IITs, the total number of students in 23 IITs as on 01.11.2018 is 91448.

IITs follow flexible cadre for faculty and strive to maintain a faculty student ratio of 1:10. As on November, 2018, the combined sanctioned strength of faculty in IITs was 8856 against which, 6043 were in position with a vacancy of 2813. To bridge this gap, IITs have been taking various measures including year-round open advertisements, invitation through search-cum-selection procedures to potential faculty in India and abroad, publication of vacancy advertisements in international journals. In addition, Government has also launched schemes such as Global Initiative for Academic Networks (GIAN) to enable foreign faculty to teach courses in the higher educational institutions, Prime Minister's Research Fellows (PMRF) to attract bright students into Ph.D programmes as well as relaxing the norms for appointment of OCIs, NRIs and foreigners as faculty in IITs.

Focus on Research: To complement the renewed focus of the Government on developing indigenous R&D capabilities, boosting manufacturing and creating a successful startup culture in the country, a number of steps as detailed below have been taken:-

(i) **Research Parks:** Complementing the renewed focus of the Government on developing indigenous R&D capabilities, boosting manufacturing and creating a successful startup culture in the country, five new Research Parks at IIT Delhi, IIT Guwahati, IIT Kanpur, IIT Hyderabad, and IISc Bangalore at a total cost of Rs.75.00 crore each have been approved by the Government. Approval has also been accorded for continuation of two already approved Research Parks at IIT Bombay and IIT Kharagpur at a cost of Rs.100 crore each. The Research Park at IIT Gandhinagar at a total cost of Rs.90 crore is being funded by the Department of Science & Technology. Construction of Research Parks at IIT Kharagpur and IIT Bombay to achieve 100% and 60% completion whereas five new Research Parks to reach 10% completion.

(ii) **IMPRINT:** IMPRINT is a flagship national initiative of the Government, launched on November 5, 2015, which aims at providing solutions to the most relevant

engineering challenges and translating knowledge into viable technology in 10 selected technology domains, viz. health care, energy, sustainable habitat, nano technology hardware, water resources and river systems, advanced materials, Information and communication technology, manufacturing, security and defence, and environmental science and climate change. It is a pan IITs and IISc Joint Initiative seeking to develop a roadmap for research. 142 research projects at a total cost of Rs.318.71 crore (First year cost: 153.25 crore, Second year: 91.41 Crore, Third Year: 74.05 Crore) for 3 years were accepted with joint funding by MHRD and various participating Ministries/Departments are currently under execution under IMPRINT-I. As on April, 2018, MHRD has released Rs. 123.71 cr. and other Ministries have released Rs. 59.62 cr. as their share. An expenditure of Rs. 118.29 cr. has been made by PIs at project level. Out of 142 projects, about 40 with potential of resulting in viable technologies, products and prototypes under IMPRINT-I have been identified, which are proposed to be exhibited in an Industry Outreach Workshop in the first week of February, 2019.

IMPRINT-II has now been launched with a dedicated funding support through a corpus jointly created by MHRD and DST. The scheme is open to all CFTIs and CUs as principal investigator (PIs) while other institutions including private institutions can participate as Co-PI. The average cost of each proposal will be about Rs.2 crore with a duration of 3 years. An outlay of 670 crore consisting of an equal share of Rs.335 cr each from MHRD and DST has been approved.Other Ministries/Departments are welcome to join this Initiative. IMPRINT-II shall be administered by the IMPRINT-SERB vertical chaired by the Secretary, SERB and the National Coordinator of IMPRINT.

There will be two calls of proposals, one each in 2018-19 and 2019-20 with the following approved outlays:

(Rupees in Crore)

Funding	2018-19	2019-20	Total
MHRD	107.00	228.00	335.00
DST	107.00	228.00	335.00
Gr. Total	**214.00**	**456.00**	**670.00**

In the first call of proposals in 2018-19 more than 2100 proposals were received, out of which 122 proposals worth Rs.112.51 cr. (excluding overhead) have been approved by the Apex Committee after various levels of scrutiny. These 122 projects selected under IMPRINT-II are to achieve 10% completion.

(iii)Uchhatar Avishkar Yojana (UAY): UAY was announced in the IIT Council meeting held on October 6, 2015 with a view to promoting innovation of a higher order that directly impacts the needs of the Industry and thereby improves the competitive edge of Indian manufacturing. The project envisages collaboration between the academia and industry – within or outside India. The funding pattern of the projects selected would be 25% by Industry; 25% by participating Department/Ministry; and 50% by MHRD. Currently, 87 projects at a total cost of Rs.265.59 crore with joint funding by MHRD, participating Ministries and Industry are currently under execution. In the second call of proposals, the Apex Committee of UAY in its meeting held on 21.11.2017 has approved 65 projects at a cost of Rs.139.48 Cr for a period of 3 years. 30 projects with potential to be used by the Industry for commercialization are proposed to be showcased in a joint Workshop for IMPRINT and UAY projects in the first week of February, 2019.

(iv) Prime Minister's Research Fellows: In order to attract best talent for undertaking research in the frontier areas of science & technology, the PMRF Scheme was announced in the Budget Speech 2018-19. It seeks to incentivize a maximum of 3,000 most talented students from IITs/IIITs/NITs/IISERs who will be selected as per PMRF guidelines to enroll in the Ph.D program in IITs/IISc by providing attractive rates of fellowship @ Rs.70,000/- per month for the first two years, Rs.75,000/- per month for the 3rd year, and Rs.80,000/- per month in the 4th and 5th years. In addition, a research grant of Rs.2.00 lakh per year for a period of 5 years will be given to each fellow to meet the cost of presenting research papers. The Scheme was appraised by the EFC and approved by the Union Cabinet in its meeting held on 07.02.2018. In the first call, 119 students have been selected under the scheme. Now PMRF guidelines have been revised and the scheme is opened to eligible students from all institutes/universities recognized in India. Further they can now pursue research in IISERs as well along with IITs/IISc. Advertisement for selection in December, 2018 and May, 2019 has been issued.

S.No.	IIMs	(a) The number of students studying at IIMs	(b) Budget Allocation (in Lakh)	(b)Utilized
1	IIM Udaipur	504	(Year) 2015-16 – 9000.00 2016-17 – 14005.00 2017-18 – 10161.92	(Year) 2015-16 – 9000.00 2016-17 – 14005.00 2017-18 – 10161.92
2	IIM Bodh Gaya	105	(Year) 2015-16 – 150 Lakh (5 la per student) 2016-17 – 235 Lakh 2017-18 – 190 Lakh 2018-19 – 165 Lakh	
3	IIM Nagpur	166	(Year) **2015-16 – 14 Crores** **2016-17 – 05 Crores** **2017-18 – 27.51 Crores**	
4	IIM Amritsar	202	(Year) 2015-16 – 1285.00 2016-17 – 962.00 2017-18 – 1690.00	
5	IIM Tiruchirappalli	369	(Year) 2015-16 – 7484.36 2016-17 – 14340.00 2017-18 – 7930.82	(Year) 2015-16 – 7853.13 2016-17 – 14625.26 2017-18 – 6861.40
6	IIM Visakhapatnam	166	(Year) 2015-16 – 1361.99 2016-17 – 1796.92 2017-18 – 2524.80	(Year) 2015-16 – 952.24 2016-17 – 1629.85 2017-18 – 4149.98
7	IIM Ahmedabad	886	(Year) 2015-16 – 0.00 2016-17 – 0.00 2017-18 – 0.00	
8	IIM Bangalore	830	(Year) 2015-16 – 0.00 2016-17 – 0.00 2017-18 – 0.00	
9	IIM Calcutta	912	(Year) 2015-16 – 81.27 2016-17 – 0.00 2017-18 – 74.50	
10	IIM Lucknow	922	(Year) 2015-16 – 81.27 2016-17 – 0.00 2017-18 – 74.50	
11	IIM Indore	969	(Year) 2015-16 – 0.00 2016-17 – 0.00	

			2017-18 – 184.48	
12	IIM Kozhikode	797	(Year) 2015-16 – 0.00 2016-17 – 0.00 2017-18 – 0.00	
13	IIM Shillong	357	(Year) 2015-16 – 3258.58 2016-17 – 4050.00 2017-18 – 6000.00	
14	IIM Rohtak	504	(Year) 2015-16 – 6961.01 2016-17 – 9400.00 2017-18 – 13280.00	
15	IIM Ranchi	502	(Year) 2015-16 – 1176.20 2016-17 – 2700.00 2017-18 – 7300.00	
16	IIM Raipur	422	(Year) 2015-16 – 3040.58 2016-17 – 9660.80 2017-18 – 14500.00	
17	IIM Kashipur	472	(Year) 2015-16 – 8150.00 2016-17 – 9515.00 2017-18 – 9110.28	
18	IIM Sambalpur	152	(Year) 2015-16 – 1000.00 2016-17 – 988.00 2017-18 – 1690.00	
19	IIM Sirmaur	167	(Year) 2015-16 – 1000.00 2016-17 – 1364.00 2017-18 – 1499.00	
20	IIM Jammu	125	2016-17 – 2216.50 2017-18 – 2080.00	

The information in respect of IIITs is as under:-

(a) At present there are five (5) centrally funded IIITs and Nineteen (19) IIITs are set up in PPP mode. Total 11670 number students are studying in these Institutes.

(b) The budgetary allocation made and utilized by these institutes during the last three years are as under:

Sl. No.	Name of the Scheme	Budget Allocation during last three (3) years.	Budget Utilized during last three (3) years.
1.	Support to Indian Institute(s) of Information Technology (Allahabad, Gwalior, Jabalpur and Kanchipuram)	464.75 Cr.	396.13 Cr.
2.	Setting up of Indian Institutes of Information Technology in PPP mode	239.45 Cr.	238.25Cr.
3.	Setting up of IIIT in Andhra Pradesh	43.10 Cr.	20.10 Cr.

(c) IIITs follows flexible structure for appointment of faculty. According to it, the faculty student ratio is 1:12. The current sanctioned strength of faculty in IIITs is 646.

I. Professors of the institute are eligible for undergoing three week Leadership Academic Programme (LEAP) programme of the Government of India to acquire leadership and managerial skills to cope up with complexity and challenges of Government in HEI's, financial and general administration. Faculty of the Institutes has also participated in the training programme like FDP, IIT Chennai, Industrial Workshop, Anna University-Chennai etc.

II. The institute provides financial assistance to its faculties to participate in National/International Conference which enables them to interact with other leading institutions.

III. The Research council as well as Innovation Council has been constituted in the Institute to encourage and co-ordinate/supports the research activities including filing of parents etc.

IV. MaDeIT Innovation Foundation, a design driven Technology Business Incubator, has been promoted with the support from a grant from the Department of Science and Technology (NSTEDB Division), Government of India. MaDeIT encourages startup in

the manufacturing and healthcare sectors with the technical capability of the Institute and Students. This eco system helps the faculty to interact with the startups.

V. The institute also has Design Innovation Centre to inculcate, facilitate and spread the culture of innovation among the faculties and students to take up innovation project as a part of their programme.

VI. The Institute are also eligible to impart training programs of National training Agency like NIMAT-DST sponsored Technology Development Entrepreneurship program on IoT Cloud solutions, Skill Development in Electronic System Design and Manufacturing Sector (IoT specific), Apprenticeship program on IoT Cloud domain etc.

The information concerning NITs / IIEST is as under:-

(a) The list of 31 NITs & IIEST, Shibpur functioning in the country as Institutes of national importance is attached. As per available records, approximately 1,00,000 students are studying in the above mentioned Institutes.

(b) A statement indicating the Institute-wise details of releases made to above Institutes is attached.

(c) The Recruitment Rules (RRs) for faculty of NITs and IIEST, Shibpur have recently been amended to address the issues concerning stagnation, promotion and to accelerate the recruitment process. As a result, above Institutes could be able to initiate steps to fill up approximately 2900 positions of faculty on regular basis. The Institutes are at various stages of recruitment.

S. No.	Institutes	Located at	State / UT
1	National Institute of Technology, Agartala	Agartala	Tripura
2	Motilal Nehru National Institute of Technology, Allahabad	Allahabad	Uttar Pradesh
3	Maulana Azad National Institute of Technology, Bhopal	Bhopal	Madhya Pradesh
4	National Institute of Technology, Calicut	Calicut	Kerala
5	National Institute of Technology, Durgapur	Durgapur	West Bengal
6	National Institute of Technology, Hamirpur	Hamirpur	Himachal Pradesh
7	Malaviya National Institute of Technology, Jaipur	Jaipur	Rajasthan
8	Dr. B R Ambedkar National Institute of Technology, Jalandhar	Jalandhar	Punjab
9	National Institute of Technology, Jamshedpur	Jamshedpur	Jharkhand
10	National Institute of Technology, Kurukshetra	Kurukshetra	Haryana
11	Visvesvaraya National Institute of Technology, Nagpur	Nagpur	Maharashtra
12	National Institute of Technology, Patna	Patna	Bihar
13	National Institute of Technology, Raipur	Raipur	Chhattisgarh
14	National Institute of Technology, Rourkela	Rourkela	Odisha
15	National Institute of Technology, Silchar	Silchar	Assam
16	National Institute of Technology, Srinagar	Srinagar	Jammu & Kashmir
17	Sardar Vallabhbhai National Institute of Technology, Surat	Surat	Gujarat
18	National Institute of Technology Karnataka, Surathkal	Karnataka	Karnataka

19	National Institute of Technology, Tiruchirappalli	Tiruchirappalli	Tamil Nadu
20	National Institute of Technology, Warangal	Warangal	Telangana
21	National Institute of Technology, Arunachal Pradesh	Yupia	Andhra Pradesh
22	National Institute of Technology, Delhi	Narela	Delhi
23	National Institute of Technology, Goa	Farmagudi	Goa
24	National Institute of Technology, Manipur	Imphal	Manipur
25	National Institute of Technology, Meghalaya	Shillong	Meghalaya
26	National Institute of Technology, Mizoram	Aizawl	Mizoram
27	National Institute of Technology, Nagaland	Dimapur	Nagaland
28	National Institute of Technology, Puducherry	Karaikal	Puducherry
29	National Institute of Technology, Sikkim	Ravangla	Sikkim
30	National Institute of Technology, Uttarakhand	Srinagar	Uttarakhand
31	National Institute of Technology, Andhra Pradesh	Tadepalligudem	Andhra Pradesh
32	Indian Institute of Engineering Science and Technology, Shibpur	Shibpur	West Bengal

ACTUAL AMOUNT RELEASED TO NATIONAL INSTITUTES OF TECHNOLOGY (NITs) and INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY (IIEST) DURING FROM FINANCIAL YEAR 2015-2016 TO 2018– 2019

(Rs. in lakhs)

S.No	NITs	2015-16	2016-17	2017-18	2018-19*
1	**Agartala**	8799.60	11820.00	10916.00	4064.00
2	**Allahabad**	9300.00	10280.00	12684.00	8111.00
3	**Bhopal**	11100.00	9250.00	13267.00	9517.00
4	**Calicut**	3000.00	12130.00	13340.00	12882.00
5	**Durgapur**	11300.00	10330.00	16934.00	10303.00
6	**Hamirpur**	5200.00	5830.00	9352.00	12309.00
7	**Jaipur**	10600.00	13530.00	17662.00	12300.00
8	**Jalandhar**	2998.00	4600.00	12724.00	6575.00
9	**Jamshedpur**	9500.00	9450.00	14285.00	6738.00
10	**Kurukshetra**	12200.00	10990.00	15229.00	9401.00
11	**Nagpur**	12396.00	14350.00	17813.00	11188.00
12	**Patna**	10400.00	10180.00	12189.00	7499.00
13	**Raipur**	6100.00	4620.00	6443.00	6739.00
14	**Rourkela**	14698.00	18821.43	23840.00	15343.00

15	Silchar	11100.00	12865.60	12015.00	4227.00
16	Srinagar	9400.00	8900.00	13090.00	13109.00
17	Surat	11400.00	10900.00	6924.00	0.00
18	Surathkal	9900.00	14240.00	22070.00	15255.00
19	Truchirapalli	12304.00	12840.00	14588.00	12305.00
20	Warangal	17700.00	16260.00	12593.00	12767.00
	Total (A)	199395.60	222187.03	277958.00	190632.00

S.No	New NITs	2015-16	2016-17	2017-18	2018-19
21	Goa	1700.00	2300.00	8600.00	1457.00
22	Puducherry	4504.00	4000.00	3900.00	3392.00
23	Delhi	1500.00	8270.00	3400.00	3934.00
24	Uttarakhand	2300.00	699.98	3500.00	3909.00
25	Mizoram	6594.65	5500.00	7316.00	831.00
26	Meghalaya	4803.75	11970.00	7000.00	2278.00
27	Manipur	7200.00	4400.00	4400.00	1251.00
28	Nagaland	2800.00	8681.00	6200.00	725.00
29	Arunachal Pradesh	12000.00	5171.00	3000.00	1208.00
30	Sikkim	967.00	1200.00	1900.00	1817.00
	Total(B)	44369.40	52191.98	49216.00	20802.00
	Grant Total (A+B)	243765.00	274379.01	327174.00	211434.00

31	NIT Andhra Pradesh		1000.00	5000.00	5425.00
32	IIEST Shibpur	6500.00	9882.00	13000.00	6275.00

	Total (Old + New NITs+IIEST)	250265.00	284261.01	340174.00	223134.00

'Unnat Bharat Abhiyan'

The objective of the scheme Unnat Bharat Abhiyanis to engage reputed Higher Educational Institutions (central and state; public and private) to understand and work in rural areas. With the intention of enriching rural India, the Higher Education Institutes are expected to adopt at least 5 villages and customize the available technologies or develop new technologies as per the local needs and also to improve the implementation of existing government programs. As if now 1832 Institutions are part of UBA and 9160 villages are adopted by the selected Institutions. It may be mentioned that program focuses on more of enrichment of rural India through technological interventions. Under the scheme Subject Expert Group have been formulated which comprises of different experts from different fields. The role of these SEG's is to devise and suggest possible solutions for improvement in strategy adopted under different subjects like rural education, Energy, water conservation etc. which will be valuable for improvement in higher education.

The faculty and the students, through close interaction with rural India, get sensitized with the ground realities to design the curriculum and research activities.