GOVERNMENT OF INDIA MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY

RAJYA SABHA UNSTARRED QUESTION NO. 400

TO BE ANSWERED ON: 09.12.2022

PROMOTION OF ARTIFICIAL INTELLIGENCE

400 SHRLB, PARTHASARADHI REDDY:

Will the Minister of Electronics and Information Technology be pleased to state:

- (a) whether Government is aware that the future workforce equipped with the knowledge in the area of Artificial Intelligence is imperative for growth of the country;
- (b) if so, the details of the steps taken by Government to impart the knowledge of Artificial Intelligence to the youth of the country;
- (c) the details of the funds allocated, released and utilized vide various schemes for promoting Artificial Intelligence during the last three years, year-wise, State-wise; and
- (d) the details of the beneficiaries under the said schemes during the last three years, Statewise and year-wise, and district-wise for Telangana?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY (SHRI RAJEEV CHANDRASEKHAR)

- (a) and (b): Yes, Sir. The Government considers Artificial Intelligence (AI) tobe kinetic enabler for the growth of our digital economy, investments and jobs. The various initiatives taken by the Government to expand AI ecosystem and connect the AI opportunities to the youth of the country are as under:
- Government has initiated 'Visvesvaraya PhD Scheme' with the objective to enhance the number of PhDs in Electronics System Design & Manufacturing (ESDM) and IT/IT Enabled Services (IT/ITES) sectors including AI and Emerging Technologies.
- MeitY has initiated 'FutureSkills PRIME'a programme for Re-skilling/Up-skilling of IT Manpower for Employability in 10 new/emerging technologies including Artificial Intelligence. Under this programme, so far, 21,873 candidates have completed their AI course. In addition, a total of 925 Government Officials and 78 Trainers have been trained in Artificial Intelligence.
- With the objective to empower the youth to become AI ready as well as increase the skilled AI youth, Government along with Industry partner has initiated Responsible AI for Youth' programme to promote AI awareness among Government school children, who had limited or no access to the latest technologies and resources. Around 52,628 students across 35 States and UTs have been trained with necessary AI skill sets.
- Government has also launched National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS). Under this Mission, Department of Science & Technology (DST) has created a Technology Innovation Hub (TIH) on Artificial Intelligence and Machine Learning at the Indian Institute of Technology (IIT) Kharagpur, which aims to provide the state of the art training and capacity building for the creation of next-generation scientists, engineers, technicians, and technocrats in the field of Artificial Intelligence.
- (c): The initiatives taken by Government for expanding AI ecosystem are for the entire country. Further, the above-mentioned initiatives are implemented by the Central Ministries/Departments through their implementing agencies, and the funds are not allocated to any States/UTs. The Responsible AI for Youth programme is being implemented in

association with Industry partner and there is no funding support from the Government. The details of fund allocated and released under these initiatives is as under:

Name of I	Programm	e/Scheme	Funds Allocated	Funds released in FY 2019-20	Funds released in FY 2020-21
Future	Skills	PRIME	Rs. 436.87 Cr	Rs. 43.36 Cr	Rs. 80 Cr
Programm	ie				
Visvesvaraya PhD Scheme			Rs. 466 Cr	Rs. 80 Cr	Rs. 20 Cr

- (d): Aforesaid initiatives are supported at the pan-India level covering all States and UTs and these are not State specific. The details of the beneficiaries under the following programmes are as under:
- Under NMICPS, 25 TIH in various technology verticals are set up across the country. The list of these TIHsalong with details of Telangana district wise hubs is annexed at Annexure 'A'.
- The State-wise and Telangana district-wise details of participation in the Responsible AI for Youth is annexed at Annexure 'B'.
- The State-wise allocation of seats under Visvesvaraya PhD Scheme is annexed at Annexure 'C'.

List of Technology Innovation Hubs (TIH) under NMICPS:

SN	TIH Name	TIH Name Location		Domain Area
1	IIT Tirupati Nav Avishakar Foundation	Indian Institute of Technology Tirupati	Andhra Pradesh	Positioning and Precision Technologies
2	IIT Guwahati Technology Innovation and Development Foundation	Indian Institute of Technology Guwahati	Assam	Technologies for Under water exploration
3	IIT Patna Vishlesan I- Hub Foundation	Indian Institute of Technology, Patna	Bihar	Speech, Video & Text Analytics
4	IIT BHILAI INNOVATION AND TECHNOLOGY FOUNDATION	Indian Institute of Technology Bhilai	Chhattisgarh	Technologies for financial sector (Fintech)
5	I-Hub Foundation for Cobotics (IHFC)	Indian Institute of Technology Delhi	Delhi	Cobotics
6	IHub Anubhuti-IIITD Foundation	Indraprastha Institute of Information Technology, New Delhi	Delhi	Cognitive Computing & Social Censing
7	IIT Mandi IHub and HCI Foundation	Indian Institute of Technology, Mandi	Himachal Pradesh	Human Computer Interaction
8	Technology Innovation In Exploration & Mining Foundation	Indian Institute of Technology, Dhanbad	Jharkhand	Technologies for Mining
9	i-Hub for Autonomous Intelligence and Robotics Foundation (ARTPARK) A joint initiative of IISc and Aifoundry	Indian Institute of Science, Bengaluru	Karnataka	Robotics & Autonomous Systems
10	IIITB COMET Foundation	International Institute of Information Technology Bengaluru	Karnataka	Advanced Communication System
11	IIT Palakkad Technology Ihub Foundation	Indian Institute of Technology Palakkad	Kerala	Intelligent Collaborative Systems
12	IITI Drishti CPS Foundation	Indian Institute of Technology Indore	Madhya Pradesh	System Simulation, Modelling & Visualization
13	TIH FOUNDATION FOR IOT AND IOE	Indian Institute of Technology Bombay	Maharashtra	Technologies for Internet of Things & Internet of Everything
14	As per TIH nodel officer "Registration is in process"	Indian Institute of Science Education and Research Pune	Maharashtra	Quantum Technologies
15	IIT Ropar – Technology and Innovation Foundation	Indian Institute of Technology Ropar	Punjab	Technologies for Agriculture & Water
16	IHUB Drishti Foundation	Indian Institute of Technology Jodhpur	Rajasthan	Computer Vision, Augmented and virtual reality
17	BITS BioCyTiH Foundation	Birla Institute of Technology & Science Pilani	Rajasthan	Bio-CPS

SN	TIH Name	Location	State	Domain Area
18	IIT Madras Pravartak Technologies Foundation	Indian Institute of Technology Madras	Tamil Nadu	Sensors, Networking, Actuator & controls
19	IIIT-H Data I-Hub	International Institute of Information Technology, Hyderabad	Telangana	Data Banks & Data Services, Data Analysis
20	NMICPS Technology Innovation Hub On Autonomous Navigation Foundation	Indian Institute of Technology Hyderabad	Telangana	Autonomous Navigation and Data Acquisition systems(UAV, RoVetc)
21	IHUB NTIHAC FOUNDATION - c3ihub	Indian Institute of Technology Kanpur	Uttar Pradesh	Cyber Security and Cyber Security for Physical Infrastructure
22	I-Dapt-Hub Foundation	Indian Institute of Technology (Banaras Hindu University)	Uttar Pradesh	Data Analytics & Predictive Technologies
23	Divyasampark Ihub Roorkee for Devices Materials and Technology Foundation	Indian Institute of Technology Roorkee	Uttarakhand	Device Technology and Materials
24	AI4ICPS	Indian Institute of Technology (IIT) Kharagpur	West Bengal	Artificial Intelligence and Machine Learning
25	Institute of Data Engineering, Analytics and Science Foundation(IDEAS)	Indian Statistical Institute Kolkata	West Bengal	Data Science, Big Data Analytics and Data curation etc.

List of Telanagana district wise hubs are as below:

S.No.	Technology	State	Name of the Technological	Year
	Vertical		Innovation Hub	
1.	Data Banks & Data Services,	Telangana (District:	IIIT-H Data I-Hub Foundation at International Institute of	2019-20
	Data Analysis	Rangareddy)	Information Technology, Hyderabad	
2.	Autonomous Navigation and Data Acquisition systems (UAV, RoV etc)	Telangana (District: Sangareddy)	NMICPS Technology Innovation Hub on Autonomous Navigation Foundation (TiHAN) at Indian Institute of Technology, Hyderabad	2019-20

The State-wise details of participation in Responsible AI for Youth programme:

State	Participants	State	Participants	State	Participants
Andaman and Nicobar Islands	30	Himachal Pradesh	299	Odisha	2323
Andhra Pradesh	3998	Jammu and Kashmir	213	Puducherry	280
Arunachal Pradesh	434	Jharkhand	247	Punjab	2310
Assam	614	Karnataka	1761	Rajasthan	2993
Bihar	773	Kerala	2987	Sikkim	152
Chandigarh	386	Ladakh	106	Tamil Nadu	6025
Chhattisgarh	1264	Madhya Pradesh	4427	Telangana	717
Dadra and Nagar Haveli and Daman and Diu	135	Maharashtra	834	Tripura	135
Delhi	3233	Manipur	122	Uttar Pradesh	2379
Goa	236	Meghalaya	136	Uttarakhand	1504
Gujarat	1030	Mizoram	279	West Bengal	582
Haryana	2365	Nagaland	519		

Telangana district-wise details of participation in Responsible AI for Youth Programme:

District	Registration	District	Registration	District	Registration
Adilabad	2	Jayashankar	1 €	Medchal, Hyderabad	3
Alampur	1	Kagaznagar	4	Nalgonda	1
Bhupalpally	1	Kamareddy	1	Nizamabad	1
Chegunta	1	Kanchanbagh, Hyderabad	1	Null	165
Darmasagar	1	Karimnagar	2	Palwancha	1
Dornakal	1	Kazipet	7	Ranga Reddy	8
Durga Nagarmailardevpally	2	Khammam	3	Sangareddy	3
Gadwal	1	Kothaguudem	1	Secunderabad	10
Golconda	1	Langer House, Hyderabad	2	Shamshabad	1
Hanamakonda	6	Mahabubnagar	1	Sirpurkagaznagar	1
Hi Tech City	1	Maldakal	1	Tirumalanagar	1
Hyd-Suncity	2	Mancherial	2	Wanaparthy	2
Hyderabad	461	Manuguru	1	Warangal	70
Jagtial	2	Medak	2	Warangal Urban	6

 $\underline{\textbf{Annexure `C'}}$ Statewise beneficiaries of the Visvesvara ya PhD scheme in Phase-1

Sr.No	State/Union Territory	Full-time PhD Candidates	Part-time PhD Candidates	Total
1.	Andhra Pradesh	10	20	30
2.	Arunachal Pradesh	11	8	19
3.	Assam	49	19	68
4.	Bihar	54	6	60
5.	Chandigarh	11	5	16
6.	Delhi	139	68	207
7.	Goa	13	2	15
8.	Gujarat	25	14	39
9.	Haryana	8	0	08
10.	Himachal Pradesh	27	1	28
11.	Jammu and Kashmir	5	1	06
12.	Jharkhand	3	2	05
13.	Karnataka	97	0	97
14.	Kerala	9	0	09
15.	Madhya Pradesh	43	1	44
16.	Maharashtra	90	38	128
17.	Meghalaya	12	1	13
18.	Mizoram	0	1	01
19.	Odisha	11	0	11
20.	Puducherry	8	2	10
21.	Punjab	34	8	42
22.	Rajasthan	37	21	58
23.	Sikkim	5	0	05
24.	Tamil Nadu	106	43	149
25.	Telangana	80	32	112
26.	Tripura	3	4	07
27.	Uttar Pradesh	83	16	99
28.	Uttarakhand	21	2	23
29.	West Bengal	96	18	114
	Total	1090	333	1423

State wise seat allocations for the Visvesvaraya PhD scheme in Phase-2

S.No.	State/Union Territory	Seats allocated under Full-time category
1	Andhra Pradesh	5
2	Arunachal Pradesh	6
3	Assam	10
4	Bihar	6
5	Chandigarh	5
6	Chhattisgarh	6
7	Delhi	11
8	Goa	5
9	Gujarat	7
10	Haryana	8
11	Jammu and Kashmir	2
12	Jharkhand	3
13	Karnataka	19
14	Kerala	9
15	Madhya Pradesh	8
16	Maharashtra	17
17	Meghalaya	3
18	Mizoram	3
19	Puducherry	6
20	Punjab	9
21	Rajasthan	6
22	Tamil Nadu	16
23	Telangana	5
24	Uttar Pradesh	11
25	Uttarakhand	5
26	West Bengal	9
	Total	200
