

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 556
TO BE ANSWERED ON 01.12.2021

PhD SCHEME

556 COL. RAJYAVARDHAN RATHORE:

Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) whether the Government proposes to extend the duration of the Visvesvayara PhD Scheme started in 2014 beyond 2023;
- (b) the State-wise details of distribution of funds allocated and institutions associated with the scheme;
- (c) whether the Institutions of National Importance have been covered under the scheme, specially the ones which have been nominated in the last two years and if not, the reasons therefor;
- (d) the details of number of fellows enrolled in the above said scheme as per their area of research;
- (e) whether the Government has granted an extension to the graduating fellows in light of the Covid-19 pandemic in 2020 and if so, the details thereof; and
- (f) whether the Government has taken action towards updating the structure of the above said scheme as per research objectives laid out in the National Education Policy 2020; and if so, the details thereof ?

ANSWER

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

- (a) There is no such proposal. Phase-II of Visvesvaraya PhD Scheme has been launched on September 17th, 2021.
- (b) The details of distribution of funds allocated and institutions associated with the scheme are at Annexure A.
- (c) As per the guidelines of the scheme, all the institutions of national importance are eligible to receive support under the scheme.
- (d) The details of number of fellows enrolled in the Visvesvaraya PhD Scheme as per their area of research are at Annexure B.
- (e) Visvesvaraya PhD scheme is an institutional scheme and is being implemented as per the rules of the participating institutions. The fellowship support under the scheme is provided to the research fellows through participating institutions upto 5 years or their PhD

completion, whichever is earlier. No fellowship extension was granted to the graduating fellows in light of the Covid-19 pandemic in 2020.

- (f) Visvesvaraya PhD scheme was initiated with the objective of enhancing the number of PhDs in Electronics System Design and Manufacturing (ESDM) and IT / IT enabled Services (ITES) sectors. The research areas such as Machine Learning and Artificial Intelligence mentioned under the National Education Policy 2020 are covered in Phase II of Visvesvaraya PhD Scheme.

Annexure A

Visvesvaraya Phd Scheme for Electronics & IT

| State wise details of distribution of funds allocated and institutions associated with the scheme | | | |
|---|-----------------------|---|-----------------------|
| S.N. | Name of the States/UT | Name of the Institutions | Amount (in Rs. Lakhs) |
| 1 | Andhra Pradesh | Andhra University | 248.48 |
| 2 | Arunachal Pradesh | NIT Arunachal Pradesh, Yupia | 139.85 |
| | | NERIST Nirjuli | 129.37 |
| 3 | Assam | Gauhati University | 252.28 |
| | | IIT Guwahati | 72.00 |
| | | IIT Guwahati | 340.75 |
| | | NIT Silchar | 201.79 |
| | | Tezpur University | 257.63 |
| 4 | Bihar | IIT Patna | 793.80 |
| | | NIT Patna | 368.23 |
| 5 | Chandigarh | Punjab Engg College University of Technology, Chandigarh | 170.52 |
| | | University Institute of Engineering and Technology, Panjab University | 158.71 |
| 6 | Delhi | Guru Gobind Singh Indraprastha University, Delhi | 233.73 |
| | | IIT Delhi | 1697.69 |
| | | Indraprastha Institute of Information Technology, Delhi | 803.54 |
| | | Jamia Millia Islamia | 433.72 |
| | | JNU Delhi | 54.35 |
| | | South Asian University | 51.91 |
| 7 | Goa | Goa University | 203.38 |
| | | NIT Goa | 104.60 |
| 8 | Gujarat | IIT Gandhinagar | 267.75 |
| | | Nirma University | 135.09 |
| | | Sardar Vallabhbhai National Institute of Technology, Surat | 145.12 |
| 9 | Haryana | NIT Kurukshetra | 177.36 |
| 10 | Himachal Pradesh | IIT Mandi | 306.09 |
| | | NIT Hamirpur | 205.23 |
| 11 | Jammu & Kashmir | University of Kashmir | 88.81 |
| | | NIT Srinagar | 53.73 |
| 12 | Jharkhand | IIT-Indian School of Mines, Dhanbad | 42.46 |
| 13 | Karnataka | IISc Bangalore | 1446.86 |
| | | IIIT, Bangalore | 449.73 |
| | | NIT Karnataka, Surathkal | 621.62 |
| 14 | Kerala | Mahatma Gandhi University, Kerala | 53.69 |
| | | NIT Calicut | 127.62 |
| 15 | Madhya Pradesh | Devi Ahilya Vishwavidyalaya | 61.98 |
| | | IIT Indore | 673.20 |

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| | | Indian Institute of Information Technology and Management, Gwalior | 1.63 |
| | | Indian Institute of Information Technology, Design and Manufacturing, Jabalpur | 160.72 |
| | | Maulana Azad National Institute of Technology, Bhopal | 127.26 |
| 16 | Maharashtra | Bharati Vidyapeeth University | 55.07 |
| | | Dr. Babasaheb Ambedkar Marathwada University | 39.89 |
| | | IIT Bombay | 745.81 |
| | | Rashtrasant Tukadoji Maharaj Nagpur University | 3.25 |
| | | Sant Gadge Baba Amravati University, Amravati | 3.25 |
| | | Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded | 93.66 |
| | | Shri Ramdeobaba College of Engineering & Management, Nagpur | 16.85 |
| | | SNDT Women's University | 51.47 |
| | | Solapur University | 98.96 |
| | | VNIT Nagpur | 924.53 |
| 17 | Meghalaya | NE Hill University, Shillong | 102.51 |
| | | NIT Meghalaya | 113.30 |
| 18 | Odisha | IIT Bhubaneswar | 22.82 |
| | | NIT Rourkela | 264.37 |
| 19 | Puducherry | Pondicherry University | 75.09 |
| | | NIT Puducherry | 53.04 |
| 20 | Punjab | Dr. B. R. Ambedkar National Institute of Technology, Jalandhar | 24.12 |
| | | Guru Nanak Dev University, Amritsar | 27.26 |
| | | IIT Ropar | 169.74 |
| | | Punjabi University | 111.76 |
| | | Thapar University | 336.02 |
| 21 | Rajasthan | Central University of Rajasthan | 15.77 |
| | | IIT Jodhpur | 412.16 |
| | | MNIT Jaipur | 491.57 |
| 22 | Sikkim | NIT Sikkim | 112.20 |
| 23 | Tamil Nadu | Amrita University | 376.21 |
| | | Anna University | 545.06 |
| | | Annamalai University | 118.65 |
| | | IIT Madras | 141.51 |
| | | Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram | 45.75 |
| | | Karunya University, Coimbatore | 63.33 |
| | | NIT Tiruchirappalli | 889.61 |
| | | PSG College of Technology, Coimbatore | 31.60 |
| | | SRM University | 73.70 |
| | | Vellore Institute of Technology, Tamil Nadu | 86.15 |
| 24 | Telangana | IIT Hyderabad | 1199.17 |
| | | International Institute of Information Technology Hyderabad | 382.19 |

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| | | NIT Warangal | 145.76 |
| | | University College of Engineering, Osmania University | 153.48 |
| | | University of Hyderabad | 213.33 |
| 25 | Tripura | NIT Agartala | 60.56 |
| 26 | Uttar Pradesh | Aligarh Muslim University | 233.61 |
| | | IIT BHU | 145.87 |
| | | IIT Kanpur | 1018.60 |
| | | Indian Institute of Information Technology, Allahabad | 23.87 |
| | | MLN-NIT Allahabad | 505.03 |
| 27 | Uttarakhand | IIT Roorkee | 480.04 |
| 28 | West Bengal | IEST Shibpur | 683.85 |
| | | IIT Kharagpur | 20.29 |
| | | ISI Kolkata | 189.87 |
| | | Jadavpur University Kolkata | 594.44 |
| | | NIT Durgapur | 896.60 |
| | | University of Calcutta | 208.53 |

Annexure B

Visvesvaraya PhD Scheme for Electronics & IT

| S/No. | Research Areas | No. of fellows |
|-------|------------------------------------|----------------|
| 1 | 3D Printing | 1 |
| 2 | 5G Communication | 29 |
| 3 | Algorithms | 1 |
| 4 | Analog Electronics | 22 |
| 5 | Artificial Intelligence | 94 |
| 6 | Big Data | 67 |
| 7 | Biotechnology/ Medical Electronics | 74 |
| 8 | Blockchain/ Distributed Computing | 6 |
| 9 | Cloud Computing | 57 |
| 10 | Compiler Design | 4 |
| 11 | Compressed Sensing | 1 |
| 12 | Computer Architecture | 12 |
| 13 | Computer Networking | 17 |
| 14 | Control Systems/ Robotics | 21 |
| 15 | Cryptography | 34 |
| 16 | Cyber Security | 50 |
| 17 | e-Governance | 2 |
| 18 | Electrical Machines and Drives | 4 |
| 19 | Electromagnetic | 2 |
| 20 | Embedded System | 4 |
| 21 | Evolutionary Computation | 1 |
| 22 | Fluid and thermal | 1 |
| 23 | Geospatial System | 4 |
| 24 | Green and Sustainable ICT | 2 |

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| 25 | Haptics | 1 |
| 26 | Hardware security | 2 |
| 27 | HCI and ICTD | 2 |
| 28 | Image Processing/ DSP/ Pattern Recognition | 134 |
| 29 | Internet of Things/ Wireless Sensor Network | 76 |
| 30 | IT and Agriculture | 1 |
| 31 | Large Area Electronics | 7 |
| 32 | Machine Learning | 67 |
| 33 | Materials | 45 |
| 34 | Microwave Devices | 10 |
| 35 | Mobile Communication | 17 |
| 36 | Nanoelectronics | 36 |
| 37 | Natural Language Processing | 31 |
| 38 | Optoelectronics | 83 |
| 39 | Packaging | 27 |
| 40 | Power Electronics | 64 |
| 41 | Quantum Computing/ Communication | 12 |
| 42 | Renewable Energy source | 17 |
| 43 | RF/ Wireless Communications | 149 |
| 44 | Robust control of motors | 1 |
| 45 | Scientific Evaluation | 2 |
| 46 | Software Engineering | 5 |
| 47 | Synthesis and Sensor Technology | 1 |
| 48 | Vehicular electronics | 6 |
| 49 | VLSI Design | 93 |