### GOVERNMENT OF INDIA MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP

## LOK SABHA UNSTARRED QUESTION NO. 2222

ANSWERED ON 09.12.2024

#### AI-BASED SKILL TRAINING PROGRAMMES

#### 2222. DR. BHOLA SINGH:

Will the Minister of SKILL DEVELOPMENT AND ENTREPRENEURSHIP be pleased to state:

- (a) the steps taken by the Government to integrate Al-based skill training programmes into the Skill India Mission;
- (b) the number of Al-related courses currently being offered under Government-run skill training programmes;
- (c) the details of number of beneficiaries enrolled in such courses, categorized by region and gender;
- (d) whether the Government has collaborated with private technology firms to improve Al training infrastructure and if so, the details thereof; and
- (e) the future plans of the Government for expanding Al-based training to align with India's workforce requirements?

#### **ANSWER**

THE MINISTER OF STATE (INDEPENDENT CHARGE) IN THE MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP

(SHRI JAYANT CHAUDHARY)

(a) to (c): Under the Government of India's Skill India Mission (SIM), the Ministry of Skill Development and Entrepreneurship (MSDE) delivers skill, re-skill and up-skill training through an extensive network of skill development centres / institutes etc. under various schemes, viz. Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Jan Sikhshan Sansthan (JSS), National Apprenticeship Promotion Scheme (NAPS) and Craftsman Training Scheme (CTS) through Industrial Training Institutes (ITIs).

Following steps have been taken to integrate AI- based skill training programs under SIM:

- i. New training programs have been introduced under PMKVY 4.0 to enhance digital and technical skills among youth. PMKVY 4.0 has focus on new age skills like Industry 4.0, Web 3.0, Al/ML etc.
- ii. State-wise and gender-wise details of the candidates enrolled under nine (09) Alrelated courses under PMKVY 4.0 up to 31<sup>st</sup> October 2024 is given at **Annexure-I**.

- iii. Under NAPS, there are 61 private establishments which are providing apprenticeship related to Al-related courses. State-wise and gender-wise details of apprentices engaged under seven (07) Al-related trades under NAPS are given at **Annexure-II**.
- iv. Directorate General of Training (DGT) under MSDE has introduced one course 'Artificial Intelligence Programming Assistant (AIPA)' to impart Al-based skill training through Industrial Training Institutes (ITIs) and National Skill Training Institutes (NSTIs). The AIPA course has been implemented under CTS at selected 19 NSTIs from the Academic Session 2024-25. Gender-wise details of the 442 trainees admitted at 19 NSTIs is given at Annexure-III.
- v. A micro-credential course "Introduction to Artificial Intelligence (AI)" of 7.5-hour has been developed for all CTS trainees in Industrial Training Institutes (ITIs), in collaboration with industry and academic experts.
- vi. MSDE has launched Skill India Digital Hub (SIDH) platform, a comprehensive and accessible platform for skill enhancement, offering industry-relevant skill courses, job opportunities, and entrepreneurship support to youth of the country from rural and urban areas. SIDH offers an extensive array of AI and ML courses, ranging from foundational programs like 'Fundamentals of Azure AI Speech' and 'Machine Learning', to specialized offerings such as 'Google Cloud Generative AI' and 'AI Strategy to Create Business Value in Healthcare', to cater to varying levels of expertise and application, enabling participants to stay at the forefront of AI and ML technology.
- (d) & (e): DGT has collaborated with Microsoft India to implement capacity-building training programs for the students of NSTIs & ITIs in the future skills ensuring better preparedness for upcoming jobs. The project provides training in digital productivity and advanced IT skilling viz., Artificial Intelligence/ Cloud & Cyber Security skilling, to the students of Government ITIs and NSTIs to empower learners with the essential skills to become self-reliant with industry-relevant skills and enhance their employability while connecting them to relevant job opportunities and the development of talents within the country.

ANNEXURES REFERRED TO IN PART (a) to (c) OF REPLY TO LOK SABHA UNSTARRED QUESTION NO. 2222 ANSWERED ON 09.12.2024 REGARDING 'AI-BASED SKILL TRAINING PROGRAMMES'

State-wise and gender-wise details of the candidates enrolled in nine (09) Al-related courses under PMKVY 4.0 up to 31<sup>st</sup> October 2024:

| SI<br>No | Trades                                | Female | Male | State/UT   |
|----------|---------------------------------------|--------|------|--|
| 1        | AI - Business<br>Intelligence Analyst | 1206   | 1309 | Andhra Pradesh, Haryana, J&K, Karnataka,<br>Maharashtra, Punjab, Tamil Nadu, Uttarakhand   |
| 2        | Al- Data Architech                    | 466    | 209  | Bihar, Kerala, Rajasthan, Tamil Nadu, Uttar Pradesh  |
| 3        | AI - Data Engineer                    | 632    | 778  | Andhra Pradesh, Bihar, Gujarat, Maharashtra,<br>Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar<br>Pradesh  |
| 4        | AI – Data Quality<br>Analyst          | 3824   | 2522 | Andhra Pradesh, Assam, Bihar, Gujarat, Haryana,<br>Himachal Pradesh, J&K, Karnataka, Kerala, Madhya<br>Pradesh, Odisha, Rajasthan, Tamil Nadu,<br>Telangana, Uttar Pradesh |
| 5        | AI – Data Scientist                   | 2220   | 2227 | Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, J&K, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, , Uttar Pradesh, Uttarakhand                  |
| 6        | AI - Machine Learning<br>Engineer     | 3697   | 3942 | Andhra Pradesh, Gujarat, Karnataka, Kerala,<br>Madhya Pradesh, Maharashtra, Odisha, Rajasthan,<br>Tamil Nadu, Telangana, Uttar Pradesh                                     |
| 7        | Al-Solution Architect                 | 90     | 247  | Andhra Pradesh, Punjab   |
| 8        | AI & ML-Jr Telecom<br>Data Analyst    | 115    | 200  | Gujarat, Tamil Nadu, Tripura, Uttar Pradesh  |
| 9        | Al- Device Installation<br>Operator   | 77     | 88   | Tamil Nadu   |

### **Annexure-II**

# State-wise and gender-wise details of apprentices engaged in seven (07) Al-related trades under NAPS:

| SI No | Trades                                | Female | Male | State/UT  |
|-------|---------------------------------------|--------|------|---|
| 1     | AI - Business<br>Intelligence Analyst | 09     | 16   | Gujarat, Karnataka, Maharashtra, Rajasthan and<br>Telangana   |
| 2     | Al - Data Engineer                    | 33     | 50   | Karnataka, Maharashtra, Punjab, Tamil Nadu and<br>Telangana   |
| 3     | AI - Database<br>Administrator        | 16     | 12   | Delhi, Gujarat, Karnataka, Maharashtra, Punjab,<br>Tamil Nadu, Telangana, Dadra & Nagar Haveli And<br>Daman & Diu and Uttar Pradesh |
| 4     | AI - Machine Learning<br>Engineer     | 01     | 02   | Maharashtra and Telangana   |
| 5     | AI – Data Quality<br>Analyst          | 120    | 135  | Delhi, Gujarat, Jharkhand, Karnataka, Madhya<br>Pradesh, Maharashtra, Odisha, Tamil Nadu,<br>Telangana, Uttarakhand                 |
| 6     | AI – Data Scientist                   | 23     | 33   | Gujarat, Haryana, Karnataka, Maharashtra, Uttar<br>Pradesh  |
| 7     | AI – DevOps<br>Engineer               | 89     | 85   | Goa, Gujarat, Karnataka, Telangana, Uttar Pradesh,<br>West Bengal   |

# Gender-wise details of the 442 trainees admitted 'Artificial Intelligence Programming Assistant (AIPA)' at 19 NSTIs as on 5<sup>th</sup> December 2024:

| SI. No | Institute's      | Male | Female |
|--------|------------------|------|--------|
| 1      | NSTI Bengaluru   | 12   | 2      |
| 2      | NSTI Calicut     | 20   | 4      |
| 3      | NSTI Chennai     | 13   | 7      |
| 4      | NSTI Howrah      | 11   | 9      |
| 5      | NSTI Jodhpur     | 4    | 16     |
| 6      | NSTI Kanpur      | 16   | 8      |
| 7      | NSTI Ludhiana    | 19   | 5      |
| 8      | NSTI Mumbai      | 17   | 2      |
| 9      | NSTI Ramanthapur | 15   | 9      |
| 10     | NSTI W Allahabad | -    | 24     |
| 11     | NSTI W Bengaluru | -    | 16     |
| 12     | NSTI W Hyderabad | -    | 24     |
| 13     | NSTI W Indore    | -    | 24     |
| 14     | NSTI W Jaipur    | -    | 24     |
| 15     | NSTI W Kolkata   | -    | 24     |
| 16     | NSTI W Mumbai    | -    | 24     |
| 17     | NSTI W Noida     | -    | 48     |
| 18     | NSTI W Patna     | -    | 21     |
| 19     | NSTI W Vadodara  | -    | 24     |
|        | Total            | 127  | 315    |

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