USE OF AI IN MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLO GY

3253. SMT. SAGARIKA GHOSE:

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

(a) whether Artificial Intelligence (AI) is used in the Ministry;
(b) if so, the details thereof, if not, the reasons therefor;
(c) whether more AI tools will be incorporated in the Ministry in the near future; and
(d) whether the advent of AI will cause layoffs in the Ministry as many tasks can be achieved through the aid of AI?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI JITIN PRASADA)

(a) to (d): The Government of India emphasizes the concept of 'AI for All,' aligning with the Hon'ble Prime Minister's vision to democratise use of technology. This initiative aims to ensure that AI benefits all sectors of society, driving innovation and growth.

Artificial Intelligence is actively used in the Ministry of Electronics and Information Technology (MeitY) for improving governance, cybersecurity, legal research, and language accessibility. Through initiatives like the **IndiaAI Mission, Digital India Bhashini**, MeitY is fostering AI adoption to enhance public service delivery, automate processes, and strengthen decision-making.
Artificial Intelligence is being used as a tool for augmenting capability.

The government's approach focuses on leveraging AI for economic growth and development while fostering a robust AI ecosystem. To achieve this, the Government is implementing key AI initiatives that drive digital transformation, improve public service efficiency, and ensure responsible AI adoption across sectors such as:

I. **IndiaAI Mission**: Union Cabinet led by Hon'ble Prime Minister has approved the IndiaAI Mission on 7th March 2024, a strategic initiative to establish a robust and inclusive AI ecosystem that aligns with the country's development goals. This mission is driven by a vision to position India as a global leader in artificial intelligence by focusing on seven foundational pillars namely- IndiaAI Compute Capacity, IndiaAI Innovation Center (IAIC), IndiaAI Dataset Platform, IndiaAI Application Development Initiative (IADI), IndiaAI FutureSkills, IndiaAI Startup Financing, Safe & Trusted AI.
By democratizing access to computing resources, enhancing data quality, nurturing homegrown AI expertise, attracting top talent, fostering industry partnerships, supporting startup ventures, promoting socially impactful AI projects, and emphasizing ethical practices, the mission seeks to foster responsible and inclusive growth within India's AI landscape.

II. **Digital India Bhashini** - initiative to provide Artificial Intelligence (AI) driven language technology solutions through the Bhashini platform (https://bhashini.gov.in) for all 22 Scheduled Indian Languages including Marathi, providing voice-based access, and to assist in the creation of content in Indian languages. Digital India

Bhashini aims to build speech-to-speech machine translation systems for various Indian languages and dialects and to evolve a Unified Language Interface (ULI). This initiative enabled citizens to access digital services in their vernacular languages, further increasing digital inclusion and accessibility, as recommended in SDG 10 (Reduce inequality within and among countries).

III. **Aadhaar (India's Digital ID DPI)** - Leveraging AI, Aadhaar **enhances accuracy in biometric assessments and facilitates efficient direct beneficiary transfers**, significantly improving public service delivery.

IV. **DigiYatra -** A facial recognition based boarding system for Indian airports has **enhanced airport throughput**, providing a more efficient and secure travel experience for passengers while **minimizing queuing times** and **maximizing the utilization of resources**.

V. **UMANG (Unified Mobile Application for NewAge Governance) -** UMANG serves as a unified platform, offering all Indian citizens a singular point of access to pan-India e-government services, spanning from central to local government bodies. It also has an AI enabled voice-based chatbot that enables users to inquire about various Government services in Hindi and English.

VI. **CoWIN:** A digital platform that enabled delivery of COVID-19 vaccines across the country in a safe and cost-effective manner along with providing an effective communication platform.

VII. **C-DAC (Centre for Development of Advanced Computing)** is leading the development of AI-driven solutions to combat deepfakes. Under the **MeitY-funded project "Design and Development of Software for Detecting Deepfake Videos and Images,"** C-DAC has developed **FakeCheck**, a prototype tool capable of detecting deepfakes without requiring an internet connection. The tool has been shared with select law enforcement agencies for testing and further refinement. Additionally, another project, **"Fake Speech Detection Using Deep Learning Framework,"** is focused on identifying manipulated speech using AI techniques.

VIII. The **National Informatics Centre (NIC)** attached office of MeitY**,** is leveraging **Artificial Intelligence (AI)** to enhance the efficiency of the **legal and judicial ecosystem** in India. AI-powered tools are being integrated into various legal departments to streamline case management, automate legal research, and improve access to justice. NIC has developed AI-driven solutions for **legal document analysis, case prediction, and contract review**, helping legal professionals and government departments process large volumes of legal data efficiently

In addition, the details of seven pillars of IndiaAI Mission are as follows:

IndiaAI Compute:
- IndiaAI compute pillar envisions building a high-end scalable AI computing ecosystem comprising AI compute infrastructure of 10,000 or more Graphics Processing Units (GPUs).
- Towards this, IndiaAI Independent Business Division (IBD) published a Request for Empanelment (RFE) on August 16, 2024, to empanel AI services on cloud including GPUs. 19 bidders had submitted proposals to empanel their AI cloud services, out of which 10 bidders have been empaneled.
- Against the target of 10,000 GPUs outlined in the IndiaAI compute pillar, **empaneled bidders have offered 14,517 GPUs at an average rate of Rs. 115 per GPU hour with Government support of upto 40%**. Further, an IndiaAI Compute Portal has been developed for accessing and leveraging the empaneled AI services on cloud.

IndiaAI FutureSkills:
- IndiaAI FutureSkills Pillar envisions to augment the number of graduates, postgraduate and PhDs in AI domain. Further, it envisions setting up Data and AI Labs in Tier 2 and Tier 3 cities across India, to impart foundational-level courses in Data and AI.
- IndiaAI Fellowships are being offered to students pursuing relevant undergraduate and postgraduate programs at Private / Centrally Funded Technical Institutes (CFTI)

under the Government of India or must be recognized either by the All-India Council for Technical Education (AICTE) / National Board of Accreditation (NBA) / National Assessment and Accreditation Council (NAAC) of the University Grants Commission (UGC) or as per the extant norms. Till date, 150 UG students, 48 PG students and 3 PhD scholars have been selected for the IndiaAI Fellowship.

- IndiaAI has established IndiaAI Data Lab in National Institute of Electronics & Information Technology (NIELIT's) Delhi centre and & ICET, Nagaland. Additionally, IndiaAI in collaboration with NIELIT plans to establish 27 data labs in Tier 2 and Tier 3 cities across the country, details of which are placed at **Annexure I.**

IndiaAI Startup Financing:
- IndiaAI Startup Financing pillar is to provide support to AI startups at all stages. Multiple rounds of stakeholder consultations have been held to deliberate on the scheme for supporting AI Startups at Pre-Seed, Seed and Growth stage.
- In collaboration with STATION F and HEC Paris, the IndiaAI Mission has been launched an acceleration program for Indian AI startups. This four-month immersive program (1 month online, 3 months onsite at STATION F in Paris) at the world's largest startup campus will provide 10 selected AI startups with access to mentorship, networking, and global market expansion opportunities in Europe. A call for applications has been announced at the event.

IndiaAI Innovation Centre:
- IndiaAI Innovation centre aims to develop and deploy indigenous Large Multimodal Models (LMMs) trained on India-specific data
- IndiaAI had launched a Call for Proposals inviting proposals from startups, researchers, and entrepreneurs to collaborate on building state-of-the-art foundational AI models trained on Indian datasets. A total of 67 proposals till February 15 aimed at building India's foundation models, with contributions from both established startups and new teams of researchers & academia.

IndiaAI Datasets Platform:
- The IndiaAI Datasets Platform (IDP) seeks to enhance access, quality, and utilization of public sector datasets to make them AI-ready.
- Government has launched AIKosh: IndiaAI Datasets Platform. AIKosh is a secured platform that provides a repository of datasets, models and use cases to enable AI innovation. It also features AI sandbox capabilities through an integrated development environment along with tools and tutorials.

IndiaAI Applications Development Initiative:
- IndiaAI Application Development Initiative aims to develop, scale, and promote the adoption of impactful AI solutions to effectively tackle significant problem statements.
- IndiaAI Innovation challenge was launched on the themes of healthcare, agriculture, improved governance, climate change & disaster management and assistive technologies for learning disabilities. The Innovation Challenge was open to Indian innovators, startups, non-profits, students, academic/R&D organizations, and companies. A total of 900 applications have been received across the five focus areas by the deadline of 30th September. Out these, the 30 shortlisted AI solutions under the identified sectors across three stages of maturity: Idea, Prototype, and Existing Solutions. The details of shortlisted AI solutions is given at **Annexure II**
- CyberGuard AI Hackathon was launched on 17th October 2024 for Cybercrime prevention in collaboration with the Indian Cybercrime Coordination Centre (I4C) and in response 263 responses have been received, and the top 20 shortlisted teams were invited to a physical hackathon at I4C. From these, the top three teams were selected for pilot testing of their solutions at I4C.

Safe & Trusted AI:

- This pillar enables the implementation of Responsible AI projects including the development of indigenous tools and frameworks, self-assessment checklists for innovators, and other guidelines and governance frameworks.
- Eight Responsible AI Projects have been selected to address the need for robust guardrails to ensure the responsible development, deployment, and adoption of AI technologies. The projects cover a range of critical themes, including Machine Unlearning, Synthetic Data Generation, AI Bias Mitigation, Ethical AI Frameworks, Privacy-Enhancing Tools, Explainable AI, AI Governance Testing, and Algorithm Auditing Tools. The details of the selected projects are given at **Annexure III.**
- Further, IndiaAI invited Expressions of Interest from individuals and organizations for the development of tools in areas such as Watermarking & Labelling, Ethical AI Frameworks, AI Risk Assessment & Management, Stress Testing Tools, and Deepfake Detection Tools. A total of 420 submissions received and evaluation is under process.

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List of Data & AI labs planned by IndiaAI in collaboration with NIELIT in Tier 2 and Tier 3 cities across the country:

S.No.	NIELIT Centre	State/UT
1	Gorakhpur	Uttar Pradesh
2	Lucknow	Uttar Pradesh
3	Shimla	Himachal Pradesh
4	Aurangabad	Maharashtra
5	Patna	Bihar
6	Buxar	Bihar
7	Muzaffarpur	Bihar
8	Kurukshetra	Haryana
9	Ropar	Punjab
10	Haridwar	Uttarakhand
11	Bikaner	Rajasthan
12	Tezpur	Assam
13	Bhubaneswar	Odisha
14	Calicut	Kerala
15	Guwahati	Assam
16	Itanagar	Arunachal Pradesh
17	Srinagar	J&K
18	Jammu	J&K

19	Ranchi	Jharkhand
20	Imphal	Manipur
21	Gangtok	Sikkim
22	Agartala	Tripura
23	Aizawl	Mizoram
24	Shillong	Meghalaya
25	Kohima	Nagaland
26	Leh	Ladakh
27	Silchar	Assam

The details of shortlisted AI solution under IndiaAI Application Development Initiative are as under:

Sl.No.	Name of the Solution	Solution Description	Stage	Team Name	Theme
1	Promoting regenerative agriculture practices for a sustainable future using AI	In-house developed MRV (Measurement, Reporting, and Verification) technology designed to ensure the integrity and quality of generated carbon credits.	Solution	Varaha ClimateAG Private Limited	Agriculture
2	Krishi Sah'AI'yak - Farming Co-pilot	AI-powered conversational co-pilot to provide personalized advisory to farmers in Indic languages	Solution	Samagra Development Associates Pvt. Ltd	Agriculture
3	Kadalcompass - We Amplify the voice of water using Hydro-AI,Underwatercom ,IoUT with Sensor Network	5G-enabled device that transforms fishing practices using AI, IoUT, and advanced communication technologies	Solution	Innogle Technologies Pvt LTD	Agriculture
4	KissanCopilot Multilingual Multimodal personalized AI Assistant for small holder farmers	Powered by Dhenu's vertical LLM for agriculture, provides personalized agricultural advisory services to smallholder farmers.	Solution	Titodi Infotech Pvt Ltd	Agriculture
5	Rapid, chemical-free soil testing solution using NIR Spectroscopy & AI/ML models	End-to-end soil testing approach leverages an offline app, AI-powered spectral device, and ML models to deliver timely, chemical-free soil analysis.	Solution	Neoperk Technologies	Agriculture
6	AI deep-tech driven quality assessment of Maize	SAAS platform to provide objective quality assessment of maize including price estimation & sales pipelining.	Solution	RootsGoods (OPC) Pvt. Ltd.	Agriculture
7	AI-Driven Live Fish Logistics and Mortality Reduction in Aquaculture	AI-driven solution that optimizes aquaculture operations	Solution	Shuvoneel Ras System Pvt. Ltd.	Agriculture
8	QScan	AI-powered IoT solution that captures critical data throughout the fresh produce	Prototype	Qzense Labs Pvt Ltd	Agriculture

		lifecycle, providing real-time analysis of food quality and actionable insights to sellers.			
9	Heatwave Resilience: Integrating AI-based Advanced Forecasting for Extreme Heat Events	Integrates AI-based climate forecasting with health data to develop a targeted risk classification system for heat-health impacts	Idea	I-Hub for Robotics and Autonomous Systems Innovation Foundation	Climate
10	Multi-Hazard Susceptibility Mapping	hazard management system topredict Landslides, Debris Flows and Flash Floods	Prototype	Jarbits Pvt Ltd	Climate
11	DeepFlood: Rapid flood inundation mapping using Vision Transformers and Satellite Data	Advanced flood inundation mapping tool using SAR data and deep learning models for real-time, automated flood detection	Prototype	Indian Institute of Technology Delhi	Climate
12	Moskeet: Climate impact on mosquito-borne diseases	AI-powered platform integrates real-time climate data with mosquito tracking to predict and prevent disease outbreaks.	Prototype	Moskeet AI	Climate
13	End to End AI Cloud Platform for Radiology Diagnosis	AI cloud platform for radiology diagnosis, integrating innovative technologies such as CV, GenAI, NLP, Dicom, mobile, and cloud computing	Solution	Endimension Technology Pvt. Ltd.	Healthcare
14	NIDAAN (iNtegrated lung health screening &tuberculosIs Detection through Ai At National scale)	qXR, an advanced AI tool for interpreting chest X-rays (CXR), detects & localizes 30+ findings.	Solution	Qure.ai Technologies Pvt. Ltd.	Healthcare
15	Impactful AI solution, preventing preventable blindness, for socio-economic transformation.	early detection of vision threatening retinal abnormalities	Solution	Artelus	Healthcare
16	AI Powered Wearable Technology for Detection & Diagnosis of Musculoskeletal Joint Health Pain.	AI Enabled Hardware Platform for Joint Pain Diagnostics and Rehabilitation Segments of Healthcare	Solution	Startoon Labs Private Limited	Healthcare

17	VoxelBox	Neuro-informatics platform that allows to map the functional maps / connectomics of the human brain	Prototype	BrainSight Technology Pvt Ltd	Healthcare
18	Development of Ocellux: An AI-Based Solution for Enhanced Early Diabetic Eye Screening in INDIA.	Portable, affordable and highly accessible retina imaging device powered by AI for early detection of eye diseases like Diabetic Retinopathy, AMD & Glaucoma	Prototype	Anself Dynamics Pvt. Ltd.	Healthcare
19	Revolutionizing healthcare using doctor-led AI	AI-powered personal doctor available 24x7 and free of cost, designed to assist people when they are sick, monitor their health through wearables, and act as a health coach to prevent diseases.	Prototype	Jivi Health Pvt. Ltd.	Healthcare
20	AI/ML enabled MafPro device platform for cancer staging, localization, and margins.	MafPro handheld detector provides a radiation-free, non-invasive, safe and cost-effective solution that can reliably detect and adequately evaluate metastases in lymph nodes using AI/ML based algorithms	Prototype	SIAMAF Healthcare	Healthcare
21	Readabled (Online Dyslexia Training)	web-based application designed to help children with dyslexia improve phonetic awareness through interactive exercises.	Existing	Hermit Labs Pvt. Ltd.	Learning disabilities
22	Voice fusion AI	AI application to provide assistive support to individuals with SLDs in multiple Indian languages	Prototype	PerpetualBlock Technologies Private Limited	Learning disabilities
23	ScreenPlay - a digital game based screening tool for autism and related disorders.	Digital, game-based screening tool designed to identify children aged 3 to 6 who may be at risk for autism or related developmental conditions	Existing	Kidaura Innovations Pvt Ltd	Learning disabilities
24	Jiveesha	AI-powered diagnostic platform for early detection of SLDs	Idea	Daira Edtech Private Limited	Learning disabilities

25	Adaptive Learning and Detection for SLDs	Advanced AI techniques to detect Specific Learning Disabilities (SLDs) such as dyslexia, dysgraphia, and dyscalculia.	Prototype	Narottam Innovations Pvt. Ltd.	Learning disabilities
26	Special Educator AI	AI-driven system designed to address India's shortage of special educators and support children with SLDs.	Idea	Banyan Intelligence Private Limited	Learning disabilities
27	ConvoZen.AI by NoBroker Technologies	AI-powered conversational platform that automates customer engagement across channels like chat, voice, email, and social media, offering fast, personalized, and multilingual support.	Solution	Nobroker Technologies Solutions Pvt. Ltd	Governance
28	AI contact center	AI-powered technologies like machine translation, NLP, ASR and TTS, and multilingual voice recognition to enhance governance by improving communication and accessibility across India's linguistic diversity	Solution	Devnagri AI Pvt. Ltd	Governance
29	Adalat AI: AI solutions for Courts	AI-powered platform provides real-time multilingual transcription, translation, live case flow management, and WhatsApp chatbots to streamline courtroom operations	Prototype	Legsys.AI Technology Foundation	Governance
30	Gov.Civis.Vote	AI-powered Digital Public Infrastructure designed to transform public consultations in India by making citizen engagement more inclusive, scalable, and comprehensive	Solution	Civic Innovation Foundation	Governance

The details of the selected projects under "Safe & Trusted AI" Pillar are as under:

NAME OF THE THEME	SELECTED APPLICANT	TITLE OF THE PROJECT
Machine Unlearning	IIT Jodhpur	Machine Unlearning in Generative Foundation Models
Synthetic Data Generation	IIT Roorkee	Design and Development of Method for Generating Synthetic Data for Mitigating Bias in Datasets; and Framework for Mitigating Bias in Machine Learning Pipeline for Responsible AI
AI Bias Mitigation Strategy	National Institute of Technology Raipur	Development of Responsible Artificial Intelligence for Bias Mitigation in Health Care Systems
Explainable AI Framework	DIAT Pune and Mindgraph Technology Pvt. Ltd.	Enabling Explainable and Privacy Preserving AI for Security
Privacy Enhancing Strategy	IIT Delhi, IIIT Delhi, IIT Dharwad andTelecommunication Engineering Center (TEC)	Robust Privacy-Preserving Machine Learning Models
AI Ethical Certification Framework	IIIT Delhi and Telecommunication Engineering Center (TEC)	Tools for assessing fairness of AI model
AI Algorithm Auditing Tool	Civic Data Labs	ParakhAI - An open-source framework and toolkit for Participatory Algorithmic Auditing
AI Governance Testing Framework	Amrita Vishwa Vidyapeetham andTelecommunication Engineering Center (TEC)	Track-LLM, Transparency, Risk Assessment, Context & Knowledge for Large Language Models

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