GPAI chaired by India:

An International Initiative Focused on Responsible use of AI

Mint

Paper - III
(Sci. & Tech.)

❖ **The Global Partnership for Artificial Intelligence (GPAI), an international initiative focused on responsible AI use, is headed by India.**

In recent weeks, two seemingly unrelated developments in the field of artificial intelligence (AI) have brought India into focus. The Global Partnership for Artificial Intelligence (GPAI), an international initiative that focuses on responsible AI use, passed its chairmanship to India. This coincides with India's presidency of the G20.

ChatGPT System

In parallel, OpenAI, an AI research initiative in the US, made public its ChatGPT system, which has raised the chatbot bar with its ability to write and provide answers in English to questions across a wide range of subjects. ChatGPT's interactive interface was made publicly accessible for testing and feedback has since gone viral on social media, with questions ranging from math problems to software programming source codes being generated by the AI tool.

While ChatGPT has certain restrictions imposed on it, the viral social experiment underway through its interface raises several questions about how AI can potentially blur the lines between creative products resulting from human cognition and programmatically generated text that is almost human-like. The ease with which the AI tool is able to generate fiction in response to queries also poses questions on how to assess the truth quotient of artificially generated creative products. For an instance, when asked to compose an essay on events that may not have occurred historically, the AI tool got its dates mixed up. Fictional products from generative AI are perhaps less of a worry than students using it to draft project reports, solutions to assignments, and more.

Concerns About Artificial Intelligence

While regulatory concerns around AI are yet to reach a critical threshold, substantial groundwork seems to have been put in place with the recently released Data Protection draft bill and from early indications around the proposed Digital India Act. A key area of concern would be the use of large personal datasets and AI-based algorithms for the profiling and behavioral targeting of individuals.

Such behavioral targeting is already an everyday phenomenon for most users of smartphone-based apps and platforms such as YouTube and Facebook. While the aiming of advertisements based on browsing history is commonplace and overt, it is the more subtle recommendation algorithms that need scrutiny. Given the propensity of these algorithms to suggest similar content based on past browsing and consumption behavior, the risks of algorithms reinforcing biases, prejudices, and amplifying fake news need to be assessed. In light of recent experiences in the US with politically oriented content on Facebook and Tik-Tok, the manner in which recommendation algorithms can distort the public discourse needs to be put under greater regulatory scrutiny.

Promotion of AI in India

While fears around AI are natural, they must not distract from the immense potential technology holds for India's development. The initiatives of the government under the Digital India banner through the National Programme on Artificial Intelligence are noteworthy for their focus on starting early and engaging school students.

The Digital India week held back in July was particularly striking; young school students showcased their ideas around potential applications based on AI for India's development to Prime Minister Narendra Modi. From using AI for soil analysis and crop recommendation to helping identify herbs and leaves of medicinal value, the student projects offered a glimpse of AI's potential in traditional sectors of the economy that are perhaps the last to embrace cutting-edge technologies.

Also on display were apps focused on improving athletic performance, doing yoga, and the early detection of diseases. With several studies highlighting the potential of AI to accelerate drug discovery and assist in disease management as well as create new biological products, the spectrum of AI applications with relevance to India is quite broad.

Efforts To Make AI Successful

Realizing this vast potential, however, will require further strengthening the country's enabling ecosystem of data centers, cloud computing services, and open-stack API-based algorithms. While the past few years have seen India make reasonable progress on this front, we are still a substantial distance away from creating formidable homegrown cloud-based alternatives to Amazon's AWS or Microsoft's Azure from both a scale as well as ease of use standpoint. While the Bhashini initiative is a significant effort at creating an open-stack algorithm library for recognition, translating, and transcribing Indian Languages as a domestic alternative to Google's language services, similar open-stack efforts are needed in other areas such as visual recognition and generative AI, among others.

Lastly, more core research in AI needs to happen in Indian research labs and academic institutions. This would ensure that a significant body of intellectual property in this emerging technology space is created in India. The many tools created by the OpenAI project in the US and the extensive use of recognition technologies by China are important lessons on the strategic need for India to invest as much in core intellectual property as the country does in applications of AI.

G-20 and GPAI Under The Chairmanship Of India

With G20 and GPAI leadership coming to India, the world is keenly looking at India's unique approach to digitalization, one that leverages open stack-based digital platforms for mass use. India's relative success with digital public goods such as Aadhaar identities, Unified Payments Interface (UPI) transfers, and Co-Win vaccination in recent years offers a strong foundation to take AI to traditional sectors of our economy in mission mode.

Artificial Intelligence(AI)

Artificial intelligence is the branch of computer science that deals with human-like behavior of computers. It describes the ability of machines to perform creative tasks such as thinking, understanding, learning, problem solving and decision making. John McCarthy is considered its father. The formal beginning of Artificial Intelligence (AI) is believed to be from the 1950s.

Global Partnership on Artificial Intelligence (GPAI)

- The Global Partnership in Artificial Intelligence was launched on June 15, 2020. It is a multi-stakeholder initiative that was developed by the G-7 alliance. It aims to bridge the gap between theory and practice on Artificial Intelligence by promoting cutting-edge research and related activities.

- The initiative promotes global collaboration on artificial intelligence technology by bringing together experts from fields such as science, industry, civil society, governments, international bodies and academia on a single platform.

GPAI Member Countries

GPAI currently has 25 member countries. Australia, Belgium, Brazil, Canada, Czech Republic, Denmark, France, Germany, India, Ireland, Israel, Italy, Japan, Mexico, Netherlands, New Zealand, Poland, Republic of Korea (South Korea), Singapore, Slovenia, Spain, Sweden , UK, US and EU. India became a part of this international alliance in the year 2020 as a founding member.

GPAI Summit

- The first i.e. the inaugural edition of the GPAI summit was held on 3rd and 4th December in 2020. It was hosted by Montreal, Canada.

- The second edition was held on November 11 and 12, 2021 in Paris, France. Two offices of GPAI are located in these two cities.

- The third edition of this summit, which is to be held in Tokyo, Japan in 2022.

- The chairmanship of the 4th edition of the GPAI summit for 2023 has been assigned to India.

Importance of Artificial Intelligence (AI)

- According to NITI Aayog, if AI is adopted properly in India, the Gross Value Added (GVA) of the economy will increase by 15 percent by the year 2035.

- Can prove helpful in increasing access and affordability of quality healthcare. In the agriculture sector, this technology can contribute to increasing farmers' income, increasing agricultural productivity and reducing wastage. Through this, the quality and accessibility of education will also improve. Apart from this, Artificial Intelligence can prove to be helpful in building efficient infrastructure for the growing urban population.

Artificial Intelligence Challenges

- Artificial Intelligence (AI) will revolutionize the way we live and work. Technologies such as robotics and virtual reality will revolutionize the way production and manufacturing are done. According to a study by the University of Oxford, 150,000 jobs will be lost in the US alone in the next two decades.

- According to experts, if thinking and understanding robots start considering humans as their enemy for any reason or situation, then it can become a big threat to humanity.

Initiatives of India related to Artificial Intelligence

- National Artificial Intelligence Strategy
- MyGov Corona Helpdesk Chatbot
- RAGE 2020 - 'Responsible Artificial Intelligence for Social Empowerment 2020'
- Global Indian Scientist (VAIBHAV) Summit

Que. With reference to Global Partnership on Artificial Intelligence (GPAI), consider the following statements-

1. The first summit of GPAI was organized in 2020 in Montreal, Canada.

2. Presently it has 25 member countries including India.

   Which of the statements given above is/are correct?

(a) Only 1
(b) Only 3
(c) 1 and 2
(d) Neither 1 nor 2

Answer : C

Que.: What is Artificial Intelligence? Explain its relevance by stating its importance and challenges.

Answer Format :

❖ Explain what is Artificial Intelligence.

❖ Explain the importance and challenges of Artificial Intelligence.

❖ State the relevance of Artificial Intelligence.

Note: - The question of the main examination given for practice is designed keeping in mind the upcoming UPSC mains examination. Therefore, to get an answer to this question, you can take the help of this source as well as other sources related to this topic.