



Science & Technology

Global Partnership on Artificial Intelligence (GPAI) Summit

Tags:

- GS Paper - 3
- IT & Computers
- Achievements of Indians in Science & Technology
- Scientific Innovations & Discoveries
- Artificial Intelligence

For Prelims: Global Partnership on Artificial Intelligence (GPAI) Summit, AIRAWAT, NITI Aayog, Cloud Computing Platform

For Mains: Significance of GPAI Summit for the Better Regulation and Functioning of Artificial Intelligence Technology.

Why in News?

The Prime Minister of India inaugurated the Global Partnership on Artificial Intelligence (GPAI) Summit. **India is the lead chair of GPAI in 2024.** The GPAI is an alliance of 28 countries; the European Union adopted the 'New Delhi Declaration' of the GPAI.

What are the Key Highlights of the GPAI Summit?

- The Prime Minister of India discussed the national AI portal, highlighting the AIRAWAT initiative and raising concerns over the potential misuse of **deep fake technology**.
- **YUVAi** was prominently featured at the **GPAI Summit**, and the winners of the **YUVAi** initiative and start-ups showcased their **AI models and solutions**.

- The Prime Minister suggested using AI to make digital services available in **local languages** to increase **digital inclusion**.
- **Responsible AI, data governance, future of work, and innovation and commercialization** are the four different themes of four sessions organized in the **GPAI**.
- The summit also included various side events showcasing AI progress and engaging in discussions, such as **industry panel discussions, workshops, research symposiums, hackathons, and the Global AI Expo**.

What is the Delhi Declaration of the GPAI?

- It acknowledges the need to harness new opportunities and mitigate the risks arising from the **development, deployment, and use of Artificial Intelligence (AI)**.
- Affirms the commitment to uphold **human dignity, human rights, and democratic values**.
- Emphasizes the importance of fostering **trust, transparency, accountability, and inclusiveness in AI**.
- Recognizes the potential of AI to contribute to the United Nations Sustainable Development Goals and address global challenges.
- Encourages **international cooperation and coordination** on AI research, innovation, and policy.
- Supports the development of a **comprehensive framework** that encompasses shared principles for safe and trusted AI.
- Endorses India's proposal to establish and maintain a **Global Digital Public Infrastructure Repository (GDPIR)** to share digital public goods.

- **GDPIR** was established under the **Ministry of Electronics and Information Technology (MeitY)**, to serve as an extensive repository, consolidating crucial insights and knowledge from both **G20 members** and **guest nations**.
- Calls for further dialogue on **AI governance** and **ethics** among stakeholders.

What is Artificial Intelligence (AI)?

- AI is the ability of a computer, or a robot controlled by a computer to do tasks that are usually done by humans because they require **human intelligence** and **judgement**.
 - Although no AI can perform the wide variety of tasks an ordinary human can do, **some AI can match humans in specific tasks**.
- The ideal characteristic of AI is its ability to rationalize and take actions that have the best chance of achieving a specific goal. A subset of AI is Machine Learning (ML).
 - Deep Learning (DL) techniques enable this automatic learning through the absorption of huge amounts of unstructured data such as text, images, or video.

What is AIRAWAT?

- NITI Aayog circulated the cabinet note to establish a **cloud computing platform called AIRAWAT (Artificial Intelligence Research, Analytics and Knowledge Assimilation Platform in 2019)**.
- The move to create a cloud computing platform is part of the government's goal of making India a pioneer amongst emerging economies with regard to AI and transforming sectors like education, health, agriculture, urbanization and mobility.
- What is DeepFake?

- Deepfakes are synthetic media that use AI to manipulate or generate visual and audio content, usually with the intention of deceiving or misleading someone.
- Deepfakes are created using a technique called generative adversarial networks (GANs), which involve two competing neural networks: a generator and a discriminator.
 - The generator tries to create **fake images** or **videos** that look realistic, while the discriminator tries to distinguish between the real and the fake ones.
 - The generator learns from the feedback of the discriminator and improves its output until it can fool the discriminator.
 - Deepfakes require a large amount of data, such as photos or videos, of the source and the target person, which are often collected from the internet or social media without their consent or knowledge.
- Deepfakes are a part of Deep Synthesis, which uses technologies, including deep learning and augmented reality, to generate text, images, audio and video to create virtual scenes.

What is the YUVA Ai initiative?

- **About:**
 - National e-Governance Division (NeGD) partnered with Intel India to launch 'YUVAi- Youth for Unnati and Vikas with AI' program.
- **Aims:**
 - To foster a deeper understanding of **AI**, equip school students from **classes 8 to 12** across the nation with relevant mindset and skill

sets, and empower them to become human-centric designers and users of AI.

- The program offers an applied learning experience for students to understand and identify how **AI technology** can be used to tackle critical problems and lead to inclusive development of the nation.
- The program will be ongoing throughout the year to give a maximum number of students a chance to empower themselves to be future-ready.

Conclusion

- India launched the GPAI Summit, where India seeks to equip school students with AI skills for inclusive development. The **New Delhi Declaration** emphasizes a global AI framework grounded in democracy, human rights, and responsible practices.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. With the present state of development, Artificial Intelligence can effectively do which of the following? (2020)

1. Bring down electricity consumption in industrial units
2. Create meaningful short stories and songs
3. Disease diagnosis
4. Text-to-Speech Conversion
5. Wireless transmission of electrical energy

Select the correct answer using the code given below:

- (a) 1, 2, 3 and 5 only
- (b) 1, 3 and 4 only
- (c) 2, 4 and 5 only

(d) 1, 2, 3, 4 and 5

Ans: (b)

Q. The terms 'WannaCry, Petya and EternalBlue' sometimes mentioned in the news recently are related to (2018)

(a) Exoplanets

(b) Cryptocurrency

(c) Cyber attacks

(d) Mini satellites

Ans: (c)

Mains

Q. What are the main socio-economic implications arising out of the development of IT industries in major cities of India? (2022)

Q. "The emergence of the Fourth Industrial Revolution (Digital Revolution) has initiated e-Governance as an integral part of government". Discuss. (2020)

