

## **UPSC Daily Current Affairs | Prelim Bits 06-03-2021**

### **Blockchain in Space**

- JP Morgan has successfully tested a space-based payment infrastructure utilising blockchain technology, using GomSpace's satellites.
- It is the world's first bank-led tokenised value transfer in space.
- It was executed via smart contracts on a blockchain network that was established between two GOMX-4 satellites orbiting the earth in the low Earth orbit (LEO).
- This has validated the approach towards a decentralised network where communication with the earth is not necessary.
- It may lead to a potential peer-to-peer satellite marketplace in the long term, allowing data transfers between satellites against payment.

### **Technology and Innovation Report 2020**

- This report was released by the United Nations Conference on Trade and Development (UNCTAD).
- [Frontier technologies are those that take advantage of digitalization and connectivity.
- They are Artificial intelligence, Internet of things, Big data, blockchain, fifth-generation mobile telephony, 3D printing, robotics, drones, gene-editing, nanotechnology and solar power.]
- It provides a "Country Readiness Index" that assesses the countries' progress in using frontier technologies, in view of their capacities related to physical investment, technological effort and human capital.
- It scores countries on their readiness based on - ICT deployment, skills, R&D, industry activity and access to finance.
- It spotlights developing countries that perform better on frontier technologies than their per capita GDP would suggest.
- India was the biggest 'over-performer' in frontier technologies.
- Most of the "best-prepared" countries are from Europe, except the Republic of Korea, Singapore and the United States.

### **Freedom in the World Report 2021**

- This report has claimed that India's status as a "free" country has declined to "partly free".

- Titled as “Democracy Under Siege”, it was released by Freedom House, a watchdog of human rights.
- It rates people’s access to **political rights** and **civil liberties** in 210 countries and territories.
- These countries are declared as “free”, “partly free” or “not free”.
- **Indicators** - Electoral process, political pluralism and participation, government functioning, Freedom of expression and belief, associational and organisational rights, rule of law, personal autonomy and individual rights.

## World Report on Hearing

- This report was released by the World Health Organization (WHO).
- One in every four individuals, or around 2.5 billion people, across the world will experience mild-to-profound hearing loss by 2050.
- It is estimated that at least 700 million people will suffer from disabling hearing loss and require ear and hearing care.
- WHO defines disabling hearing loss as greater than 40 decibels (dB) loss in adults and greater than 30 dB in children.
- **Reasons for the disability** - Exposure to excessive noise, genetic causes, complications at birth, certain infectious diseases, chronic ear infections, the use of particular drugs and ageing.
- Over 5% of the global population have disabling hearing loss. But only 17% of those who required hearing aid, actually used one.

## AI Gamechangers’ Programme

- National Association of Software and Services Companies (NASSCOM) has launched the ‘AI Gamechangers’ programme.
- This programme promotes artificial intelligence (AI) led innovation in India, with Microsoft as the ‘Innovation Partner’.
- It will be a platform for startups, enterprises, academia, governments, and NGOs to showcase their AI-based products and solutions.
- It will recognise innovators for their successful AI implementation at NASSCOM’s Xperience AI Summit.

**Source: PIB, The Hindu, Down To Earth**