

January - 26

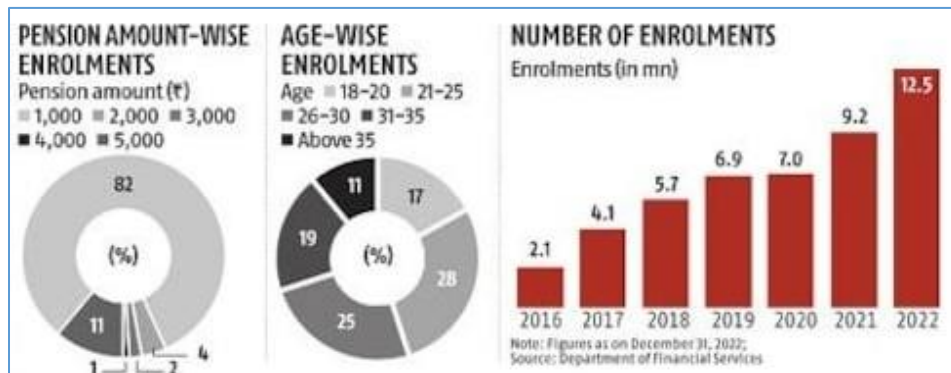
## TNPSC BITS

- ❖ Aruna Miller has made a history by becoming the first Indian-American politician to be sworn in as the Lieutenant Governor in the state of Maryland, USA.
- ❖ Higher Education Minister in Kerala R Bindu announced that girl students above the age of 18 years would get menstrual leave of 60 days.
- ❖ The Ruling party in New Zealand chooses the education minister to replace Jacinda Ardern as its new leader and become New Zealand's next prime minister.
- ❖ Indian Navy's fifth stealth Scorpene class Submarine, INS Vagir, was commissioned into the Indian Navy.

## NATIONAL

### 10 million enrolments in a year

- ❖ The Atal Pension Yojana (APY) is targeted towards unorganised sector workers.
- ❖ It saw the highest-ever takers in 2022 with enrolments rising 36 per cent.
- ❖ The figure crossed 10 million for the first time in a calendar year.
- ❖ The number of enrolments in 2022 rose to 12.5 million from 9.2 million in 2021.

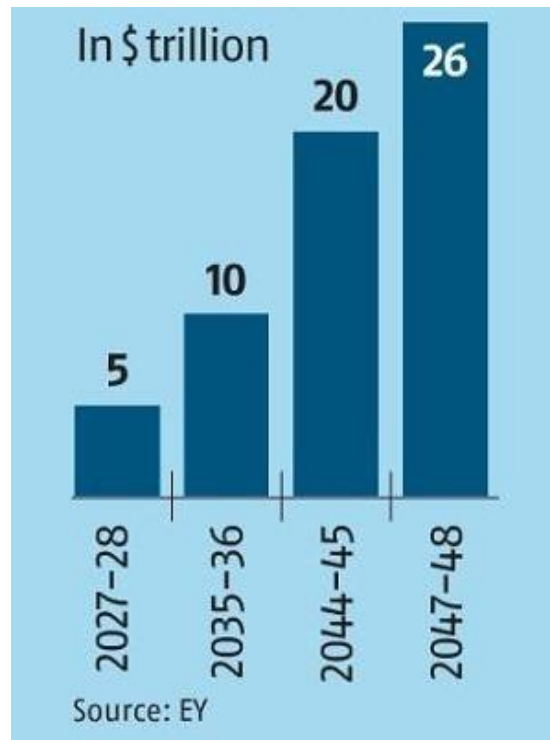


## ECONOMY

### \$26 trillion economy by 2047

- ❖ India is expected to become a US\$ 26 trillion GDP economy by 2047 with her per capita income reaching US\$ 15,000.
- ❖ This is reported by the Global Consulting Firm, Ernst & Young's report.

- ❖ RBI and International Monetary Fund (IMF) have forecast 6.8% growth in FY23 while World Bank has pegged it at 6.9%.
- ❖ London-based IHS Markit has projected India's GDP in 2030 to reach \$8.4 trillion.
- ❖ India is likely to overtake Japan as Asia's second-largest economy by 2030.
- ❖ GDP is also projected to surpass that of Germany and the UK to rank as the world's No.3.
- ❖ Currently, India is the sixth-largest economy, behind the US, China, Japan, Germany, and the UK.

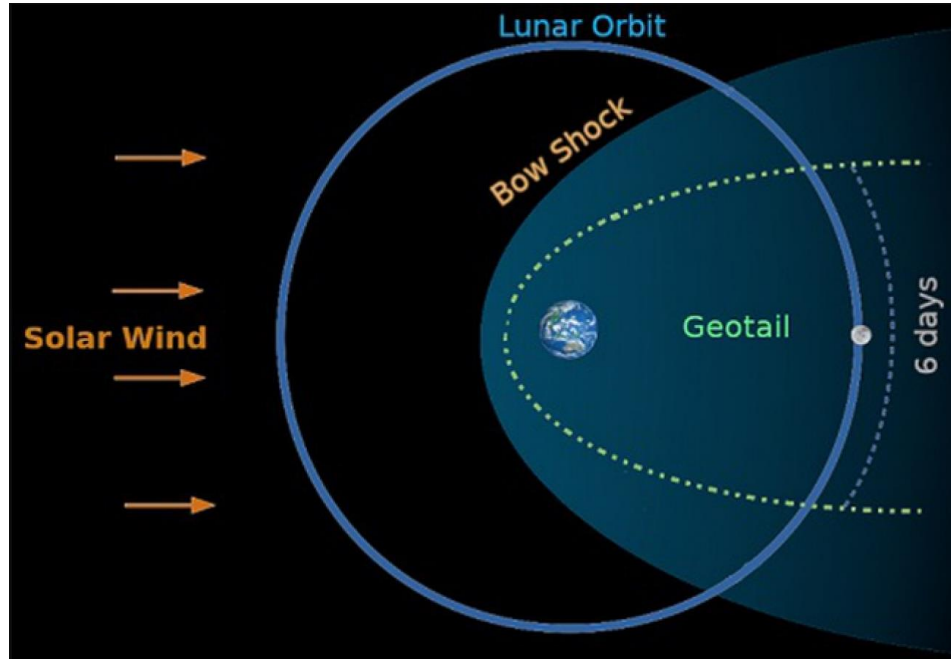


## SCIENCE AND TECHNOLOGY

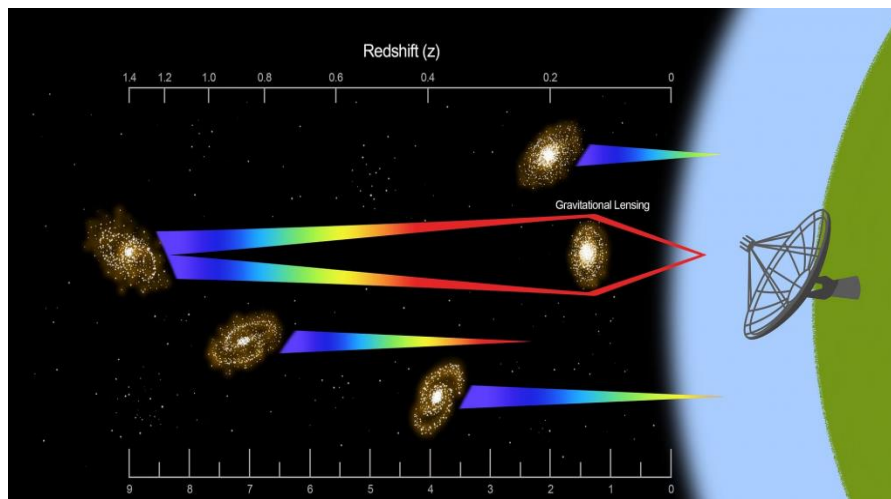
### NASA's Geotail Mission

- ❖ After 30 years in orbit, mission operations for the joint NASA-JAXA Geotail spacecraft have ended.
- ❖ It was launched on July 24, 1992.
- ❖ The mission was part of the International Solar-Terrestrial Physics (ISTP) project.
- ❖ It had gathered an immense dataset on the structure and dynamics of the magnetosphere, Earth's protective magnetic bubble.

- ❖ Geotail was originally slated for a four-year run, but the mission was extended several times due to its high-quality data return.
- ❖ While one of Geotail's two data recorders failed in 2012, the second continued to work until experiencing an anomaly on June 28, 2022.



### Radio signal originating from atomic hydrogen

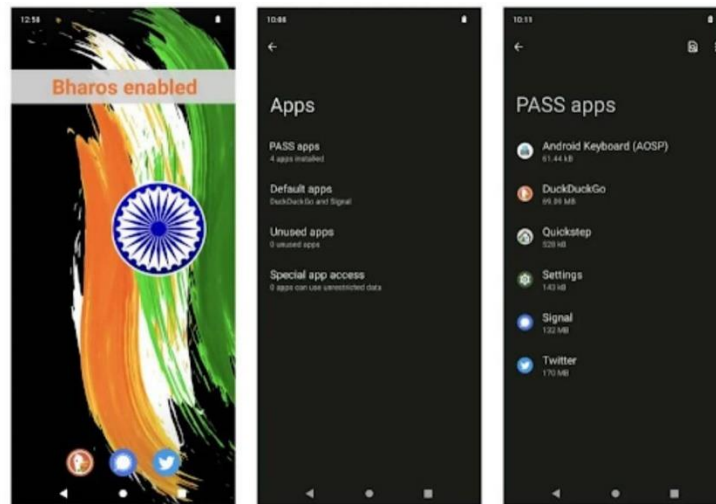


- ❖ Recently, a radio signal originating from atomic hydrogen in an extremely distant galaxy was detected by the Giant Metrewave Radio Telescope (GMRT).
- ❖ Atomic hydrogen is the basic fuel required for star formation in a galaxy.
- ❖ Atomic hydrogen emits radio waves of 21 cm wavelength.

- ❖ The wavelength is a direct tracer of the atomic gas content in nearby and distant galaxies.
- ❖ The signal detected by the team was emitted from this galaxy when the universe was only 4.9 billion years old.
- ❖ Redshift represents the signal's wavelength change depending on the object's location and movement; a greater value of  $z$  indicates a farther object.

## BharOS

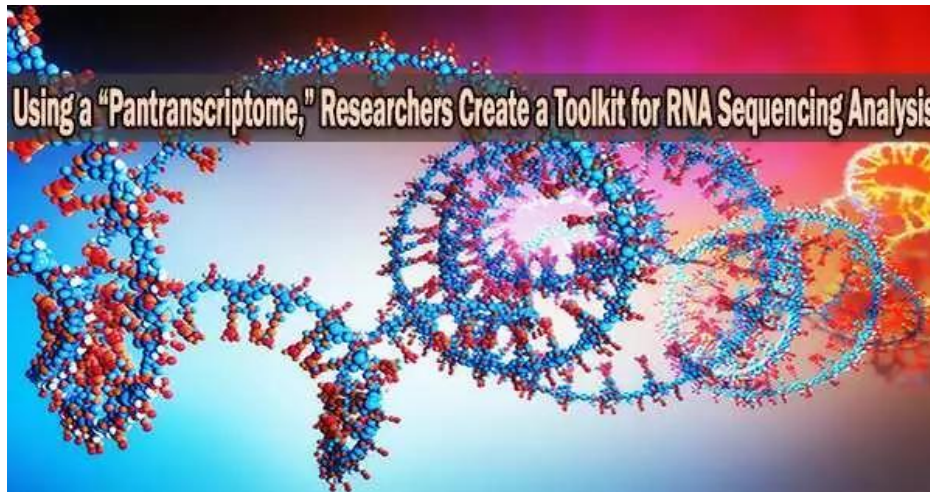
- ❖ BharOS' is an indigenous operating system for smartphones developed by the Indian Institute of Technology, Madras (IIT).
- ❖ It was developed by JandK Operations Private Limited (JandKops), which has been incubated by IIT Madras.
- ❖ It aspires to put India on par with those few countries that currently possess such capabilities.
- ❖ It aims to develop a free and open-source operating system (OS) for use in government and public systems.
- ❖ BharOS comes with No Default Apps (NDA).



## Pantranscriptome

- ❖ Pantranscriptome is a combination of transcriptome and a pangenome.
- ❖ It contains genetic material from a cohort of diverse individuals, rather than just a single linear strand.
- ❖ RNA's most commonly recognized function is to translate DNA into proteins.

- ❖ But scientists now understand that the vast majority of RNA does not make proteins, but instead can play roles such as influencing cell structure or regulating genes.
- ❖ The entire RNA landscape is known collectively as the transcriptome.
- ❖ The pantranscriptome-concept builds on the emerging concept of “pangenomics” in the genomics field.
- ❖ Using a pangenome allows researchers to compare an individual’s genome to that of a genetically diverse cohort of reference sequences all at once, sourced from individuals representing a diversity of biogeographic ancestry.



## ENVIRONMENT

### Nature Risk profile



- ❖ The UN Environment Programme (UNEP) and S&P Global launched the Nature Risk Profile.
- ❖ It is a new methodology for analyzing companies' impacts and dependencies on nature.
- ❖ It is aimed at enabling the financial sector to measure and address nature-related risk by providing scientifically robust and actionable analytics on nature impacts and dependencies.

## IMPORTANT DAYS

### Parakram Diwas/ Netaji Jayanti - January 23



- ❖ India celebrated 126th Birth anniversary of Netaji Subhas Chandra Bose.
- ❖ His birth anniversary is also marked as "Parakram Diwas or Courage Day".
- ❖ This day was announced in 2021.
- ❖ He is remembered for his fierce resistance against colonial rule.
- ❖ The day seeks to inspire people of India, especially the youth, to act with fortitude in the face of adversity.
- ❖ It further aims to infuse a spirit of patriotic favour in youth.

### National Girl Child Day - January 24

- ❖ This day was established in 2008 by the Ministry of Women and Child Development.

- ❖ The goal of National Female Child Day is to highlight the prejudice and injustice that girl children face.
- ❖ This day also encourages awareness of women's rights in our country.
- ❖ The main aim of the day is to raise awareness of the disparities that girls face in a variety of areas, including education, employment, clothing, and others.
- ❖ International Girl Child Day is celebrated on October 11.



## MISCELLANEOUS

### World Oldest Runestone



- ❖ Archaeologists in Norway have found what they claim is the world's oldest runestone.



- ❖ The inscriptions are up to 2,000 years old and date back to the earliest days of the enigmatic history of runic writing.
- ❖ It was “among the oldest runic inscriptions ever found” and “the oldest datable runestone in the world”.
- ❖ Older runes have been found on other items, but not on stone.
- ❖ The earliest runic find is on a bone comb found in Denmark.

