

January - 03

TNPSC BITS

- ❖ The former vice-chairman of NITI Aayog Arvind Panagariya has been appointed as the chairman of the 16th Finance Commission.
- ❖ The country's first all-girl Sainik School inaugurated at Vrindavan in Uttar Pradesh's Mathura district.
- ❖ India's Koneru Humpy won the women's individual silver medal at the 2023 World Rapid Chess Championships held in Samarkand, Uzbekistan.
- ❖ Jio is working with IIT Bombay on an artificial intelligence project called Bharat GPT.
- ❖ An appellate court in Qatar has commuted the death sentence handed out to eight former Indian Navy officers, allegedly over charges of espionage.
- ❖ The tenth phase of Sagar Parikrama, a coastal yatra spreading awareness about government welfare schemes began from Chennai Port.
 - This edition covers villages across Andhra Pradesh and Puducherry.
- ❖ The 12th 'Divya Kala Mela,' took place in Surat, Gujarat.
 - It aims to contribute to the economic empowerment of Persons with Disabilities (PwD)/Divyangjan.
- ❖ The Catholic Church has observed the World Day of Peace on January 1, the Solemnity of Mary, Mother of God, since 1968.

NATIONAL

Bharat Brand rice

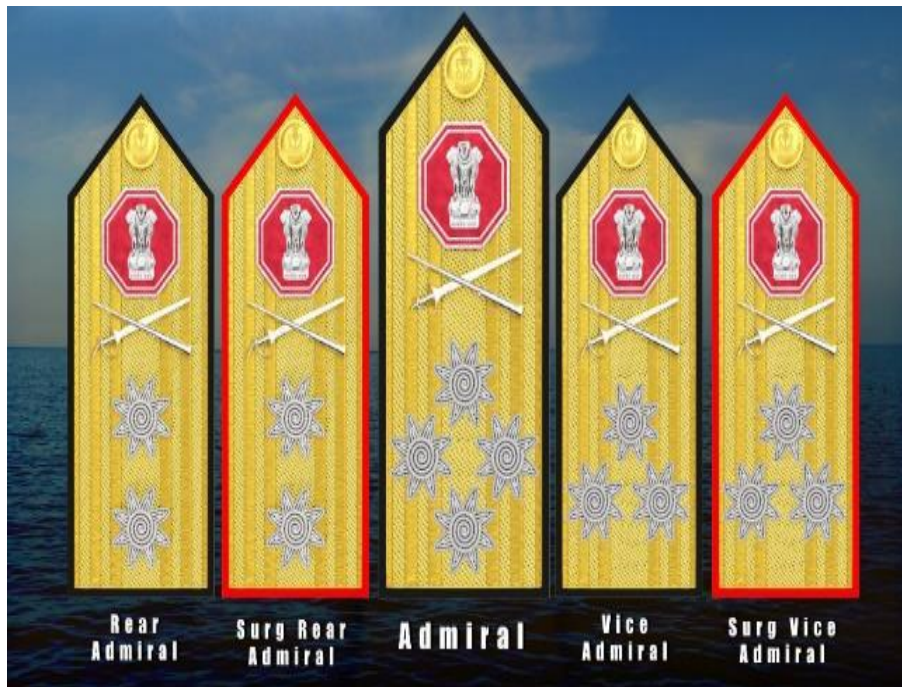


- ❖ The Government is considering a proposal to sell FCI (Food Corporation of India) rice under the 'Bharat' brand.

- ❖ There is a proposal to retail 'Bharat rice' but the price has not yet been decided.
- ❖ Under the OMSS, the Food Corporation of India (FCI) is offering quality rice at a reserve price of ₹29 per kg.
- ❖ The Government is already selling wheat flour (atta) and pulses under the Bharat brand.
- ❖ Rice inflation is at 13% year-on-year.

New epaulettes for Admirals

- ❖ The Navy unveiled the new design of Admirals' epaulettes, with the octagon in the new design.
- ❖ It was drawn from the naval ensign and inspired from rajmudra of Chhatrapati Shivaji.
- ❖ Further, the Navy was now going to name its ranks "in line" with Indian traditions.



Amrit Bharat train

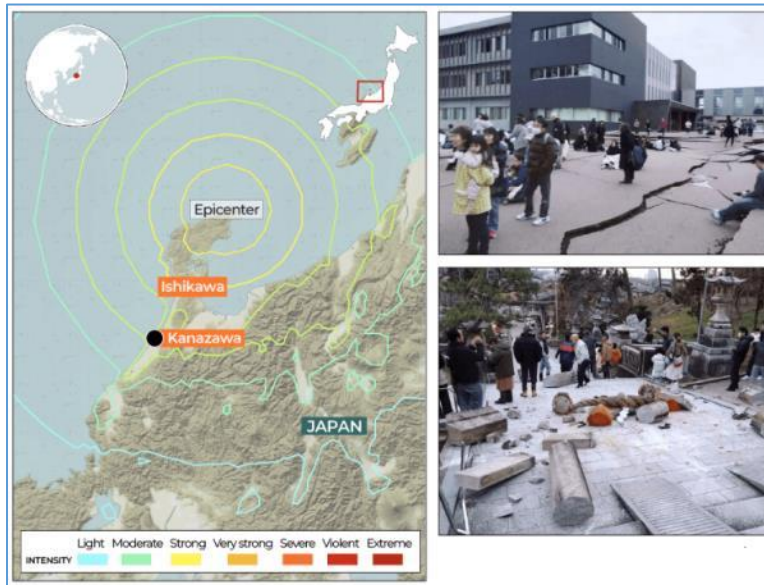
- ❖ Amrit Bharat is an all-new train being inducted into the Indian Railways keeping in mind the comforts and travel needs of the common man.
- ❖ These trains will be non-air conditioned with second class unreserved coaches and sleeper coaches.

- ❖ Newly launched Amrit Bharat Express trains routes:
 - Darbhanga to Anand Vihar Terminal in Delhi via Ayodhya
 - Malda Town to Bengaluru.



INTERNATIONAL

Japan Earthquake



- ❖ A major earthquake with a preliminary magnitude of 7.6 hit north-central Japan.

- ❖ Soon after, the Japan Meteorological Agency issued a tsunami warning along the coastal regions of Ishikawa, Niigata and Toyama prefectures.
- ❖ Waves more than 1-metre-high hit the coast of Wajima City in Ishikawa Territory.
- ❖ Last week, an earthquake of magnitude 6.3 on the Richter scale occurred in Japan's Kuril Islands.
- ❖ Japan was devastated by a massive 9.0-magnitude undersea quake off northeastern Japan in March 2011.
- ❖ In March 2022, a 7.4-magnitude quake off the coast of Fukushima shook large areas of eastern Japan.
- ❖ The capital Tokyo was devastated by a huge earthquake a century ago in 1923.

China's Mengxiang

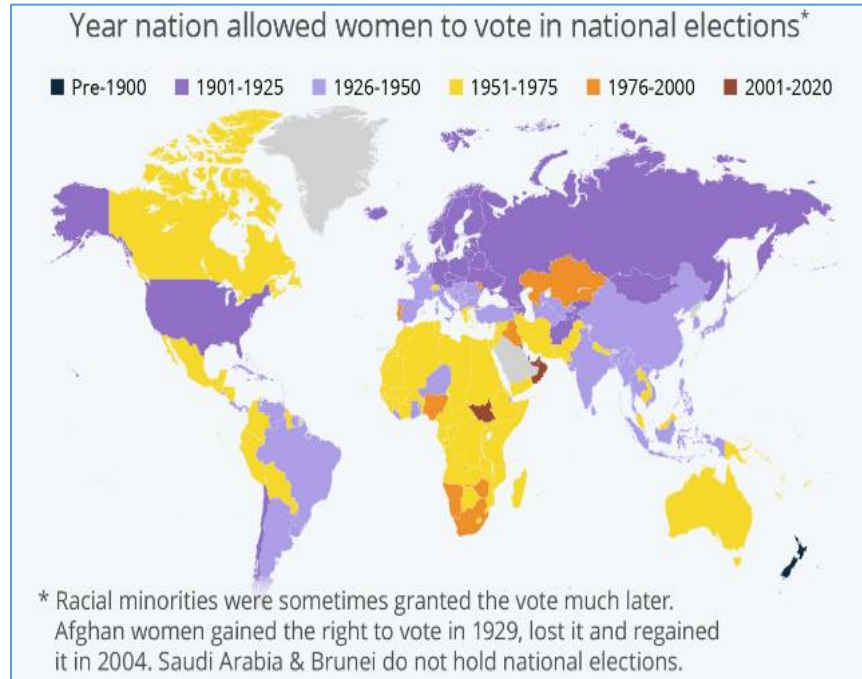
- ❖ China has unveiled its first ocean drilling vessel, the Mengxiang.
- ❖ It is designed to delve into the Earth's crust and explore the mysteries of the mantle.
- ❖ If successful, this will mark humanity's first exploration into the upper mantle.
- ❖ Moreover, its drilling power is the best in its class, with the ability to reach 11,000 metres below the sea's surface.



Women's Suffrage at Vatican

- ❖ In October 2023, Pope Francis allowed women to vote at the Synod of Bishops for the first time.
- ❖ With this historic move, Vatican City became the last country in the world to give its women the right to vote.

- ❖ Earlier in 2021, Francis for the first time named a woman to the number two position in the governorship of Vatican City.
- ❖ This was making Sister Raffaella Petrini the highest-ranking woman in the world's smallest state.



Russia on International Space Station



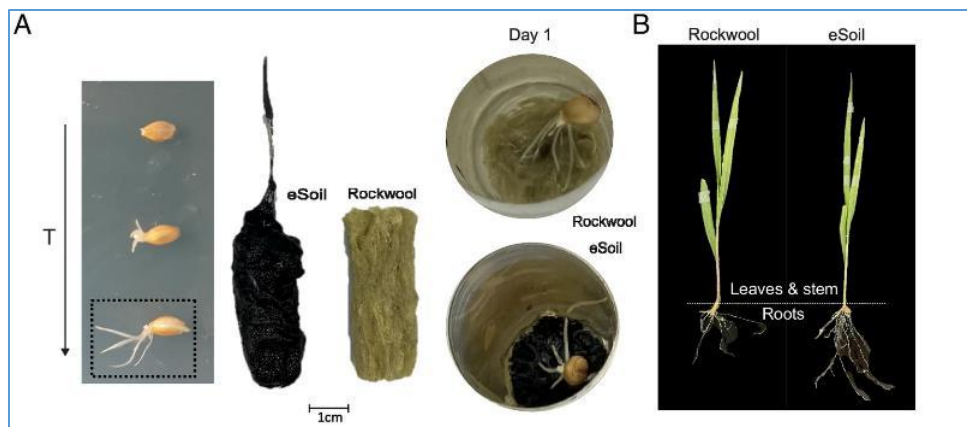
- ❖ Russian and U.S. space agencies have agreed to keep working together to deliver crews to the International Space Station (ISS) until at least 2025.
- ❖ The ISS was launched in 1998 at a time of increased US-Russia cooperation following the Cold War "Space Race."

- ❖ ISS partners – the United States, Russia, Europe, Canada and Japan – are for the moment only committed to operate the orbiting laboratory until 2024.
- ❖ Russia said that it planned to use the International Space Station until 2028.

SCIENCE AND TECHNOLOGY

eSoil: New Development

- ❖ New method of soilless gardening, or hydroponics, using an electrically conductive growing medium is called "electronic soil" or eSoil.
- ❖ eSoil is a low-power bioelectronic growth substrate that can electrically stimulate the root system and growth environment of plants.
- ❖ This novel substrate is environmentally friendly, being derived from cellulose and a conductive polymer called PEDOT.
- ❖ It also offers a low energy, safe alternative to previous methods that required high voltage and non-biodegradable materials.
- ❖ eSoil uses low energy and minimises resource consumption.
- ❖ Its active material is an organic mixed-ionic electronic conductor.
- ❖ When the roots of barley seedlings were electrically stimulated for 15 days, they showed a 50% increase in growth using eSoil.



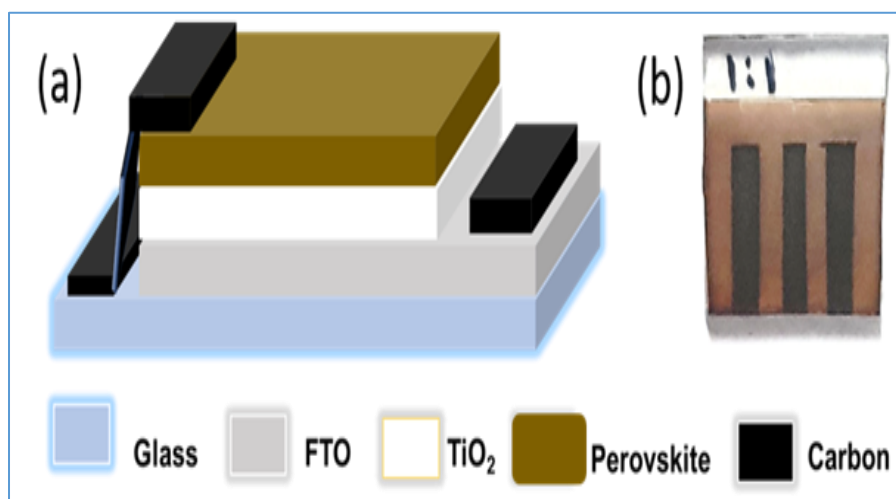
Hameleon Trojan

- ❖ The Security researchers have found a new version of the 'Chameleon Trojan' malware.
- ❖ It can disable biometric authentication methods like fingerprint and face unlock to steal your phone's PIN.

- ❖ It steals on-screen content, gives itself more permission and can even navigate using gestures to capture any PINs and passwords users enter to unlock the device.



Eco-Friendly Solar Cell Material



- ❖ The Indian scientists have indigenously developed organic-inorganic halide perovskite self-powered broadband photodetector.

- ❖ It has partial substitution of lead by magnesium which can be useful for solar energy generation.
- ❖ The research represents a significant step towards the replacement of toxic Pb²⁺ in perovskite optoelectronic devices.
- ❖ The toxic lead (Pb²⁺) is known for harmful effects on health and the environment.

ENVIRONMENT

Deep-sea bird survey



- ❖ Throughout 14 surveys saw the active participation of over 180 ornithologists and birdwatchers from various parts of India.
- ❖ The new addition to the Karnataka state bird list is sooty shearwater, streaked shearwater, brown skua, and brown booby.
- ❖ The sooty shearwater spotted in April was the first sighting for India off the Mangaluru coast.
- ❖ The Brown Skua, also seen for the first time in Karnataka.

IMPORTANT DAYS

Global Family Day 2024 - January 01

- ❖ This day revolves around the idea of promoting positivity, fostering unity, and cultivating a sense of community and brotherhood among nations.



- ❖ This day was established in 1999.
- ❖ The theme for 2024 is “Embracing Diversity, Strengthening Families.”

