

May - 26

## TNPSC BITS

- ❖ Industrialist Karumuttu T. Kannan passed away recently in Madurai.
  - He served as Thakkar of Menakshi Amman Temple and Chairman of Thiagarajar Mills.
- ❖ G20's third Environment and Climate Sustainability Working Group (ECSWG) meeting was held in Mumbai, Maharashtra.
- ❖ The National Investigation Agency (NIA) conducted a nationwide drive codenamed 'Operation Dhvast'.
- ❖ Canara Bank emerged as the largest buyer among the state-owned lenders in 2022-23, making total purchases of Rs 592.82 crore from the portal.
- ❖ Union Home Minister laid the foundation stone for the permanent campus of the National Academy of Coastal Policing (NACP) at Okha in Gujarat.
- ❖ Public sector banks' cumulative profit crossed the Rs 1 lakh crore-mark in the financial year ended March 2023.
- ❖ Global private equity firm Blackstone has acquired 100% stake in International Gemmological Institute (IGI) from China-based investment firm Fosun, and Roland Lorie.

## TAMIL NADU

### IIT-M incubated TuTr Hyperloop



- ❖ A start-up, TuTr Hyperloop, was incubated in the Indian Institute of Technology Madras.



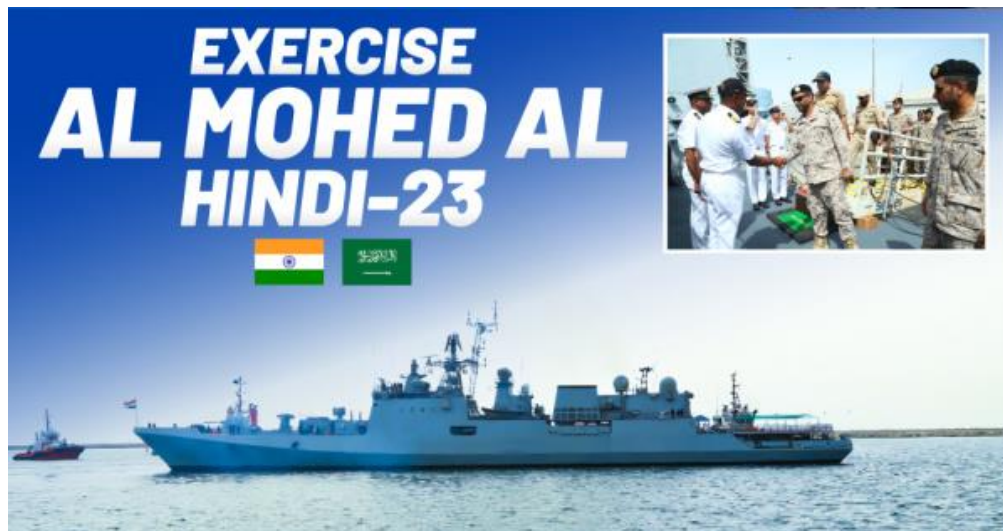
- ❖ It will help the institute develop intellectual property in hyperloop technology.
- ❖ TuTr has partnered with Tata Steel to develop and deploy the technology.
- ❖ TuTr's mission is to deliver customers with fast and reliable "on-demand" affordable transportation.
- ❖ TuTr Hyperloop has partnered with European company Hardt Hyperloop for interoperable hyperloop technology between India and Europe.

### **Tamil as compulsory additional language**

- ❖ The Tamil Nadu Director of Private Schools has announced that students in classes 9 and 10 in all private schools affiliated to various boards.
- ❖ This will be applicable to those, who have not opted for Tamil as one of the languages as a part of their respective board exam requirements.
- ❖ They will have to be mandatorily taught Tamil as an additional compulsory language in the 2024-25 academic year.
- ❖ This Government Order passed based on the Tamil Language Learning Act 2006.
- ❖ Syllabus and the exam pattern will be determined by the Director of Private Schools.

## **INTERNATIONAL**

### **AL-MOHED AL-HINDI 2023 Naval Exercise**



- ❖ Al-Mohed-Al Hindi is a joint Naval Exercise held between India and Saudi Arabia.
- ❖ INS Tarkash and INS Subhadra from India participated in this exercise.

- ❖ The decision on the Bilateral exercise was taken during the Riyadh Summit held in 2019.
- ❖ The exercise was the second such Naval Exercise.
- ❖ The inaugural edition of the exercise was successfully conducted in 2021.

### **FIPIC Summit 2023**



- ❖ The third forum for India-Pacific islands co-operation (FIPIC Summit) was held today at Port Moresby.
- ❖ It was jointly hosted by India and Papua New Guinea.
- ❖ FIPIC is a multinational grouping for cooperation between India and 14 Pacific Islands nations.
- ❖ In 2015, FIPIC Trade Office at Federation of Indian Chambers of Commerce & Industry (FICCI) to promote Trade & Investment opportunities between India & Pacific Island Countries.

### **International Pathogen Surveillance Network**

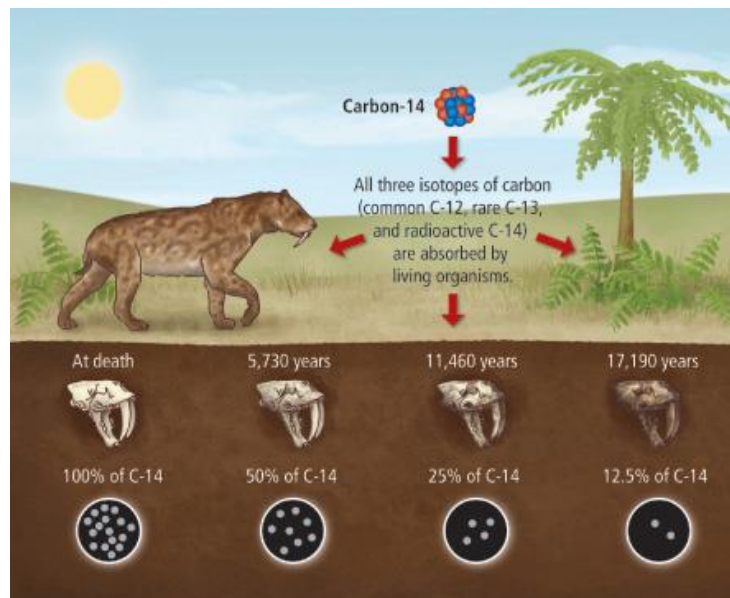
- ❖ The World Health Organization launched this global network.
- ❖ It aims to help swiftly detect the threat from infectious diseases, like COVID-19, and share the information to prevent their spread.

- ❖ The International Pathogen Surveillance Network (IPSN) will provide a platform for connecting countries and regions, improving systems for collecting and analysing samples, the agency said.
- ❖ The network will rely on pathogen genomics to analyse the genetic code of viruses, bacteria and other disease-causing organisms.



## SCIENCE AND TECHNOLOGY

### Calcium-41 radiometric dating



- ❖ Since its invention in 1947, carbon dating allowing scientists to estimate the age of an organic material based on how much carbon-14 it contains.
- ❖ Carbon-14 has a half-life of 5,700 years.



- ❖ So, the technique can't determine the age of objects older than around 50,000 years.
- ❖ In 1979, scientists suggested using calcium-41, with a half-life of 99,400 years, instead.
- ❖ Calcium-41 is rarer, occurring once in around  $10^{15}$  calcium atoms.
- ❖ The researchers able to spot one calcium-41 atom in every  $10^{16}$  calcium atoms with 12% precision in seawater.

## STATES

### Highest sugar production

| TOP SUGAR PRODUCING STATES<br>(IN LAKH TONNES) |             |                  |           |         |           |
|--|-------------|------------------|-----------|---------|-----------|
| YEAR<br>(OCT-SEP)                              | MAHARASHTRA | UTTAR<br>PRADESH | KARNATAKA | GUJARAT | ALL-INDIA |
| 2013-14  | 76.85       | 64.87            | 41.77     | 11.77   | 243.60    |
| 2014-15  | 105.07      | 71.01            | 49.35     | 11.54   | 283.13    |
| 2015-16  | 84.24       | 68.55            | 40.49     | 11.68   | 251.25    |
| 2016-17  | 42.38       | 87.73            | 21.44     | 8.85    | 202.62    |
| 2017-18  | 107.05      | 120.50           | 36.58     | 10.67   | 323.28    |
| 2018-19  | 107.21      | 118.22           | 44.29     | 11.23   | 331.62    |
| 2019-20  | 61.70       | 126.37           | 35.00     | 9.30    | 273.85    |
| 2020-21  | 106.30      | 110.59           | 44.65     | 10.50   | 311.20    |
| 2021-22*                                       | 138.00      | 104.00           | 60.00     | 12.00   | 355.50    |

\*Projected

- ❖ Uttar Pradesh has surpassed Maharashtra in sugar production in the current season.
- ❖ The total sugar produced by Uttar Pradesh in sugar season 2022-2023 is 107.29 lakh tonnes.
- ❖ Maharashtra produced 105.30 lakh tonnes.
- ❖ The area under cane cultivation in Uttar Pradesh is 28.53 lakh hectare.

## PERSONALITIES, AWARDS, AND EVENTS

### Rayyanah Barnawi

- ❖ Rayyanah Barnawi made history as the first Arab woman to venture into space.
- ❖ She is one of two Saudis on Axiom Space's second private mission

- ❖ Ms Barnawi is joined on Axiom Mission 2 by fellow Saudi mission specialist Ali Alqarni.
- ❖ He is the second male astronaut from the Gulf kingdom to go to space.
- ❖ Other two astronauts are American commander Peggy Whitson and pilot John Shoffner.



## IMPORTANT DAYS

### **National Anti-Terrorism Day - May 21**



- ❖ This day highlights the significance of eradicating terrorism and promoting peace and harmony.

- ❖ Former Indian Prime Minister Rajiv Gandhi was assassinated on this day in 1991.
- ❖ On this year's Anti-Terrorism Day, India commemorates Rajiv Gandhi's 32nd anniversary of death.
- ❖ He was the youngest prime minister of India who came into power at 40.
- ❖ This day was officially announced on May 21, 1991.
- ❖ According to the 10th edition of the Global Terrorism Index, India ranked among the 25-worst terror-hit countries.
- ❖ Globally, the deaths from terrorism fell by 9% to 6,701 in 2022.
- ❖ Terror attacks declining by almost 28% from 5,463 in 2021 to 3,955 in 2022.

### **International Day to End Obstetric Fistula - May 23**



- ❖ This day aims to spread awareness about the prevention and treatment of problems like obstetric fistula.
- ❖ In 2003, the United Nations Population Fund launched the 'Campaign to End Fistula.'
- ❖ The United Nations began celebrating this Day in 2013.
- ❖ Obstetric fistula is a birth-related injury that primarily affects women in low-income regions.

### **International Missing Children's Day - May 25**

- ❖ This day aims to place a spotlight on the issue of child abduction, educate parents on safeguarding measures to protect their children.

- ❖ This day began as an observance in the USA in 1983.
- ❖ In 2001, the same date was launched as an international event.



## MISCELLANEOUS

### Wolf-dog hybridisation

- ❖ The Researchers have found the first evidence of wolf-dog hybridisation in the country.
- ❖ The hair samples were used to extract DNA and processed for segregating, identifying, pressing and following other scientific protocols.
- ❖ The results provide the first genetic evidence of one F2 hybrid (offspring from an F1 hybrid) and the other individual could be a complex hybrid between dogs and wolves.
- ❖ These results reiterate the power of next-generation sequencing (NGS) for non-invasive samples as an efficient tool for detecting hybrids.

|  |   |  |
|--|---|--|
| <p><b>WARNING SIGNS</b></p> <p>➤ Wolf-dog hybridization &amp; introgression of dog genomes could lead to loss of unique and adaptive</p> |  <p>The suspected wolf-dog hybrid individual (L) with a wolf</p> <p>variation in wolves, posing a significant conservation challenge</p> | <p>➤ As wolves mostly occupy grasslands and scrub habitats outside PAs, involving citizen scientists can play a key role in their conservation</p> <p>➤ Hybridization among canid species is complex. Both sexes of canid hybrids are fertile in contrast to the other mammalian species</p> |
|--|---|--|

