

March - 17

TNPSC BITS

- ❖ India's first FutureLABS center named, "Centre for Semiconductor Chips & Systems for Strategic Electronics" was inaugurated in C-DAC of the Thiruvananthapuram.
- ❖ Retired IAS officers Gyanesh Kumar and Sukhbir Singh Sandhu were appointed new Election Commissioners of India.
- ❖ Directorate of Revenue Intelligence has busted a major gold smuggling racket under Operation Rising Sun.
- ❖ IIT Madras is collaborating and funding a space startup Vellon Space to demonstrate a miniature space laboratory called 'AsteriX Lab' in orbit by 2025.

TAMIL NADU

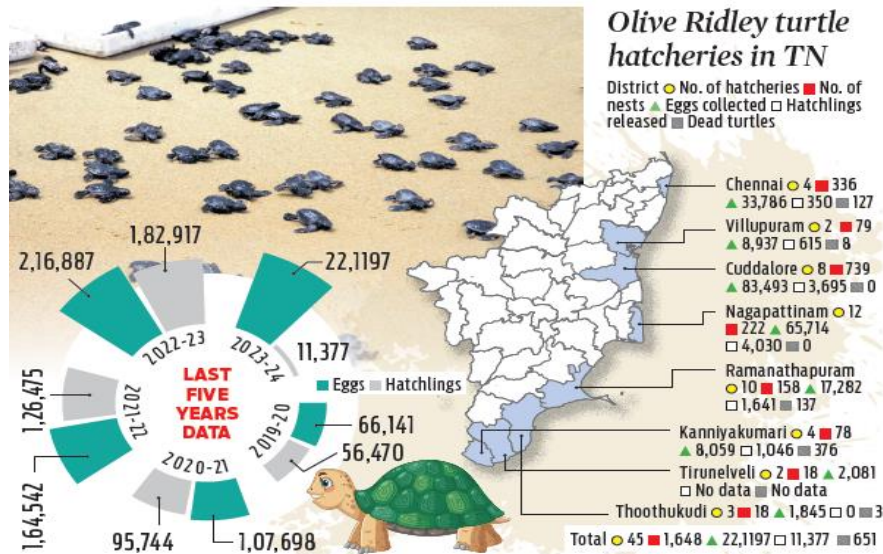
Madras High Court on Srilankan Refugees



- ❖ The Madras High Court refused to issue a general direction to the Centre to grant Indian citizenship to all children born at the special camps for Sri Lankan refugees in Tamil Nadu.

- ❖ An Indian citizenship was granted to Indian origin Tamils as per the terms of Sirimavo - Shastri Agreement of the year 1964 and the Sirimavo - Gandhi Agreement of the year 1974.
- ❖ Then, the issue was dealt with under Section 5(1)(b) of the Citizenship Act of 1955, applicable to people of Indian origin.
- ❖ However, the statutory time limit for making an application under the Sirima - Shastri pact of 1964 was fixed to be October 31, 1981.
- ❖ The Indian Origin Tamils who had failed to apply before the cut-off date were not entitled to get Indian citizenship even under Section 5(1)(b).
- ❖ A foreigner who had entered India without valid travel documents and remained beyond permitted period of time would be considered only an illegal migrant under Section 2(1)(b) of the Citizenship Act of 1955.
- ❖ Section 3(1)(c) of the Citizenship Act of 1955 clearly states that those who were born in India after the commencement of the 2003 amendment could claim citizenship by birth only if both the parents were Indian citizens or if one of the parents was an Indian citizen and the other was not an illegal migrant.

Olive Ridley hatcheries



- ❖ The Tamil Nadu Forest Department has set up 'climate-resilient' hatcheries for Olive Ridley Sea turtles.
- ❖ As many as 10 hatcheries — two each in Chennai and Nagapattinam, one each in Villupuram, Cuddalore, Nagapattinam, Tirunelveli, Ramnad, Thoothukudi and Kanniyakumari have been established.

- ❖ Warmer temperatures are known to produce a higher proportion of female hatchlings and cooler temperatures lead to a higher proportion of males from the nests.
- ❖ The Sea turtles exhibit temperature-dependent sex determination with pivotal temperatures close to 30°C.

NATIONAL

UNDP Gender Inequality Index 2022

- ❖ In Gender Inequality Index (GII) 2022, India has been ranked at 108 out of 193 countries with a score of 0.437.
- ❖ India stood at rank 122 out of 191 countries in the Gender Inequality Index 2021.
- ❖ Over the last 10 years, India's rank in GII has become consistently better.
- ❖ In 2014, this rank was 127, which has now become 108.
- ❖ However, the country also has one of the largest gender gaps in its labour force participation rate.
- ❖ India has 47.8 per cent difference between women (28.3 per cent) and men (76.1 per cent) in labour force participation rate.



Launch of NFECs and NECCE

- ❖ The Government of India is launching a National Curriculum for ECCE and a National Framework for Early Childhood Stimulation.

- ❖ ECCE covers children from three to six years old as well as a National Framework deals with Early Childhood Stimulation for children from birth to three years.
- ❖ These initiatives recognizing the pivotal role of early years in development and thereby seeking to strengthen India's Early Childhood Care and Education landscape.
- ❖ NECCE deals with children between the ages of 3 and 8 and focuses on “playful joy-based learning”.
- ❖ NFECES provides a combination of activities, including in-centre and at-home, indoor and outdoor, child-led and educator-led, and robust assessment tools.

Key features of the framework
The National Curriculum Framework, made for the 3-8 age group, is the first such integrated curriculum for children

What replaces textbooks?
NCF suggests the use of simple worksheets for the 3-6 age group


- “...for ages 3-6, there should not be any prescribed textbooks for the children...(they) should not be burdened with textbooks,” the document states.

Why is this an important step?

- Vast numbers of school-going children routinely fail learning outcome tests
- Effect of holistic education in founding years on learning levels of children

Other reforms

- Toy-based learning
- Avoiding stereotypes
- Gender representation
- Ethical, moral awareness



SCIENCE AND TECHNOLOGY

Astronomical Grand Cycles

- ❖ The Earth undergoes climate fluctuations in a newly discovered 2.4-million-year cycle.
- ❖ Geological sedimentary evidence in the deep sea has proved the existence of the cycle, which is linked with Mars’ orbit.
- ❖ We are now about 200,000 years into a warming cycle.
- ❖ In about 1 million years, we’ll reach the next peak.



- ❖ The gravity fields of the planets in the solar system, interfere with each other and this interaction, called a resonance.
- ❖ It changes planetary eccentricity, which measures how close to circular their orbits are.
- ❖ This interaction leads to periods of higher incoming solar radiation and warmer climates in cycles of 2.4 million years on Earth.



Devin AI



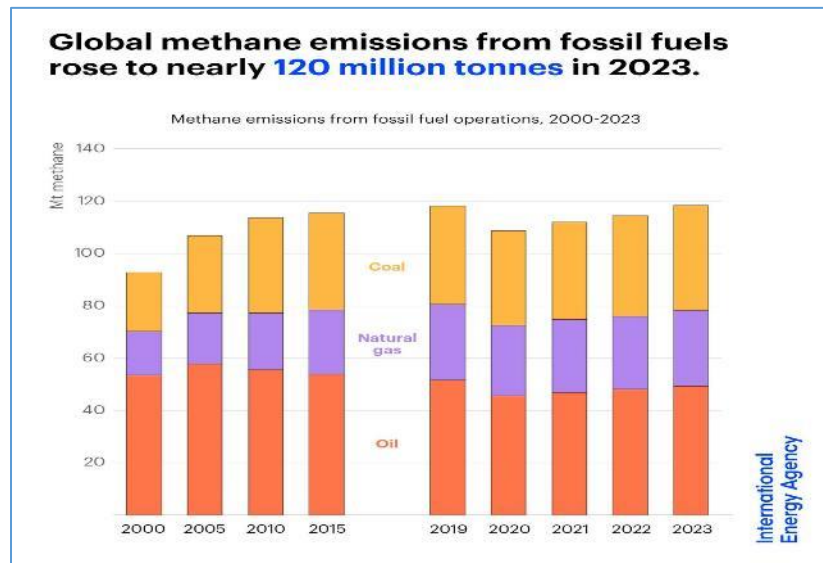
- ❖ US-based startup Cognition launched Devin AI, an artificial intelligence software.
- ❖ It alters the way code is debugged, written and deployed.

- ❖ Devin AI is a first of its kind and has the ability of taking a simple command and turning it into a functioning website or software program.
- ❖ It can also manage the whole process of creating and releasing whole software applications.

ENVIRONMENT

Global Methane Tracker 2024

- ❖ Methane emissions from fuel use in 2023 were close to being the highest ever at 120 million tonnes
- ❖ Of the 120 Mt of methane that escaped into the atmosphere, around 80 Mt came from the top 10 emitter countries.
- ❖ The United States, being the largest emitter of methane from oil and gas operations, topped the list, followed by Russia.
- ❖ Methane emissions rose by more than 50 per cent in 2023 compared to 2022.
- ❖ More than 5 Mt was traced back to major fossil fuel leaks around the world.
- ❖ Bioenergy — largely from biomass use — contributed a further 10 Mt emissions.



Scorpion with 8 Eyes and Legs

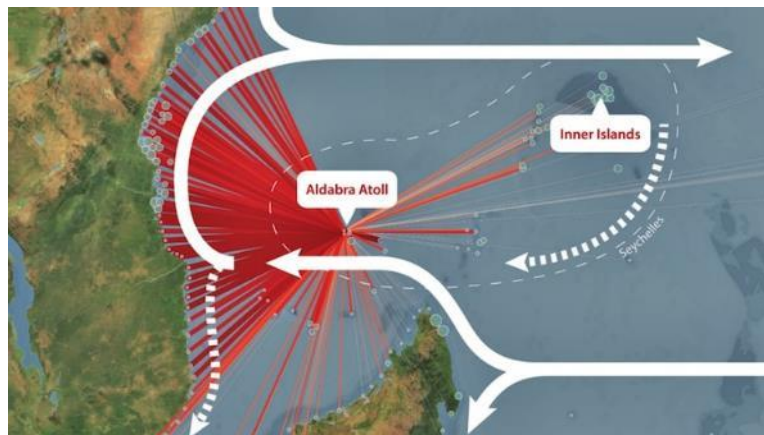
- ❖ Team of researchers discovered a previously unknown species of scorpion.
- ❖ This new species belongs to the subgenus Euscorpions and has been named Euscorpions Krachan after the national park in Thailand.
- ❖ They are 'very small in comparison to most other species of the subgenus'.

- ❖ They also have eight eyes and eight legs.



Coral Superhighway

- ❖ The Remote coral reefs across the Seychelles are closely related despite being scattered across more than a million square kilometres.
- ❖ Ocean currents scatter larvae between these distant islands, creating a kind of “coral superhighways.”
- ❖ This discovery is very important because a key factor in coral reef recovery is larval supply.



STATES

Aghanashini Estuary

- ❖ Aghanashini River in central Uttara Kannada district of Karnataka will be pitched for Ramsar tag.

- ❖ Aghanashini River originates in the Western Ghats and flows westward towards Arabian Sea and a major part of its course flows through the forested gorges and valleys.
- ❖ The other contender in the list is Ranganathittu Bird Sanctuary in Mandya district of Karnataka.

