

## My Notes....

### NATIONAL

#### FIRST TIME HOME VOTING IN COMING 2024 ELECTION

- The **Election Commission of India (ECI)** has introduced **home voting** for the **first time in a Lok Sabha Election**.
- **This initiative** aims to make voting **easier for elderly citizens** and **Persons with Disabilities (PwDs)** during the 2024 Lok Sabha elections.
- **Now, voters above 85 years of age** and **PwDs with 40% benchmark disability** can **choose to vote from home**.

#### 1<sup>ST</sup> HOMEGROWN CAR T-CELL THERAPY CENTRE

- President **Droupadi Murmu** inaugurated a **CAR T-cell therapy centre** at **IIT Bombay**; the **first domestically developed one in the country**.
- The treatment known as **CAR T-cell therapy** is a form of **immunotherapy** that uses a **person's immune system** to **fight off cancer cells**.
- The **therapy uses our body's immune cells**, called **T-cells**, a type of **lymphocyte** or **white blood cell**.

#### METAL-RICH INDIAN OCEAN SEABED

- **Indian delegates** visited the **International Seabed Authority (ISA)**, **Jamaica** to **strengthen efforts to explore two deep sea regions** in the **Indian Ocean** for mining
- **New Delhi** is exploring **obtaining rights to mine a metal-rich region**, the **Carlsberg Ridge**, located **away from India's western shores**, and a **cobalt-rich ferromanganese crusts** in deep seabed region, **Afanasy-Nikitin Seamount (ANS)**, located **away from the eastern shores**, both in the **vast Indian Ocean**.

#### GOPI THOTAKURA TO BE THE FIRST INDIAN SPACE TOURIST

- **Entrepreneur** and **pilot Gopi Thotakura** is set to become the **first Indian** to **venture into space as a tourist** on the **NS-25 mission of Blue Origin** — a company founded by **Jeff Bezos**, who is also the **founder of Amazon**.
- **Space tourism** is essentially a **section of the aviation sector** which seeks to **provide tourists** with the **opportunity to become astronauts** and **experience space travel for recreational, leisure, or business purposes**.

### INTERNATIONAL

#### ISRAEL KILLED IRANIAN GENERALS IN SYRIA

- **Israeli warjets** attacked an **Iranian consulate building** in **Damascus, Syria**, killed at **least 13 people** including **General Mohammad Reza Zahedi**, who was a senior leader of the **Iranian Quds Force**.
- The **Quds Force** is the **paramilitary and intelligence wing** of the **Iranian Revolutionary Guard Corps (IRCG)**.

- The **IRCG** was set up by the leader of the **Islamic Revolution** and **Iran's first Supreme Leader, Ayatollah Ruhollah Khomeini**, in **1979**.

## WORLD CENTRAL KITCHEN

- **World Central Kitchen**, the **food charity** founded by celebrity **chef José Andrés**, called a **halt to its work in the Gaza Strip** after an apparent **Israeli strike killed seven of its workers**, mostly foreigners.
- **Founded in 2010**, **World Central Kitchen** delivers **freshly prepared meals** to people in need following **natural disasters**, like **hurricanes or earthquakes**, or to those enduring conflict.

## IRAN LAUNCHES ATTACKS ON ISRAEL

- **Iran launched hundreds of drones and missiles** towards **Israel**, in **retaliation for an Israeli attack on its consulate** that occurred in **Damascus, Syria**.
- **Iran and Israel** have also been **regional rivals for long**. Iran has also blamed **Israel for some other attacks** that have taken place in the country.
- **Israel**, in turn, has **not claimed responsibility** but has been **critical of Iran supporting regional groups** such as **Hezbollah**, the **Houthis**, and **Hamas**.

# ECONOMY

## CDP-SURAKSHA

- The **CDP-SURAKSHA** is essentially a **digital platform**. **SURAKSHA** stands for "**System for Unified Resource Allocation, Knowledge, and Secure Horticulture Assistance**."
- The platform will allow **an instant disbursement of subsidies to farmers in their bank account** by utilising the **e-RUPI voucher** (more on this later) from the **National Payments Corporation of India (NPCI)**.
- The **CDP** is a **component** of the **central sector scheme of NHB**. It is aimed at leveraging **the geographical specialisation of horticulture clusters**.

# SCIENCE & TECHNOLOGY

## INDIA'S NEW GENERATION BALLISTIC MISSILE

- **India** successfully flight tested the **new generation ballistic missile Agni-Prime** from the **APJ Abdul Kalam Island** off the coast of **Odisha**.
- **Agni Prime** is the **Two-stage** canisterised **solid propellant ballistic missile**, with a maximum range of **1000 to 2000 km**.

## FIRST EVER ENERGY TRANSITIONS REPORT

- A first of its kind report titled “**Synchronizing energy transitions towards possible Net-Zero for India: Affordable and clean energy for All**” launched on 3 April 2024.
- **Coal** is projected to continue until the next two decades as **the backbone** of the **Indian energy system**, the report said.
- **Net-zero** is not possible without **substantial nuclear power** and Renewable Energy (RE) generation **by 2070**.

## WORLD'S FIRST ORBITER TO MAKE DIRECT SATELLITE CALLS

- Chinese scientists have developed **world's first satellite series (Tiantong-1)** capable of enabling **Smartphone calls** without the need for ground-based infrastructure such as **Base Transceiver Station (BTSs)** or **cellular towers**.

## NEW MAP OF UNIVERSE

- **An international team of researchers** has released **the most comprehensive “three-dimensional” map of the universe**, which, scientists hope, could **reveal some clues about dark energy**.
- **Dark energy** is the **mysterious force** that is believed to be **causing the universe to expand uncontrollably**.
- The researchers have published its findings from the **first year of observations** by the **Dark Energy Spectroscopic Instrument**, or **DESI**.

## A TIME STANDARD FOR THE MOON

- The **White House** has **tasked NASA** with creating a **new time zone for the moon** by the **end of 2026**.
- The **new lunar standard**, called “**Coordinated Lunar Time (LTC)**,” is part of a broader effort to “**establish time standards at and around celestial bodies other than Earth**.”

## OPEN AI'S NEW VOICE ENGINE CLONES HUMAN SPEECH

- **OpenAI**, the company behind **AI chatbot ChatGPT**, introduced a **new AI model** that **can replicate any voice in any language** by simply using a **brief audio sample**.
- Known as **Voice Engine**, it lets users upload a **15-second audio sample** and **uses it to generate audio in the same voice** and manner of speaking.

## MISCELLANEOUS

### PHYSICIST PETER HIGGS PASSES AWAY

- **Peter Higgs**, who predicted **the existence of a new particle** that came to be named after him (as well as God) died on 9 April 2024. He was 94.
- He was awarded the Nobel prize for physics in 2013 for his work in 1964 showing how the **boson helped bind the universe together** by **giving particles their mass**.

## WORLD'S 1<sup>ST</sup> CONVERSATIONAL AI WITH EMOTIONAL INTELLIGENCE

- **Hume**, a **New York-based research lab** and **technology company**, has introduced what can be called the '**first conversational AI with emotional intelligence**'.
- The company claims that it is **building empathic AI** that could '**serve human well-being**' through an **application programming interface (API)** that can **interpret emotional expressions** and come up with **empathic responses**.

## MASSIVE EARTHQUAKE HITS TAIWAN

- **Several people died** and **injured in Taiwan** after **the island was hit by its biggest earthquake** in at least 25 years on 4 April 2024.
- **Taiwan is prone to earthquakes** as it lies along the **Pacific "Ring of Fire"** — where **90% of the world's earthquakes take place**.
- The **Ring of Fire** is essentially a **string of hundreds of volcanoes** and **earthquake-sites** which runs along the **Pacific Ocean**.
- It is a **semicircle or horse shoe in shape** and stretches **nearly 40,250 kilometres**.

## FLOOD IN KERALA'S COASTAL AREAS

- **Hundreds of houses** have been **flooded in several coastal areas of Kerala** due to **high sea waves**, also known as **swell waves**. Such **flooding events** are called **swell surge** or **Kallakkadal** in Malayalam.
- **Kallakkadal** is essentially **coastal flooding** during the **pre-monsoon (April-May)** season by **swell waves on the southwest coast of India**.
- The term **Kallakkadal**, used by **local fishermen**, is a **combination of two Malayalam words**, including **Kallan** and **Kadal**. "**Kallan means thief** and **Kadal means sea**."