



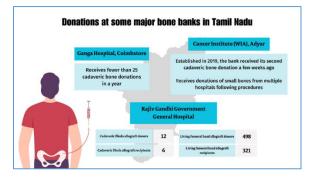
January - 26

# **TNPSC BITS**

- ✤ FIFA President, Gianni Infantino, has been honoured with the prestigious International Sports Personality of the Year award.
- SpaceX launched private Axiom Mission 3 astronaut mission (Ax3) to the International Space Station with Turkey's first space traveller.

## TAMIL NADU

#### Donations of cadaveric bones in Tamilnadu



- ✤ Cadaveric bone donations are still slow-paced in Tamil Nadu.
- While people's overall understanding of cadaveric organ donations has largely improved, this is not the case with bone donation.
- ✤ There were 248 bone donations from 2018 to 2023.
- Major bone banks have only received a small number of donations over this period.
- ✤ The bone bank at Cancer Institute (WIA), Adyar was set up in 2019.
- Every year, Coimbatore Ganga Hospital's bone bank receives fewer than 25 cadaveric bone donations.

## INTERNATIONAL

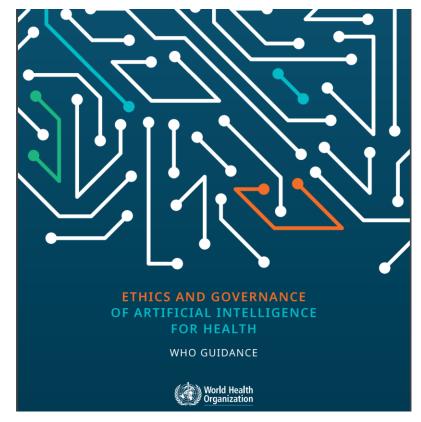
#### **Guidance on Healthcare AI Ethics**

The WHO issues guidelines on ethics and governance of AI for health, specifically multimodal AI like ChatGPT.





- These guidelines address the ethical quandaries surrounding the rapid advancement of generative AI technology, particularly in its applications within the healthcare domain.
- The new WHO guidance outlines five broad applications of large multimodal models (LMMs) for health:
  - o Diagnosis and clinical care, such as responding to patients' written queries
  - Patient-guided use, such as for investigating symptoms and treatment
  - Clerical and administrative tasks, such as documenting and summarising patient visits within electronic health records
  - Medical and nursing education, including providing trainees with simulated patient encounters
  - Scientific research and drug development, including to identify new compounds.



## SCIENCE AND TECHNOLOGY

#### **Havisure Vaccine**

 Indian Immunologicals Ltd (IIL), launched India's 'first' indigenously developed Hepatitis A vaccine, Havisure.

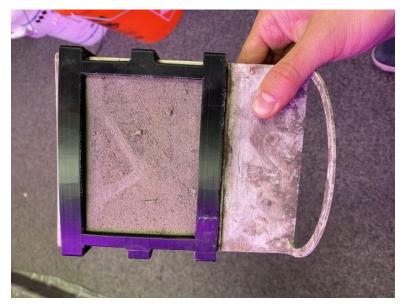




- Hepatitis A is a highly contagious liver viral infection.
- It poses a significant public health challenge primarily spreads through the fecaloral route.
- ✤ It is transmitted through the ingestion of contaminated food or water.
- The vaccine is effective in preventing the disease and is recommended for children in routine immunisation.
- ✤ IIL is a wholly-owned subsidiary of National Dairy Development Board (NDDB).



#### **Soil-Powered Fuel Cell**



 Scientists of Northwestern University in USA have developed a new fuel cell they claim can harvest energy from microbes living in the soil.





- ✤ The fuel is around the size of a book and can potentially be used to fuel underground sensors used in green infrastructure and precision agriculture.
- It could become a sustainable, renewable alternative to batteries that use toxic and flammable chemicals.
- Soil-based microbial fuel cells (MFCs) were first created in 1911 and they operate not all that differently from a battery.
- They have an anode, a cathode and electrolyte.
- But instead of using chemicals to generate electricity, they harvest electricity from bacteria that naturally give out electrons to nearby conductors.
- ✤ These electrons from anode to cathode to create an electric circuit.

#### **STATES**

#### C4IR – Hyderabad

- The World Economic Forum has agreed to set up its Centre for Fourth Industrial Revolution (C4IR) in the Telangana State capital.
- The C4IR will be launched during the Bio Asia- 2025 scheduled in the city in February next year.
- Setting up of the centre will go a long way in designing the State Health Tech Landscape aimed at improving healthcare in the State.



#### Kolam tribes

- The Central government extended basic facilities to the endangered Kolam tribe under the Jan Jati Adivasi Nyay Maha Abhiyan.
- They are listed as Particularly Vulnerable Tribal Group (PVTG) in the state of Maharashtra and Andhra Pradesh.





- It will focus on the health and education of these primitive tribal groups living in villages by strengthening local primary healthcare centres (PHCs) and imparting special training to teachers.
- Under the scheme, road connectivity will be improved to these villages from mandal headquarters.
- ✤ Also focusing improving internal roads, providing potable drinking water, electricity or solar energy, and LPG gas stoves and cylinders.
- Kolam tribes, also known as Kolamboli, Kulme and Kolmi, occupy a major portion of Madhya Pradesh.
- These tribal groups are listed as scheduled tribes and also reside in some parts of Maharashtra and Andhra Pradesh.



**Elevating PVTG\*** socio-economically in 18 States & Andaman-Nicobar

Benefits to more than 28L+ people in 22.5K+ habitations across 220 districts

#### **11 critical interventions**

for essential amenities pucca house, road connectivity, piped water supply etc

\*Particularly Vulnerable Tribal Groups



Financial Outlay: ₹24,104 crore

### Ayodhya's Ties to Korean Queen

- ♦ Queen Heo, also known as Suriratna, was the cherished princess of Ayodhya.
- Historical records suggest that she journeyed to Korea and married King Suro.
- The event is believed to have occurred in 48 AD and is acknowledged in South Korea and India.





- ✤ King Suro, who established the Karak dynasty in 42 AD, was Queen Heo's spouse.
- In 2001, the Uttar Pradesh government, in partnership with Gimhae City in South Korea, established the Queen Huh Memorial Park in Ayodhya.



# PERSONALITIES, AWARDS, AND EVENTS

#### Bharat Ratna - Karpoori Thakur

- Karpoori Thakur, the former Chief Minister of Bihar, was chosen for the country's highest civilian award Bharat Ratna (posthumously).
- ✤ He participated in the freedom struggle and was also jailed for it.
- ✤ In independent India, he was voted in as an MLA in 1952.
- When he first became an MLA in 1952, he was selected for an official delegation to Austria.
- He remained an MLA till his death in 1988, except when he became an MP in 1977 and when he lost an Assembly election in 1984.
- Thakur was education minister of Bihar from March 5 1967 to January 28, 1968.
- ✤ He became the state's chief minister in December 1970 with the Samyukta Socialist Party, but his government fell after six months.
- He came to the post again in June 1977, but could not finish a full term, losing power in about two years.
- ✤ In June 1970, the Bihar government appointed the Mungeri Lal Commission.
- Its report of February 1976 named 128 "backward" communities, 94 of which were identified as "most backward".

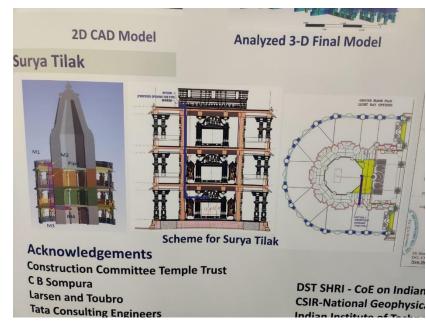




- Thakur government implemented the recommendations of the Commission.
- ✤ The 'Karpoori Thakur Formula' provided 26% reservation.
- Of which OBCs got a 12% share, the economically backward classes among the OBCs got 8%, women got 3%, and the poor from the "upper castes" got 3%.
- Due to this his government fell, and he witnessed major opposition from upper castes.



### **MISCELLANEOUS**



### Surya Tilak

 Scientists from top government institution (Indian Institute of Astrophysics in Bengaluru) have designed a special mirror- and lens-based apparatus.





- It will ensure that every Ram Navami Day at noon, there is a ray of sunlight that falls directly on the forehead of the 'achal Ram Lalla' idol at Ayodhya.
- ✤ It is officially called the 'Surya Tilak mechanism'.
- The Surya Tilak mechanism would be fully operational when the full temple is constructed.

