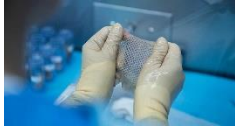## INDIAN ARMY'S SKIN BANK

The Indian Army has recently launched a skin bank facility.

- It was launched to help treat severe skin burn injuries and other skin-related conditions **for service personnel and their families.**

- The **first-of-its-kind facility established in the Armed Forces Medical Services** is staffed with trained medical professionals, including plastic surgeons, tissue engineers, and specialised technicians.

- It will serve as a centralised hub for the collection, processing, storage, and distribution of skin grafts, providing a "critical resource" for military medical centres across the country.

What is a Skin Bank?

- A skin bank is a **facility where skin is taken** from an eligible donor, and **processed, and stored** under appropriate temperature **for up to five years.**

- **Skin from** a **deceased person** can be **donated within six hours** after death.

- **Anyone can donate skin, irrespective of sex and blood group**. The donor's **minimum age** should be **18 years.**

- The skin of persons suffering from AIDS, Hepatitis B & C, Sexually Transmitted Diseases, Skin Cancer, Active skin Disease and Septicemia are considered unfit for donation.

- This **donated skin is** then **collected and processed** over five to six weeks **and frozen** until it's needed.

- The skin is generally **preserved in 85% glycerol solution**. It is **stored between 4-5 degrees Celsius for up to 5 years.**

- **When a burn victim requires skin** for their injuries, a surgical procedure called **skin grafting is conducted.**

What is Skin Grafting?

- o It is a simple process when a piece of **healthy skin is transplanted to a different area of the body** where the skin is damaged or missing.

- o There are **two main types** of skin grafts: **autograft** (**skin is taken from** another part of the patient's **own bod**y) and **allograft** (skin is taken **from a donor**, often sourced from a skin bank).

- o **Any skin can be used on anybody**, and **within two to three weeks post-grafting**, the **doctors can determine whether the patient is accepting it** or not.

WHAT IS JAL JEEVAN MISSION (JJM)?

The Central Government is conceiving a "new project" to ensure that rural households, which were provided taps under the ambitious Jal Jeevan Mission but had not yet been able to avail water, would soon be provided potable water.

- • JJM is envisioned to **provide safe and adequate drinking water through individual Functional Household Tap Connections** (FHTCs) **by 2024 to all households in rural India**.

- • JJM will be based on a **community approach** to water and will include extensive Information, Education and communication as key components of the mission.

- • The Mission was **launched on August 15, 2019.**

- • **Nodal Ministry: Ministry of Jal Shakti.**

  Components:

  - o **Development o**f in-village **piped water supply infrastructure** to provide tap water connections to every rural household.

  - o **Bottom-up planning**: **Community engagement** in planning, implementation and Operation and Maintenance (O&M)

- o **Women empowerment**: **Involvement of women** in planning, decision-making, implementation, monitoring, and O&M
- o **Focus on future generations**: Provision of **tap water supply to schools, tribal hostels, and anganwad**i (daycare) centers
- o **Skill development and employment generation**: Local people are skilled for building and maintaining water supply structures
- o **Greywater management**: Reuse and recycle waste water for source sustenance
- o **Source sustainability**: Promote **groundwater recharge** and water conservation
- o **Water Quality**: Ensure safe drinking water to **reduce water-borne ailments**

- The Mission will **converge with otherCentral and State Government Schemes** to achieve its objectives of sustainable water supply management across the country.

- **Funding Pattern**: The fund sharing pattern is in the **proportion o**f:
  - o **50:50 between Centre and States**
  - o **90:10 for Himalayan** and **North-Eastern States.**
  - o In case of UTs, 100% of the funding is provided by the Central government

WHAT IS INNOVATIONS FOR DEFENCE EXCELLENCE (IDEX)?

Recently, the 350th contract under the Innovations for Defence Excellence (iDEX) was signed with SpacePixxel Technologies Pvt Ltd for miniaturised satellite.

- It is the flagship initiative of the **Union Ministry of Defence.**
- It aims to achieve **self-reliance** and foster **innovation and technology** development in **Defence and Aerospace** by engaging Industries including **MSMEs, start-ups**, individual innovators, R&D institutes and academia.
- It has partnered with **leading incubators in** the country to provide handholding, technical support and guidance to the winners of iDEX challenges.
- **Funding:**

- o iDEX will be funded and managed by a '**Defence Innovation Organization** (DIO)' which has been formed as a '**not for profit company** as per Section 8 of the Companies Act 2013 by the two founder members, i.e. **Defence Public Sector Undertakings (DPSUs) - HAL & BEL.**
- o It functions as the executive arm of DIO, carrying out all the required activities, while DIO will provide high-level policy guidance to iDEX.
- o Under iDEX, financial support is provided to Start-ups/MSMEs/individual innovators and Partner Incubators through DIO.

- It has launched 11 editions of the Defence India Start-up Challenge and recently unveiled **the Acing Development of Innovative Technologies with iDEX (ADITI) scheme** to promote innovations in critical and strategic defence technologies.
- It was the recipient of Prime Minister Award for Public Policy in Innovation Category in 2021 and is currently engaged with over 400 start-ups and MSMEs.

AMBUBACHI MELA

Devotees from across the nation are flocking to the Kamakhya temple in Assam's Guwahati for the commencement of the annual Ambubachi Mela.

- It is an annual Hindu fair held at the historic **Kamakhya Temple.**
- It is celebrated **during the monsoon season** that happens to fall during the Assamese month Ahaar, around the middle of June.
- It is the celebration of the **yearly menstruation course** of goddess **Maa Kamakhya.**

Key facts about Kamakhya temple

- It is **situated on Nilachal Hill** and adjoining the **southern bank of the Brahmaputra** River in Guwahati, Assam.
- It is one of the most revered centres of **Tantric practices.**
- It is regarded as one of the oldest of the **51 Shakti Peethas** in India.
- **Temple Architecture:**

o It had been modelled out of a combination of two different styles namely, the traditional **nagara or North Indian** and **Saracenic or Mughal style of architecture.**

o This combination has been named the **Nilachala Style of Architecture**.

o It consists of five chambers**, garbhagriha** or sanctuary, **antarala** or vestibule, **Jagan Mohan** or principal chamber, **bhogmandir** or ritual chamber and **natmandir** or opera hall for performing traditional dance and music associated with sukti temples.

o It is interesting to note that the superstructure of each of the above chambers exhibits **different architectural features.**

o While the main temple contains a modified **Saracenic dome**, the antarala carries a two-roofed design, the bhogmandir (**also called pancharatna**) with five domes similar in appearance to the main temple and the natmandir having a shell-roof with apsidal end similar to some of the impermanent namghars or prayer halls found in Assam.

SRIKAKULAM

Several historians, academics, writers, and heritage enthusiasts have been working diligently to restore the prominence of Srikakulam's forgotten ancient history.

- It is a district place located in the state of **Andhra Pradesh.**

- It is home to numerous prominent **Buddhist sites, Neolithic-era caves**, and some of the oldest temples in the State.

- **History**

  o It was once part of the **Kalinga Dynasty**. Later it came under the rule of the **Gajapati Kingdom** during the medieval period, followed by the Eastern **Chalukyas of Vengi**. The area was a part of the Kakatiya and Vijayanagara empires as well.

- **Buddhist sites (Dantapuri and Salihundam)**
  - o Salihundam has four **stupas, relic caskets, sculptures of Buddhist deities** Mareechi and Tara.
  - o All the remnants were believed to be built between 2nd century BC and 12th century AD.
  - o It is believed that Buddhism spread to Sumatra and other far-eastern countries from here.
- **Jainism sites:** Tangamayyakonda and Rottavalasa villages.

Famous temples of Srikakulam
  - o **Arasavalli:** The Sri Suryanarayana Swamy Temple, **dedicated to the sun god,** located in Arasavalli, is one of the two temples of its kind, the other being the most popular and magnificent Konark Sun Temple in Odisha.
  - o **Srimukhalingam:** This temple, built in the **Kalinga architectural style**, is located by the **Vamsadhara River** and is dedicated to lord Srimukha Lingeswara.

ROLE PLAYED BY THE OFFICE OF DEPUTY SPEAKER OF LOK SABHA

Office of Deputy Speaker of Lok Sabha:
- **Appointment:**
  - o **Article 93** states that the House of the People shall (as soon as may be) choose two members of the House to be respectively **Speaker and Deputy Speaker.**
  - o **Article 178** contains the corresponding provision for the Speakers and Deputy Speakers in the state Assemblies.
  - o **It is a parliamentary convention** to elect a Deputy Speaker of the Lok Sabha from a party other than the ruling party to run an accountable democratic parliament.
- **Time frame to appoint a Deputy Speaker:**

- o The Constitution **does not specify** a time frame for making the appointments and it is this gap in the provision that allows governments to delay or avoid appointing a Deputy Speaker.
- o However, constitutional experts have pointed out that both Articles 93 and 178 use the words **"shall" and "as soon as may be"**.
- o This means, not only is the election of the Speaker and Deputy Speaker **mandatory**, it must be held at the earliest.

- **Powers:**
  - o According to **Article 95(1)**, the Deputy Speaker performs the duties of the Speaker if the post is vacant. **For example,**
    - ▪ After the first Speaker (**G V Mavalankar**) died in 1956 before his term ended, Deputy Speaker M Ananthasayanam Ayyangar filled in for the remaining tenure of Lok Sabha from 1956 to 1957.
    - ▪ Again, after **G M C Balayogi** (Speaker in the 13th Lok Sabha) of the TDP, passed away in 2002, Deputy Speaker P M Sayeed (of Congress) became acting Speaker for two months.
  - o The Deputy Speaker has the **same powers** as the Speaker when presiding over the House.
  - o All references to the Speaker are deemed to be references to the Deputy Speaker as well for the times when s/he presides.

- **Removal from the office:**
  - o Once elected, the Deputy Speaker usually **continues in office until the dissolution of the House.**
  - o Under **Article 94** (and Article 179 for state Assemblies), the Speaker or Deputy Speaker shall vacate his/her office if s/he ceases to be a member of the House of the People.
  - o **They may also resign (to each other)**, or may be **removed from office** by a resolution of the House of the People passed by a majority of all the then members of the House.

Rules for the Election of the Deputy Speaker of Lok Sabha:

- **Election of the Speaker:**
  - The practice in both the Lok Sabha and state Assemblies has been to elect the Speaker in the **first session of the new House**.
  - **S/he is usually elected on the third day**, after the oath-taking and affirmations have taken place over the first two days.

- **The election of the Deputy Speaker:**
  - It is generally **not delayed beyond the second session** unless there are some genuine and unavoidable constraints.
  - However, there is **no bar on having this election in the first session** of the new Lok Sabha or Assembly.
  - **In the Lok Sabha**, it is governed by Rule 8 of the **Rules of Procedure and Conduct of Business in Lok Sabha** and shall be held on such date as the **Speaker may fix**.

CHINA'S LUNAR MISSION

- China's Chang'e 6 Lunar Mission is part of the China National Space Administration's (CNSA) ambitious lunar exploration program.
- It is a follow-up mission to Chang'e 5, which successfully returned lunar samples to Earth in 2020.
- **Objectives:**
  - **Sample Return Mission**:
    - The primary objective of Chang'e 6 was to collect lunar samples and return them to Earth.
  - **Technological Demonstration**: The mission aims to demonstrate and improve technologies for lunar landing, sampling, and returning to Earth, which are critical for future lunar exploration missions.

Mission Details:

- **Landing Site**:
  - Chang'e 6 was expected to target the lunar far side for its landing, specifically the **South Pole-Aitken Basin**, one of the largest and oldest impact basins on the Moon.
  - This site is scientifically significant due to its unique geological features.

- **Spacecraft Components**:
  - The mission consists of an orbiter, a lander, an ascent vehicle, and a return capsule.
  - The orbiter remained in lunar orbit, while the lander will touch down on the Moon's surface to collect samples.

- **Sample Collection**:
  - The lander used a robotic arm and a drill to collect samples from the lunar surface and subsurface.

What Can the Samples Brought by Chang'e-6 Reveal?

- The lunar far side is geologically distinct from the near side, featuring a thicker crust, more craters, and fewer lava plains.
- Scientists are unsure why these differences exist. Analysing samples from the Chang'e-6 mission could provide answers.
- Samples from the **South Pole-Aitken basin** could reveal the timeline of lunar cratering and insights into the Moon's history and origins.
- Additionally, these samples could suggest methods for utilizing lunar resources in future exploration, such as using lunar soil for 3D-printed bricks for research bases or harvesting ice at the poles for water, oxygen, and hydrogen, the latter two serving as rocket propellants.

Countries such as China and the US also want to put astronauts on the Moon by 2030.

The success of Chang'e-6 is seen as an important step towards achieving this goal.