

SHORTNEWS:

1. VITHOOT PROGRAMME

NEWS: Kerala's forest department launched an innovative afforestation project called 'Vithoot' (Seed Shower) on World Environment Day.

What is 'Vithoot'?

- It is a **community-driven campaign** to bring back greenery and improve forest health.
 - A **first-of-its-kind aerial seed ball distribution programme in India.**
- **Objective:** Aims to reduce animal-human clashes, improve biodiversity, and restore damaged ecosystems.
- **Supported by:** The Kerala Forest Research Institute and participation from students and the public.
- Utilizes drones and helicopters for seed distribution, with support from agencies like the Air Force.
- **Potential Benefits of 'Vithoot'**
 - **Supports biodiversity** and increases forest cover.
 - **Provides food resources** for wildlife and humans.
 - **Encourages participation** in forest conservation.
 - **Enhances accessibility to non-timber forest products.**

2. FRENCH OPEN 2025

NEWS: Carlos Alcaraz, a Spanish professional tennis player, won the 2025 French Open against Jannik Sinner (Italian professional tennis player).

About French Open

- The French Open is one of the four **Grand Slam tournaments** in professional tennis, alongside the **Australian Open, Wimbledon, and the US Open.**
- It is played on **clay courts**, and is held **annually at Roland Garros Stadium in Paris, France.**
- Winners receive the **Coupe des Mousquetaires (Men's) & Suzanne Lenglen Cup (Women's).**

Historical Significance

- The French Open began in **1891**, becoming a Grand Slam in **1925.**
- **Rafael Nadal** is the most successful men's player in history at Roland Garros.

What Are Grand Slam Tournaments?

- Grand Slam tournaments are **the most prestigious events in tennis**, featuring the world's top players. **They include:**
 - **Australian Open (January)** – Played on **hard courts in Melbourne.**

- French Open (May-June) – Played on **clay courts at Roland Garros**.
- Wimbledon (June-July) – Played on **grass courts in London**.
- US Open (August-September) – Played on **hard courts in New York**.
- Each tournament crowns **singles, doubles, and mixed doubles champions**.

Tournament category	Champions
Singles	Men's Singles: Carlos Alcaraz Women's Singles: Coco Gauff
Doubles	Men's Doubles: Marcel Granollers and Horacio Zeballos. Women's Doubles: Jasmine Paolini and Sara Errani.
Mixed doubles	Mixed Doubles: Sara Errani and Andrea Vavassori

3. AMOEBIC MENINGOENCEPHALITIS

NEWS: The State Public Health Laboratory (PH Lab) in **Kerala** has developed **molecular diagnostic test kits** to identify five species of free-living amoeba (FLA) **that are toxic to humans**.
What are molecular diagnostic tests?

- These are advanced medical tests that detect diseases at **genetic, cellular, and molecular level**.
- It analyzes **RNA, DNA, proteins, or other biomarkers to identify genetic disorders, cancers, and infections**.
- Often relies on techniques such as **Polymerase Chain Reaction (PCR) and Next-Generation Sequencing (NGS)** to analyse genetic material.

About Free-Living Amoeba (FLA)

- Free-Living Amoeba (FLA) are **single-celled organisms** found in natural environments like **water, soil, and air**.
- While most are harmless, **a few species** can cause **serious infections** in humans.
- There are **over 400 species of free-living amoeba** found in the environment.
 - **Only six species** are known to **be harmful to humans**.
- **Transmission:** contaminated water, improper contact lens hygiene, and exposed to contaminated environments.
- **The PH Lab can identify five dangerous species:**
 - **Naegleria fowleri** – Causes the most fatal infections.
 - **Acanthamoeba spp.** – Now confirmed in a patient sample.
 - **Vermamoeba vermiformis**

- **Balamuthia mandrillaris**
- **Paravahlkampfia francinae**
- These amoebas can cause **amoebic meningoencephalitis**, it has become more frequent in **Kerala**.
- **About amoebic meningoencephalitis**
 - It is a deadly **brain infection**.
 - Caused by free-living amoeba species **such as Naegleria fowleri, Acanthamoeba spp, and Balamuthia mandrillaris**.
 - Infection may occur due to **contaminated water, dust, and a weak immune system**.

4. VIKSIT KRISHI SANKALP ABHIYAN

NEWS: The **Indian Council of Agricultural Research (ICAR)** in collaboration with the Department of Agriculture and Farmer's welfare, has launched a nationwide massive **pre-Kharif campaign named 'Viksit Krishi Sankalp Abhiyan'**.

About the Abhiyan

- **Objective:** To engage farmers, gather **feedback, and develop demand-driven, problem-oriented research programs** for agricultural development.

About ICAR-Indian Institute of Horticultural Research (ICAR-IIHR)

- **Established:** On 5th September 1967 by the Indian Council of Agricultural Research (ICAR).
- **Headquarters:** Hesaraghatta, Bengaluru
- **Status:** Premier institute under the Indian Council of Agricultural Research (ICAR)
- **Mission:** Achieve sustainable horticultural development for livelihood security, economic growth, and nutritional security.
- **Key Contributions:** 327 varieties/hybrids & 154 technologies developed.