

## SHORTNEWS:

### 1.BIRD WING

**NEWS:** A huge solar flare eruption, nicknamed the “Bird-Wing”, was observed.

- The “Bird-Wing” nickname comes from the wide, symmetrical arcs of plasma released during this particular flare, resembling the outstretched wings of a bird.

#### Significance:

- This event triggered a large Coronal Mass Ejection (CME) directed towards Earth.
- Such eruptions help scientists study solar-terrestrial interactions and improve space weather forecasts.

#### What Are Solar Flares?

- Solar flares are sudden bursts of electromagnetic radiation released from the Sun due to intense magnetic activity.
  - They occur when magnetic field lines break and reconnect, releasing huge amounts of energy.
- These bursts are powerful enough to affect radio signals, satellite communications, and even electrical grids on Earth.

#### What is a Coronal Mass Ejection (CME)?

- A CME is a giant cloud of charged plasma ejected from the Sun.
- CMEs often occur alongside solar flares and eject charged particles into space.
- While solar flares travel at the speed of light, CMEs move at 250 km/s to 3000 km/s, taking a few days to reach Earth.

If the CME interacts with Earth’s magnetic field, it could cause powerful auroras and potential disruptions to satellites.

### 2.INDIA’S FIRST INTERNATIONAL FURNITURE PARK

**NEWS:** India's first International Furniture Park, launched in Thoothukudi in Tamil Nadu is struggling to attract investment which is threatening its promise of large-scale employment.

### About India's first International Furniture Park

- Developed by: SIPCOT (State Industries Promotion Corporation of Tamil Nadu).
- Objective: Transforming India into a global furniture manufacturing hub.
- Reasons for Slow Development
- Infrastructure Challenges: The lack of proper infrastructure, including delays in acquiring electricity, water, and drainage connections, has discouraged investors.
- Limited Promotional Efforts: The government has invested in roads and basic facilities, but promotion to attract large-scale investors has been inadequate, affecting interest in the project.
- Feasibility and Market Challenges
  - India imports more furniture than it exports which makes domestic production costly and less competitive.
- Craftsmanship and pricing challenges further reduce viability.

Employment and Global Competition : Cheap imports from China, Indonesia, and other countries provide more affordable options than locally manufactured furniture, affecting demand.

### 3. MOSURA FENTONI

**NEWS:** Paleontologists, aided by more than 60 fossil finds, discovered Mosura fentoni, a three-eyed predator that roamed in the oceans of Earth from 506 million years ago.

- The discovery was published in Royal Society Open Science.
- About Mosura Fentoni
- Classification: Belongs to a group called Radiodonts, a predator during the Cambrian Period.

- Radiodonts are an ancient group of arthropods, ancestral to modern insects, spiders, and crustaceans.
- Nickname: Nicknamed the “sea moth” for its body resemblance to a moth and finger-sized length.
- Body Structure: Mosura had an unusual abdomen with 16 body segments and gill-like structures likely for enhanced respiratory efficiency.
  - These structures resemble those in modern horseshoe crabs and woodlice, suggesting evolutionary convergence- the mechanism by which bodily similarities develop in unrelated groups independently .
- “Third Eye”: It featured a prominent third eye in the center of its head, aiding in orientation underwater.
- Swimming Style: Used multiple swimming flaps to “fly” underwater, similar to stingrays.
- Feeding: Mouth resembled a pencil sharpener, lined with serrated plates.
- Predatory Adaptations: Mosura had forked, jointed claws, distinct from other radiodonts, possibly to grab and guide prey.
- Vision: Nerve clusters near the eyes suggest Mosura had vision processing abilities.

#### 4.INDIA PLEDGES AT UN PEACEKEEPING MINISTERIAL IN BERLIN

**NEWS:** India, a major troop contributor to UN peacekeeping, pledged significant resources at the UN peacekeeping ministerial meeting in Berlin

- About UN Peacekeeping
- UN Peacekeeping led by the United Nations Department of Peace Operations (DPO) supports countries in transitioning from conflict to peace by deploying troops, police, and civilians.
- Core Principles: Consent of parties, impartiality, and Non-use of force except in self-defence and defence of the mandate.
- New Pledges Of India at UN Peacekeeping Ministerial, 2025
- A Quick Reaction Force (QRF) company, One women-led Formed Police Unit (FPU), A counter-IED and explosive ordnance disposal unit, A K-9

(canine) unit, A SWAT police unit and a mixed armed police unit or armed police support.

- India and Peacekeeping Efforts
- India currently contributes 5,384 personnel, including 153 women, across 10 UN peacekeeping missions (as of Sept 2024).
- It remains one of the largest troop-contributing countries globally.
- India deployed the first all-female FPU to Liberia in 2007.
- Nearly 180 Indian peacekeepers have died in service, the highest number among all contributing countries.
- About Berlin UN Peacekeeping Ministerial, 2025
- The Berlin Ministerial is part of a series of high-level meetings aimed at galvanising political support and generating tangible commitments to improve UN peacekeeping.
- It follows previous Ministerial meetings held in Accra (2023), Seoul (2021), New York (2019) Vancouver (2017) and London (2016).
- The 2025 Ministerial also coincides with the 80th anniversary of the UN and the 10-year anniversary of the Leaders' Summit on Peacekeeping.

## 5.E-ZERO FIR INITIATIVE

**NEWS:** The Ministry of Home Affairs has launched the e-Zero FIR Initiative to auto-register high-value cybercrimes.

### About the e-Zero FIR Initiative

- The e-Zero FIR will automatically convert cyber financial crime complaints registered on the 1930 helpline or the National Cybercrime Reporting Portal (NCRP), into FIRs.
  - Threshold: Complaints of cybercrime above Rs 10 lakh will automatically be converted into FIR.
  - Pilot Project: The initiative is initially being launched as a pilot project for Delhi.
- Vision: To bolster the cybersecurity grid to build a 'cyber-secure Bharat'

- Implementing Agency: Indian Cyber Crime Coordination Centre (I4C), under the Ministry of Home Affairs
- Integrated Approach: The e-FIR process will integrate I4C's NCRP system, Delhi Police's e-FIR system and NCRB's Crime and Criminal Tracking Network & Systems.
- Law: The e-FIRs will be registered in accordance with the new provisions of Section 173 (1) and 1(ii) of Bhartiya Nagrik Suraksha Sanhita.
- Significance: The e-Zero FIR will be registered irrespective of the geographical jurisdiction of the crime, ensuring swift action without bureaucratic delays.

## 6.TULARE LAKE IN CALIFORNIA'S SAN JOAQUIN VALLEY.

**NEWS:** The Tulare lake has reappeared after 130 years in California's San Joaquin Valley.

### Reason of reappearance

Tulare Lake resurfaced after 130 years due to a combination of natural and human-induced factors.

- Excessive Snowmelt & Rainfall: Massive snowmelt from the Sierra Nevada in 2023–24, triggered by record snowfall, and a series of intense atmospheric rivers led to excess water accumulation.
- No Natural Outlet: Tulare Lake has no natural drainage, causing water to accumulate.
- About Tulare Lake
- Tulare Lake was once the largest freshwater body west of the Mississippi River.
- It disappeared in the late 19th century due to agricultural drainage and irrigation projects.
- Dubbed as: The "ghost lake".
- It is an important source of water for local indigenous communities, like the Tachi Yokut tribe, who called the lake "Pa'ashi."

- The lake was also used for transportation, with steamships carrying supplies from Bakersfield to San Francisco.

### About San Joaquin Valley

- The San Joaquin Valley is the southern part of California's Central Valley.
- It is located in the Northern Hemisphere of the Earth.
- It is known as a major agricultural hub, often referred to as a breadbasket of the U.S. due to its large-scale food production.
- The valley covers eight counties from Northern California and one from Southern California.
  - Entire San Joaquin and Kings counties.
  - Most of Stanislaus, Merced, and Fresno counties.
  - Parts of Madera and Tulare counties.
  - A large portion of Kern County (Southern California).

### Geographical Features

- It is Bounded by
  - North: Sacramento–San Joaquin River Delta.
  - South: Tehachapi Mountains.
  - West: California coastal ranges (Diablo and Temblor).
  - East: Sierra Nevada Mountains.
- The valley is divided into two major basins:
  - San Joaquin Basin (North): Drained by the San Joaquin River and its tributaries.
  - Tulare Basin (South): An endorheic basin (no outlet to the sea), centered on Tulare Lake.