

## Prelim Bits 30-12-2023 | UPSC Daily Current Affairs

### Srimukhalingam Temple

ASI assures to send note to UNESCO over inclusion of Srimukhalingam temple in Andhra Pradesh in world heritage structures' list.

- **Avatar** - Sri Mukha Lingam Shiva temple is very old temple where Shiva lingam is appeared as Mukha (Face) Avatar.
- Generally, Shiva lingams do not have the facial carving and hence the temple at Sri Mukhalingam is different from the other Shiva temples.
- **Construction** - This temple is said to have been constructed during the 8th century by Kamarnava-II when the region was under the control of the East Ganga Dynasty.
- **Trinity** - Srimukhalingam temple houses three ancient temples at one location.
- The Trinity of Madhukeswara, Someswara and Bheemeswara Temples are a testimony to the Magnificent Architectural skills of Kalinga Kings.
- The temple is popularly known as Dakshina Kaasi (Varanasi of South India).
- **Architecture** - Architecture of the temple is similar to [Lingaraja temple](#) located in Bhubaneswar of Odisha.
- **Location** - The temple is located on the banks of River Vamsadhara, which was the capital of Kalinga Ganga Kings for over 600 years.
- There has been a long-standing request to add the temple to the UNESCO Heritage List.



### UNESCO World Heritage Site

- **World Heritage Site (WHS)** - These are the sites are designated as having outstanding universal value under the Convention Concerning the Protection of the World Cultural and Natural Heritage.

- It was adopted by UNESCO in 1972 and formally took effect in 1975.
- The list of WHS is maintained by the International World Heritage Programme, administered by the UNESCO World Heritage Committee.
- The three types of site are Cultural, Natural, and Mixed.

## References

1. [The Hindu - Srimukhalingam Temple](#)
2. [Times of India - Devotees offer prayers at Srimukhalingam Temple](#)

## Kakad Bhairav or Bhilat Baba

*A stone deity worshipped by the Bhils in Madhya Pradesh's Bagh was recently proved to be a fossilized dinosaur egg.*

- Just like their ancestors worshipped ancient stones as deities, generations of Bhils had worshipped this sunbaked, reddish-brown Kakad Bhairav or Bhilat Baba.
- Sacrifices of chickens and sheep marked their whispered pleas to the roughly oval-shaped deity.
- The deity, whose weathered face is adorned with a black tilak and a handlebar moustache, for bountiful harvests and healthy livestock.

*India has the largest-of-its-kind dinosaur hatchery on Earth that stretches 10,000 sq. km across Gujarat, Madhya Pradesh, Maharashtra and Andhra Pradesh.*

- Tribes that resided in the Narmada Valley worshipped fossilized Titanosaurus eggs.
- **Kuladevata** - The word kuladevata is derived from two words: kula, meaning clan, and devata, meaning deity, referring to the ancestral deities that are worshipped by particular clans.



## Bhil Tribes

- Bhils are popularly known as the bow men of Rajasthan. Their name is derived from the word villu or billu.
- They are the most widely distributed and the largest tribe of the South Asia.

- Bhils comprise 39% of Rajasthan's total population.
- Bhils are classified as
  - Central or pure bills
  - Eastern or Rajput Bhils.
- The central Bhils are found in the mountain regions in the Indian states of Madhya Pradesh, Maharashtra, Gujrat and Rajasthan.
- Bhils are also found in the north eastern parts of Tripura.
- The name Bhil is also finds mentioned in the great epic called Mahabharata and Ramayana in context of Eklavya.
- The endogamous tribe speak Bhili, an Indo Aryan language.
- Earlier they were the great hunters but they now practice agriculture as the source of livelihood.
- They are also demanding a separate state of Bhil Pradesh.

### **Dinosaur Fossils National Park**

- The Dinosaur Fossils National Park is a protected area located in Madhya Pradesh, India.
- The park is renowned for its rich fossil deposits, which provide valuable insights into the prehistoric world and the existence of dinosaurs.
- Approximately 6.5 crore-year-old rare dinosaur fossils are found in this park.

### **UNESCO Global Geopark tag**

- The latest discovery, scientists hope, will give a fillip to their nomination for India's first UNESCO Global Geopark tag.
- Awarded by the United Nations' body since 2015, the Geopark tag is given to territories for sites with global relevance to geology, geomorphology or paleontology.
- If selected, the Bagh site will join a select club of 195 UNESCO Geoparks in 48 countries.

### **References**

1. [The Indian Express - Dinosaurs and Deities](#)
2. [Republic World - Kuldevtas in Madhya Pradesh are old dinosaur eggs](#)
3. [NDTV - Rocks Worshipped as Kuldevtas are Dinosaur Eggs](#)

### **Devil Comet**

*Mount Everest-sized Devil comet hurtling in Earth's direction could explode today.*

- **Pons-Brooks Comet** - Comet 13P/Pons-Brooks, also called the Devil Comet, is about the size of Mount Everest and it is hurtling towards Earth.
- After an outburst in July, scientists believe that the comet could explode once again today.
- Ice volcanoes on the comet have erupted at least six times in 2023.
- That eruption caused the comet to distort into a horseshoe or horned shape.
- **Near Earth** - When the comet reaches the closest point to the Sun in its orbit, it will

be at a distance of 0.8 astronomical units.

- One astronomical unit is the approximate distance between the Earth and the Sun.

*The Devil Comet might come relatively close to the Earth, but it will be further away than Venus, which is about 0.7 astronomical units away from the Sun.*

- **Volcanism** - The Devil Comet has its explosion due to a phenomenon, volcanism.
- **Cryovolcanic** - The comet is cryovolcanic, meaning that it has volcanoes that erupt material into the extremely cold environment of space.

## References

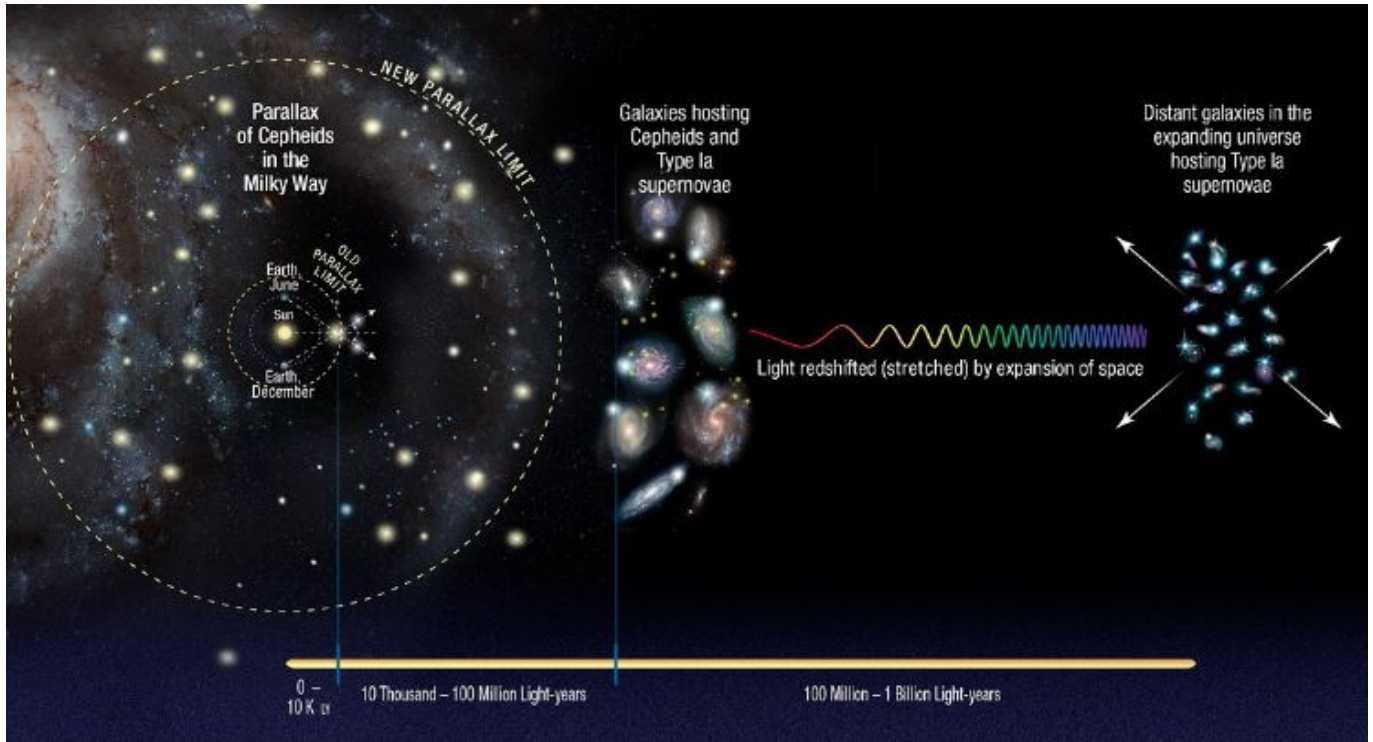
1. [The Indian Express - Everest-sized comet hurtling in Earth's direction](#)
2. [WION - Massive 'devil comet' set for another eruption](#)
3. [Hindustan Times - Devil Comet heading towards Earth](#)

## Cosmic Distances

*No human probe has travelled much beyond the Solar System, yet we are able to measure distances across billions of light-years.*

- The space beyond Earth is so incredibly vast that units of measure, which are convenient in everyday lives, can become gigantic.
- Distances between the planets, and especially between the stars, become so big when expressed in miles and kilometers.
- Hence, for cosmic distances other types of units such as astronomical units, light years and parsecs are used.

*All these methods are collectively known as the cosmic distance ladder.*



## Astronomical units (AU)

- They are a useful unit of measure within our solar system.
- One AU is the distance from the Sun to Earth's orbit, which is about 93 million miles.

*When measured in astronomical units, the distance from the Sun to Saturn's orbit, is 9.5 AU.*

- Therefore, astronomical units are a great way to compress truly astronomical numbers to a more manageable size.

## Light year

- A light year is the distance a photon of light travels in one year, which is about 6 trillion miles.

*A light year is how far one can travel in a year if they could travel at the speed of light, which is 186,000 miles per second.*

- The nearest star system to ours is the triple star system of Alpha Centauri, at about 4.3 light years away.
- Light years also provide some helpful perspective on solar system distances: the Sun is about eight light minutes from Earth.

## Parsecs

- This is the unit used when the number of light years between objects climbs into the

high thousands or millions.

- One parsec is 3.26 light years.
- Astronomers use megaparsecs, a megaparsec is 1 million parsecs, for intergalactic distances, or the scale of distances between the galaxies.
- When distances between galaxies become so epic that even megaparsecs get unwieldy, redshift is used to measure the distance.

*Astronomers talk about distances in terms of how much a galaxy's light has been shifted toward longer, redder wavelengths by the expansion of the universe, a measure known as redshift.*

## References

1. [The Hindu - How do we measure distances across the universe?](#)
2. [NASA - Cosmic Distances](#)
3. [ESA Hubble - Cosmic distance ladder](#)

## Connected Lending (CL)

*RBI's move to consolidate the scattered laws on connected lending is welcome.*

- CL refers to persons who are in the position to control the decision of the lender.
- CL is the extension of credit to individuals or firms connected through ownership or the ability to exert control, whether direct or indirect.
- CL refers to cases where the director of a bank borrows from the same bank and can have some influence.

*Examples of connected parties include a firm's parent, major shareholders, subsidiaries, affiliated companies, directors, and executive officers.*

- Firms are also connected where they are controlled by the same family or group.
- CL means loans extended by a bank to its owners or managers and to their related businesses on terms softer than the market-determined terms.
- CL or lending to persons who are in a position to control or influence the decision of a lender can be of concern.

## References

1. [The Hindu Business Line - The vexatious issue of connected lending](#)
2. [Business Standard - Connected lending](#)
3. [Business Insider - Framework on connected lending](#)

### **X-37B**

- A SpaceX Falcon Heavy rocket launched with the X-37B experimental spacecraft in U.S. recently.
- The X-37B is a ***re-entry spacecraft*** designed to operate in low-Earth orbit.
- The X-37B has been used to carry out research on
  - Relaying solar energy from space for use back on Earth
  - Studying the effects of radiation on seeds used to grow food

### **Maulana Azad National Fellowship (MANF)**

- MANF is to provide ***5-year fellowships*** in the form of financial assistance to students from 6 notified minority communities to pursue M. Phil and Ph.D.
- **6 notified communities** - Buddhist, Christian, Jain, Muslim, Parsi and Sikh, notified by the Central Government.
- The program is funded and formulated by the ***Ministry of Minority Affairs***.

### **Argentina in BRICS**

- Argentina ***formally rejects BRICS membership*** recently.
- BRICS made up of Brazil, Russia, India, China and South Africa announced it was admitting 6 new members in a bid to counter the Western-led global order.
- The membership of Argentina, Ethiopia, Iran, Saudi Arabia, Egypt and the United Arab Emirates was due to take effect from January 1, 2024.

### **Pelagic Birds**

- Birdwatchers across India were able to document rare 'pelagic' (who spend a large portion of their lives on the open ocean) birds throughout 2023 just off the Karnataka coast.
- Brown Skua was sighted for the ***1<sup>st</sup> time*** in Karnataka.
- **Significant sightings** - Sooty Shearwater, Brown Skua, Brown Booby, Streaked Shearwater and Masked Booby.
- Pomarine Skua, Arctic skua, Long-tailed skua, Swinhoes storm-petrel, Wilson's storm-petrel, Flesh-footed shearwater, Persian shearwater, (greater, lesser, crested & Bridled (tern)).

### **Lakhbir Singh Landa**

- The Ministry of Home Affairs has designated Lakhbir Singh Landa, a Canada-based member of Babbar Khalsa International (BKI), as an ***"individual terrorist"*** recently.
- He has been designated as an individual terrorist under ***Section 35 of the Unlawful Activities Prevention Act (UAPA)***.

### **New Admirals' epaulettes**

- The Indian Navy recently unveiled the new design of the **Admirals' Epaulettes**, an ornamental shoulder piece worn to show the rank of an officer.
- The Admirals' epaulettes consist of a golden navy button, an Octagon, a sword and a telescope.

### **Bail in serious Crimes**

- The Supreme Court (SC) recently held that a *plain assertion of innocence* or a promise to co-operate in the trial by an accused is no ground to grant bail in a case of a serious nature.
- The SC also said the *completion of investigation* in a serious offence was ***not*** a *default ground for bail*.

### **Chameleon Trojan**

- 'Chameleon Trojan' is a ***malware*** that can disable biometric authentication methods like fingerprint and face unlock to steal the phone's PIN in Android operating systems.
- The malware collects information on app usage habits to determine when the user is using their device and launch attacks when they are least likely to use it.

### **Beypore International Water Fest, 2023**

- The Indian Navy participated in the Beypore International Water Fest 2023 organised by Kerala recently.
- ***INS Kabra***, high-speed offshore patrol vessel of the Southern Naval Command was deployed at Beypore as part of this event.
- The festival is considered ***India's largest water festival*** and highlights Kozhikode as the country's main center for adventure water sports.

### **Death Sentence to Indian Navy Officers**

- The Qatar Court of Appeals recently ***set aside the death sentences*** of 8 former Indian Navy personnel in the Dahra Global case.