

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](#)

Other Important News

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 ***1st time*** in Karnataka.
- **Significant sightings** - Sooty Shearwater, Brown Skua, Brown Booby, Streaked Shearwater and Masked Booby.
- Pomarine Skua, Arctic skua, Long-tailed skua, Swinhoe's 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.

Beyport International Water Fest, 2023

- The Indian Navy participated in the Beyport International Water Fest 2023 organised by Kerala recently.
- ***INS Kabra***, high-speed offshore patrol vessel of the Southern Naval Command was deployed at Beyport 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.