Day Light Saving

Daylight Saving Time (DST) is the practice of turning the clock ahead as warmer weather approaches and back as it becomes colder again.

- The purpose of doing so is that people will have one more hour of daylight in the afternoon and evening during the warmer season of the year.
- The daylight saving time is followed in over 70 countries on various dates.
- India does not follow daylight saving time; countries near the Equator do not experience high variations in daytime hours between seasons.

History of Day Light Saving

- Initially, it was followed by a group of Canadians on July 1, 1908, when residents of Port Arthur, Ontario, turned their clocks forward by an hour. Other locations in Canada soon followed suit.
- However, globally Germany and Austria introduced DST on April 30, 1916, the rationale being to minimize the use of artificial lighting to save fuel during World War I.

Does Daylight Saving Time actually save energy?

- A century ago, when DST was introduced, more daylight did mean less use of artificial light. But modern society uses so many energy-consuming appliances all day long that the amount of energy saved is negligible.
- There is also a disadvantage of DST which includes disruption of the body clock or circadian rhythm.

Circadian Rhythm

- Circadian rhythm is the 24-hour cycle that tells our bodies when to sleep, rise, and eat—regulating many physiological processes.
- Internal body clock is affected by environmental cues, like sunlight and temperature, and determines whether one feels wide-awake and energized or tired.
- Jeffrey C. Hall, Michael Rosbash, and Michael W. Young, who studied the molecular mechanisms controlling circadian rhythm, were awarded the 2017 Nobel Prize in the category of physiology or medicine.

Astrobatrachus Kurichiyana Frog

Recently a starry dwarf frog, named after constellation-like markings on it and Wayanad's Kurichiya tribe, has been discovered in Wayanad district, Kerala.



- Features of the Frog //
 - It is about **2cm to 3cm long** and is the **sole member of an ancient lineage**, a long branch on the frog tree of life that researchers have classified as a **new subfamily**, Astrobatrachinae.
 - Dark brown with a bright orange underbelly and speckled with pale blue dots, the frog camouflages well in wet leaf litter.
 - It is **Nocturnal.**
 - Scans of its skeletons showed it to be completely different from any other similar-sized frog seen in Wayanad, some of its physical characteristics (such as its triangular finger- and toe tips) closely resembled frogs in South America and Africa.
 - However, Genetic studies revealed that its closest relatives are the Nycibatrachinae group of frogs that dwell in the streams of Western Ghats, and the Lankanectinae frogs of Sri Lanka.
 - Researchers still do not know its life cycle, the sound of its call or whether the species is threatened or endangered. Vision

Kurichiya Tribe

- The tribe is also known as Malai Brahmins or Hill Brahmins.
- They are the second largest adivasi community in Wayanad district. They stand at the top of the caste hierarchy among the hill tribes of Wayanad.
- The community was named Kurichiya by the Kottayam Raja for the community's expertise in archery. The name is derived from the phrase 'kuri vechavan', which means 'he who took aim'.
 - It is also said that the name `Kurichiya' is derived from the kuri or the sandalwood paste that they apply on their foreheads and chests as a custom.
- They are land-owning communities, and follow a matrilineal household system.
- They followed slash and burn (shifting) cultivation known as Punam cultivation.
- Nellukuthu Pattu is their art form.

Significance

- India, once part of Africa, split from Madagascar about 89 million years ago and drifted northeast. Its long isolation as an island provided fertile ground for the evolution of new life forms and may have sheltered species that disappeared elsewhere.
- Finding ancient lineages like Astrobatrachinae can help fill in in the region's distant **biological past** and may answer the perennial question that whether peninsular India's frogs are the descendants of African ancestors or they first originated in Asia and then moved south.

Important Facts For Prelims (13th March 2019)

Exchange Traded Fund

- The government is considering selling a fresh tranche of Central Public Sector Enterprises (CPSE) Exchange Traded Fund (ETF) to raise Rs 4,000-5,000 crore in disinvestment.
- Till now, the government's disinvestment proceeds have reached Rs 56,473 crore so far against the full year Budget target of Rs 80,000 crore.
- CPSE ETF, which functions like a mutual fund scheme, comprises scrips of 10 PSUs -- ONGC, Coal India, IOC, GAIL (India), Oil India, PFC, Bharat Electronics, REC, Engineers India and Container Corporation of India.

Exchange Traded Funds (ETF)

- ETFs are index funds that are listed and traded on stock exchanges just like regular shares.
- They are a basket of stocks with assigned weights that reflect the composition of an index.
- The ETFs trading value is based on the net asset value of the underlying stocks that it represents.
- They enable investors to gain broad exposure to entire stock markets in different countries and specific sectors with relative ease, on a real-time basis and at a lower cost than many other forms of investing.
- The ETF is aimed at helping speed up the government's disinvestment programme.

Bharat 22 ETF

- Bharat 22 ETF comprises of stocks of 22 Central Public Sector Enterprises (CPSEs), Public Sector Banks (PSBs) and Specified Undertaking of Unit Trust of India (SUUTI).
- Bharat 22 ETF is managed by ICICI Prudential Mutual Fund.
- The foundation of Bharat 22 ETF was laid by the government in the Union Budget 2017.

Early Harappan Artefacts

 Artefacts believed to be around 5,000 years old, dating back to the early <u>Harappan phase</u>, have been unearthed during an excavation jointly being held by archaeologists from the University of Kerala and Kachchh University in Khatiya village of Kutch in Gujarat.

Findings

- Rectangular graves, each of varying dimensions and assembled using stones, contained skeletons that were placed in a specific manner.
 - They were oriented east-west with the heads positioned on the eastern side.
 - Next to the legs on the western side, the archaeologists found earthen pots and pottery shards and other artefacts, including conch-shell bangles, beads made of stones and terracotta, numerous lithic tools and grinding stones.
 - The burial of belongings next to the corpse could possibly suggest the prevalence of the concept of afterlife.
- The presence of animal skeletons along with those of humans were also recorded in a few graves.
- The mode of burial was found to be non-uniform.
 - Instances of primary burial and **secondary burial (when the remains of the primary burial are exhumed and moved to another grave)** were found.
 - The remains of those who were possibly cremated were also found in a few graves.
- These artefacts bore similarities with the ones unearthed from ancient settlements in Harappan sites, including Kot Diji and Amri of Pakistan, and Nagwada, Santhali, Moti Pipli, Datrana, Surkotada, and Dhaneti in North Gujarat.
- This will shed light on the burial rituals and other customs prevalent in the Harappan civilisation during its early phase from 3300 BCE to 2600 BCE.

PDF Refernece URL: https://www.drishtiias.com/current-affairs-news-analysis-editorials/news-analysis/13-03-2019/print

TheVision