ANTHROPOLOGY NEWS DIARY (AND)

22.04.2021

FOR UPSC CSE MAINS

This series provides compilation of daily CURRENT AFFAIRS of Anthropology.

It is aimed at addressing the requirement of aspirants to add contemporary aspects of the subject to the answers.

It also helps in understanding the trends of anthropology across India and the world.

**NOTE:** Please attempt the questions given at the end of the document and can upload on the [telegram channel: Sosin for Anthropology Q&A](https://telegram.org/), for peer review.
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Note - For convenience, the respective reference links have been dropped at the end of every topic.
A. ARCHAEOLOGY

1. Maligaimedu Dig

Context:
A major dig is taking place at Maligaimedu site to know more about the royal palace and capital of King Rajendra Chola I.

Highlights:
- The State Department of Archaeology has made some encouraging finds less than two months into the excavation at Maligaimedu near Gangaikondacholapuram, the capital of King Rajendra Chola I.
- Thirteen coarse brick walls have been exposed so far at the site. A copper coin, some potsherds and iron pieces have been collected. Besides, a piece of Chinese celadon ware, belonging to 10-11th century, has also been found.
- The coin was supposed to be sent for chemical cleaning but going by its circular shape, it can be assumed that it is a Chola period one. The presence of celadon ware is indicative of the trade ties that had existed.
- Gangaikondacholapuram was established by King Rajendra Chola I (1012-1044 CE) after his victorious expedition up to the Gangetic plains.
- Excavations conducted earlier at Maligaimedu had revealed the remains of a royal palace.
- The previous excavations were carried out at the site on a smaller scale on six occasions when portions of the Rajendra Chola’s palace were unearthed. Antiques and other items found in the excavations are on display at a museum at Gangaikondacholapuram.
- The present excavation at the site began towards the end of February 2021 after conducting surveys using drone, thermal camers and ground penetrating radars, with the help of various agencies. Excavation is now underway at five trenches at the site. The department is looking to take up exploration on a larger scale now to find out more about the palace, the city and its streets.

Reference:
2. Alphabetic inscription from Israel

- Team of archaeologists from the Austrian Archaeological Institute and the Hebrew University of Jerusalem’s Institute of Archaeology has discovered an inscribed sherd at the site of Tel Lachish, which is located in the Shephelah region in modern-day Israel and is one of the most prominent Bronze and Iron Age sites of the Southern Levant.
- Dating to the 15th century BCE, the newly-discovered inscription is currently the oldest securely dated alphabetic inscription from the Southern Levant.
- This sherd is one of the earliest examples of early alphabetic writing found in Israel.
- The inscribed sherd is an approximately 4 by 3.5 cm rim fragment from a milk bowl imported from Cyprus.
- The inner surface of the sherd’s rim is inscribed in dark ink, with letters written diagonally.
- Two additional characters are visible on the right side of the upper line, and another is visible between the two lines.
- The first letter can be identified as ‘ayin (ע), which is based on the Egyptian hieroglyph ‘eye.’ As in most early alphabetic inscriptions from the Southern Levant, the letter is shaped like a circle, resembling an iris with the pupil missing.
- The second letter can be identified as bet (ב), which is based on the Egyptian hieroglyph ‘house.’ The letter has a rectangular shape with one corner open.
- The third letter can be read as dalet (ד), based on the Egyptian hieroglyph ‘door.’ The suggested reading for this line may therefore be דבוע, meaning ‘slave,’ and could be part of a personal name.
- The inscription is approximately 3,450 years old, making it the oldest securely dated alphabetic inscription from the Southern Levant, and may be regarded as the ‘missing link’ in the alphabet’s history.

Reference:

3. Neanderthal DNA recovered from cave dirt

Context:
Neanderthal DNA Recovered from Cave Dirt Using Breakthrough Technology

Highlights:
- Utilizing a new technique that allows for more precise analysis of ancient DNA, scientists have achieved a revolutionary breakthrough in the field of paleogenetics.
● For the first time, they've been able to retrieve intact and identifiable samples of Neanderthal nuclear DNA from deeply-buried sediment, which was removed from caves in northern Spain and Siberia.

● Previously, it had only been possible to extract such material from fossilized teeth and bones.

● Only 18 Neanderthal nuclear DNA samples have ever been recovered in this way, which is why this new breakthrough in DNA-extraction-and-analysis methodologies is so significant.

● In the past, sediment sampling in caves where Neanderthals or other ancient hominin species lived had only produced identifiable samples of mitochondrial DNA, which is shorter and hardier than nuclear DNA but only contains partial segments of genetic markers (all of which are inherited through the maternal line).

● Expanded nuclear DNA analysis will allow scientists to confirm genetic links between groups of Neanderthals that occupied different regions of Eurasia at different times.

● From this information they will be able to reconstruct the movements of such peoples, filling in gaps about Neanderthal lifestyles and migratory patterns and drawing more clear distinctions between the activities of various Neanderthal subpopulations.

Reference:
https://www.ancient-origins.net/news-history-archaeology/neanderthal-dna-0015216

B. BIOLOGICAL ANTHROPOLOGY

1. Fossils show mass extinction

Context:
Fossils Show Mass Extinction Occurred 10 Times Faster in Ocean

Highlights:

● Some 250 million years ago, Earth’s warming climate and extreme volcanic activity caused most animal species to go extinct, an event now known as the End-Permian Extinction which eventually ushered in the early days of the dinosaurs.

● To study trends in how the mass extinction happened, researchers looked at the difference between terrestrial and marine die-offs. They found that, on land, the process took 10 times as long as it did in the ocean.

● Previously, it had been assumed that since extinction happened quickly in the ocean, the same would have been true for land-dwellers.
● Part of the reason for the focus on marine extinction is that the fossil record underwater is better-preserved, with sediment blanketing fossilized animals.
● Now, researchers can compare the previously known submarine extinction patterns to what happened on land.

Reference:
https://www.google.co.in/amp/s/www.courthousenews.com/fossils-show-mass-extinction-occurred-10-times-faster-in-ocean/

2. Genome Wide Data recovered from cave sediments
● Genome-Wide Data from Stone Age Bears Recovered from Cave Sediments
● Scientists have reconstructed the genomes of the extinct giant short-faced bear and the American Black Bear using environmental DNA fragments from the remote Chiquihuite Cave in Mexico.
● Fossil records are incomplete, and many species of mammals, in particular those that lived at low population densities, are seldom found.
● For these ancient species, destructive DNA extraction from fossil remains has the potential to reveal new insights into population and evolutionary history; however, it also causes irreversible damage to high-value specimens.
● The discovery that DNA from past populations of organisms could be obtained directly from sediment, therefore, held great promise for ancient population genetics and phylogenetics.
● Commonly known as environmental DNA (eDNA) research, this approach relies on sequencing DNA fragments derived from shed cells, hair, feces, and urine preserved within sediment.
● To date, however, analyses of ancient eDNA have been restricted to mitochondrial and chloroplast DNA or, more recently, to short and highly diverse sequences generated using a shotgun sequencing approach.
● Analysis of DNA found in soil could have the potential to expand the narrative about everything from the evolution of species to developments in climate change — this is the moon landing of genomics because fossils will no longer be needed

Reference:
C. TRIBAL AFFAIRS

1. J&K modernisation plan

Context:
Tribal affairs department initiates ambitious plan for modernisation of its hostels in J&K

Highlights:
- With an aim to provide the best available facilities and a competitive platform to students, the J&K Tribal Affairs Department (TAD) has initiated the process for time-bound modernisation of its residential hostels in all districts concerned.
- The plan comprises and envisages infrastructure upgradation, technological interventions, management revamp and decentralised functioning.
- The modernisation plan is aimed at providing the best available educational facilities at department hostels.
- The department is also switching to a competitive selection process for admissions as part of the ambitious modernisation plan.
- Under the plan, each hostel will also get a Career Counselling Centre (CCC) for mentoring the students right from their admission. CCCs shall organise 4-5 interactive sessions each month with qualifiers of competitive examinations, innovators, entrepreneurs, educationists and domain experts. Separate budget will be provided to hostels for CCCs.

Reference:

UPSC Previous year questions based on today’s concept:

2. Neanderthalensis (10 Marks - 2008)

DAILY PRACTICE QUESTION/S FOR MAINS 2021.

Pl do not forget to upload your answer sheet for a peer review on the telegram channel:
Sosin for Anthropology Q&A

1. Present a comparative account of Paleolithic cultures of different regions of India. 20 Marks
2. Need of Human genome studies in Anthropology. 20 Marks