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, for peer review.
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Note - For convenience, the respective reference links have been dropped at the end of every topic.
A. BIOLOGICAL ANTHROPOLOGY
1. Genetic Form of ALS
   Context:
   A study conducted by an international team of researchers has discovered a new and unique form of amyotrophic lateral sclerosis (ALS). Unlike most cases of ALS, the disease began attacking these patients during childhood, worsened more slowly than usual, and was linked to a gene, called SPTLC1, that is part of the body's fat production system.

   **Highlights:**
   - ALS is a paralyzing and often fatal disease that usually affects middle-aged people. The study found that a genetic form of the disease can also threaten children.
   - The results show for the first time that ALS can be caused by changes in the way the body metabolizes lipids.
   - The team of researchers used advanced genetic techniques to solve some of the most mysterious childhood neurological disorders around the world.
   - In this study, the team discovered that 11 of these cases had ALS that was linked to variations in the DNA sequence of SPLTC1, a gene responsible for manufacturing a diverse class of fats called sphingolipids.
   - Dr. Bönnemann leads a team of researchers that uses advanced genetic techniques to solve some of the most mysterious childhood neurological disorders around the world.
   - In this study, the team discovered that 11 of these cases had ALS that was linked to variations in the DNA sequence of SPLTC1, a gene responsible for manufacturing a diverse class of fats called sphingolipids.
   - The team created small interfering strands of RNA designed to turn off the mutant SPLTC1 genes found in the patients. Experiments on the patients' skin cells showed that these RNA strands both reduced the levels of SPLTC1 gene activity and restored sphingosine levels to normal.

   **Reference:**
   https://www.sciencedaily.com/releases/2021/05/210531120926.htm

2. Climate Seesaw & Evolution
   Context:
   A scientific consortium has found that ancient El Niño-like weather patterns were the primary drivers of environmental change in sub-Saharan Africa over the last 620 thousand years - the critical time-frame for the evolution of our species. The group found that these ancient weather patterns had more profound impacts in sub-Saharan Africa than glacial-interglacial cycles more commonly linked to human evolution.
**Highlights:**

- The researchers integrated 11 climate archives from all across Africa covering the past 620 thousand years to generate a comprehensive spatial picture of when and where wet or dry conditions prevailed over the continent.
- They found a distinct climatic east-west 'seesaw' very akin to the pattern produced by the weather phenomena of El Niño, that today profoundly influences precipitation distribution in Africa.
- The effects of the tropical Pacific Ocean on the so-called "Walker Circulation" -- a belt of convection cells along the equator that impact the rainfall and aridity of the tropics -- were the prime driver of this climate seesaw.
- The data clearly shows that the wet and dry regions shifted between the east and west of the African continent on timescales of approximately 100,000 years, with each of the climatic shifts being accompanied by major turnovers in flora and mammal fauna.
- This alternation between dry and wet periods appeared to have governed the dispersion and evolution of vegetation as well as mammals in eastern and western Africa.
- The scientists' work suggests that a seesaw-like pattern of rainfall alternating between eastern and western Africa probably had the effect of creating critically important ecotonal regions -- the buffer zones between different ecological zones, such as grasslands and forests.
- Re-evaluating these patterns of stasis, change and extinction through a new climatic framework will yield new insights into the deep human past.

**Reference:**

https://www.sciencedaily.com/releases/2021/05/210531153205.htm

3. Ethnic Diversity & Diabetes

**Context:**

New findings demonstrate that expanding research into different ancestries yields more and better results, as well as ultimately benefiting global patient care.

**Highlights:**

- The team analysed data across a wide range of cohorts, encompassing more than 280,000 people without diabetes. Researchers looked at glycaemic traits, which are used to diagnose diabetes and monitor sugar and insulin levels in the blood.
- The researchers incorporated 30 percent of the overall cohort with individuals of East Asian, Hispanic, African-American, South Asian and sub-Saharan African origin. By doing so, they discovered 24 more loci -- or regions of the genome -linked to glycaemic traits than if they had conducted the research in Europeans alone.
- The team found that though some loci were not detected in all ancestries, they were still useful to capture information about the glycaemic trait in that ancestry.
● The findings matter because we're moving towards using genetic scores to weigh up a person's risk of diabetes. We know that scores developed exclusively in individuals of one ancestry don't work well in people of a different ancestry.

● This is important as increasingly healthcare is moving towards a more precise approach. Failing to account for genetic variation according to ancestry will impact our ability to accurately diagnose diabetes.

Reference:
https://www.sciencedaily.com/releases/2021/05/210531120939.htm

B. SOCIO - CULTURAL ANTHROPOLOGY

1. Forest Fires & Communities

● Increasing fire trends can be seen in data as well with the Forest Survey of India (FSI)'s system sending fire alerts 3, 86, 031 times this year, till 28 May 2021, which is already twice the number of alerts sent in all of last year.

● Villagers usually migrate to cities in search of jobs, but due to the lockdown, that option is not available. Mahua flowers and other minor forest produce were our last hope after losing jobs due to lockdown.

● States like Madhya Pradesh, Mizoram, Uttarakhand, and Odisha witnessed massive forest fires this year. Increasing fire trends can be seen in data as well with the Forest Survey of India (FSI)'s system.

● The lockdown has affected the collection, use, and sale of minor forest produces (MFP), or Non-Timber Forest Produce (NTFP) by tribals and forest dwellers. An estimated 100 million forest dwellers depend on MFP for food, shelter, medicines, and cash income.

● The report also highlighted an advisory by the Ministry of Environment, Forest and Climate Change (MoEFCC) which instructed all states and UTs to restrict entry within protected areas.

● This advisory would immediately impact about three to four million people living in and around protected areas. These are mostly tribal communities including Particularly Vulnerable Tribal Groups (PVTGs), nomadic and pastoral communities, fish workers, among others, and are most dependent on the natural resources within and around the protected areas for their livelihoods.

Reference:
2. **Lakshadweep : Islamic Matrilineal Kinship**

- According to Census 2011, the Muslim community constitutes 96.58 per cent of Lakshadweep’s population. The social structure is based on matrilineal kinship. Contrary to the prevalent societal system, matriliny adheres to a system in which ancestral descent is traced through maternal instead of paternal lines.
- Islam represented one of the factors for the unity of the Indian Ocean, but the spread of Islam was not even or consistent; nor were Muslims - the only traders in this ocean. These sea routes linked the Red Sea coast, the Persian Gulf, South India, South Arabia, Persia, Southeast Asia, East Africa and China to each other.
- Matrilineal seafarers and traders from Western Indonesia and the Malay Peninsula traversed the Indian Ocean, triggering major migrations of food culture, animals, musical instruments and maritime technology.
- Archaeological evidence suggests that Muslim sailors and merchants probably stayed through monsoon periods or used the islands as respites.
- The Arakkal family of Cannanore controlled the Lakshadweep islands from 1545 to 1819, which included the islands of Androth, Kavaratti, Agathi, Minicoy and Kalpeni.
- Traditionally, female heads of the Arakkal house are known as Arakkal Beevis, while male heads are called Ali Rajas.

*Reference:*

UPSC Previous year questions based on today’s concept:
1. Various types of descent (10 marks - 2013)  
2. Law & Justice in simple societies (L.Q. - 1987)

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. Blood pressure as a genetic marker (20 Marks)