



09 Apr 2025

National and International News

Genome India Project

Why in news?

- Preliminary findings from the GenomeIndia project, which involved genotyping 10,074 healthy, unrelated individuals from 85 populations—comprising 32 tribal and 53 non-tribal groups—across India, were published in Nature Genetics.
- Blood samples were collected from nearly 20,000 individuals, with DNA samples from 10,074 of them undergoing whole genome sequencing.

Key Points:

- **About Genome India Project:**
 - It is a **Centre-backed, Department of Biotechnology's (DBT) initiative to sequence 10,000 Indian human genomes in three years and create a database.**
 - The project has **sequenced close to 7,000 genomes and 3,000 of these are already available for public access by researchers.**
 - For conducting the project, investigators in hospitals will lead the data collection through a simple blood test from participants and the information will be added to biobanks.
 - Some of the priority areas are **Precision health, Rare genetic disorders, Mutation spectrum of genetic and complex diseases in the Indian population, Genetic Epidemiology of Multifactorial Lifestyle Diseases, and Translational Research.**
 - Countries like the **UK, China, and the US** also have projects to sequence a significant number of genomes.
- **Significance:**
 - To gain deeper insight into India's population diversity.
 - Improve diagnostic methods and medical counselling.
 - Find genetic predispositions to disease.
 - Develop personalised and customisable drugs.
 - Improve gene therapy.
 - Throw more light on individual susceptibility to infectious disease.
- **What is the Human genome?**
 - The human genome is the **entire set of deoxyribonucleic acid (DNA) residing in the nucleus of every cell of each human body.**
 - The DNA consists of a double-stranded molecule



Daily Current Affairs Encyclopedia

	<p>built up by four bases – adenine (A), cytosine (C), guanine (G) and thymine (T).</p> <ul style="list-style-type: none"> ○ Every base on one strand pairs with a complementary base on the other strand (A with T and C with G). ○ In all, the genome is made up of approximately 3.05 billion such base pairs. <ul style="list-style-type: none"> ● What is Genome sequencing? <ul style="list-style-type: none"> ○ While the sequence or order of base pairs is identical in all humans, there are differences in the genome of every human being that makes them unique. ○ The process of deciphering the order of base pairs, to decode the genetic fingerprint of a human is called genome sequencing. ○ There are several methods of genome sequencing, but the most common is called next-generation sequencing (NGS).
La Nino	<p>Why in news?</p> <ul style="list-style-type: none"> ● Skymet forecasts a "normal" monsoon, with a weak La Niña expected. <p>Key Points:</p> <ul style="list-style-type: none"> ● La Nina means The Little Girl in Spanish. It is also sometimes called El Viejo, anti-El Nino, or simply "a cold event." ● La Nina events represent periods of below-average sea surface temperatures across the east-central Equatorial Pacific. ● It is indicated by sea-surface temperature decreased by more than 0.9°F for at least five successive three-month seasons. ● The La Nina event is observed when the water temperature in the Eastern Pacific gets comparatively colder than normal, as a consequence of which, there is a strong high pressure over the eastern equatorial Pacific. ● Conditions of La Nina: <ul style="list-style-type: none"> ○ La Nina is caused by a build-up of cooler-than-normal waters in the tropical Pacific, the area of the Pacific Ocean between the Tropic of Cancer and the Tropic of Capricorn. ○ La Nina is characterized by lower-than-normal air pressure over the western Pacific. These low-pressure zones contribute to increased rainfall. ○ La Nina events are also associated with rainier-than-normal conditions over southeastern Africa and northern Brazil. ○ La Nina is also characterized by higher-than-normal pressure over the central and eastern Pacific.



Daily Current Affairs Encyclopedia

Artemis Accord

Why in news?

- Bangladesh has signed the "Artemis Accords" with NASA, committing to non-military space exploration.

Key Points:

- Named after the **Greek Moon goddess, Artemis represents a comprehensive agreement by the US to unite nations with a shared vision for civil space exploration.**
- **Framework for Cooperation:** It serves as a framework for collaboration in space exploration, building on the 1967 Outer Space Treaty.
- **Launch of the Accords:** The Artemis Accords were launched **jointly by the US Department of State and NASA on October 13, 2020, with seven partner countries: Canada, Italy, Japan, Luxembourg, UAE, and the UK.**
- **Signatories:** As of June 23, 26 countries have signed the Accords, including the original eight.
- **Diverse Participants:** The signatories include traditional US allies like Japan, Australia, the UK, France, and Canada, as well as countries with less developed space programs, such as Colombia, Rwanda, Nigeria, and Mexico.
- The Artemis programme includes **plans for a base on the lunar surface, multiple spacecraft to ferry humans and cargo, an orbiting space station, and a constellation of satellites to help with navigation and communication. The first Artemis crewed mission to the moon's surface is likely in 2026.**
- NASA is also keen to emphasise that the Artemis programme will take the first woman, and the "first person of colour", to the moon.
- **India became the 27th country to sign the nonbinding Artemis Accords.**

India-UAE Relations

Why in news?

- India and the UAE are set to deepen their defense cooperation.

Key Points:

- India-UAE diplomatic relations began in 1972. The year 2015 marked the beginning of a new strategic partnership between the two nations.
- **Areas of Cooperation:**
 - **Economic & Commercial Cooperation:** The UAE's investment in India is valued at approximately US\$ 20-21 billion, with US\$ 15.5 billion in Foreign Direct Investment (FDI) and the rest in portfolio investments between April 2000 and March 2023.
 - **Fintech Cooperation:** Agreements have been made



	<p>to interlink instant payment platforms UPI (India) and AANI (UAE), as well as to connect domestic debit/credit cards, RuPay (India) and JAYWAN (UAE).</p> <ul style="list-style-type: none"> ○ Energy Security: The UAE plays a key role in supplying crude oil, LNG, and LPG to the Indian market. ○ Multilateral Cooperation: Both countries are involved in various international platforms, including BRICS, I2U2 (India-Israel-UAE-USA), and UFI (UAE-France-India) trilateral. ○ Diaspora & People-to-People Relations: The UAE is home to over 3.5 million Indian nationals, making up roughly 35% of the country's population. The Prime Minister also inaugurated the Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS) Hindu temple in Abu Dhabi. ○ Regional Connectivity: The India-Middle East Economic Corridor (IMEC) will enhance connectivity between India, the European Union, France, Germany, Italy, Saudi Arabia, UAE, and the US. ○ Education: The UAE hosts several international Indian schools offering CBSE and Kerala Board curricula, and an overseas campus of IIT Delhi is being set up in Abu Dhabi. ○ Defence Cooperation: This is guided by the Joint Defence Cooperation Committee, with a signed Defence Cooperation Agreement. Both nations also participate in defense exhibitions like IDEX and NAVDEX, and joint military exercises such as Desert Flag and Desert Cyclone. ○ Space Cooperation: ISRO and the UAE Space Agency have signed an agreement to explore and use outer space for peaceful purposes, also contributing to the I2U2 cooperation.
<p>Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)</p>	<p>Why in news?</p> <ul style="list-style-type: none"> ● Delhi has become the 35th state/UT to implement the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana. <p>Key Points:</p> <ul style="list-style-type: none"> ● Launched in September 2018, the scheme aimed to offer secondary and tertiary care services to the vulnerable population in the society. ● It was launched as a second component of the 'Ayushman Bharat' scheme. ● This scheme aimed to offer medical coverage of Rs. 5 lakh per family per year for secondary and tertiary care hospitalisation to poor and vulnerable families. ● The scheme covers over nearly 40% of the population



Daily Current Affairs Encyclopedia

	<p>targeted towards the poorest and the vulnerable.</p> <ul style="list-style-type: none"> ● Eligibility: <ul style="list-style-type: none"> ○ The scheme is targeted to cover 10.74 crore poor, deprived rural families and identified occupational category of urban worker's families. ○ The beneficiaries as identified by latest Socio-Economic Caste Census (SECC) data. ● Benefits: <ul style="list-style-type: none"> ○ It provides cashless access to health care services for the beneficiary at the point of service, i.e., the hospital. ○ Under the scheme every eligible family will be given Rs 5 lakh Insurance coverage benefit per year. ○ It offers Health Benefit Packages which covers surgery, medical and day care treatments, cost of medicines and diagnostics.
<p>Digital Threat Report 2024</p>	<p>Why in news?</p> <ul style="list-style-type: none"> ● The Ministry of Electronics and Information Technology recently launched the Digital Threat Report 2024 for the Banking, Financial Services, and insurance (BFSI) sector. <p>Key Points:</p> <ul style="list-style-type: none"> ● It is a collaborative effort by SISA (Strategic Information Services Agreement), a global cybersecurity company, in collaboration with the Computer Emergency Response Team (CERT-In, Ministry of Electronics and Information Technology) and CSIRT-Fin. ● It offers an in-depth analysis of the growing cybersecurity risks in India's Banking, Financial Services, and Insurance (BFSI) sector. ● Key highlights: <ul style="list-style-type: none"> ○ Social Engineering Rise: BEC and phishing attacks are increasingly targeted, bypassing traditional security. ○ Supply Chain Risks: Threats from third-party vendors stress the need for better vendor management. ○ Compliance Change: Evolving regulations turn compliance into a tool for growth and resilience. ○ Control Gaps: Misconfigurations and weak access controls remain major issues. ○ AI Threats: AI is driving personalized, large-scale cyber attacks.

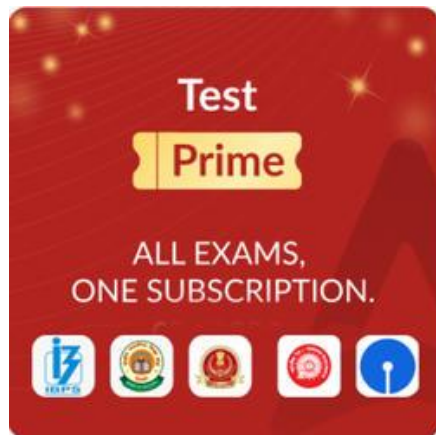


తెలుగు

ADDA247

Daily Current Affairs Encyclopedia

To get free Live Classes,
Materials Scan this QR Code &
Download our Adda247 App



Copyright © by Adda247

All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Adda247.