



## **EVE** **RYDAY CURRENT AFFAIRS-july** **STATES**

- **The outbreak of anthrax - has been confirmed in Athirappilly forest range in Kerala's Thrissur district after testing carcasses of wild boars**
- ✓ Health Minister Veena George confirmed the outbreak and said the government was taking immediate steps to prevent the spread of the disease.



- ✓ Many wild pigs died in the area in the last couple of days and their samples were tested to confirm the case of anthrax infection
- ✓ Over the past years, anthrax has been reported in Andhra Pradesh, Jammu and Kashmir, Tamil Nadu, Assam, Orissa and Karnataka.
- ✓ Anthrax is a rare but serious disease caused by the rod-shaped bacteria known as *Bacillus anthracis*
- ✓ It is a zoonotic disease, which means it is naturally transmissible from animals to humans.
- ✓ People can get the disease through contact with infected animals or animal products that are contaminated with bacteria
- ✓ Common symptoms of the disease in humans are sores, fever, shortness of breath, nausea and heavy sweating

# NATIONAL

- **The Ministry of Environment, Forest and Climate Change - recently notified Forest (conservation) Rules 2022, under Forest (conservation) Act, 1980.**
- ✓ The new rules propose the constitution of an Advisory Committee, a regional empowered committee at each of the integrated regional offices and a screening committee at the state/Union Territory (UT) government-level.
  - ✓ The role of the Advisory Committee was restricted to advise or recommend grant of approval under relevant sections in respect of proposals referred to it
  - ✓ The regional empowered committee must examine the proposal referred to it under relevant clauses and recommend the grant of approval or rejection of proposals
  - ✓ The five-member project screening committee will, after examination of the proposal, make recommendations to the state government or UT administration
- ✓ The new rules also prescribe the time frame of review for different kinds of projects.
  - ✓ All non-mining projects between 5-40 hectares must be reviewed within a period of 60 days and all such mining projects within 75 days.
  - ✓ For projects involving a larger area, the committee gets some more time — 120 days for non-mining projects involving more than 100 hectares and 150 days for mining projects.
- ✓ As per new rules, project developers can purchase land with plantations from private individuals to present them as compensatory afforestation against forest diversion for non-forest activities
- ✓ This land, however, must be of 10 ha and comprise trees that are at least five years old and have a density of 0.4 or more.
- ✓ The new rules also make provisions for state governments to create land banks which can serve as plots for compensatory afforestation.
- ✓ Compensatory afforestation refers to planting activities done against diversion of forest for non-forest purposes such as mining, setting up of an industry or an infrastructure project.
- ✓ Another significant change introduced by the new rules is that all linear projects (roads, highways, etc.), projects involving forest land up to 40 hectares, and projects involving forest land with a canopy density of up to 0.7 -regardless of their extent for survey purposes- must be examined in the Integrated Regional Office.
  
- **The Railway Protection Force (RPF) - recovered various narcotic products worth over Rs. 7.4 crore and arrested 165 people under its “Operation NARCOS” conducted in the month of June 2022**

- ✓ The RPF has been empowered to conduct search, seizure and arrest under the Narcotic Drugs and Psychotropic Substances (NDPS) Act, since April 2019
- ✓ The agency started a month-long pan-India drive in June against smuggling of narcotics through rail, named Operation NARCOS



- ✓ The RPF intensified its checks in trains and at identified black spots across the country in coordination with the Narcotics Control Bureau (NCB) and other Law Enforcement Agencies (LEAs) to target drug peddlers involved in this illegal trade

## INTERNATIONAL

- **The members of the European Union - approved the passage of the “Digital Services Act package” on July 4.**
- ✓ The two new landmark rules - Digital Services Act (DSA) and the Digital Markets Act (DMA) - are aimed at creating a safer, accountable, open and more competitive digital space.
- ✓ Both the DSA and the DMA are supposed to control four Big Tech giants - Facebook, Google, Apple and Amazon - by setting down new responsibilities for online platforms
- ✓ The Digital Services Act was adopted with 539 votes in favour, 54 votes against and 30 abstentions.
- ✓ The Digital Markets Act was adopted with 588 in favour, 11 votes against and 31 abstentions.
- ✓ The Digital Services Act (DSA) sets clear obligations for digital service providers, such as social media, to tackle the spread of illegal content, online disinformation and other societal risks.
- ✓ The DSA bans targeted advertising aimed at children or based on sensitive data such as religion, gender, race and political opinions.
- ✓ The Digital Markets Act (DMA) sets obligations for large online platforms acting as “gatekeepers” (platforms whose dominant online position make them hard for consumers to avoid) on the digital market to ensure a fairer business environment and more services for consumers.
- ✓ The DMA is set to force changes in companies’ businesses, requiring them to make their messaging services interoperable and provide business users access to their data.

- ✓ Companies face fines of up to 10% of annual global turnover for DMA violations and 6% for DSA breaches.

## **SCIENCE, TECHNOLOGY & ENVIRONMENT**

- **A subsidiary of Indian engineering giant L&T, L&T Technology Services (LTTTS) – to jointly develop an eVTOL (electric vertical takeoff and landing) air taxi with Texas-based aerospace company, Jaunt Air Mobility.**
- ✓ In this regard, LTTTS has won a multi-year \$100-million-plus electric air mobility deal from Jaunt that has its design and manufacturing centre in Montreal, Canada.
- ✓ As part of the contract, LTTTS will open an engineering and R&D Centre in Canada “for the next-gen electric aircraft manufacturer to provide engineering services for the eVTOL air taxi”.
- ✓ Union aviation minister J M Scindia had recently invited eVTOL manufacturers to come to India to set up manufacturing units here and operate services too.
- ✓ The L&TJaunt craft could first have its pilot runs in the US and subsequently come to India and other countries.
- ✓ Jaunt is rolling out a new generation of sustainable aircraft to meet the growing demand for faster urban and regional travel.
- ✓ These eVTOLs take off like a helicopter and transition to flying like a fixed-wing plane.
  
- **Scientists in the US - have developed a rapid Covid-19 test that can accurately detect all current variants of SARS-CoV-2 within hours**
- ✓ The test, CoVarScan, detects the signatures of eight hotspots on the SARS-CoV-2 virus that causes Covid-19.
- ✓ The researchers at the University of Texas (UT) in the US tested CoVarScan on samples collected from more than 4,000 patients.
- ✓ The method relies on polymerase chain reaction (PCR) -- a technique common in most pathology labs -- to copy and measure the RNA at these eight sites of interest.
- ✓ To determine which variant of Covid-19 a patient has, scientists typically must use whole genome sequencing, which is time-consuming and expensive, relying on sophisticated equipment and analysis
- ✓ Compared to whole genome sequencing, CoVarScan had 96% sensitivity and 99% specificity.
- ✓ The test identified and differentiated Delta, Mu, Lambda, and Omicron variants of Covid-19, including the BA.2 version of Omicron, once known as "stealth Omicron" because it did not show up on some tests designed to detect only the Omicron strain.

# DEFENCE

- **Fighter pilots Air Commodore Sanjay Sharma and Flying Officer Ananya of the Indian Air Force (IAF) - have scripted history in the country's military aviation by becoming the first father-daughter pair to fly in a formation of jets**



- ✓ Flying Officer Ananya and her father Air Commodore Sanjay Sharma - flew in same formation of Hawk-132 Advanced Jet Trainers (AJT) at IAF Station, Bidar on May 30
- ✓ Air Commodore Sanjay Sharma was commissioned in the fighter stream of the IAF in 1989.
- ✓ During his tenure, Sharma has commanded the famous 101 'Falcons of Chhamb and Akhnoor' squadron of MiG-21s as well as a frontline fighter station.
- ✓ The squadron, which was subsequently 'number-plated', was resurrected last year at Hasimara with the new Rafale fighters.
- ✓ A graduate in Electronics and Communication, Ananya was selected for training for the flying branch of IAF and was commissioned as a fighter pilot in December 2021.
- ✓ The 24-year-old will be posted to a full-fledged fighter squadron in January next year.
- ✓ Her Hawk sortie with her father is part of her transitional fighter training at the Air Force Station, Bidar in Karnataka
- ✓ The Air Force Station at Bidar is one of the Premier Flying Training establishments of the Indian Air Force.
- ✓ It was established during World War II, and has been a training centre for budding pilots of the IAF since 1963

- ✓ In October 2015, the Government of India approved the inclusion of female fighter pilots in the Indian Air Force
- ✓ In 2016, the IAF admitted women into the fighter stream on an experimental basis.
- ✓ Flying Officers Avani Chaturvedi, Bhawana Kanth, and Mohana Singh were the first female pilots to be accepted into an IAF fighter squadron.
- ✓ Chaturvedi and Kanth flew a solo flight on MiG -21 Bison in 2018 while Mohana rode a Hawk Mk132 in 2019
- ✓ In 2020, the IAF had 1,625 female officers (excluding medical and dental branches), which includes 16 women fighter pilots.
- ✓ On February 1, 2022, the Defence Ministry finally converted the experimental women's recruitment scheme into a permanent one

## **AWARDS**

- **Ukraine's Maryna Viazovska - became the second woman to be awarded the Fields medal, known as the Nobel prize for mathematics.**



- ✓ Viazovska, a 37-year-old Kyiv-born math professor, received the prestigious award alongside three other winners at a ceremony in Helsinki.
- ✓ The International Congress of Mathematicians was initially scheduled to be held in Russian city Saint Petersburg — and opened by President Putin.
- ✓ Later, several mathematicians signed an open letter protesting the choice, and after Moscow invaded Ukraine the event was moved to the Finnish capital.
- ✓ The other Fields winners were France's Hugo Duminil-Copin of the University of Geneva, Britain's James Maynard of Oxford University and June Huh of Princeton in the US.
- ✓ The medal, along with \$11,600, is awarded every four years to between two to four candidates under the age of 40 for "outstanding mathematical achievement".
- ✓ Of the 60 mathematicians who won Fields Medals before this year, 59 were men.
- ✓ The only previous female laureate in the prize's more than 80-year history was Iranian mathematician Maryam Mirzakhani, who won it in 2014.

- ✓ In a decision made before the war in Ukraine began, Viazovska was awarded for her work in sphere packing — a problem first posed by German astronomer and mathematician Johannes Kepler nearly 400 years ago.
- ✓ In what is called the Kepler conjecture, he proposed that the most compact way to pack spheres was in a pyramid, like oranges at a supermarket.
- ✓ But it was such a complex problem that it was not considered proved correct until 1998 via intense computer number-crunching.
- ✓ Then in 2016, Viazovska solved the problem in the eighth dimension, using what is called an E8 lattice.

