

EXERCISE PRASTHAN



- The security of the Offshore Development Area (ODA) in Krishna Godavari Basin on the East Coast of India was reviewed during exercise "Prasthan" conducted from 21 December to 22 December 21.
- The biannual exercise was coordinated and controlled by NOIC (APD) from Joint Operations Centre (JOC) Vizag under the aegis of Indian Navy.
- Objective was to assess overall security architecture to provide support during an emergent situation at ODA and for the Oil Operators to validate their Standard Operating Procedures laid out for various contingencies related to ODA.

- Indian Naval Ships Kamorta, Tarmugli along with ISVs, T 36, T 38, T 39 and ICG ship Kanaklata Barua participated in the exercise along with MARCOS from INS Karna and naval helicopters from INS Dega.
- Oil Operators namely ONGC Ltd, Reliance Ltd & Vedanta Ltd, Coastal Police, Department of Port and Department of Fisheries also participated.



QUICK METHOD TO DRY 'SHEET RUBBER'



- The Rubber Research Institute of India (RRII) has developed a method to dry sheet rubber in 24 hours in place of the traditional method that takes four to five days.
- The conversion of raw latex into sheet rubber helps rubber farmers store the produce and sell according to the market situation as price fluctuation is a constant phenomenon.
- However, the traditional method of drying sheet rubber takes four to five days. The processing involves coagulation, sheeting and drying.
- The much quicker method of drying is done by replacing the conventional coagulant — diluted formic acid — with a mixture of the acid and alcohol and an improved sheeting process.

- In the new process, coagulation takes only about 30 minutes and the drying can be faster after loading the wet coagula in the smokehouse. Quick drying is achieved by increasing the effective surface area through additional rolling.
- Rubber Research Institute of India (RRII) under Rubber Board, Ministry of Commerce & Industry, Government of India is located at Kottayam, Kerala, India. It was established in 1955.

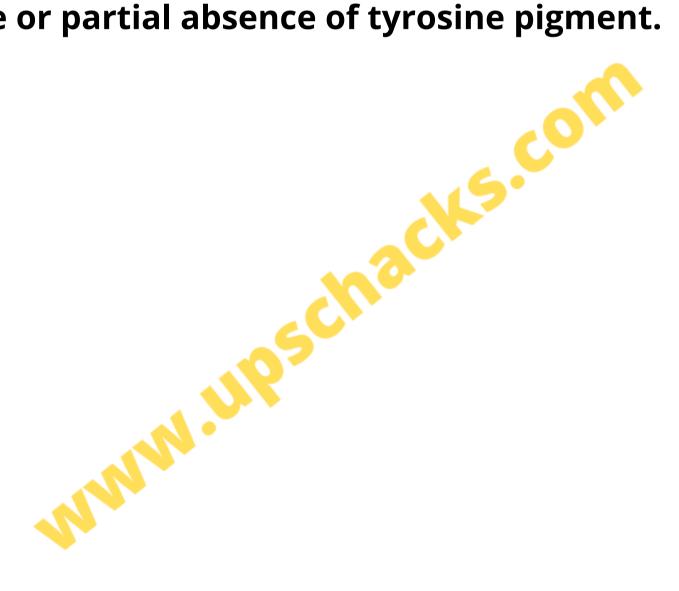


ALBINO INDIAN FLAPSHELL TURTLE



- In the Sirnapalli forest in Telangana's Nizamabad, an international forest forensic investigator, had a chance encounter with the rarely found species of Albino Indian Flapshell turtle.
- The Indian flapshell turtle (Lissemys punctata) is a freshwater species of turtle found in South Asia.
- The "flap-shelled" name stems from the presence of femoral flaps located on the plastron. These flaps of skin cover the limbs when they retract into the shell.
- Its IUCN status is Vulnerable.

- These freshwater turtles are widespread across South Asian countries like Pakistan, India, Sri Lanka, and Bangladesh. And while typical Indian flapshell turtles are dark green and brown, the example found recently has a decidedly more vibrant appearance.
- There were only two instances earlier of having 'recorded' the presence of albino version of this specie across India once in Odisha and then in West Bengal.
- The Indian flapshell turtle's albino appearance is due to genetics. It is a congenital disorder and it is characterized by complete or partial absence of tyrosine pigment.



CHILLAI KALAN



- Kashmir is in a deep freeze as the 40-day harshest spell of winter, locally called 'chillai kalan', started on December 21, 2021, with the minimum temperature already sub-zero in the entire Valley.
- Chillai Kalan or Chillia Kalan is a Persian word which literally means forty days of intense cold.
- It is the local name given to 40 day period of harsh winter in Kashmir.
- It is the coldest part of winter, starting from 21 December to January 29 every year.
- Chillai-Kalan is followed by 20-day long Chillai Khurd (small cold) that occurs between January 30 and February 18 and a 10-days long Chillai Bachha (baby cold) which is from February 19 to February 28.

- Impact of Chillai Kalan on daily life of Kashmiris: Use of Pheran (Kashmiri dress) and a traditional firing pot called Kanger increases.
- Due to subzero temperature, tap water pipelines freeze partially during this period and world-famous Dal Lake also freezes.



Word 'Anti-national' not defined in Statutes



- Ministry of Home Affairs (MHA) informed the Lok Sabha that the word 'anti-national' has not been defined in statutes.
- The word 'anti-national' has not been defined in Statutes.
- However, there are criminal legislations and various judicial pronouncements to sternly deal with unlawful and subversive activities which are detrimental to the unity and integrity of the country.
- The Constitution (42nd Amendment) Act, 1976 inserted in the Constitution Article 31D (during Emergency) which defined "anti-national activity" and this Article 31D was, subsequently, omitted by the Constitution (3rd Amendment) Act, 1977.

- In 2019, when the National Crime Records Bureau (NCRB) released the annual Crime in India report for the year 2017, it included for the first time a new chapter on "Crime Committed by Anti National Elements."
- The chapter listed "North East insurgents, Left Wing Extremists and Terrorists (including Jihadi terrorists)" as the three anti-national elements.
- According to the NCRB report, these three elements were responsible for 398 violent attacks that took place in 2020.
- Parliament's standing committee on communication and information technology, headed by Congress MP Shashi Tharoor, in its report on "ethical standards in media coverage" recommended that the government properly define terms such as "anti-national attitude" to remove any ambiguity in interpretation.

WADA report: India among world's top three dope violators country



- India is among the world's top three dope violators country in the world. Indian athletes were involved 152 times in dope-related activities in the year 2019. The report has revealed the latest report published by the World Anti-Doping Agency (Wada), which has put India into the top-three of the world's biggest violators behind Russia (167) and Italy (157). Brazil (78) is at fourth and Iran (70) fifth positions.
- In 2019, 152 (17 per cent of the world total) Anti-doping Rule Violations (ADRVs) were reported in India. The maximum dope offenders are from bodybuilding followed by weightlifting (25), athletics (20), wrestling (10), and boxing.

- A total of 278,047 samples were collected by Anti-Doping Organisations worldwide in 2019, and subsequently, analysed by WADA-accredited laboratories. Of these samples, 2,701 (1 per cent) were reported as Adverse Analytical Findings.
- Based on a compilation of the information received by WADA till January 31, 2021, 1,535 samples (57 per cent) were confirmed as ADRVs (sanctions), the world anti-doping watchdog.
- Among Olympic sports worldwide, athletics leads the number of dope offenders with 227 (18 per cent), followed o lead by weightlifting with 160. Bodybuilding leads overall with **272.**

India successfully tests 'Pralay' missile off Odisha coast



- India successfully conducted the maiden flight test of the indigenously-developed, surface-to-surface missile 'Pralay' off the Odisha coast.
- The solid-fuel, battlefield missile developed by the Defence Research Development Organisation is based on Prithvi Defence Vehicle from the Indian ballistic missile programme. The missile, launched from the APJ Abdul Kalam Island.
- The new missile followed the desired quasi ballistic trajectory and reached the designated target with high degree accuracy, validating the control, guidance and mission algorithms.

- With a range of 150 to 500 km, 'Pralay' is powered with the solid propellant rocket motor and other new technologies.
- The missile guidance system includes state-of-the-art navigation and integrated avionics.



What is a Boxing Day Test match in cricket?



- The Test match that starts on December 26, primarily at Australia's Melbourne Cricket Ground, is called Boxing Day Test.
- According to a theory, December 26 came to be known as the Boxing Day as the servants in Victorian-era England were given boxes of gifts a day after Christmas.
- Australia has hosted a Boxing Day Test every year since 1990.

Belgium to close all existing nuclear power plants by 2025



- Belgium's government on Thursday reportedly said it would shut all of the country's nuclear power plants by 2025.
- Indicating that two plants could remain open if needed, Belgium PM Alexander De Croo said, "It would not be smart not to have a safety net." "We say goodbye to...old nuclear reactors and look to nuclear energy of the future," Croo added.

Largest group of 70 rogue planets yet found: Scientists



- Astronomers have spotted at least 70 new rogue planets in our galaxy, making it the largest group of rogue planets ever discovered.
- Each planet is about the mass of Jupiter, and they're located around the Upper Scorpius and Ophiuchus constellations, a star-forming area relatively near our Sun.
- The team used data spanning about 20 years from a number of telescopes.