

18TH December 2024

Odhiya Bai Bega

Padma Shri awardee Jodhaiya Bai Baiga, a renowned Baiga painter, died in her village Lodha, Umaria district, Madhya Pradesh, at about 86 years old after an 11-month illness.



Key Point

- ❖ Despite being paralyzed on her right side, she continued to be celebrated for her contributions to tribal art, learning painting at age 67.
- ❖ Jodhaiya Bai belongs to the Baiga tribe of Madhya Pradesh. She hails from Umaria district.
- ❖ Her paintings were exhibited in Milan, Italy in 2019, showcasing her artistic talent internationally.
- ❖ In 2022, Jodhaiya Bai was honored with the Nari Shakti Award for her contributions to art.
- ❖ She was further recognized with the Padma Shri Award on March 22, 2023 for her significant achievements in the field of art.

INS Nirdeshak

The Indian Navy is set to commission the new survey ship, the future INS Nirdeshak, at the Naval Dockyard in Visakhapatnam on 18 December 2024.



Key Point

- ❖ The ship, built at GRSE Kolkata, boasts over 80% indigenous content, reaffirming India's expertise in ship design and construction & Indian Navy's focus towards Aatmanirbharta.
- ❖ The 110-meter-long vessel, with a displacement of approximately 3800 tons, is powered by two diesel engines and is equipped with state-of-the-art Hydrographic and Oceanographic Survey Equipment.
- ❖ Nirdeshak, the second ship of the Survey Vessel (Large) Project, is designed to conduct hydrographic surveys, aid in navigation, and support maritime operations.
- ❖ It represents the reincarnation of the erstwhile Nirdeshak, which served the Indian Navy with distinction for 32 years until its decommissioning on 19 Dec 2014.
- ❖ With an endurance of over 25 days at sea and a top speed exceeding 18 knots, INS Nirdeshak is set to enhance India's Maritime capabilities.

The United Nations Convention on the Law of the Sea (UNCLOS) is an international treaty which was adopted and signed in 1982.

Baseline:

- ❖ It is the low-water line along the coast as officially recognized by the coastal state.

Territorial sea

- ❖ The territorial sea extends seaward up to 12 nautical miles (nm) from its baselines.
- ❖ The coastal states have sovereignty and jurisdiction over the territorial sea. These rights extend not only on the surface but also to the seabed, subsoil.

Contiguous Zone

- ❖ The contiguous zone extends seaward up to 24 nm from its baselines.
- ❖ It is an intermediary zone between the territorial sea and the high seas.
- ❖ Unlike the territorial sea, the contiguous zone only gives jurisdiction to a state on the ocean's surface and floor. It does not provide air and space rights.

Exclusive Economic Zone (EEZ):

- ❖ Each coastal State may claim an EEZ beyond and adjacent to its territorial sea that extends seaward up to 200 nm from its baselines.
- ❖ Sovereign rights for the purpose of exploring, exploiting, conserving and managing natural resources, whether living or nonliving, of the seabed and subsoil.

- ❖ Rights to carry out activities like the production of energy from the water, currents and wind.

High Seas:

- ❖ The ocean surface and the water column beyond the EEZ are referred to as the high seas.

Women's Junior Asia Cup

The Indian women's junior hockey team emerged victorious for the second time in Women's Junior Asia Cup again defeating China in the finals 3-2.


Key Point

- ❖ The last match was played at Oman, Muscat on 15-12-2024. The match was decided after a penalty shootout in which the winners were India defeating Oman 3-2.
- ❖ India, the winner of the previous 2023 edition clinched the 10th Women Junior Asia Cup title.
- ❖ Out of them, five teams reaching the finals include India, China, Japan, the South Korea, and Malaysia will participate in the FIH women junior world cup - Chile 2025.
- ❖ Indian women junior team followed like the Indian men's which won the 2024 Hockey Junior Asia Cup Muscat, Oman for fifth time.

Maha Kumbh 2025

The Prime Minister recently inaugurated and launched 167 development projects worth ₹5,500 crore in Prayagraj, Uttar Pradesh, as part of preparations for Maha Kumbh 2025.



Key Point

- ❖ Describing the event as a “Maha Yagya of unity,” the PM highlighted its significance in promoting spiritual, cultural, and social cohesion while showcasing India’s rich traditions to the world.
- ❖ A multilingual AI-powered chatbot, Sah’Al’yak, launched to assist devotees in 11 Indian languages.
- ❖ He emphasized the historical importance of Prayagraj including its association with Lord Ram’s journey and sites like Akshay Vat and Saraswati Koop.
- ❖ The Maha Kumbh Mela is a sacred pilgrimage celebrated four times over 12 years, known as the world’s largest peaceful gathering.
- ❖ Millions of pilgrims attend to bathe in holy rivers, seeking spiritual liberation and cleansing of sins.
- ❖ Historical Background: The founding myth of the Kumbh Mela points to the Puranas (compilations of ancient legends).
- ❖ It is widely believed that Lord Vishnu (disguised as the enchantress ‘Mohini’) whisked the Kumbh out of the grasp of the covetous demons who had tried to claim it.
- ❖ The origins of the Kumbh Mela date back thousands of years, with references from the Maurya and Gupta periods (4th century BCE to 6th century CE).
- ❖ It was supported by royal dynasties such as the Cholas, Vijayanagar Empire, Delhi Sultanate, and Mughals, including Emperor Akbar.
- ❖ The origin of Maha Kumbh Mela was transcribed by the 8th-century philosopher Adi Shankaracharya.
- ❖ Recognized by UNESCO in 2017 as an intangible cultural heritage of humanity, it remains a testament to India’s enduring traditions.

Types of Kumbh Melas in India

❖ India hosts four types of Kumbh Melas, each occurring at different sacred locations:

Type of Kumbh Mela	Frequency	Locations	Significance
Maha Kumbh Mela	It comes in every 144 years or after 12 Purna (Complete) Kumbh Mela.	Prayagraj	Largest and most significant of all.
Ardh Kumbh Mela	Every 6 years	Prayagraj, Haridwar	Mid-point gathering between Maha Kumbhs.
Purna Kumbh Mela	Every 12 years	Prayagraj, Haridwar, Ujjain, Nashik	Major event held at other sacred locations.
Magh Mela	Annually	Prayagraj	Smaller version of Maha Kumbh, celebrated annually

ISRO Successfully Tests CE20 Cryogenic Engine

ISRO achieved a significant milestone with the sea-level hot test of the CE20 cryogenic engine, conducted at the ISRO Propulsion Complex, Mahendragiri, Tamil Nadu.



Key Point

- ❖ The CE20 cryogenic engine is a rocket engine that uses liquefied gases as both fuel and oxidizer.
- ❖ These gases are kept at extremely low temperatures to maintain their liquid state.
- ❖ ISRO Developed by the Liquid Propulsion Systems Centre, the CE20 engine powers the upper stage of the Launch Vehicle Mark-3 (LVM-3)
- ❖ Fuel and Oxidizer Used
 - Liquid Oxygen (LOX): Acts as the oxidizer. It liquefies at -183°C .

- Liquid Hydrogen (LH₂): Serves as the fuel which liquefies at -253°C .
- ❖ The reaction between LOX and LH₂ generates thrust for propulsion.
- ❖ Equipped with a multi-element igniter, enabling the engine to restart mid-mission, crucial for missions like Gaganyaan.
- ❖ This test validated ISRO's ability to perform vacuum ignition without nozzle closure, advancing its cryogenic propulsion capabilities.
- ❖ Prevents flow separation in the nozzle and reduces vibrations enhancing performance and simplifies testing procedures.
- ❖ Provides increased thrust and enhances payload capacity.
- ❖ Primarily used in the upper stages of rockets, where high efficiency is essential for placing satellites or spacecraft into orbit.
- ❖ The engine, initially qualified for 19 tonnes of thrust, has been upgraded to:
 - ❖ 20 tonnes for the Gaganyaan mission, India's first manned spaceflight.
 - ❖ 22 tonnes for the C32 stage, enhancing the payload capacity of the LVM3 rocket.

Short News

- ❖ The Lok Sabha Speaker XI won against the Rajya Sabha Chairman XI in the TB Mukta Bharat Awareness Cricket Match at the Major Dhyan Chand National Stadium in New Delhi.
- ❖ The National Highways Authority of India has launched 'Rajmarg Saathi', a modernized Route Patrolling Vehicle system to enhance highway safety. The Indian Navy is likely to induct the last Kalvari class or Scorpene class submarine in early 2025 and the first Nilgiri class frigate in January.
- ❖ According to the Civil Aviation Minister, 'Udaan Yatri Cafés' will be opened at airports managed by the Airports Authority of India (AAI) to provide affordable refreshment options to passengers
- ❖ The first 'Udaan Yatri Café' will be opened at Kolkata's Netaji Subhas Chandra Bose International Airport as a pilot project.
- ❖ Renowned philanthropist, author Dr. Dinesh Shahra released his much-awaited book, Dalai Lama's Secret to Happiness at the prestigious Library of Tibetan Work and Archives (LTWA) in Dharamshala.
- ❖ Indians could soon benefit from visa-free travel to Russia under a new initiative set to launch in spring 2025.

Important Daily Current Affairs Question

1. Which of the following countries won the Women's Junior Asia Cup 2024 after defeating China in the finals?

- A. China
- B. Japan
- C. Indonesia
- D. India

Answer - D

2. Jodhaiya Bai , a renowned painter, died in her village Lodha, Umaria district, Madhya Pradesh belongs to which of the following tribe?

- A. Baiga
- B. Bhariya
- C. Bhil
- D. Gond

Answer - A

