

# Daily Defence Current Affairs

## 12 May 2025

### National Technology Day 2025

- The Technology Development Board under the Department of Science and Technology, GOI unveiled the official theme for National Technology Day 2025 — **“YANTRA – Yugantar for Advancing New Technology, Research & Acceleration.”**
- The word YANTRA, deeply rooted in India’s scientific and cultural heritage, represents not just mechanical ingenuity but also symbolic power — of systems, synergy, and scalable solutions.
- National Technology Day commemorates the momentous events of 11th May 1998, when India conducted successful nuclear tests under **Operation Shakti**, and saw the maiden flight of the indigenously developed **Hansa-3 aircraft**. In recognition of these achievements, then PM Sh. Atal Bihari Vajpayee declared 11th May as National Technology Day.
- On May 11, 1998, India conducted a series of underground nuclear tests at the Pokhran Test Range in the Thar Desert of Rajasthan. It was India's second nuclear test; the first, codenamed **Smiling Buddha**, was conducted in May 1974.





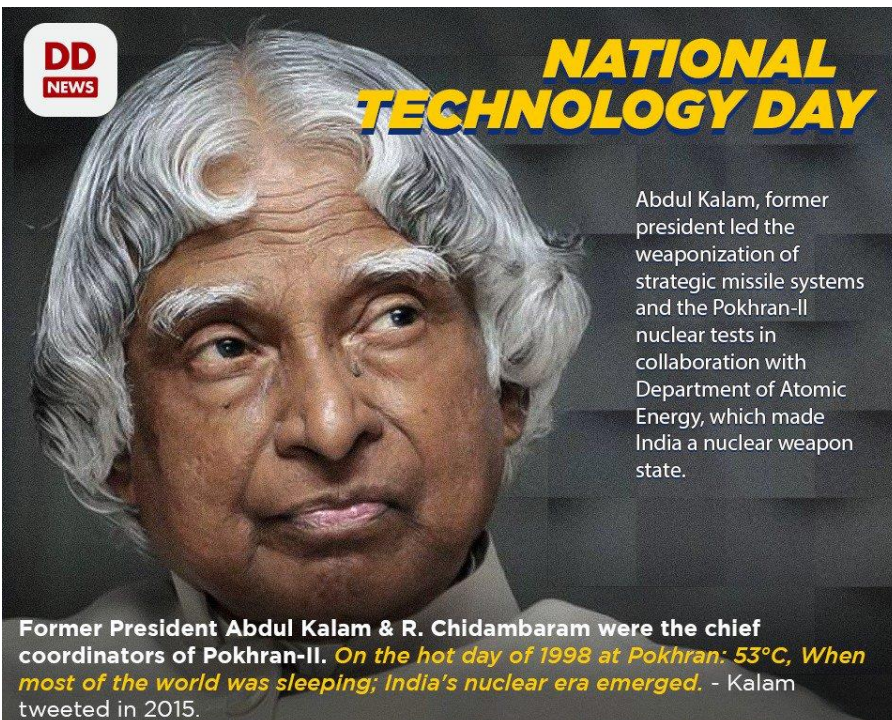

## NATIONAL TECHNOLOGY DAY

- Major Bombs detonated
  - 15kt Atom Bomb
  - 45kt Hydrogen Bomb
  - 0.2kt Sub-kiloton device

India became the 6th country to join the nuclear club.

Originally these were collectively called **Operation Shakti-98**, and the five nuclear bombs were designated Shakti-I through to Shakti-V.

On **May 11, 1998** India, successfully tested nuclear bombs in Pokhran and is commemorated every year by **honouring the architects of such innovations.**



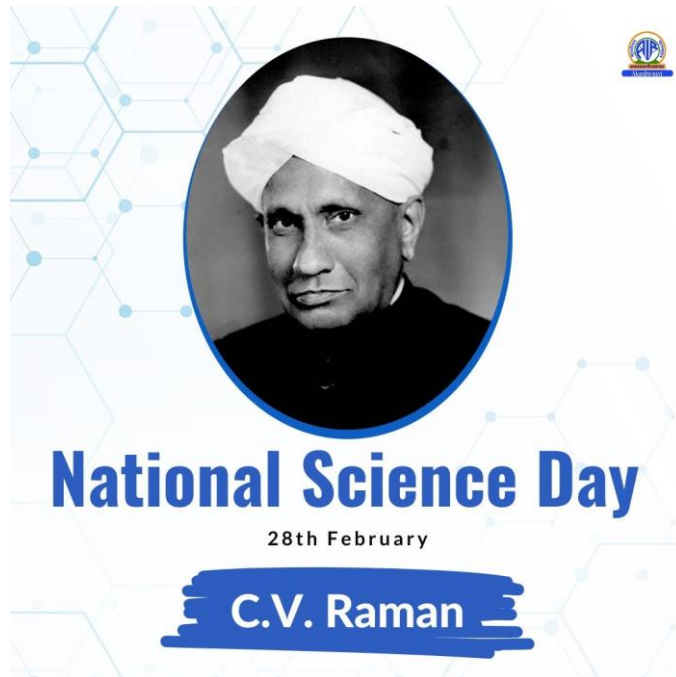
## NATIONAL TECHNOLOGY DAY

Abdul Kalam, former president led the weaponization of strategic missile systems and the Pokhran-II nuclear tests in collaboration with Department of Atomic Energy, which made India a nuclear weapon state.

**Former President Abdul Kalam & R. Chidambaram were the chief coordinators of Pokhran-II. On the hot day of 1998 at Pokhran: 53°C, When most of the world was sleeping; India's nuclear era emerged.** - Kalam tweeted in 2015.

SSBCrack  
EXAMS





## INS Tamal

- The Indian Navy is set to receive advanced stealth warship INS Tamal from Russia.
- Tamal is a stealth warship, built as a part of the 2016 Indo-Russian deal, with two ships built in Russia and two in India.
- INS Tamal is the 2nd Russian-built frigate in this batch, following **INS Tushil** (commissioned Dec 2024).
- Precision Strikes: Speeds up to 30 knots and a range of 3,000 km per mission.
- Anti-Submarine Weapons: Equipped with torpedoes and rocket systems like BrahMos missile.
- BrahMos is a supersonic cruise missile with a range of nearly 300-400 km and operates at near Mach 2.8 speed, ensuring quick engagement times.
- Helicopter Deployment: Can operate a multi-role helicopter for enhanced surveillance and combat.
- Stealth Design: Built to evade radar, improving survivability in modern naval warfare.



## BrahMos Aerospace Integration and Testing Facility

- Defence Minister Rajnath Singh has said that Operation Sindoor is not just a military action, but a symbol of India's political, social and strategic will. Virtually inaugurating the BAITF in Lucknow this afternoon,
- He said, the inauguration of Brahmos integration and testing facility will help in further strengthening India's defence prowess.
- BrahMos is the first supersonic cruise missile known to be in service. Induction of the first version of Brahmos weapon complex in the Indian Navy commenced from 2005 with **INS Rajput** as the first ship.
- The Indian Army has also inducted many BrahMos regiments since 2007. The IAF has successfully inducted BrahMos Air Launched Cruise Missile system armed with Sukhoi-30MKI frontline fighter aircraft.

## WHAT'S SPECIAL ABOUT BRAHMOS?

### **BrahMos Capabilities:**

**Range:** Over 450 km (extended range variants up to 800 km reportedly tested)

**Speed:** Supersonic (Mach 2.8–3.0), making interception highly difficult

**Launch Platform:** Air, land, sea, and submarine capable – the ALCM version is launched from Su-30MKI

**Accuracy:** Near pinpoint precision with advanced guidance and navigation

**Payload:** High-explosive warhead (200–300 kg), ideal for hardened targets

**Compared to existing state-of-the-art subsonic cruise missiles, BraHmos has:**

- 3 times more velocity
- 2.5 to 3 times more flight range
- 3 to 4 times more seeker range
- 9 times more kinetic energy



## Maha Govt To Introduce Civil Defence Course

- The Maharashtra government has decided to introduce a civil defence course in the **Mumbai University curriculum**, acknowledging the key role the volunteer-based emergency response mechanism can play during emergencies amid a spotlight on the Indo-Pakistan conflict that necessitated mock drill exercises.
- The government is also trying to strengthen the Directorate of Civil Defence, beset by multiple issues ranging from manpower crunch to paltry daily

allowance and logistical problems, including inadequate sirens, vehicles and ambulances.

- This course will be taught in all engineering colleges affiliated with the University of Mumbai and will carry a weightage of 25 marks.



## India's First Locally-Made Hydrogen Drones

- **Paras Defence & Space Technologies** has taken a significant leap in India's defence and security landscape by announcing the country's first locally-made hydrogen-powered drones, ready for immediate deployment.
- This milestone follows a strategic joint venture (JV) with **Heven Drones**, an Israeli subsidiary of the **US-based Heven**, renowned for its autonomous, hydrogen-fuelled and mission-specific drones.
- The JV will establish a new entity in India, dedicated to designing, manufacturing, and supplying next-generation drone systems tailored for India's defence and homeland security requirements, with future plans to address global markets.
- Paras Defence brings its expertise in advanced optics, optronic systems, and defence solutions, while Heven Drones contributes proprietary platforms and proven combat-tested technology.

*Key features of these hydrogen drones include:*

**Extended Endurance:** Capable of staying airborne five times longer than conventional battery-powered drones, greatly enhancing persistent surveillance capabilities.

**Silent Operation:** Their near-silent functioning makes them ideal for covert, round-the-clock monitoring.

**High-Altitude Surveillance:** Some models can hover at 500 meters, providing continuous oversight of vast and difficult terrains.

**Advanced Payloads:** Equipped with stabilised optical payloads, thermal imaging, and wide-area coverage, these drones offer early detection, tracking, and rapid threat assessment-crucial in challenging conditions where human patrols and traditional systems fall short.



## REVIEW QUESTIONS

1. What new course has the Maharashtra government decided to introduce in the Mumbai University curriculum?

- A. Defence Management
- B. Civil Defence
- C. Disaster Technology
- D. Nuclear Studies

**ANSWER: B**

**2. Which company has announced India's first locally-made hydrogen-powered drones?**

- A. DRDO
- B. Bharat Electronics
- C. Paras Defence & Space Technologies
- D. Hindustan Aeronautics Limited

**ANSWER: C**

**3. Who is the strategic partner of Paras Defence for developing hydrogen-powered drones?**

- A. Rafael
- B. Heven Drones
- C. Elbit Systems
- D. Boeing

**ANSWER: B**

**4. Which is the second Russian-built frigate that the Indian Navy is set to receive?**

- A. INS Vikrant
- B. INS Tushil
- C. INS Tamal
- D. INS Shivalik

**ANSWER: C**

**5. What is the theme for National Technology Day 2025?**

- A. Innovate India
- B. Tech for Tomorrow
- C. Science for Sustainability
- D. YANTRA – Yugantar for Advancing New Technology, Research & Acceleration

**ANSWER: D**

**6. What significant event is commemorated on National Technology Day in India?**

- A. India's first satellite launch
- B. Pokhran-II nuclear tests and Hansa-3's maiden flight
- C. Chandrayaan-2 launch
- D. Launch of the Make in India initiative

**ANSWER: B**

**7. Indian Army Installs First Windmill On LOC In**

- E. Jammu
- F. Kashmir
- G. Jaipur
- H. Amritsar

**ANSWER: B**

**8. Which Of The Indian Army Has Been Appointed As New Force Commander Of The UMNIS?**

- E. Lt Gen Mohan Subramanian
- F. Lt Gen Shailesh Tinaikar
- G. Lt Gen Sulabh Mani
- H. None of the above

**ANSWER: A**

**9. United Nations High Commissioner for Refugees HQ Is In**

- A. Geneva
- B. Berlin
- C. New York
- D. Moscow

**ANSWER: A**

**10. Peacetime Distinguished Service Medal Is**

- A. PVC
- B. MVC
- C. VSM
- D. YSM

**ANSWER: C**

**11. Major Rank of the Indian Army Is Equivalent To Rank Of IAF Is**

- A. Commander
- B. Squadron Leader
- C. Group Captain
- D. Lieutenant

**ANSWER: B**

**12. UNDP Was Established In**

- A. 1965

- B. 1975
- C. 1985
- D. 1995

**ANSWER: A**

**13. Lamitye Exercise Held B/W India And \_\_\_\_?**

- A. Thailand
- B. USA
- C. Qatar
- D. Seychelles

**ANSWER: D**

**14. Nomadic Elephant Exercise Held B/W India And \_\_\_\_?**

- A. Australia
- B. USA
- C. Mongolia
- D. Singapore

**ANSWER: C**

**15. Defence Services Staff College Is At**

- A. Wellington
- B. Bangalore
- C. Pune
- D. Dehradun

**ANSWER: A**

**16. Amman Is The Capital Of**

- A. Oman
- B. Jordan
- C. Kiribati
- D. Maldives

**ANSWER: B**

**17. "The Upside-Down King" Book Is Written By**

- A. Sudha Murthy
- B. Nadia Murad
- C. Naseeruddin Shah
- D. APJ Abdul Kalam

**ANSWER: A**

**18. War Cry of THE MAHAR REGIMENT**

- A. Bharat Mata ki Jai
- B. Bolo Hindustan Ki Jay
- C. Jai Hind
- D. Durga Mata Ki Jai

**ANSWER: B**

**19. Southwestern Air Command Of IAF Is In**

- A. Prayagraj
- B. Gandhinagar
- C. Shillong
- D. New Delhi

**ANSWER: B**

**20. Bagram Air Base Located In**

- A. Pakistan
- B. Iraq
- C. Afghanistan
- D. Qatar

**ANSWER: C**