

8. Short News

1. Winter Olympics 2026 (Milano Cortina 2026)

Context- The 25th Winter Games concluded in Italy, marked as the most geographically spread-out Winter Olympics ever.

Host- Jointly hosted by Milan and Cortina d'Ampezzo; the closing ceremony was held at the historic Verona Arena.

Theme- "Beauty in Action."

Top Performers-

1. Norway- Finished 1st with 18 Gold medals (41 total).
2. USA- Finished 2nd with 12 Gold medals (33 total).
3. Italy- Achieved its highest-ever tally of 30 medals.

India's Milestone- Arif Khan recorded India's best-ever men's slalom finish (39th place).

2. Tetanus and Adult Diphtheria (Td) Vaccine

Context- India launched its indigenously manufactured Td vaccine, developed by the Central Research Institute (CRI), Kasauli.

Purpose- Replaces the old Tetanus Toxoid (TT) vaccine to provide combined protection against both Tetanus and Diphtheria.

Target- Integrated into the U-WIN platform to supply 55 lakh doses to the Universal Immunization Programme (UIP).

The Diseases-

1. Tetanus- Bacterial (*Clostridium tetani*) infection causing "lockjaw" and muscle stiffness.
2. Diphtheria- Contagious bacterial (*Corynebacterium diphtheriae*) infection affecting the throat and airways.

3. Tetrodotoxin (TTX) and Neurotoxins

Context- Suspected TTX poisoning in Kerala after consumption of fish roe (eggs).

About TTX- A potent marine neurotoxin produced by bacteria (*Vibrio/Pseudomonas*).

1. **Heat-stable-** Not destroyed by boiling or frying.
2. **Sources-** Pufferfish (highly concentrated in liver/ovaries), blue-ringed octopus, and certain crabs.
3. **Treatment-** No known antidote; requires immediate supportive care.

What are Neurotoxins? Substances that disrupt the nervous system by interfering with electrical signals across nerve cells.

1. Natural sources- Snake venom (cobras), scorpion stings.
2. Chemical sources- Lead, mercury, and certain pesticides.

4. 79th BAFTA Awards 2026

Historic Win- The Manipuri film "Boong", directed by Lakshmipriya Devi, won Best Children's and Family Film.

First for India- It is the first Indian production to secure this specific BAFTA honor.

About "Boong"- A coming-of-age drama about a young boy's journey to reunite his family in Manipur.

Main Winner- The film *One Battle After Another* dominated with six awards, including Best Film and Best Director.

5. Revision of Merchandise Trade Indices Base Year

Change- Base year revised from 2012-13 to 2022-23 by the DGCI&S.

Purpose of Base Year- Serves as a reference (index value = 100) to measure changes in trade volume and price over time.

Need for Revision- * To reflect structural changes in India's trade basket (new technology/products).

1. To align with international statistical best practices.
2. To improve accuracy in GDP estimation and Balance of Payments analysis.

Building Bureaucrats Since 2006

6. C. Rajagopalachari (Rajaji)

Context- A bust of Rajaji was recently unveiled at Rashtrapati Bhavan.

Historical Significance- The first and only Indian Governor-General of independent India (until 1950).

1. Successor to Lord Mountbatten.

Political Life- * Joined the freedom struggle in 1919 after meeting Gandhi.

1. Chief Minister of Madras State (1952–54).

2. Founded the Swatantra Party (1959), advocating for classical liberal economics.

Awards- First recipient of the Bharat Ratna (1954).

Literary Work- Retold the *Ramayana* and *Mahabharata* in English and Tamil.

7. ALARA Philosophy in Radiation Protection

Context- The U.S. Dept of Energy has eliminated the ALARA philosophy, sparking international debate.

ALARA Definition- "As Low as Reasonably Achievable." It is a safety principle to minimize radiation doses while considering cost and feasibility.

The LNT Model- The "Linear No-Threshold" model assumes any amount of radiation carries a risk; there is no "safe" minimum level.

Applications- Essential for safety cultures in nuclear power plants, X-rays, CT scans, and research labs.

