

9. Short News

1. Maternal Health- GARBH-INi Initiative

What it is- A flagship national research program aimed at reducing preterm births (babies born too early) using AI and indigenous data.

Lead Agency- Department of Biotechnology (Ministry of Science & Technology); launched in 2019.

Scale- India's largest pregnancy study cohort (~12,000 women).

Tech used- AI, genetic markers, and "multi-omics" (biological data) to predict pregnancy risks.

AnandiMaa- The "translational arm" that takes research from the lab to real-world hospitals.

2. Anti-Corruption- GlobE Network

What it is- A global platform for anti-corruption authorities to cooperate directly and share intelligence in real-time.

Origin- Conceived under the Riyadh Initiative (2020); officially launched in 2021.

India's Role- India joined in 2022; represented by the CBI and ED.

Secretariat- Based in Vienna, Austria (supported by UNODC).

Key Tool- Uses a Secure Communication Platform (SCP) for encrypted, instant data exchange between countries.

3. Environment- World Air Quality Report 2025

Publisher- IQAir (Swiss technology company).

India's Rank- 6th most polluted country globally (improved from 3rd in 2023).

Key Pollutant- Focuses on PM2.5 (fine particles ≤ 2.5 micrometres that enter the bloodstream).

Top Polluters- Pakistan (1st), followed by Bangladesh and Tajikistan.

Indian Cities- Loni (UP) is the most polluted city; New Delhi remains the world's most polluted capital.

WHO Standards- Only 13 countries globally met the safe limit of $< 5 \mu\text{g}/\text{m}^3$.

4. Geography & Conflict- Litani River

Location- The longest river flowing entirely within Lebanon.

Course- Starts in the Beqaa Valley, flows south, then turns west to the Mediterranean Sea near Tyre.

Strategic Importance- It is the "buffer zone" boundary between Israel and Hezbollah.

UN Resolution 1701- Mandates that the area between the Blue Line (border) and the Litani River must be free of unauthorized weapons and armed personnel.

5. Standards & Governance- Bureau of Indian Standards (BIS)

Statute- Established under the BIS Act, 2016.

HQ- New Delhi (with five regional offices).

Functions- Formulating "Indian Standards" (IS codes).

1. Product certification (e.g., the ISI mark).
2. Hallmarking of gold and silver jewellery.

6. National Honours- Subhash Chandra Bose Aapda Prabandhan Puraskar

Field- Excellence in Disaster Management.

Date- Announced annually on January 23 (Netaji's birth anniversary).

Eligibility- Open to both Indian individuals and institutions.

Awards- Institution- ₹51 Lakh and a certificate.

Individual- ₹5 Lakh and a medal.

7. Healthcare Regulation- National Dental Commission (NDC)

Change- Replaced the old Dental Council of India (DCI).

Law- Established under the National Dental Commission Act, 2023.

Structure- Includes three autonomous boards for (1) Education, (2) Assessment/Rating, and (3) Ethics/Registration.

Goal- To make dental education more transparent and oral healthcare more affordable.

8. Physics- Superconductivity

Definition- A state where a material has zero electrical resistance and expels magnetic fields.

Critical Temperature- The specific cold temperature at which a material becomes a superconductor.

New Breakthrough- Researchers used "pressure quenching" to raise the transition temperature by 18°C, bringing us closer to room-temperature superconductivity.

Applications-

1. Maglev Trains- For frictionless levitation.
2. MRI Machines- To create strong magnetic fields.
3. Lossless Power Lines- Moving electricity without losing energy to heat.

