



July - 07

TNPSC BITS

- ❖ The Fintech company Slice launched the Slice UPI credit card and India's first UPI-powered physical bank branch and ATM.
- ❖ The Karnataka Cabinet has approved renaming Bengaluru City University as Dr. Manmohan Singh City University to very honouring the former Prime Minister's legacy.
- ❖ The National Institute of Public Cooperation and Child Development (NIPCCD) of Delhi has been renamed as Savitribai Phule National Institute of Women and Child Development.
- ❖ The Narcotics Control Bureau (NCB), under Operation MED MAX, dismantled a drug cartel operating in over 10 countries across Asia, North America, Europe, and Oceania.
- ❖ Jio has become the world's largest Fixed Wireless Access (FWA) provider by the subscriber count by overtaking the United States (US)-based telecom company T-Mobile in total subscribers.
- ❖ Canada withdrew its 3% digital services tax on U.S. tech firms, which had been set to start on June 30, 2025, to support trade talks with the United States.
- ❖ Tamil Nadu higher education department has released a draft model code of conduct for college teachers.
 - This will help colleges and universities develop their own specific guidelines for teachers on posting videos and posts on social media.
- ❖ The first-ever national conference of Urban Local Body (ULB) chairpersons from Indian States and Union Territories (UTs) was held in Manesar, Gurugram, Haryana.
 - The event aims to strengthen the voice of ULBs in India's democratic system and support their important role in local governance.
- ❖ Puducherry has become the first state to include the tuberculosis (TB) screening under the "Family Adoption Program."
 - Under this initiative, the medical students adopt families for regular health outreach and monitoring.

TAMIL NADU NEWS

Coimbatore Master Plan 2041

- ❖ Tamil Nadu Chief Minister released the Coimbatore Master Plan 2041 in Chennai.

- ❖ The plan is based on Geographic Information System (GIS) technology.
- ❖ It covers the Coimbatore Local Planning Area which is spread over 1,531 square kilometres.
- ❖ The plan was prepared by the Directorate of Town and Country Planning under the Housing and Urban Development Department.
- ❖ In the revised land use plan, 33% of the area is marked as green zone.
- ❖ The remaining land is opened up for urban and infrastructure development.
- ❖ The plan is designed for the projected population growth up to 60 lakh (6 million) by 2041.



NATIONAL NEWS

RDI Scheme

- ❖ The Union Cabinet approved the Research, Development and Innovation (RDI) Scheme 2025.
- ❖ The scheme has a total funding of ₹99,771 crore (Indian Rupees) or US\$11.65 billion.
- ❖ It aims to improve India's investment in research and deep-tech.
- ❖ India currently spends only 0.64% of Gross Domestic Product (GDP) on research and development.

- ❖ Other countries like the United States, Japan, and China spend between 2% and 5% of GDP.
- ❖ The funds will be given as interest-free loans for 50 years.
- ❖ The Anusandhan National Research Foundation (ANRF) will manage the funds.
- ❖ The plan includes support for the commercialising research and setting up lab infrastructure.
- ❖ The scheme will help the move research from basic ideas (TRL-4) to fully ready technologies (TRL-9).
- ❖ The Technology Readiness Level (TRL) measures the stage of development of a new invention.



**CABINET APPROVES
RESEARCH, DEVELOPMENT
AND INNOVATION (RDI)
SCHEME**

AIM

- To provide long-term financing or refinancing with long tenors at low or nil interest rates to spur private sector investment in RDI.
- To overcome the constraints and challenges in the funding of private sector.

Key Objectives :

- Encourage the private sector to scale up RDI in sunrise domains and in other sectors relevant for economic security, strategic purpose, and self-reliance.
- Finance transformative projects at higher levels of Technology Readiness Levels.
- Support acquisition of technologies which are critical or of high strategic importance.

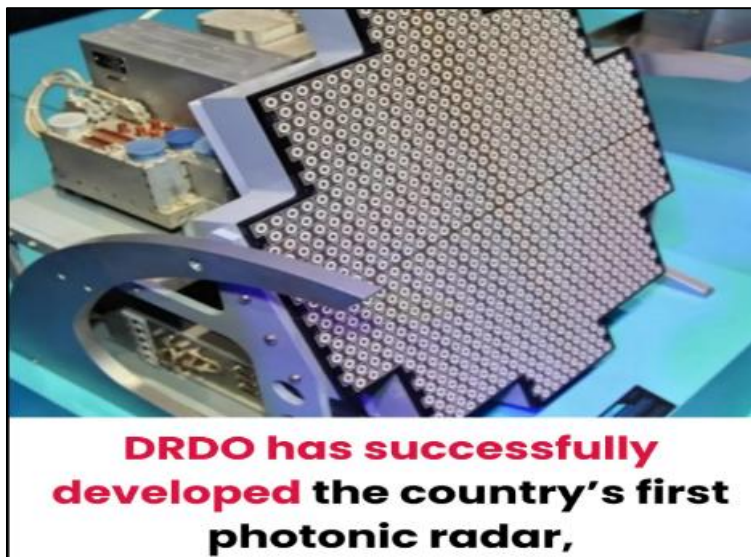
ELI Scheme

- ❖ The Union Cabinet has approved the Employment Linked Incentive (ELI) Scheme 2025.
- ❖ The scheme has a total budget of ₹99,446 crore.
- ❖ It will be active from 1 August 2025 to 31 July 2027.
- ❖ The goal is to create over 3.5 crore (35 million) jobs in two years.
- ❖ Out of these, about 1.92 crore (19.2 million) jobs will be for first-time workers.

- ❖ The scheme gives the incentives to employees who register with the Employees' Provident Fund Organisation (EPFO) for the first time.
- ❖ The Employees will get their payments through the Direct Benefit Transfer (DBT) using Aadhaar.



First Photonic Radar



- ❖ India's Defence Research and Development Organisation (DRDO) has developed the country's first fully indigenous photonic radar.

- ❖ The radar uses the light-based components like lasers and photonic integrated circuits (PICs) instead of traditional radio waves.
- ❖ It operates at around 11 gigahertz (GHz) bandwidth, allowing it to detect stealth aircraft and small drones.
- ❖ The system provides a high resolution of about 1.3 centimetres, making it capable of spotting even tiny parts like drone blades.
- ❖ Its optical signal processing makes it naturally resistant to electronic jamming and deception.
- ❖ The radar is compact and energy-efficient, suitable for platforms like Su-30MKI, Tejas, Rafale jets, naval ships, and air defence units.

Facial Recognition for POSHAN Abhiyaan



- ❖ Facial recognition is mandatory for pregnant and lactating women to get take-home rations under POSHAN Abhiyaan (National Nutrition Mission) from July 1, 2025,
- ❖ The Ministry of Women and Child Development (MoWCD) updated the POSHAN Tracker app to remove the option to skip facial recognition.
- ❖ Anganwadi workers must reinstall the app to use the new version for biometric verification.
- ❖ The scheme targets children aged 6-36 months, pregnant women, and lactating mothers under the Integrated Child Development Services (ICDS).

- ❖ Children aged 3-6 years will also need to undergo 'liveliness detection' to prove they are real persons during biometric checks.

India's Darknet Drug Bust

- ❖ The Narcotics Control Bureau (NCB) conducted the Operation Melon to stop a big darknet drug group named Ketamelon.
- ❖ It was run by a person who bought the Lysergic Acid Diethylamide (LSD) and the ketamine from UK and sold them online using cryptocurrency.
- ❖ LSD is a hallucinogenic drug made from a fungus.
- ❖ It causes visual trips, mood changes, and affects the brain's serotonin system.
- ❖ Ketamine is an anaesthetic that causes dream-like and out-of-body feelings.



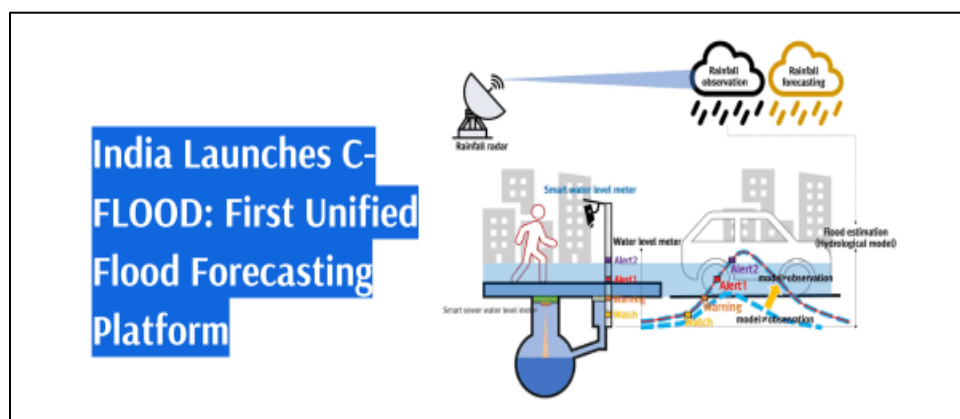
India's First QR Code House Address Project

- ❖ Indore Municipal Corporation has begun a new digital project in Madhya Pradesh (MP).
- ❖ Special plates with the Quick Response (QR) codes are being fixed outside every house.

- ❖ People can scan the QR code to see the house's Global Positioning System (GPS) location on their mobile phones.
- ❖ The Citizens can use the QR system to pay property and water taxes or file complaints.
- ❖ The project is connected to the central government's Digipin (Digital Postal Index Number) system.



C-FLOOD Platform



- ❖ C-FLOOD is a web-based platform providing two-day advance flood forecasts up to village level with flood maps and water level predictions.
- ❖ The system integrates flood modelling data from national and regional agencies for improved disaster management.



- ❖ Currently, C-FLOOD covers Mahanadi, Godavari, and Tapi river basins, with the plans to include more basins soon.
- ❖ It also uses the advanced two-dimensional hydrodynamic modelling and High-Performance Computing (HPC) under National Supercomputing Mission (NSM).
- ❖ The platform is developed by Centre for Development of Advanced Computing (C-DAC), Pune, and Central Water Commission (CWC).

INTERNATIONAL NEWS

"3 by 35" initiative – WHO



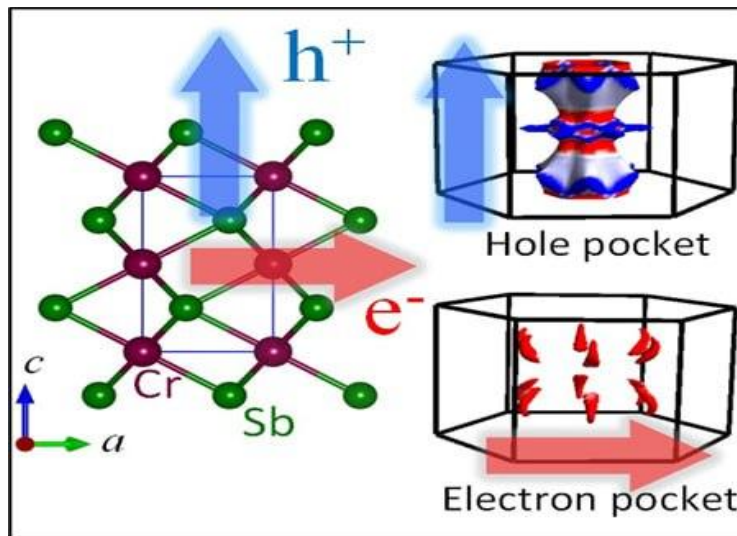
- ❖ The World Health Organization (WHO) has launched a “3 by 35” initiative.
- ❖ It was urging countries to raise real prices on tobacco, alcohol, and sugary drinks by at least 50 per cent by 2035 through health taxes.
- ❖ It is designed to curb chronic diseases and generate critical public revenue.
- ❖ As per the WHO data, the consumption of tobacco, alcohol, and sugary drinks are fuelling the epidemic of non-communicable diseases.

- ❖ NCDs, including heart disease, cancer, and diabetes, account for over 75 per cent of all deaths worldwide.

SCIENCE AND TECHNOLOGY NEWS

A New magnetic Material for Future Electronics

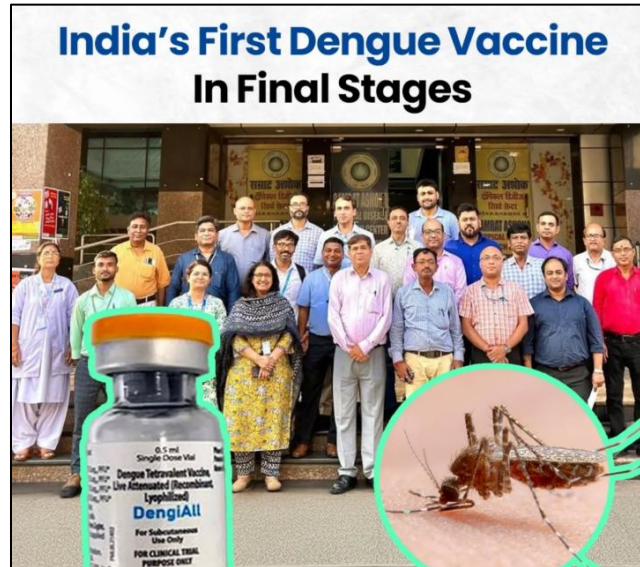
- ❖ The Scientists found a rare behaviour in a magnetic material called chromium antimonide (CrSb).
- ❖ It is part of a new class called altermagnets.
- ❖ It has the best features of both ferromagnets and antiferromagnets.
- ❖ The researchers from the S N Bose National Centre for Basic Sciences (SNBNCBS) found CrSb changes behaviour based on current direction.
- ❖ This material acts like n-type (electrons) along one direction and p-type (holes) in another, showing direction-dependent conduction polarity (DDCP).
- ❖ It is the first known altermagnet to show this rare duality.
- ❖ This can simplify devices by removing the need for separate materials or doping.
- ❖ CrSb is also eco-friendly and ideal for next-gen electronics like spintronics.



First Indigenous Dengue Vaccine

- ❖ India's first indigenous tetravalent dengue vaccine, DengiAll, has reached 50% enrolment in Phase 3 clinical trials.
- ❖ DengiAll is developed by Panacea Biotech under a license from the US National Institutes of Health (NIH).

- ❖ The vaccine targets all four dengue virus subtypes (DEN-1, DEN-2, DEN-3, DEN-4).
- ❖ Dengue is a mosquito-borne viral disease spread by the female *Aedes aegypti* mosquito.



MISCELLANEOUS NEWS

Ancient Egyptian Genome



- ❖ Researchers have sequenced the first whole ancient Egyptian genome from an individual who lived 4,500 to 4,800 years ago.
- ❖ This is the oldest DNA sample from Egypt to date.



- ❖ The body belongs to an adult male who died more than 4,500 years ago during Egypt's Old Kingdom.
- ❖ About 22% of his DNA is a close match to early farmers from Mesopotamia (present-day Iraq, western Iran, southern Syria, southeast Turkiye).
- ❖ Previously, only three ancient Egyptian genetic datasets were available from later periods —787 cal. BCE to 23 cal. CE.

