

November - 12

## TNPSC BITS

- ❖ “The Loneliness of Sonia and Sunny”, a book by Kiran Desai, was shortlisted for the Booker Prize.
- ❖ Google has announced Project Suncatcher, an ambitious research initiative to develop AI-powered data centres in space.
  - Solar-powered satellites hosting AI data centres in space to reduce Earth’s energy and water consumption
- ❖ November 8 is observed globally as World Urbanism Day, also known as World Town Planning Day to highlight the importance of urban and regional planning for sustainable and liveable cities.
  - The theme for 2025 is “With Planning We Can.”

## TAMIL NADU NEWS

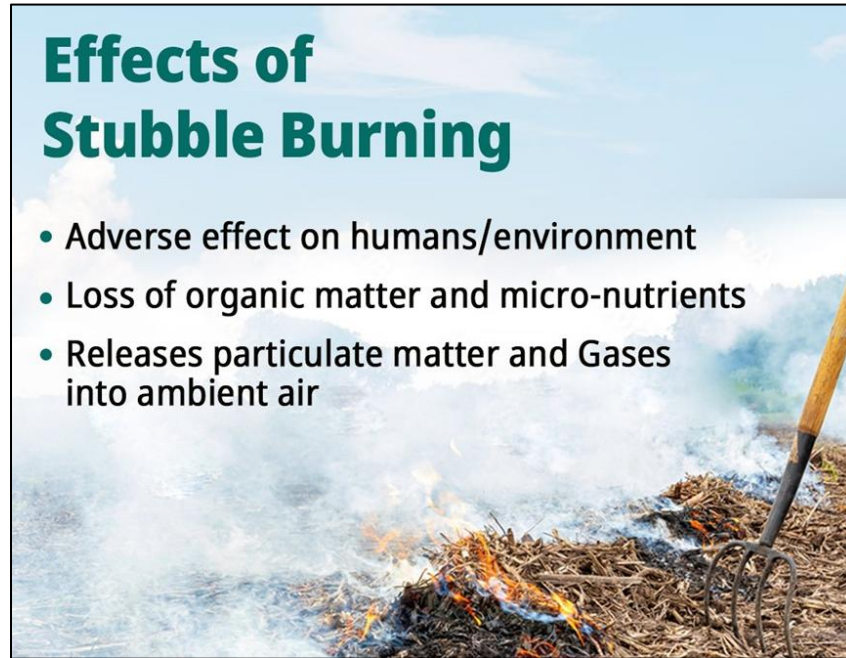
### 18th UMI Conference 2024



- ❖ The three-days Urban Mobility India (UMI) Conference & Exhibition 2025, was held in Gurugram, Haryana.
- ❖ Chennai Won the awards in the categories of
  - City with the Best Public Transport System for its MTC.
  - Metro Rail with the Best Multimodal Integration.

- ❖ Chennai also got Commendation in 'Metro Rail with the Best Passenger Services and Satisfaction' Category.

### **Stubble Burning in Kodaikanal Hills**



- ❖ Stubble burning has become a growing concern in the Kodaikanal and Palani hills of Tamil Nadu.
- ❖ Farmers burn crop residue after harvest during November and December to prepare the land for the next sowing season.
- ❖ Terrace farming and a shortage of manpower make manual or mechanical stubble removal difficult in the hilly terrain.
- ❖ Environmental activists warn that burning affects soil fertility by killing earthworms and microbes and releasing harmful gases.
- ❖ Officials caution that flying embers from stubble fires can ignite forest fires and damage the ecologically sensitive zones of the hills.

### **Chennai Metro's First Organ Transport Mission**

- ❖ For the first time in Tamil Nadu, the Chennai Metro Rail (CMRL) served as a green corridor to transport a pair of donor lungs.
- ❖ On November 8, 2025, the organs were moved from Meenambakkam Metro to AG-DMS Metro, covering 10.82 kilometres in 21 minutes.

- ❖ This marks Tamil Nadu's first metro-based organ transport, coordinated smoothly by CMRL officials.



## NATIONAL NEWS

### **Bharat International Rice Conference (BIRC) 2025**



- ❖ The Bharat International Rice Conference (BIRC) 2025 will be held in New Delhi.

- ❖ It is organised by the Department of Commerce, Ministry of Commerce and Industry, Government of India.
- ❖ The conference aims to position India as a global leader in the rice supply chain.
- ❖ It is expected to unlock ₹1.80 lakh crore in new rice markets and sign export MoUs worth ₹25,000 crore.
- ❖ India produces about 150 million tonnes of rice annually, accounting for nearly 28 percent of global output.
- ❖ India exported 20.1 million metric tonnes of rice in 2024–25, valued at around USD 12.95 billion.
- ❖ A new AI-based rice sorting technology will be launched at the AgriTech Pavilion.
- ❖ The global rice industry is valued at around USD 330 billion and supports over four billion people.

### India's Leap in Research and Innovation



**India's**  
**₹1 Lakh Crore**  
**RDI fund gets**  
**Cabinet nod**

- **Goal:** Scale up Research, Development & Innovation (RDI) in **Strategic & Sunrise Sectors**
- Provides Long-term, Low/Nil Interest Financing for **Private Sector**
- RDI fund will boost **Private Sector** investment in R&D

Empowering **India's** Future Through Research, Development & Innovation

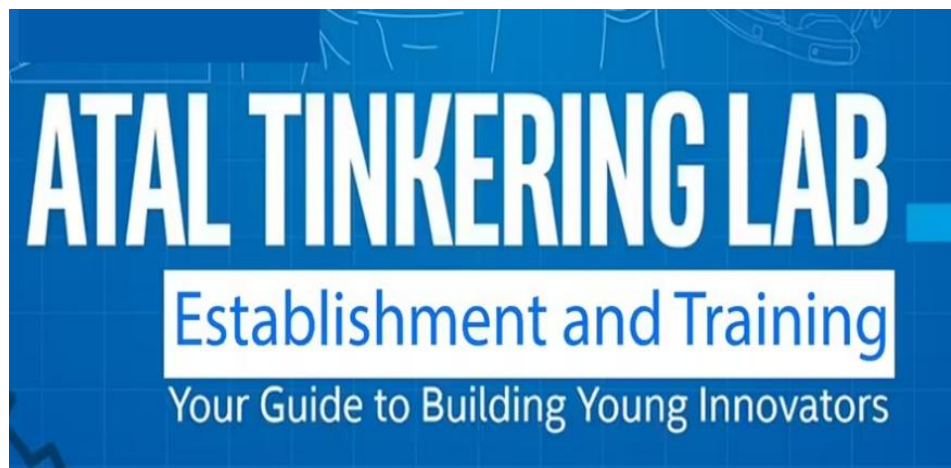
- ❖ The Government of India launched the ₹1 lakh crore Research, Development, and Innovation (RDI) Scheme in November 2025.
- ❖ India's research and development expenditure rose from ₹60,196 crore in 2010–11 to ₹1.27 lakh crore in 2020–21.
- ❖ The central government contributes 43.7 per cent of R&D spending, while the private sector accounts for 36 per cent.



- ❖ Patent filings increased from 24,326 in 2020–21 to 68,176 in 2024–25, reflecting a surge in domestic innovation.

### **25,000 New Atal Tinkering Labs**

- ❖ Nearly 10,000 Atal Tinkering Labs are currently active across India, engaging over one crore children in hands-on experiments.
- ❖ Encouraged by their success, the government will establish 25,000 new Atal Tinkering Labs nationwide.
- ❖ These labs aim to promote science, technology, engineering, and mathematics (STEM) education and foster curiosity and creativity in students.
- ❖ Hundreds of new universities, including seven IITs and sixteen IIITs, have been established to complement this STEM ecosystem.



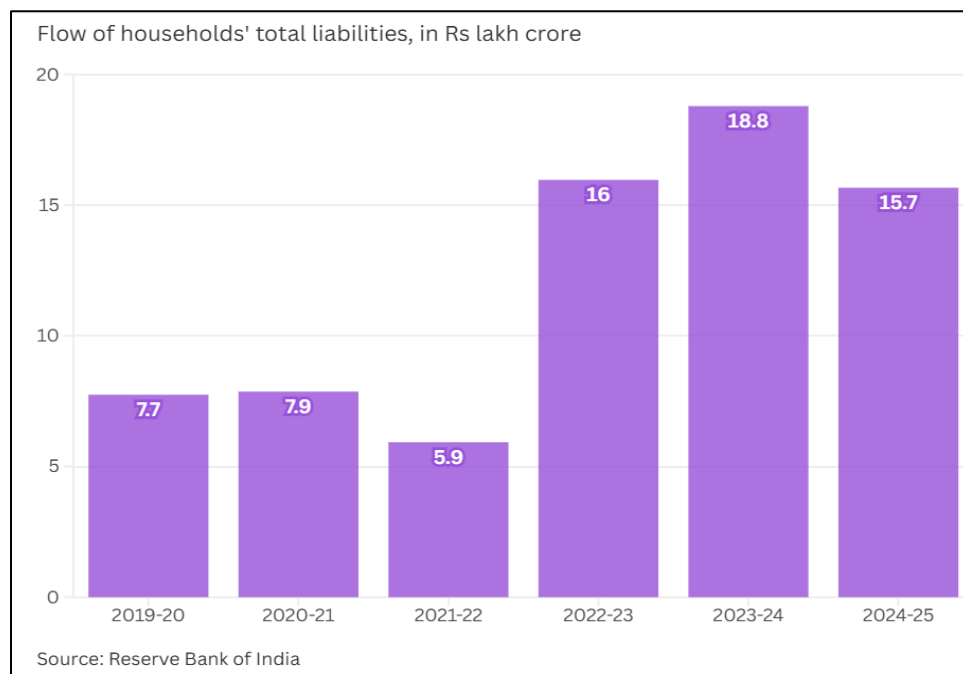
## **ECONOMY NEWS**

### **Household borrowings surge**

- ❖ Indian households are accumulating financial debt faster than building financial assets.
- ❖ As per RBI Data, annual financial assets grew 48% between 2019 and 2025.
- ❖ During the same period, annual financial liabilities increased by 102%.
- ❖ Households added ₹24.1 lakh crore in financial assets in 2019–20, which rose to ₹35.6 lakh crore in 2024–25.
- ❖ Financial liabilities grew from ₹7.5 lakh crore in 2019–20 to ₹15.7 lakh crore in 2024–25.



- ❖ Financial assets as a share of Gross Domestic Product (GDP) declined from 12% in 2019–20 to 10.8% in 2024–25.
- ❖ Financial liabilities as a share of GDP increased from 3.9% to 4.7% during the same period.
- ❖ Bank deposits remained the main savings avenue, forming 33.3% of total assets in 2024–25, up from 32% in 2019–20.
- ❖ Deposits in commercial banks rose from ₹7.7 lakh crore in 2019–20 to ₹11.8 lakh crore in 2024–25, a growth of 54%.
- ❖ Investments in mutual funds surged 655%, from ₹61,686 crore in 2019–20 to ₹4.7 lakh crore in 2024–25.
- ❖ The share of mutual funds in total household assets increased from 2.6% to 13.1% over this period.
- ❖ The share of currency holdings declined from 11.7% in 2019–20 to 5.9% in 2024–25.



### **AIF Capital in Indian Real Estate 2025**

- ❖ Alternative Investment Funds (AIFs) have become the primary capital source for India's real estate sector.
- ❖ Real estate is now the single largest recipient of AIF capital in India.
- ❖ AIFs contribute nearly 80 percent of total Category II commitments, surpassing traditional bank and private equity funding.

- ❖ As of June 2025, total AIF commitments stood at ₹14.2 lakh crore, and funds raised reached ₹6 lakh crore.



## SCIENCE AND TECHNOLOGY NEWS

### First Indigenous CAR T-Cell Therapy in India

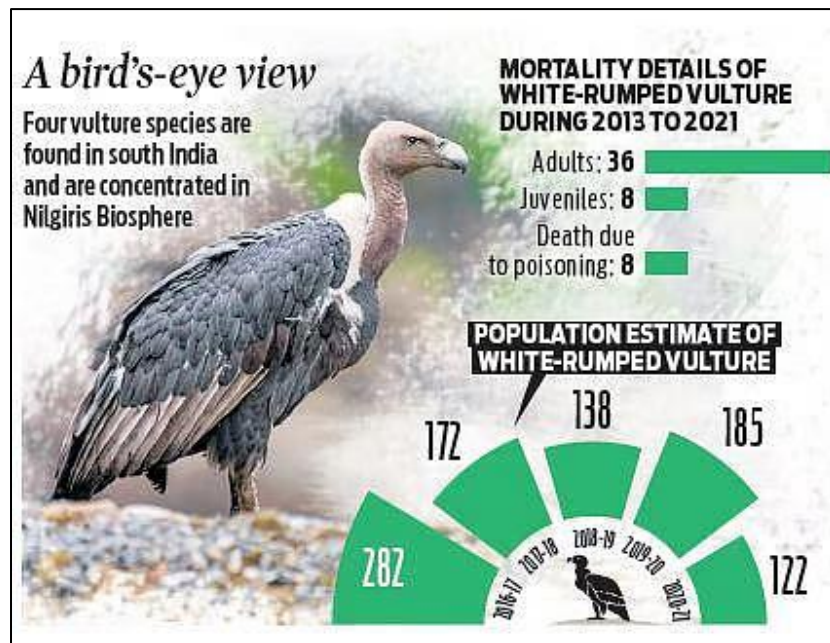


- ❖ The NexCAR19, India's first indigenous Chimeric Antigen Receptor (CAR) T-cell therapy was launched recently.
- ❖ The therapy targets B-cell blood cancers, including leukemia and lymphoma.

- ❖ NexCAR19 is developed by Immuno ACT, an IIT Bombay-incubated startup, in collaboration with Tata Memorial Hospital.
- ❖ CAR T-cell therapy uses a patient's own T-cells, genetically modified to attack cancer cells, and then reinfused into the body.

## ENVIRONMENT NEWS

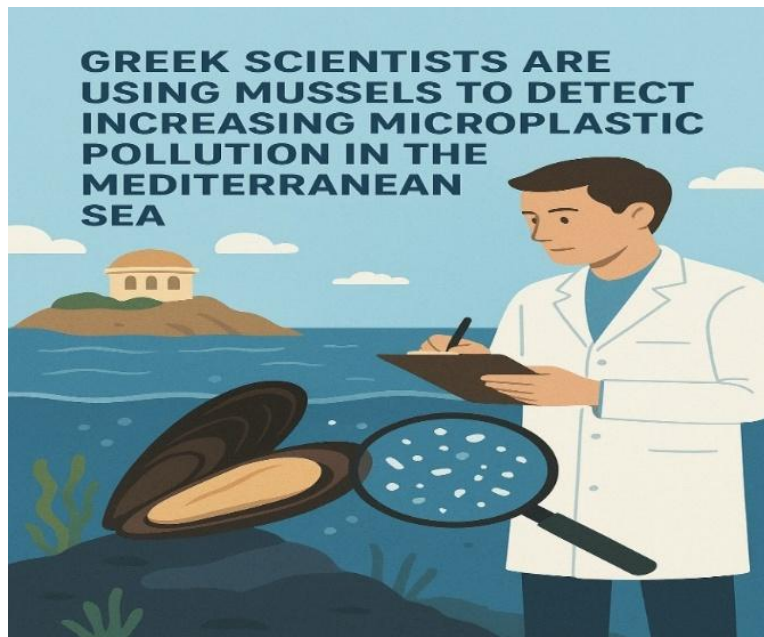
### First Pan-India Vulture Survey



- ❖ The Wildlife Institute of India (WII) released its first nationwide assessment and monitoring of endangered vulture species.
- ❖ The study covered 216 sites across 17 states and found no nesting in nearly 70% of historical sites.
- ❖ The Protected Areas hold 54% of all documented nests, showing their vital conservation role.
- ❖ Four critically endangered species were assessed — white-rumped, Indian, slender-billed, and red-headed vultures.
- ❖ Madhya Pradesh and Rajasthan, together harbor about 63% of India's known vulture nests.
- ❖ The assessment highlighted habitat loss, food scarcity, and diclofenac poisoning as major threats.
- ❖ Vultures are protected under Schedule I of the Wildlife Protection Act (1972) and covered under the Action Plan for Vulture Conservation (2020–25).

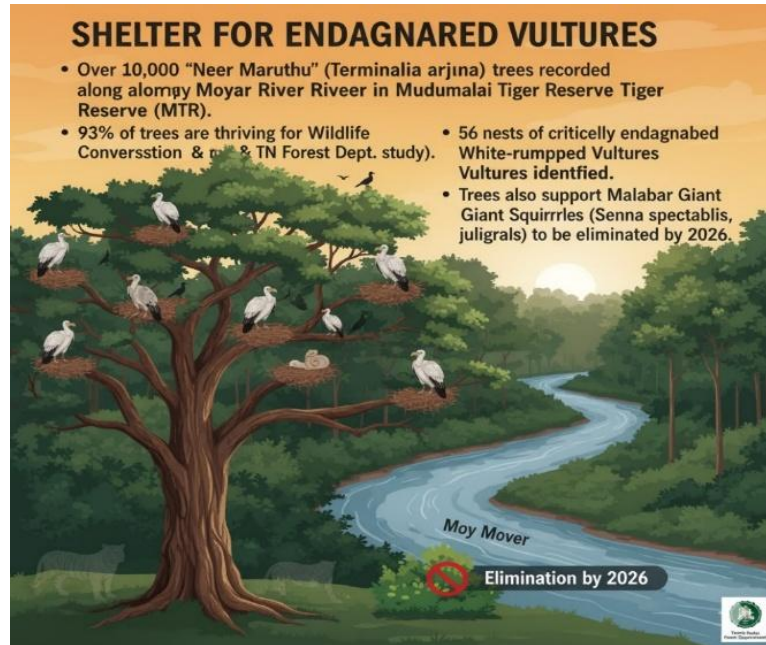
### **Mussels to Detect Marine Pollution**

- ❖ Greek scientists are using mussels to detect increasing microplastic pollution in the Mediterranean Sea.
- ❖ Thousands of mussels were deployed by the Hellenic Centre for Marine Research and later analysed for contamination.
- ❖ Most microplastic particles found came from single-use plastics such as bottles and bags.
- ❖ Microplastics were detected in every marine species studied, showing widespread pollution.



### **Shelter for Endangered Vultures**

- ❖ Researchers recorded over 10,000 Terminalia arjuna ('Neer Maruthu') trees along the Moyar River in Mudumalai Tiger Reserve (MTR).
- ❖ The study, by the Advanced Institute for Wildlife Conservation and Tamil Nadu Forest Department, found 93% of trees alive and thriving.
- ❖ A total of 56 nests of critically endangered White-rumped vultures (Gyps bengalensis) were identified in these trees.
- ❖ The trees also support Malabar giant squirrels, tigers, leopards, and other species, showing high ecological value.
- ❖ Forest officials plan to eliminate invasive species like Senna spectabilis and Prosopis juliflora by 2026 to aid native flora recovery.



## REPORTS AND INDICES

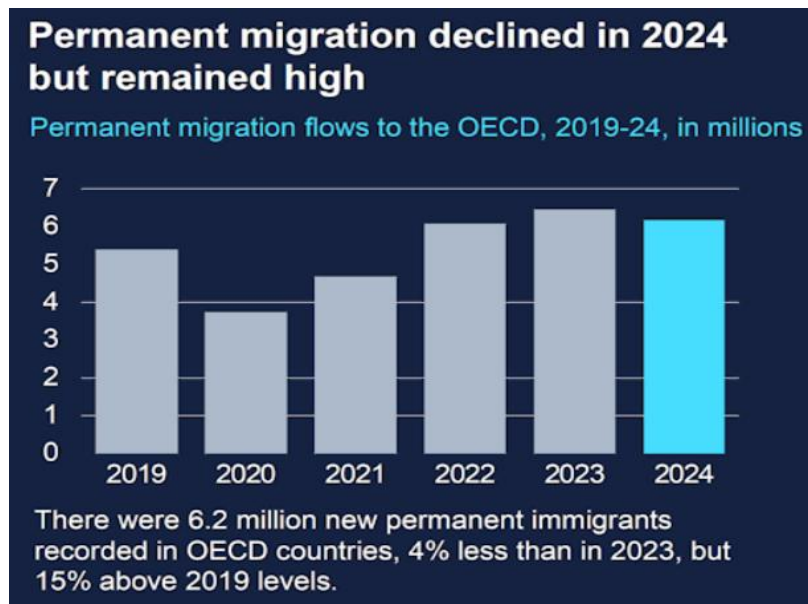
### State of Food and Agriculture Report 2025

| GLOBAL DISTRIBUTION OF FARMS, AREA OPERATED AND DIETARY ENERGY PRODUCTION |                        |                                  |                    |                            |                                             |
|---------------------------------------------------------------------------|------------------------|----------------------------------|--------------------|----------------------------|---------------------------------------------|
| Farm size category (ha)                                                   | Total farms (millions) | Total area operated (million ha) | Share of farms (%) | Share of area operated (%) | Share of dietary energy (kcal) produced (%) |
| <1                                                                        | 422.5                  | 156.7                            | 72.6               | 5.5                        | 9.9                                         |
| 1–2                                                                       | 73.5                   | 101.9                            | 12.6               | 3.6                        | 6.3                                         |
| 2–5                                                                       | 58.3                   | 169.4                            | 10.0               | 5.9                        | 9.3                                         |
| 5–10                                                                      | 14.8                   | 99.1                             | 2.5                | 3.5                        | 4.9                                         |
| 10–20                                                                     | 5.7                    | 75.6                             | 1.0                | 2.6                        | 4.5                                         |
| 20–50                                                                     | 3.6                    | 107.8                            | 0.6                | 3.8                        | 7.6                                         |
| 50–100                                                                    | 1.6                    | 105.5                            | 0.3                | 3.7                        | 7.3                                         |
| 100–200                                                                   | 1.0                    | 132.9                            | 0.2                | 4.6                        | 9.5                                         |
| 200–500                                                                   | 0.7                    | 200.2                            | 0.1                | 7.0                        | 11.5                                        |
| 500–1 000                                                                 | 0.3                    | 182.5                            | 0.0                | 6.4                        | 11.6                                        |
| >1 000                                                                    | 0.3                    | 1 529.8                          | 0.1                | 53.5                       | 17.6                                        |
| Total                                                                     | 582.1                  | 2 861.5                          | 100.0              | 100.0                      | 100.0                                       |

- ❖ The State of Food and Agriculture (SOFA) Report 2025 is published by the Food and Agriculture Organization (FAO) of the United Nations.
- ❖ The report stated that land degradation affects 1.7 billion people worldwide, threatening food security and ecosystems.
- ❖ Agricultural expansion remains the main cause of global deforestation, contributing to nearly 90% of forest loss.

- ❖ The report noted that 3.6 million hectares (mha) of cropland are abandoned every year due to land degradation.
- ❖ Eastern and southern Asia has the largest affected populations facing severe land degradation and dense population pressure.
- ❖ India recorded some of the highest crop yield gaps linked to human-induced land degradation.

### International Migration Outlook 2025



- ❖ The International Migration Outlook 2025 was released by the Organisation for Economic Co-operation and Development (OECD).
- ❖ Permanent migration to OECD countries declined by 4% in 2024 to 6.2 million but remained 15% above 2019 levels.
- ❖ Family reunification remained the main reason for migration, while labour migration fell by 21% and humanitarian migration rose by 23%.
- ❖ The number of asylum applications reached a record 3 million in 2024, with more than half filed in the United States.
- ❖ Asia remained the leading source of migrant health professionals, with India, China, the Philippines, and Germany as top contributors.
- ❖ India emerged as the top origin country for new migrants to OECD nations in 2023, with nearly 600,000 Indians migrating.
- ❖ It is an 8% rise from the previous year.
- ❖ India was also among the top countries of origin for asylum seekers in OECD nations in 2024.

## PERSONALITIES, AWARDS, AND EVENTS

### Dr. Bhupen Hazarika National Awards 2025

- ❖ The Bharat Ratna Dr. Bhupen Hazarika National Awards were presented in Guwahati, Assam.
- ❖ The awards honoured six cultural figures, including Yeshe Dorjee Thongchi, Laishram Mema, Rajni Basumatary, L. R. Sailo, Dr. Surjya Kanta Hazarika, and Prof. David R. Syiemlieh from the Northeast for their contributions to literature, music, film, and heritage.
- ❖ The event marked the centenary year of Bhupen Hazarika, celebrating his legacy of unity and cultural harmony.
- ❖ Bhupen Hazarika (1926–2011) was an Indian singer, composer, lyricist, and filmmaker from Assam.



## IMPORTANT DAYS

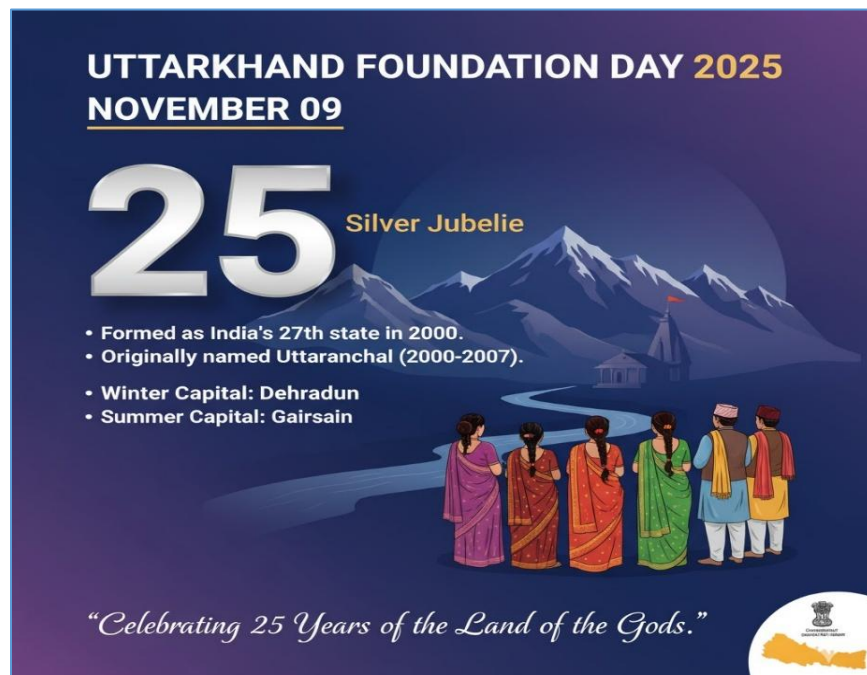
### National Legal Services Day 2025 - November 09

- ❖ It commemorates the Legal Services Authorities Act, 1987, which came into effect on this date in 1995.
- ❖ It promotes access to justice for everyone, especially for those who are poor or socially disadvantaged.

- ❖ Between 2022 and 2025, more than 44 lakh people received free legal assistance through the National Legal Services Authority (NALSA).
- ❖ The theme for 2025 is “Justice for All: Through the Lens of Legal Aid.”



### Uttarakhand Foundation Day 2025 - November 09





- ❖ The year 2025 marks the Silver Jubilee of Uttarakhand.
- ❖ The state was originally named Uttaranchal and was officially renamed Uttarakhand in 2007.
- ❖ The winter capital is Dehradun, and the summer capital is Gairsain.
- ❖ The theme for 2025 is “Celebrating 25 Years of the Land of the Gods.”

