# APTI PLUS OAS GAZETTE

## **MARCH 2025**







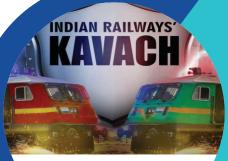
Bikashita Gaon, Bikashita Odisha Scheme



Bali Yatra Festival



National Logistics Policy (NLP)



Kavach: India's Indigenous Automatic Train Protection System



Odissi Dance Legend Mayadhar Raut passes away

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# APTI PLUS OAS GAZETTE

**MARCH 2025** 

A House Journal of APTI PLUS



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## **SCHEMES IN NEWS**

## Bikashita Gaon, Bikashita Odisha (BGBO) Scheme

## **Context:**

 Odisha's rural population, constituting 80% of the state, faces a development gap compared to urban areas

## Bikashita Gaon, Bikashita Odisha (BGBO) Scheme

 Launched by CM Mohan Charan Majhi in Jankia, Khurda, the BGBO scheme aims to bridge this gap through ₹5,000 crore funding over five years, focusing on infrastructure, civic amenities and economic growth.

## **Key Features**

- **Budget Allocation**: ₹1,000 crore for 2024-25; minimum project cost ₹3 lakh.
- Development Focus:
  - o Road Connectivity Improved rural access.
  - Civic Amenities Market sheds, community centres, public utilities.
  - Education New classrooms, infrastructure upgrades.
  - Micro Tourism Small-scale tourism for economic growth.
- Implementation: Villager-led projects, with 40% funds for ITDA to support tribal communities.
- Accountability: Collectors to oversee execution, social audits for transparency.

## Initiatives in Odisha under The Beti Bachao Beti Padhao (BBBP) Scheme

## **Context:**

 Odisha has implemented key initiatives under the Beti Bachao Beti Padhao (BBBP) Scheme, which was launched on 22nd January 2015 to combat gender imbalance and promote the welfare of the girl child. Various district-specific schemes have been introduced to prevent child marriage, sex selection and female foeticide while encouraging higher education and self-defense training for adolescent girls.

### **Key Initiatives in Odisha Under BBBP**

## Nirbhay Kadhi and Mo Gelha Jhia (Ganjam District)

- Nirbhay Kadhi covers 183,933 adolescent girls (aged 11-18 years) across 3,309 villages, raising awareness through community meetings.
- Mo Gelha Jhia is a scheme designed to combat sex selection and female foeticide in the district.
- On 3rd January 2022, Ganjam was declared a child marriage-free district after successfully preventing

- 20 out of 953 child marriages between 2019 and 2024.
- **450,000 students from 3,614 schools** took a public pledge against child marriage.
- An award of ₹5,000 is given to individuals who provide the first report of a child marriage.
- The Ganjam Collector was felicitated by OSCPCR for taking proactive measures in preventing child marriages and ensuring child rights.

## Kalpana Avijan (Dhenkanal District)

- This scheme tracks and monitors 1,13,515 adolescent girls (10-19 years old) to prevent child marriages.
- 343 child marriages were successfully prevented between 2019 and 2024.
- **4,45,000 students from 3,425 schools** publicly took an oath against child marriage.
- Awareness programs were conducted in 1,211 villages and strategic forums were formed to engage youth and traditional leaders.
- The **District Administration was felicitated** for its proactive efforts in preventing child marriage.
- Ms. Barsha Priyadarshini Sahoo and a rescued mountaineer who rejected child marriage were declared brand ambassadors for the program.

### Swarna Kalika (Keonjhar District)

- The Swarna Kalika scheme focuses on raising awareness about child marriage and mobilizing the community to combat the issue.
- Over 2,000 stakeholders were involved in awareness campaigns.
- The ADVIKA app was promoted as a tool for awareness and intervention.
- As a result of these efforts, there was a 50% reduction in child marriages by 2024.

## Veerangana (Deogarh District)

- The Veerangana scheme provides martial arts and self-defense training to adolescent girls to boost their self-esteem and confidence.
- A 30-day training camp was organized with technical support from the State KUDO Association, Odisha.
- 500 adolescent girls (aged 14-19) participated in the training, along with 300 parents and teachers, who received orientation on legal rights and entitlements for girls.
- 50 female master trainers were developed under this initiative and they went on to provide martial





- arts training to 6,000 students in 300 rural schools.
- The initiative was institutionalized in several schools and colleges.
- The Veerangana program received the prestigious SKOCH Award (Semi-Finalist).
- The scheme was also recognized and awarded at the Deogarh District Festival.

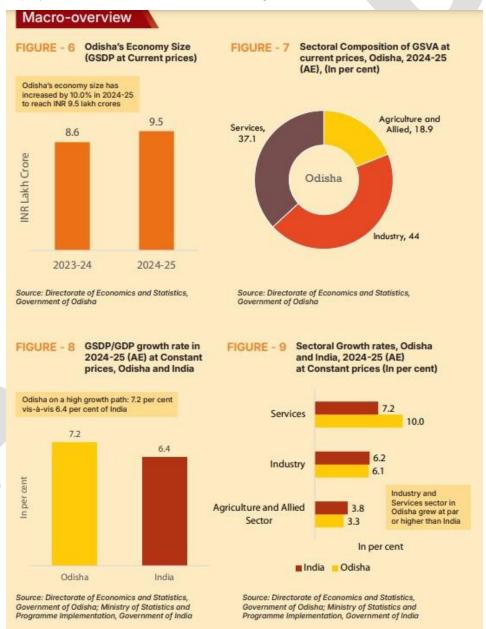
#### Conclusion

The district-specific initiatives under the BBBP Scheme in Odisha have played a crucial role in preventing child marriages, raising awareness about gender equality and empowering adolescent girls. These efforts have significantly contributed to the broader goal of gender justice and women's empowerment in the state.

## ODISHA ECONOMIC SURVEY 2024-25: KEY HIGHLIGHTS

## **Context**

• The Odisha Economic Survey 2024-25 has been released ahead of the Odisha Budget 2025-26 on February 17, 2025. The report projects Odisha's growth rate at 7.2%, higher than India's estimated growth rate of 6.4%.





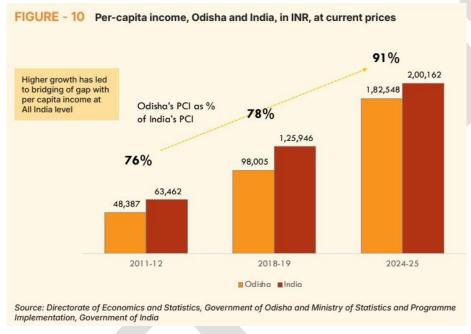


### **Economic Growth & GSDP**

- Odisha's Gross State Domestic Product (GSDP) at current prices is estimated at INR 9.5 lakh crore in 2024-25, a 10% increase from INR 8.6 lakh crore in 2023-24.
- The **real economic growth rate** is projected at **7.2**% **in 2024-25**, surpassing the **national growth rate of 6.4**%.
- The growth rate has declined from 8.5% in 2023-24 and 7.8% in 2022-23.
- Odisha's economy is expected to expand further due to higher capital investment and investment inflows from Utkarsh Odisha.

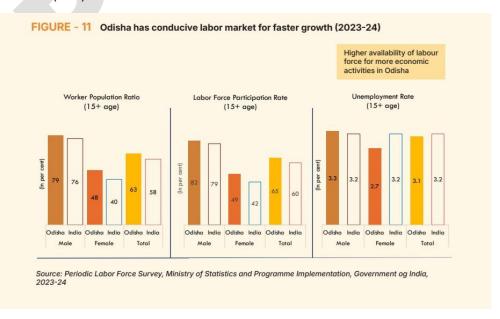
## Per Capita Income

- Odisha's Per Capita Income has increased by 10.6% to INR 1,82,548 in 2024-25 (Advance Estimate).
- India's Per Capita Income has grown by 8.7% to INR 2,00,162.
- Odisha's per capita income is 8.8% lower than India's, but the state is on a convergent path.



## **Labour Force Participation (LFPR)**

- LFPR (for age 15+) in Odisha has risen from 51.2% in 2018-19 to 64.9% in 2023-24. This is higher than India's LFPR (58%).
- Female LFPR (for age 15+) in Odisha has increased from 24.4% in 2018-19 to 49.4% in 2023-24, higher than India's female LFPR (42%).



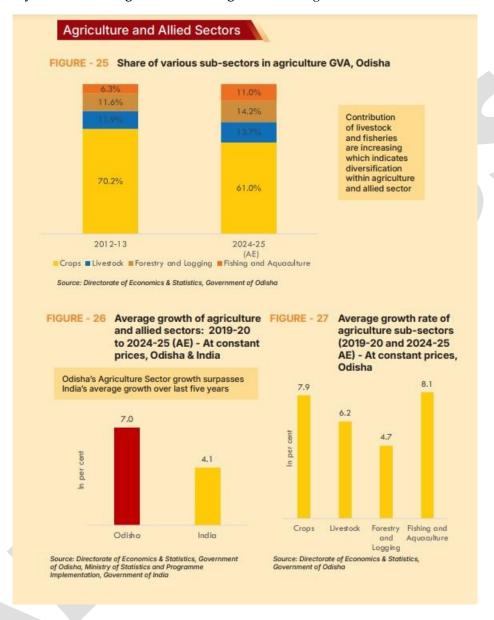




## **Agriculture and Allied Sectors**

## **Agriculture Sector Growth**

- Agriculture and allied sectors registered a growth rate of 3.3% in 2024-25, contributing 19% to Gross State Value Added (GSVA).
- Over the last five years, Odisha's agriculture sector grew at 7%, higher than India's 4.1%.



## **Foodgrains Production**

- Odisha's foodgrain production has increased from 116.9 lakh MT in 2019-20 to a record 143 lakh MT in 2023-24, growing at a CAGR of 5.2%.
- Odisha is the 5th largest rice producer in India with an 8% share in total production.
- Rice production rose from 97.6 lakh MT (2019-20) to 115.4 lakh MT (2023-24).
- Crop diversification is increasing, with cash crops like cotton, maize, vegetables and spices gaining prominence.

### **Vegetable Production**

- Odisha's vegetable production grew from 97.34 lakh MT (2019-20) to 109.3 lakh MT (2023-24), achieving a 3% CAGR
- Odisha is the 7th largest vegetable producer, contributing 5.2% to India's total vegetable production.

## Oil Palm Cultivation

- Oil palm cultivation expanded from 6.7 thousand hectares (2019-20) to 8.8 thousand hectares (2023-24), growing at a 7.1% CAGR.
- Odisha plans to add 6,500 hectares in 2024-25 and 9,000 hectares in 2025-26.

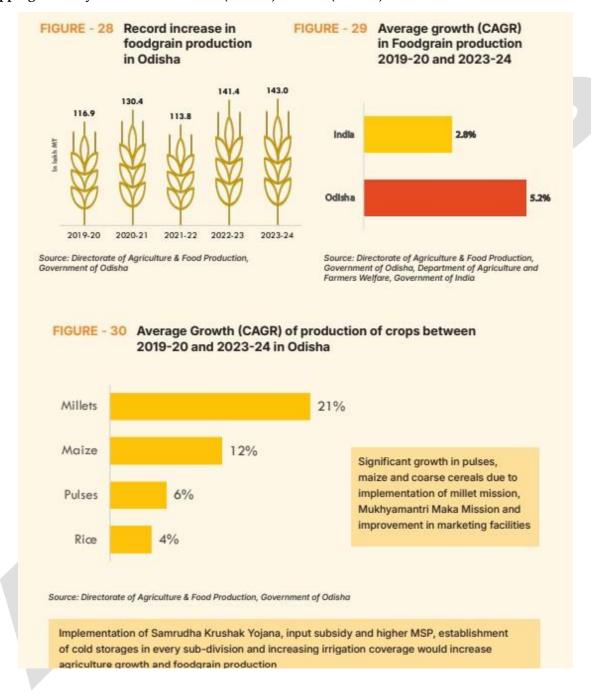




• The state is promoting **oil processing units** to enhance **income and employment**.

## **Irrigation Infrastructure**

- Irrigation coverage during Kharif season rose from 43.1 lakh ha (2019-20) to 49.9 lakh ha (2023-24) at 3.8% CAGR
- Rabi season irrigation expanded from 19.5 lakh ha to 22.2 lakh ha in the same period, at a 3.3% CAGR.
- Sprinkler and drip irrigation expanded to 53,733 ha in 2023-24, with plans to add 1.5 lakh ha in 2024-25.
- Cropping intensity increased from 154% (2019-20) to 164% (2023-24).



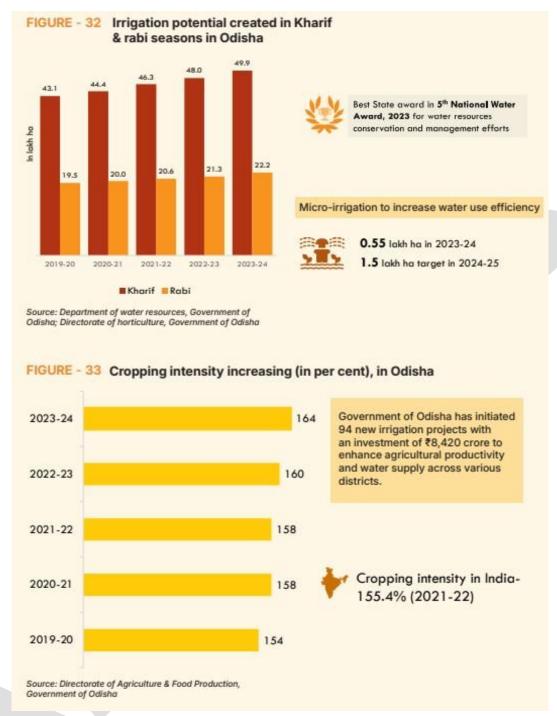












## Livestock, Poultry and Fisheries

## **Dairy Sector**

- Milk production increased by 6.8% in 2023-24, reaching 26.4 lakh MT.
- Odisha's per capita milk availability is 156 grams/day (2023-24).
- GOMATA and Mukhyamantri Kamdhenu Yojana (MKY) were launched to boost milk production.

### **Poultry**

- Egg production increased by 9.2% to 372.3 crore eggs (2023-24), surpassing India's 6.8% growth.
- Per capita egg availability is 72 eggs in 2023-24.
- The government is promoting commercial poultry to make Odisha self-sufficient.



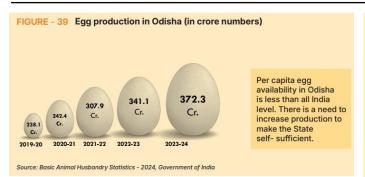


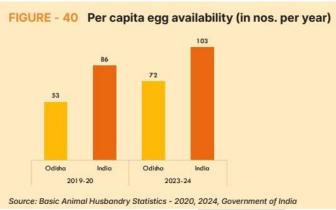
## FIGURE - 36 Milk Production in Odisha FIGURE - 37 Per capita availability of Milk (in gms/day) 24.0 23.7 23.7 2020-21 2021-22 2022-23 2023-24 2019-20 Milk Production 2019-20 2023-24 Average milk production growth rate 2019-20 to 2023-24 Growth 406 471 (CAGR)- 2.9% 2019-20 2023-24 Growth (CAGR)- 4.8% Source: Basic Animal Husbandry Statistics - 2024, Source: Basic Animal Husbandry Statistics - 2024, Government of India Government of India

#### FIGURE - 38 Key Benefits of Mukhyamantri Kamdhenu Yojana (MKY) 1. Buffalo Entrepreneurship **Development (BED)** 2. Go-Palan Yojana (GPY) 60-70% subsidy for establishing dairy units 60-70% subsidy for establishing dairy with improved buffalo varieties. units with crossbred cows from other 3. Gosampad Bima Yojana (GBY) 85% subsidy of the premium cost is offered 4. Calf Rearing Scheme for 3 years starting 2024-25 50% calf feed subsidy, full insurance premium subsidy, and free healthcare for 5. Incentive to Dairy Farmers of DCS (IDF) Al-born calves. cash incentive of up to INR 5 per litre to dairy farmers during the lean season, (Sep-Feb) 6. Strengthening of Dairy Organization Strengthening frozen semen bank and 7. Interventions to boost fodder cultivation **Bovine Breeding Research** INR 35,000 subsidy for fodder cultivation & supplying of seasonal & perennial 8. Support to OMFED fodder minikits Development of dairy value chain and upgradation of dairy plants

In 2024-25, government has launched MKY, a comprehensive scheme with a budget outlay of ₹1,423.5 crores over a period of five years, to increase milk production, per capita availability of milk and increase farmers income.

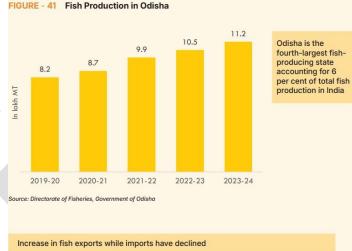


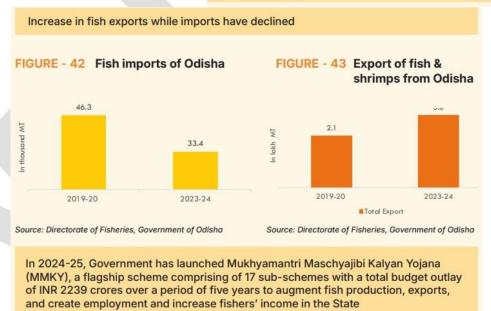




## **Fisheries**

- Odisha is the 4th largest fish producer in India, contributing 6% of national output.
- Fish production grew from 8.2 lakh MT (2019-20) to 11.2 lakh MT (2023-24) at 8.3% CAGR, exceeding India's 6.6% CAGR.
- Mukhyamantri Maschyajibi Kalyan Yojana (MMKY) was launched in 2024-25 with a budget of INR 2,239 crores over five years.





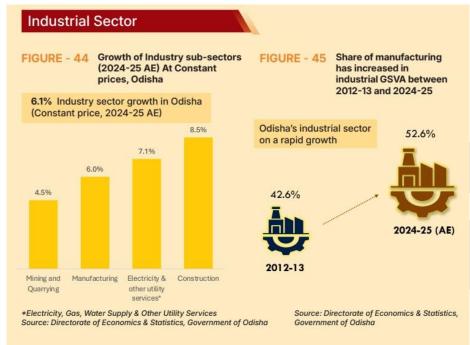
#### **Industrial Sector**

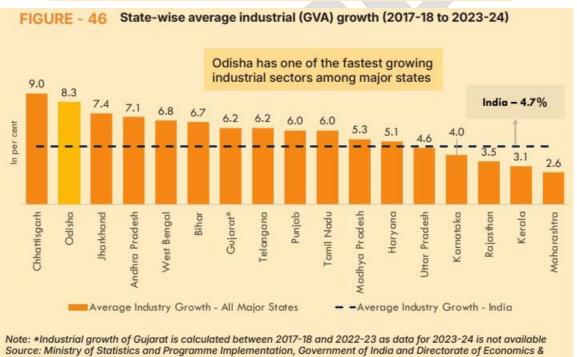
- Industrial sector growth is projected at 6.1% in 2024-25, contributing 43.9% to GSVA.
- 133 new industrial projects worth INR 2.4 lakh crore were approved, creating 1.8 lakh jobs.
- Utkarsh Odisha 2025 attracted INR 16.7 lakh crore investments, generating 12.9 lakh jobs across 20 sectors.
- Odisha's mineral production grew at 21.4% CAGR (2017-18 to 2023-24), the highest among major mineral-producing states.
- Odisha accounts for 45% of India's major mineral production.





- Merchandise exports doubled from INR 47,200 crore (2019-20) to INR 98,800 crore (2023-24) at a 20.3% CAGR.
- Odisha is focusing on textiles, apparel, automobiles and green equipment to diversify industries.



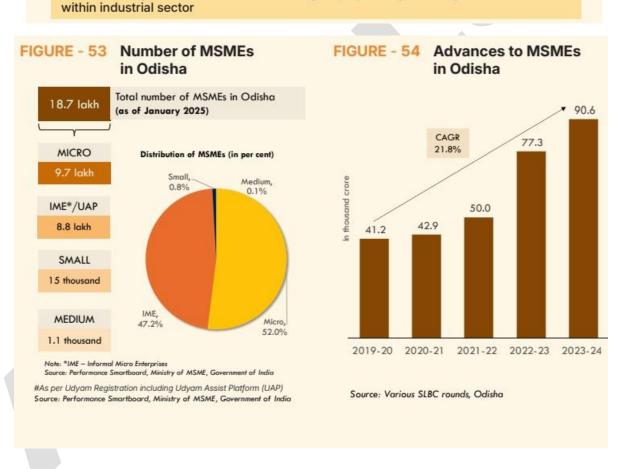


Statistics, Government of Odisha

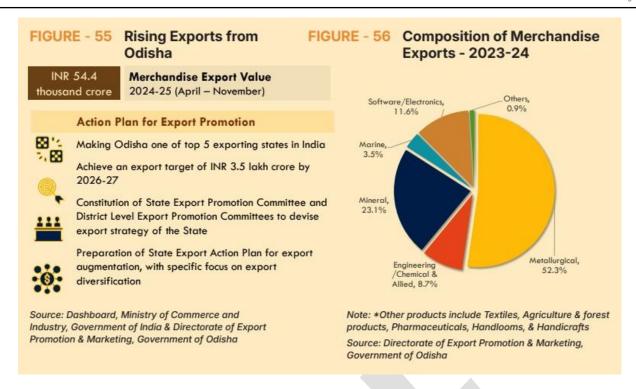




FIGURE - 51 Workforce in industry FIGURE - 52 Workforce distribution sector in Odisha\* across industrial sector (2023-24)Workforce engagement in Industry Industry 58.9 lakh sector increased by 20 lakh Manufacturing 27.6% 16.3 lakh 58.9 lakh Mining & Quarrying 1.5% 0.9 lakh **Electricity & others** 38.8 lakh 1.9% 1.4 lakh Construction 69% 2023-24 40.3 lakh 2017-18 Note: "For age group 15 years and above. Source: Periodic Labor Force Survey, Ministry of Statistics and Programme Implementation, Government of India, 2017-18 and 2023-24 Source: Periodic Labor Force Survey, Ministry of Statistics and Programme Implementation, Government of India, 2023-24 Manufacturing and construction are leading employment generating sub-sectors

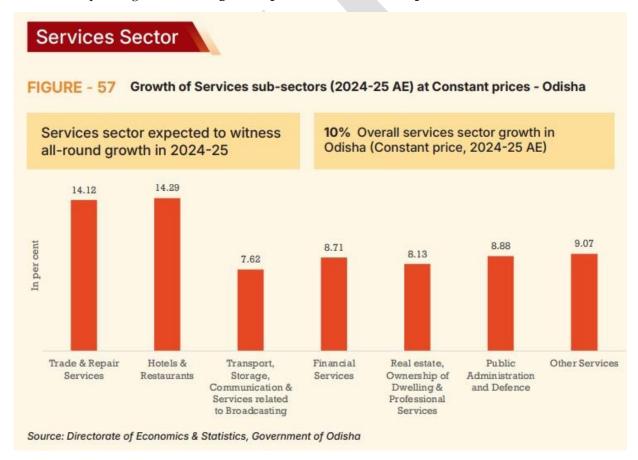






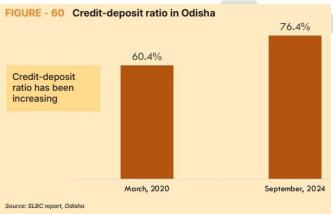
## **Services Sector**

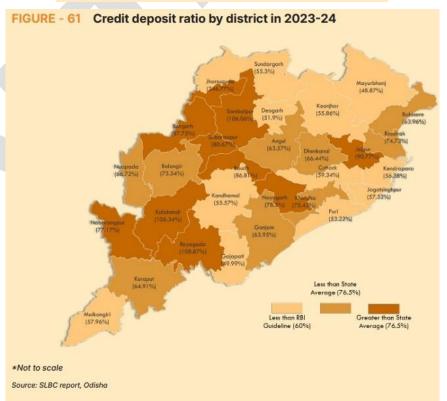
- Services sector growth is estimated at 10% in 2024-25, contributing 37.1% to Odisha's economy.
- Bhubaneswar is emerging as a major IT/ITeS hub, with new IT parks driving sectoral growth.
- Software exports rose from INR 4,500 crore (2019-20) to INR 12,904.5 crore (2023-24), growing at 30% CAGR.
- Tourism is expanding due to heritage sites, pristine beaches and improved infrastructure.













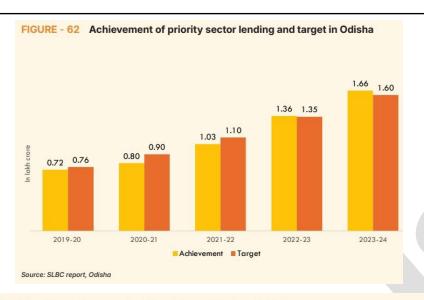


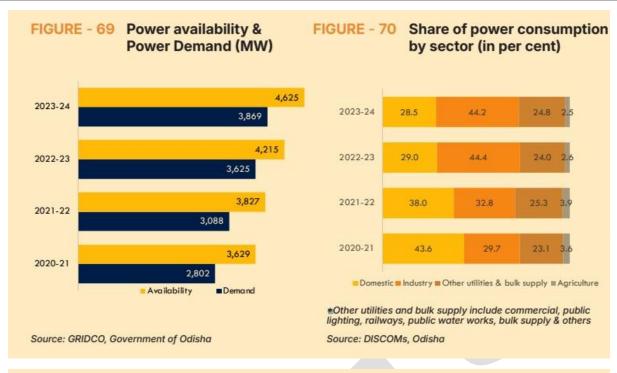
FIGURE - 66 Development of Ports and Inland Waterways

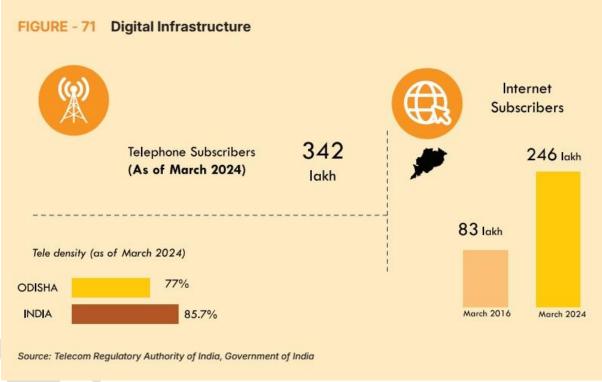


FIGURE - 67 Installed Power FIGURE - 68 Installed Power Capacity Capacity (MW) (MW) by Sources (2023-24) Composition of new and renewable energy 8,845 2023-24 1.3% 2022-23 2021-22 8,107 5olar, 69.8% 2020-21 8,018 SHEP\* stands for Small Hydro Electric Project Source: GRIDCO, Government of Odisha Source: GRIDCO, Government of Odisha









## Conclusion

• The Odisha Economic Survey 2024-25 highlights the state's strong economic performance, higher investment inflows, growth in agriculture, industry and services and rapid improvements in per capita income and employment generation. With strategic industrial expansion, enhanced agricultural productivity and focus on human development, Odisha is on a trajectory of high growth and economic transformation.

## ODISHA BUDGET 2025-26: KEY HIGHLIGHTS

## Introduction

The Chief Minister of Odisha, Mr. Mohan Charan Majhi, presented the Budget for the state for the financial year

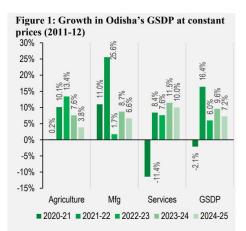




## 2025-26 on February 17, 2025.

## **Budget Highlights**

- The Gross State Domestic Product (GSDP) of Odisha for 2025-26 (at current prices) is projected to be Rs 10.63 lakh crore, reflecting a growth of 12% over 2024-25.
- Expenditure (excluding debt repayment) in 2025-26 is estimated to be Rs 2,66,800 crore, an increase of 9% from the revised estimates of 2024-25. Additionally, Rs 23,200 crore will be used for debt repayment.
- Receipts (excluding borrowings) for 2025-26 are estimated to be Rs 2,32,600 crore, an increase of 8% compared to the revised estimate of 2024-25.
- Revenue surplus for 2025-26 is estimated at 3% of GSDP (Rs 31,800 crore), compared to 2.9% of GSDP (Rs 27,935 crore) in the revised estimate for 2024-25.
- Fiscal deficit for 2025-26 is targeted at 3.2% of GSDP (Rs 34,200 crore), slightly higher than 3.1% in 2024-25 (revised estimate), but lower than the initially budgeted 3.5% of GSDP.



Note: Mfg is Manufacturing. Numbers are as per constant prices, which implies that the growth rate is adjusted for inflation. Sources: Odisha Economic Survey (2024-25); PRS.

## **Policy Highlights**

## AntyodayaGruha Yojana

- A scheme to provide concrete houses to poor families has been announced with an outlay of Rs 7,550 crore over three years.
- Rs 2,603 crore has been allocated for the construction of 75,000 houses under this scheme in 2025-26.

## **Rural Connectivity**

 Rs 3,470 crore has been allocated under the Mukhya Mantri Sadak Yojana to improve rural roads and connect unconnected rural habitations.

## **Urban Infrastructure**

- Rs 1,100 crore has been earmarked under Mukhyamantri Sahari Bikas Yojana for civic amenities across cities.
- Rs 200 crore has been allocated for the development of 322 hectares in Bhubaneswar for the services, IT and research & development sectors.

### **MLALAD Scheme**

 The Member of Legislative Assembly Local Area Development (MLALAD) Scheme allocation per constituency has been increased from Rs 3 crore to Rs 5 crore, with a total allocation of Rs 735 crore.

## Odisha's Economy

## **Growth in GSDP**

 Odisha's GSDP (at constant prices) is expected to grow by 7.2% in 2024-25, compared to India's estimated 6.4% GDP growth.

## **Sector-wise Growth**

- Agriculture: Estimated to grow at 3.8% in 2024-25, lower than 7.6% in 2023-24.
- **Manufacturing**: Expected to grow at **6.6%**, compared to **8.7%** in **2023-24**.
- Services: Estimated to grow at 10%, lower than 11.5% in 2023-24.

## Sector-wise Contribution to GSDP (2024-25)

- Agriculture: 28%
- Manufacturing: 35%
- Services: 37%

## Per Capita GSDP

 Odisha's per capita GSDP (2024-25) is estimated to be Rs 2,03,085, while India's per capita GDP is estimated at Rs 2,30,195.

## **Budget Estimates for 2025-26**

- Total expenditure (excluding debt repayment) is targeted at Rs 2,66,800 crore, a 9% increase from the revised estimate of 2024-25.
- Receipts (excluding borrowings) are projected at Rs 2,32,600 crore, an 8% increase over 2024-25.
- Revenue surplus is estimated at 3% of GSDP (Rs 31,800 crore).
- Fiscal deficit is targeted at 3.2% of GSDP (Rs 34,200 crore), within the 3.5% fiscal deficit limit set for states, including 0.5% for power sector reforms.





**Key Budget Figures (in Rs crore)** 

Items	Items 2023-24 Actuals		2024-25	2025-26	% Change
		Budgeted	Revised	Budgeted	(RE 24-25 to
					BE 25-26)
Total Expenditure	2,04,130	2,65,000	2,65,000	2,90,000	9%
Repayment of Debt	9,235	21,092	21,092	23,200	10%
Net Expenditure	1,94,895	2,43,908	2,43,908	2,66,800	9%
Total Receipts	1,98,276	2,54,000	2,49,000	2,79,000	12%
Borrowings	18,123	42,495	34,495	46,400	35%
Fiscal Deficit	14,743	32,403	29,403	34,200	16%
Revenue Surplus	30,761	27,437	27,935	31,800	14%
Primary Deficit	9,562	26,903	23,903	27,700	16%
GSDP	8,62,658	9,26,000	9,49,140	10,63,000	12%

### Expenditure in 2025-26

- Revenue expenditure: Rs 2,00,200 crore, 8% increase over 2024-25 (RE).
- Capital outlay: Rs 65,012 crore, 17% increase over 2024-25 (RE).
- Loans and advances: Rs 1,588 crore, 35% lower than 2024-25 (RE).

## Receipts Overview

Odisha's total revenue receipts for 2025-26 are projected at Rs 2,32,000 crore, marking an 8% increase over the revised estimate of 2024-25. The state's own resources will contribute Rs 1,26,000 crore (54%), while Rs 1,06,000 crore (46%) will come from the Centre.

## **Devolution from the Centre**

- Share in central taxes: Rs 64,408 crore, an 11% increase over 2024-25.
- Grants from the Centre: Rs **41,592** crore, up by **10**% from 2024-25.

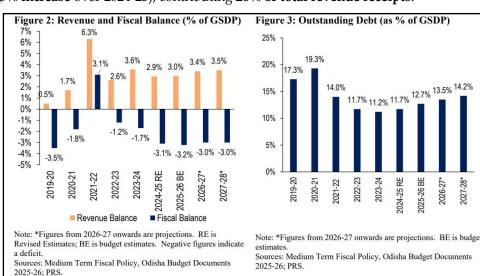
#### State's Own Tax Revenue

The state's own tax revenue for 2025-26 is estimated at **Rs 66,000 crore**, a **10**% **rise** over the previous year.

- Own tax revenue as a percentage of GSDP: 6.2%, slightly lower than 2024-25 (6.3%).
- Major tax components:
  - State GST: Rs 28,175 crore (8% increase)
  - Sales Tax/VAT: Rs 15,970 crore (12% increase)
  - State Excise: Rs 9,754 crore (12% increase)
  - o Taxes on Vehicles: Rs 3,034 crore (12% increase)
  - o Stamp Duty and Registration Fees: Rs 2,610 crore (8% increase)

## Non-Tax Revenue

- Estimated at Rs 60,000 crore (3% increase over 2024-25), contributing 26% of total revenue receipts.
- Royalties from non-ferrous mining and metallurgical industries will contribute 79% (Rs 47,467 crore).
- Coal and lignite revenue is estimated at Rs 2,758 crore.
- The Supreme Court judgment (July 2024) upholding the state's right to levy taxes on mineral-bearing land could boost revenue through retrospective taxation.





## **Fiscal Indicators**

## **Revenue Surplus**

• Estimated at **Rs 31,800 crore (3% of GSDP)**, ensuring Odisha does not need to borrow for revenue expenditures.

#### **Fiscal Deficit**

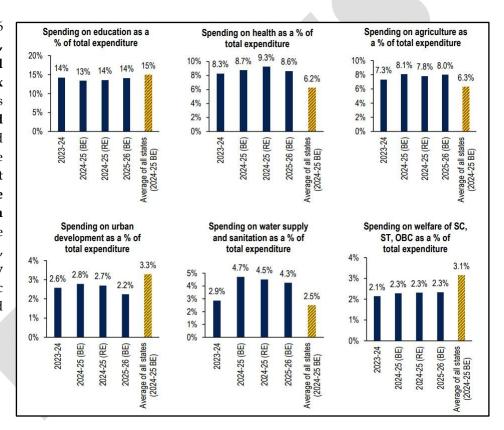
- Projected at 3.2% of GSDP.
- Within the 3% **limit** permitted by the Centre, with an additional **0.5**% **borrowing space** for power sector reforms.
- Lower than the 3.5% fiscal deficit target for 2024-25.

## **Outstanding Debt**

- Estimated at 12.7% of GSDP in 2025-26, an increase from 11.7% in 2024-25.
- Outstanding government guarantees: Rs 2,341 crore (0.23% of GSDP).

## **Conclusion**

Odisha's budget for 2025-26 reflects steady revenue growth, prudent fiscal management and increasing reliance on own tax and non-tax revenues. The focus mining rovalties retrospective taxation could further enhance revenue generation. While the fiscal deficit remains within manageable limits, the rising debt burden requires careful monitoring. The budget aligns with FRBM targets, ensuring fiscal sustainability while enabling strategic investments in infrastructure and social sectors.



## **MISCELLANEOUS**

## **Bali Yatra Festival**

## Context

 The Odisha government is striving to secure global recognition for Bali Yatra, particularly through UNESCO's intangible cultural heritage list.

## Bali Yatra festival

- The **Bali Yatra festival** of Cuttack, Odisha, is a historic event commemorating the state's rich **maritime heritage**.
- Held annually on the banks of the **Mahanadi River**, the festival celebrates the ancient trade connections between Odisha (then Kalinga) and Southeast Asian countries like **Bali**, **Java**, **Sumatra and Sri Lanka**.
- Securing UNESCO recognition would not only provide **global visibility** to Bali Yatra but also ensure **long-term preservation**, reinforcing Odisha's position in the **world's intangible cultural heritage map**.

## **UNESCO's Lists of Intangible Cultural Heritage**

- UNESCO's Lists of Intangible Cultural Heritage were established under the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage to protect, promote and raise awareness about cultural traditions worldwide.
- The Representative List of the Intangible Cultural Heritage of Humanity recognizes cultural elements that





highlight diversity and traditional knowledge, while the List of Intangible Cultural Heritage in Need of Urgent Safeguarding supports traditions requiring immediate conservation efforts.

## <u>India's UNESCO-recognized intangible cultural heritage elements:</u>

Name	Year	Region/State	Description
	Listed		
Kutiyattam, Sanskrit Theatre	2001	Kerala	Traditional Sanskrit theatre performed by the Chakyar and Nangyaramma castes, dating back to the Sangam era.
Tradition of Vedic Chanting	2008	Whole India	The recitation of Sanskrit mantras, an essential part of Vedic studies and memorization.
Ramlila, the Traditional Performance of the Ramayana	2008	Whole India (Mainly North India)	A dramatic reenactment of the life of Lord Rama, based on the Ramayana.
Ramman, Religious Festival and Ritual Theatre	2009	Garhwal, Uttarakhand	A ritual festival unique to the Saloor Dungra
Chhau Dance	2010	West Bengal, Jharkhand, Odisha	village in the Garhwal Himalayas.  A martial dance form with three distinct styles: Purulia, Saraikela and Mayurbhanj Chhau.
Kalbelia Folk Songs and Dances of Rajasthan	2010	Rajasthan	A traditional dance form of the Kalbelia (snake-charmer) community.
Mudiyettu, Ritual Theatre and Dance Drama	2010	Kerala	A theatrical enactment of the battle between Goddess Kali and demon Darika.
<b>Buddhist Chanting of Ladakh</b>	2012	Ladakh	The sacred recitation of Buddhist texts by different sects like Kagyud, Nyingma, Geluk and Shakya.
Sankirtana, Ritual Singing, Drumming and Dancing	2013	Manipur	A Vaishnava tradition narrating the stories of Lord Krishna through music and dance.
Traditional Brass and Copper Craft of Utensil Making (Thatheras of Jandiala Guru)	2014	Punjab	The skilled craftsmanship of the Thateras community in making brass and copper utensils.
Navroz (Nowruz) +	2016	Whole India	A New Year festival celebrated by the Parsi community, shared with twelve other countries.
Yoga	2016	Whole India	A spiritual and physical practice that originated in India, celebrated globally on June 21 (International Yoga Day).
Kumbh Mela	2017	Prayagraj, Haridwar, Nashik, Ujjain	A massive Hindu pilgrimage held every <b>12 years</b> at four sacred riverbank locations.
Durga Puja in Kolkata	2021	Kolkata, West Bengal	The grand festival of Goddess Durga worship, known for its artistic celebrations.
Garba of Gujarat	2023	Gujarat	A vibrant and energetic dance form performed during Navratri and other festive occasions.



## JP Nadda launches 9th National Summit on Public Health Care at Puri

#### Context

The 9th National Summit on Public Health Care
was recently held in Puri, Odisha, bringing
together policymakers, health experts and
government officials to discuss best practices and
innovations in public healthcare. Organized by the
National Health Mission under the Union
Ministry of Health and Family Welfare, the
summit serves as a platform to share successful
strategies in healthcare implementation.

## **Event Details**

- Date & Venue: 28 February 2025, Puri, Odisha
- **Inauguration:** Union Minister for Health and Family Welfare, **JP Nadda**
- Theme: Good & Replicable Practices and Innovation in the Public Healthcare System

## **Summit Highlights**

## **Platform for Sharing Best Practices**

- Provides a stage for States and Union Territories to present their innovative healthcare solutions.
- Focus on collaborative learning and knowledge sharing to improve healthcare service delivery.

## **Key Announcements & Initiatives**

### **Tuberculosis (TB) Elimination**

 JP Nadda reaffirmed that India is on track to eliminate TB by 2025, ahead of the UN's 2030 SDG target.

## **Special Screening Campaign**

 A nationwide campaign for screening Diabetes, Hypertension, Oral, Breast and Cervical cancers for individuals aged 30 and above will continue until 31 March 2025.

## **Day Care Cancer Centres**

 The government plans to establish 200 day care centres for cancer patients in the fiscal year 2025-26, ensuring every district has at least one by 2026-27.

## Remembering Uttam Mohanty: A Pillar of Odia Cinema

#### Context

- Odia film legend Uttam Mohanty passed away at 66.
- Odisha Chief Minister Mohan Charan Majhi announced that Mohanty's last rites would be performed with full state honours, marking a significant tribute to his contributions to Odia cinema.

## **Career Highlights**

• Acted in over 130 films over a career spanning

#### more than four decades.

- Debuted with Sadhu Meher's Abhimaan (1977) and became famous through films like Danda Balunga and Kie Jite Kie Haare.
- Worked in around 30 Bengali films and appeared in the Hindi film Naya Zaher.

## **Accolades and Recognition**

- Honoured with the prestigious Jayadev Puraskar (1999).
- Received the Odisha Living Legend Award (2012).
- Multiple recipient of the Odisha State Film Award for his lasting impact on the film industry.

The 9th National Summit on Public Health Care and the tribute to Uttam Mohanty highlight Odisha's role in both healthcare innovation and cultural heritage, reinforcing its significance at the national level.

## Odissi Dance Legend Mayadhar Raut passes away at 92

## **Context**

Mayadhar Raut, a highly respected and influential figure in Odissi dance, passed away at the age of 92. He was renowned for his mastery of the classical dance form and his significant contributions to its revival and evolution. Raut was a Padma Shri awardee, recognizing his exceptional contributions to Indian classical dance.

## Mayadhar Raut's Contributions to Odissi Dance

- Purist and Revivalist: Considered a purist of Odissi dance, he dedicated his life to preserving and promoting the traditional form. He played a crucial role in the revival of Odissi in the mid-20th century.
- Guru and Teacher: He was a distinguished guru and trained numerous disciples who have become leading Odissi exponents. He imparted his profound knowledge and passion for the dance form to generations of students.
- Choreographer and Innovator: While rooted in tradition, Raut was also known for his innovative choreography, expanding the repertoire of Odissi dance while maintaining its classical essence.
- Scholar and Theoretician: He was a scholar of Odissi music and dance theory, contributing to a deeper understanding of the art form's technical and aesthetic aspects.
- Founder of Kalachakra: He founded the Odissi dance institution, Kalachakra, in Delhi, which has become a prominent center for Odissi training and performance.

**Additional Information** 





### **Odissi Dance**

 Odissi is one of the eight classical dance forms of India, originating from the state of Odisha. It is known for its lyrical movements, graceful postures and expressive storytelling. Odissi's history can be traced back to ancient temples and it has evolved over centuries.

## **Key Features**

• Tribhangi Posture: A distinctive posture in Odissi involving the bending of the head, torso and knees, creating an 'S' shape.

- Chauka and Tribhanga: Fundamental stances in Odissi.
- Mudras and Expressions: Extensive use of hand gestures (mudras) and facial expressions (abhinaya) to convey emotions and narratives.
- Music and Instruments: Accompanied by classical Hindustani music, with instruments like the pakhawaj, sitar, violin, flute and cymbals.
- Themes: Traditionally, Odissi dance themes are based on Hindu mythology and devotional literature, particularly stories of Lord Krishna and Lord Jagannath.













## **NATIONAL**

## India to host first Regional Social Justice Dialogue in 2025

### **Context**

 India will host the first Regional Dialogue on the Global Coalition for Social Justice on February 24-25, 2025, in New Delhi.

## **Key Details:**

- Organizer: Ministry of Labour and Employment, Confederation of Indian Industry, Employers' Federation of India
- Global Context: Part of International Labour Organization's Global Coalition for Social Justice (2023)
- Theme: "Responsible Businesses for Inclusive and Sustainable Societies"
- Participation: More than 80 partners from the Asia-Pacific region and beyond
- Focus Areas:Fair employment, social security, sustainable enterprises
- Significance: Strengthens India's leadership in labor rights and social justice
- Event Link: Coincides with Employees' State Insurance Corporation's 74th Foundation Day

This dialogue reinforces **India's role** in shaping **global social justice policies** and enhancing **regional cooperation**.

## Dr. Jitendra Singh to preside over 12th All India Pension Adalat

## **Context**

 Dr. Jitendra Singh, Minister of State for Personnel, Public Grievances and Pensions, will chair the 12th All India Pension Adalat on February 13, 2025, in New Delhi.

## **Key Details:**

- Organizer: Department of Pension and Pensioners' Welfare
- Objective: Resolve pension-related grievances pending for over 120 days
- Major Ministries Involved: Home Affairs, Defence, Railways, Housing and Urban Affairs, Central Board of Direct Taxes, Central Pension Accounting Office
- Past Achievements:18,005 cases resolved since 2017, with a 71% success rate
- Significance: Enhances pension dispute resolution efficiency, ensures timely disbursal and reinforces the government's commitment to pensioners' welfare

## New Income Tax Bill introduced in Parliament

## **Context**

 On February 13, 2025, Finance Minister Nirmala Sitharaman introduced the Income Tax Bill, 2025 in the Lok Sabha during the Budget session.

#### **Details**

 This bill aims to replace the Income Tax Act, 1961, which has become overly complex due to multiple amendments over the years.

## **Key Highlights of the Income Tax Bill, 2025**

- Simplification of Tax Laws: Eliminates outdated terminology, making tax provisions clearer and reducing litigation.
- Terminology Changes: "Assessment Year" and "Previous Year" replaced with "Tax Year" to streamline tax filing.
- Structural Changes: The number of sections increased from 298 to 536, while schedules expanded from 14 to 16.
- Expected Impact:
  - Easier compliance for taxpayers with simplified language.
  - More transparent and structured tax filing system.
  - **Faster resolution** of tax disputes and reduced litigation.
  - Modernized tax laws aligning with global tax systems.

## Lok Sabha expands Translation Services to 6 More Languages

## Context

 In a move to promote linguistic inclusivity, Lok Sabha Speaker Om Birla announced the expansion of translation services to six additional languages. This initiative aims to enhance accessibility for Members of Parliament and strengthen democratic participation.

## **Key Highlights of the Initiative**

- Newly Added Languages: Bodo, Dogri, Maithili, Manipuri, Sanskrit and Urdu.
- Existing Translation Services: Assamese, Bengali, Gujarati, Kannada, Malayalam, Marathi, Odia, Tamil, Telugu, Hindi and English.
- Total Languages Supported: Now 16, with plans to expand to all 22 languages listed in Schedule 8 of the Constitution.
- Global Recognition: India's Parliament is the only





- democratic institution globally offering real-time translations in multiple languages.
- This expansion is a step toward greater linguistic representation in Parliament, ensuring that more MPs can express themselves in their native languages, fostering a more inclusive legislative process.

## Cabinet Extends Safai Karamchari Commission Tenure

## Context

 The Union Cabinet, chaired by Prime Minister Narendra Modi, has approved the extension of the National Commission for Safai Karamcharis (NCSK) for three more years, from March 31, 2025, to March 31, 2028.

## **Significance of the Extension**

- Ensures continued monitoring and implementation of welfare schemes for Safai Karamcharis.
- Aims to achieve full mechanization of sewer and septic tank cleaning to eliminate hazardous manual cleaning.
- Supports the rehabilitation of manual scavengers, addressing socio-economic challenges faced by sanitation workers.
- Allocates a budget of ₹43.68 crore for the extended period, reflecting an increased financial commitment.

## About the National Commission for Safai Karamcharis (NCSK)

- Established in 1993 under the NCSK Act, the commission works to protect the rights of Safai Karamcharis and improve their living and working conditions.
- Functions of NCSK:
  - Recommends programs and policies for their welfare.
  - Evaluates the implementation of social and economic rehabilitation schemes.
  - Investigates grievances related to nonimplementation of these programs.
  - Monitors working conditions, wages and safety measures.
- Under the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013, the NCSK monitors the act's enforcement and advises governments on policy measures.

75th Anniversary of The National Sample Survey (NSS)

**Context** 

 On 7th February 2025, the Ministry of Statistics and Programme Implementation (MoSPI) commemorated the 75th anniversary of the National Sample Survey (NSS) at Vigyan Bhawan, New Delhi.

## **National Sample Survey Office (NSSO)**

 The National Sample Survey Office (NSSO), headed by a Director General, is responsible for conducting large-scale sample surveys across India. It plays a crucial role in data collection, analysis and reporting on socio-economic aspects, industrial statistics and price data.

## **Key Responsibilities of NSSO**

- Conducting nationwide household surveys on various socio-economic subjects.
- Managing the Annual Survey of Industries (ASI).
- Collecting rural and urban price data.
- Supervising crop estimation surveys to improve agricultural statistics.
- Maintaining a **frame of urban area units** for sample surveys in urban areas.

### **Divisions of NSSO**

- 1. Survey Design and Research Division (SDRD) Kolkata
- Plans survey methodologies, sampling designs and inquiry schedules.
- Defines concepts, tabulation plans and data analysis frameworks.
- 2. Field Operations Division (FOD) Delhi/Faridabad
- Responsible for data collection through 52 Regional Offices, 117 Sub-Regional Offices and 6 Zonal Offices.
- Conducts **on-ground surveys** across rural and urban areas.
- 3. Data Processing Division (DPD) Kolkata
- Handles sample selection, software development and data validation.
- Processes data for Periodic Labour Force Survey (PLFS) and Annual Survey of Industries (ASI).
- Manages industrial statistics and processes wage data for rural India.
- 4. Survey Coordination Division (SCD) New Delhi
- Coordinates activities of all NSSO divisions.
- Publishes the **bi-annual journal "Sarvekshana"**.
- Organizes National Seminars on socio-economic survey findings.

NSSO plays a **pivotal role** in strengthening India's **statistical system** and ensuring **data-driven policymaking**.





## **India's Maternal Mortality**

#### **Context:**

 India has made remarkable progress in reducing maternal mortality, achieving an 83% decline in the Maternal Mortality Ratio (MMR) over the last 30 years. This improvement is attributed to enhanced healthcare infrastructure, government schemes and increased institutional deliveries.

## **Key Highlights:**

- MMR Reduction: Dropped from 556 deaths per 1 lakh live births (1990) to 97 (2018–20), surpassing the global decline of 42%.
- Infant Mortality Rate (IMR): Declined by 69%, compared to a global reduction of 55%.
- SDG Target: India achieved the National Health Policy 2017 goal of reducing MMR to below 100 by 2020 and is progressing toward SDG 3.1 target (70/lakh births) by 2030.
- State Achievements: Kerala (19), Maharashtra (33) and Tamil Nadu (54) have already met SDG targets.

## **Key Factors Behind the Decline:**

- Institutional Deliveries: Increased from 40% (2005–06) to 89% (2019–20), ensuring safer childbirth.
- Government Schemes:
  - Pradhan Mantri SurakshitMatritva Abhiyan (PMSMA): Free antenatal care.
  - o **LaQshya:** Quality maternity care.
  - Pradhan Mantri Matru Vandana Yojana (PMMVY): Cash incentives for pregnant women.
- Female Literacy & Delayed Marriages: Literacy improved from 55% (2005–06) to 83% (2019–21); child marriage rates dropped from 47% to 15%.

## **Global Comparison:**

- **India's MMR (97)** is lower than the global average (211 in 2017).
- Kerala's MMR (19) is at par with the United States, while Maharashtra's (33) aligns with Mexico.

## **Additional Information:**

- MMR Definition: Maternal deaths per 100,000 live births during pregnancy or within 42 days of termination.
- Three Delays Model: Delays in seeking care, reaching facilities and receiving treatment contribute to maternal deaths.

## **National Logistics Policy (NLP)**

## **Context**

• India is advancing its logistics sector with PM Gati

Shakti and the National Logistics Policy (NLP) to enter the top 25 of the World Bank's Logistics Performance Index (LPI) by 2030.

## **Key Highlights**

### India's Current Rank & Goals

- LPI Rank: 38th (2024) → Target: Top 25 (2030)
- Major Government Initiatives: PM Gati Shakti, National Logistics Policy

## **Infrastructure Investments**

- 434 projects worth ₹11.17 lakh crore under PM Gati Shakti.
- Focus on energy, minerals, cement, port connectivity and high-traffic corridors.

## Market Growth & Cost Reduction

- Logistics sector growing at 8.8% annually, projected to reach \$484.43 billion by 2029.
- Target: Reduce logistics costs from 13-14% of GDP to single digits by 2030.

## Multi-Modal Transformation & Transport Efficiency

- High-speed roads, hyperloops, new airports to cut transport time by 66%.
- Advanced technology & public-private partnerships to boost efficiency.

## Agrihub: AI-Driven transformation in Indian Agriculture

## **Context**

 The Ministry of Electronics & Information Technology (MeitY) and IIT Indore have launched AgriHub.

## **Details**

- AgriHub is a state-of-the-art AI-driven Center of Excellence (CoE) to revolutionize Indian agriculture.
- This initiative aims to tackle droughts, floods and low productivity by integrating Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL).

# **Kavach: India's Indigenous Automatic Train Protection (ATP) System**

## Context

- Kavach is an indigenously developed Automatic Train Protection (ATP) system, designed by the Research Design and Standards Organisation (RDSO) in collaboration with Indian industries.
- It aims to enhance railway safety by preventing signal passing at danger (SPAD), collisions and overspeeding.

### **Key Features of Kavach**

 Developed by RDSO with trials conducted by South Central Railway.





- SIL-4 (Safety Integrity Level-4) certified, ensuring a 1 in 10,000 years probability of failure.
- **Prevents train collisions** by automatically activating the braking system when required.
- Transmits SoS messages during emergencies.
- Provides live monitoring of train movements through a Network Monitor System.
- Cost-effective ATP solution, making it one of the cheapest SIL-4 certified technologies globally.

## **How Kavach Works in Railway Systems**

- Uses Traffic Collision Avoidance System (TCAS) with RFID-based two-way communication between loco-pilots and station masters.
- Instrument panels inside locomotives display real-time signal status and speed limits to drivers.
- Automatically applies emergency brakes if a red signal is ignored or two trains come on the same track.
- Activates a hooter near level crossings, helping pilots during low-visibility conditions like fog.

## 'Swarail' Superapp: A One-Stop Solution for Seamless Railway Services

## Context

 The Ministry of Railways has launched the 'SwaRail' SuperApp on January 31, 2025, integrating multiple railway services into a single platform.

## Key Services Offered by 'SwaRail'

- Ticket Booking Facilitates reserved and unreserved ticket reservations.
- Platform & Parcel Booking Allows platform ticket purchases and parcel management.
- Train & PNR Inquiry Provides real-time train schedules and PNR status updates.

- Food Ordering Enables passengers to order meals during travel.
- Rail Madad A platform for lodging complaints and seeking assistance.

## Unique Features of 'SwaRail'

- Single Sign-On Unified login for all railway services.
- Integrated Services Displays PNR inquiries, train schedules and ticket details in one place.
- User-Friendly Onboarding Quick registration and easy navigation.
- Secure Login Options Supports m-PIN and biometric authentication for enhanced security.

## MoMSME launches Team Initiative to strengthen MSME Digital Presence

### Context

 The Ministry of Micro, Small and Medium Enterprises (MoMSME) has introduced the MSME Trade Enablement and Marketing (TEAM) Initiative to enhance the digital footprint of small businesses in India.

## **Details**

- With a budget of ₹277.35 crore over three years, the initiative aims to onboard 5 lakh MSMEs, with a special focus on women-led businesses and SC/ST enterprises.
- Implemented in collaboration with the Open Network for Digital Commerce (ONDC), the initiative seeks to democratize e-commerce and provide MSMEs with essential tools for digital success.

<u>Note:</u> ONDC is an open-source e-commerce platform designed to promote inclusivity and competition by allowing small businesses to reach a wider audience without reliance on dominant e-commerce giants.

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## **INTERNATIONAL**

## Takeaways from PM Modi's US visit

### Context

 The Prime Minister's visit to the United States laid the groundwork for stronger Indo-US trade relations, with a focus on doubling bilateral trade to \$500 billion by 2030.

## **Key Takeaways**

 The "MEGA Partnership" (Make India Great Again + Make America Great Again) signifies a deepening strategic alliance, with economic growth, technological advancements and global leadership at the forefront.

## **Technology Partnership**

- <u>Semiconductor</u> <u>Supply</u> <u>Chain</u>: <u>Micron</u>
   <u>Technology</u> to invest <u>over</u> \$800 million in India
   for a new <u>semiconductor</u> <u>assembly</u> and test
   facility.
- <u>Critical Minerals</u>: India joins the US-led Minerals
   <u>Security Partnership</u> (MSP) to promote sustainable energy supply chains.
- <u>Telecommunications:</u> Public-private task forces launched for Open RAN systems, with collaboration between India's Bharat 6G and the US Next G Alliance.

## **Space Collaboration**

 <u>NASA-ISRO</u>: India joins the Artemis Accords, with NASA providing advanced astronaut training for joint missions to the International Space Station.

## Research and Development

- Quantum Computing and AI: Quantum Coordination Mechanism created for joint research in AI and advanced wireless technologies.
- <u>Scientific</u> <u>Research</u>:35 joint research collaborations between the US National Science Foundation and India's Department of Science and Technology.

## **Health Initiatives**

- <u>Cancer and Diabetes Research</u>: Collaboration between US and Indian scientists on AI-based digital pathology and radiotherapy treatments.
- <u>Diabetes Research:</u> Partnership between the US National Institute of Diabetes and India's Indian Council of Medical Research.

## **Defense Agreement**

• <u>F-35 Stealth Fighter Jets:</u> The US to sell F-35 fighter jets to India, enhancing India's defense

## capabilities.

 <u>Defense Roadmap</u>: A ten-year defense collaboration with potential co-production of jet engines and other military technologies. The deal aligns with the US strategy to strengthen allies in Asia.

## **Security Support**

- Extradition of Tahawwur Hussain Rana: The US commits to supporting India in extraditing the 2008 Mumbai attacks accused.
- Intelligence Sharing and Counterterrorism:
   Enhanced intelligence sharing and joint efforts on illegal immigration and terrorism.

## 25% Tariffs on Steel & Aluminum imports Context

- U.S. President Donald Trump has imposed a 25% tariff on all steel and aluminum imports, effective March 4, 2025.
- This removes previous country-specific exemptions, impacting major exporters like Canada, Brazil, Mexico and South Korea.

## **Impact on India**

- <u>Steel and Aluminum Imports</u>: India is concerned about excess steel and aluminum being dumped in its market, especially from China.
- The Indian steel ministry has proposed a 25% safeguard duty to protect domestic producers.

## 14AFAF 2025: Advancing Sustainable Fisheries in Asia-Pacific

#### Context

• The 14th Asian Fisheries and Aquaculture Forum (14AFAF) in New Delhi, focussed on sustainable fisheries in the Asia-Pacific region.

## **Key Highlights:**

- With over 1,000 delegates from 24 countries, the forum explored pressing issues such as climate change, smart aquaculture and policy advancements, underscoring India's role as a global leader in the fisheries sector.
- <u>Theme:</u> "Greening the Blue Growth in Asia-Pacific".
- Organizers: The Asian Fisheries Society (AFS) is a professional organization, with the Indian Council of Agricultural Research (ICAR) and the Department of Fisheries (DoF) supporting the AFS Indian Branch in advancing fisheries science.





 <u>Key Topics</u>: Sustainable fisheries management, climate change impacts, smart aquaculture, fish genetics, post-harvest processing and policy.

#### **Fish Sector**

• China leads the world in fish production. India is the <u>second largest fish producing country with around 8 per cent share in global fish production and during the financial year 2023-24</u>, the country exported 17,81,602 metric tonnes (MT) of seafood worth Rs 60,523.89 crore.

## Indian Consulate in Marseille

## Context

 Prime Minister Narendra Modi and French President Emmanuel Macron inaugurated India's second diplomatic mission in France, the Indian Consulate in Marseille.

## **Details**

- Marseille, France's second-largest city, holds a vital position on the Mediterranean coast and serves as a gateway for trade between Europe, Africa and Asia.
- The Port of Marseille-Fos, France's largest port, handles substantial imports and exports, making it a crucial hub for oil shipments. Establishing a consulate in this region will strengthen India's trade ties, especially with the India-Middle East-Europe Economic Corridor (IMEEC).

## India and Nicaragua Forge Partnership for Quick Impact Projects

## Context

 India and Nicaragua have signed a Memorandum of Understanding (MoU) for Quick Impact Projects (QIPs), aimed at enhancing physical and social infrastructure in Nicaragua.

## **Details**

- The agreement was signed in Managua between Indian Ambassador Sumit Seth and Nicaraguan Foreign Minister ValdrackJaentschke.
- Under this, India will provide grant assistance for the development of roads, community centers, education, healthcare and sanitation.

## **Nicaragua**

- Geographically largest country in Central America.
- Known as "the breadbasket of Central America" due to having the most fertile soil and arable land in all of Central America.
- Known as the <u>"land of lakes and volcanoes"</u>,
   Nicaragua is also home to the Bosawás Biosphere
   Reserve, the second-largest rainforest of the

Americas.

- President: Daniel Ortega
- Indian Diplomatic Presence: Indian Embassy in Panama concurrently accredited to Nicaragua

## Lord Buddha Trination Triservices Expedition

## Context

 The International Buddhist Confederation (IBC) is set to launch the Lord Buddha Trination Triservices Expedition.

## **Details**

- This unique motorcycle expedition will start from Lumbini (Nepal), the birthplace of Lord Buddha and conclude in Galle, Sri Lanka, covering significant Buddhist heritage sites such as Sarnath, Bodhgaya, Nalanda, Nagarjuna Sagar and Udayagiri along the route.
- Objective: The expedition aims to promote peace, harmony, tourism, environmental awareness and celebrate the shared Buddhist heritage of the three nations.

## Key Buddhist Sites in India:

- Lumbini (Nepal): Birthplace of Buddha, part of Shakya Janapada.
- **Bodhgaya** (Bihar): Site of Buddha's enlightenment on the **Neranjana River** (Uruwela).
- Sarnath (Uttar Pradesh): Location of Buddha's first sermon, part of Kashi Janapada.
- Kushinagar (Uttar Pradesh): Site of Buddha's death and Mahaparinirvana, part of Malla Janapada.
- Sravasti (Uttar Pradesh): Capital of Kosala Kingdom, where Buddha spent 24 Chaturmasas, also the birthplace of Jaina Tirthankar Sambhavanath.
- Sankasya (Uttar Pradesh): Believed to be the site where Buddha descended from heaven after death.
- Rajgir (Bihar): Early capital of Magadh Janapada, ruled by Bimbisara; Buddha began his ascetic life here.
- Vaishali (Bihar): Part of VajjiJanapada, where Buddha received spiritual training from Allara and Udaka after his renunciation.
- Nalanda: Ancient Buddhist university.

### **UN Honour Roll**

## **Context**

 India's timely contribution of USD 32.895 million to the UN Regular Budget on January 31, 2024,





earned it a spot on the UN Honour Roll.

### **UN Honour Roll**

- The UN Honour Roll recognizes countries that meet their financial commitments promptly. India, along with 35 other nations, secured this recognition. In 2023, India paid USD 30.54 million.
- The UN budget supports peacekeeping, humanitarian aid and sustainable development programs.

## **United Nations (UN)**

 United Nations (UN) is an intergovernmental organization focused on maintaining international peace and security, fostering friendly relations among nations and promoting cooperation and development.

## **Key Facts:**

- <u>Headquarters:</u> New York City (with offices in Geneva, Nairobi, Vienna, The Hague).
- <u>Established:</u> After World War II, succeeding the League of Nations.
- Founding Conference: San Francisco, April 25, 1945; UN Charter adopted on June 25, 1945 and took effect on October 24, 1945.
- <u>Initial Members</u>: 51 member states; **current members**: 193 sovereign states.
- <u>Mission</u>: Maintain peace, protect human rights, provide humanitarian aid, promote sustainable development and uphold international law.

## **Structure:**

- Six Principal Organizations:
  - o General Assembly
  - Security Council
  - Economic and Social Council
  - International Court of Justice
  - UN Secretariat
  - o Trusteeship Council (suspended since 1994)
- Specialized Agencies: World Bank, WHO, UNESCO, UNICEF, etc.

## Leadership:

• **Secretary-General**: António Guterres (since 2017, re-elected in 2021).

## **Funding:**

Financed by assessed and voluntary contributions from member states.

## **Economic Community of West African States (ECOWAS)**

## Context

 Economic Community of West African States (ECOWAS) officially recognized the withdrawal of Niger, Mali and Burkina Faso from the regional bloc.

### **ECOWAS**

- The Economic Community of West African States (ECOWAS) is a regional political and economic union comprising 15 countries in West Africa, formed in 1975 under the Lagos Treaty. Its primary objective is to promote economic integration and enhance cooperation among its member nations.
- Headquarters: ECOWAS has its headquarters in Abuja, Nigeria.
- ECOMOG: A peacekeeping operation initiated by ECOWAS, notably in Liberia (1990) and Sierra Leone (1997), to restore peace after military conflicts and coups.

## **USAID**

## Context

 U.S. President Donald Trump criticized USAID for its overseas spending, accusing it of being inefficient and wasteful, while prioritizing "America First" policies.

## <u>United States Agency for International Development</u> (USAID)

- The United States Agency for International Development (USAID) is an independent agency of the U.S. government responsible for administering civilian foreign aid and development assistance globally.
- **Establishment**: USAID was established in the **1960s** as a key component of U.S. foreign policy.
- Scope of Operations: USAID operates in over 60 countries, providing support in areas such as health, education, clean water, economic development and disaster relief.

## **Brazil Joins OPEC+ Amidst Climate Concerns**

## **Strategic Move in Global Energy Markets**

- Brazil, one of the world's leading oil producers, is set to join the Organization of the Petroleum Exporting Countries Plus (OPEC+). This decision is aimed at leveraging its vast oil resources and securing a stronger position in global energy negotiations.
- However, the move has sparked intense debate, particularly as the world prepares for COP30, where climate policies and emissions reductions will be key discussion points.

## **New OPEC+ Membership**

 Brazil's entry into OPEC+ marks a significant expansion of the group, traditionally dominated





by Middle Eastern and African nations.

 This inclusion is expected to introduce new perspectives on oil production policies and market regulations.

### **Additional Information**

## **OPEC and OPEC+**

- OPEC (Organization of the Petroleum Exporting Countries) is a permanent intergovernmental organization established in 1960 in Baghdad, Iraq, by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela.
- Objective: To coordinate and unify petroleum policies, ensuring stable oil markets, fair pricing and steady income for producers.
- Current Membership (2025): 13 nations, primarily from Africa, Asia and South America.
- **Influence**: OPEC plays a key role in **global oil pricing** and **production decisions**.

### OPEC+

- OPEC+ is a broader alliance formed in 2016, including OPEC nations and 10 additional oilproducing countries, such as Russia.
- It exerts greater control over global oil supply, influencing energy prices, inflation and the world economy.

## Conference of the Parties (COP)

- COP (Conference of the Parties) is the decisionmaking body of the United Nations Framework Convention on Climate Change (UNFCCC).
- Objective: To assess climate progress and establish legally binding targets for emissions reductions.
- Annual Meetings: Brings together governments, businesses and environmental organizations.

## **Key Agreements:**

- Kyoto Protocol introduced legally binding emission reduction targets.
- o **Paris Agreement** committed nations to limiting global temperature rise to **below 2°C**.

## COP30 in Brazil

- Location: Belém, Brazil (November 2025).
- Significance: A crucial platform for advancing discussions on climate finance, adaptation strategies and clean energy transitions.

Brazil's **dual role** as an OPEC+ member and **COP30 host** will put the country at the **center of global energy and climate diplomacy**, balancing economic interests with sustainability commitments.

# Pharaoh Thutmose II's Tomb: Unraveling Egypt's Ancient Secrets

## Context

- In a remarkable find, archaeologists have uncovered the tomb of Pharaoh Thutmose II, offering fresh insights into the 18th Dynasty of ancient Egypt.
- This discovery sheds light on Egypt's burial customs, religious traditions and architectural advancements, deepening our understanding of a pivotal era in history.

## **Key Highlights of the Discovery**

## **Historical Significance**

- Thutmose II, though a lesser-known ruler, presided over a period of cultural prosperity and political intrigue.
- The tomb's artifacts and inscriptions are expected to enhance our knowledge of the Amarna period, a transformative phase in Egyptian civilization.

## Mount Taranaki granted Legal Personhood Context

New Zealand passed a historic law granting
 Mount Taranaki (also known as Taranaki
 Maunga) legal personhood, recognizing the
 mountain as a living entity with rights similar to
 those of a human.

#### **Mount Taranaki**

- Mount Taranaki (also known as Taranaki Maunga in Māori and formerly Mount Egmont) is a dormant stratovolcano located in the Taranaki region on the west coast of New Zealand's North Island.
- Mount Taranaki has a secondary cone which reaches a height of 1,966 metres on its southern side.
- Mount Taranaki is deeply important to the Māori people, viewed as an ancestor and a key figure in their spiritual beliefs.

## First African country to eliminate Onchocerciasis

### Context

The World Health Organization (WHO)
recognized Niger as the first African country to
eliminate onchocerciasis (also known as river
blindness) as a public health threat.

## **Details**

 Niger joins four other countries globally -Colombia, Ecuador, Guatemala and Mexico that have successfully halted the transmission of the disease.

## **Onchocerciasis**

 Onchocerciasis, commonly known as river blindness, is a parasitic disease caused by the





roundworm *Onchocerca volvulus*. It is primarily transmitted through bites from infected black flies of the genus *Simulium*. These flies typically breed in fast-flowing rivers, which is why the disease is known as river blindness.

- The disease primarily affects rural populations near fast-flowing rivers in sub-Saharan Africa.
- Symptoms include intense itching, swelling, nodules under the skin, skin discoloration and eye problems such as corneal clouding, glaucoma and potential blindness.
- No vaccine exists. **Treatment:** Ivermectin for controlling larvae, doxycycline for weakening worms and surgery for skin nodules.

## UAE President declares 2025 as the 'Year Of Community'

### Context

 2025 has been declared the Year of Community by UAE President Sheikh Mohamed bin Zayed Al Nahyan.

### **Details**

- The initiative's slogan is "Hand in Hand", reflecting the vision of unity and collective effort in building a cohesive society.
- The campaign focuses on fostering social cohesion, promoting inclusion and strengthening community bonds.



## **SCIENCE & TECHNOLOGY**

## Launch of Garbh-Ini-Drishti Data Repository

## **Developed Under:**

 GARBH-INi (Interdisciplinary Group for Advanced Research on Birth Outcomes – DBT India Initiative).

#### Scope:

 Extensive database containing clinical data, images and bio-specimens from 12,000+ pregnant women, newborns and postpartum mothers.

## Significance:

- One of South Asia's largest maternal and child health databases.
- Enables data-driven research for improving maternal and neonatal health outcomes.
- Fosters collaborative biomedical research among research institutions and hospitals.

### **About GARBH-INi Program**

- Full Name: Interdisciplinary Group for Advanced Research on Birth Outcomes - DBT India Initiative (GARBH-INi).
- Objective: Improve maternal and child health, especially preterm birth outcomes.
- Key Focus Areas:
  - Research: Studies biological, environmental and social factors affecting pregnancy.
  - Data Collection: Builds a large cohort database to identify risk factors for preterm birth.
  - Technology Development: Uses AI-based models for early detection of pregnancy complications.
  - o **Interventions**: Develops preventive healthcare strategies for maternal and neonatal well-

being.

## **Einstein Ring**

#### **Context:**

 The European Space Agency's (ESA) Euclid space telescope recently captured an Einstein ring.

## **Details**

- An Einstein ring is a <u>ring of light formed around</u>
   <u>a massive object due to gravitational lensing</u>,
   where light from a distant object is bent by gravity,
   creating a ring shape.
- Named after Albert Einstein, this phenomenon supports his theory of general relativity.
- Einstein rings are faint and occur over vast distances, making them visible only through powerful space telescopes.
- Einstein rings <u>help map dark matter (85% of the universe's matter)</u> and study the expansion of the universe by magnifying distant galaxies. They also provide insight into gravitational effects.

## Srjanam

## **Context:**

 AIIMS Delhi launched 'Srjanam', India's first automated biomedical waste conversion system

## Key Features of 'Srjanam'

- Automated Waste Neutralization: Efficiently neutralizes hazardous biomedical waste, unlike incinerators that emit harmful gases.
- Odor Control Technology: Controls foul odors, making waste management safer and more manageable.
- Scalable Processing: Initially processes 10 kg/day, with plans to scale up to 400 kg/day upon





approval.

## Uganda launches groundbreaking Ebola Vaccine Trial

## Why in News?

 Uganda, in collaboration with WHO and global partners, launched the first clinical trial for a vaccine targeting the Sudan species of Ebola on January 30, 2025.

## **Key Highlights**

- First-ever vaccine trial for the Sudan strain of Ebola.
- Rapid Response Initiated within 4 days of outbreak confirmation.
- **No licensed vaccine** currently exists for this strain.

### **Ebola Virus Overview**

- Discovered: 1976, Democratic Republic of the Congo (DRC).
- Family: Orthoebolaviruses (formerly Ebolavirus).
- Hosts: Fruit bats, primates (gorillas, monkeys), forest animals.

## **Transmission**

- **Zoonotic** From infected animals (bats, primates) to humans.
- **Human-to-Human** Through **direct contact** with blood, secretions, or body fluids.

## **Symptoms**

- **Incubation**: 2 to 21 days.
- Key Symptoms: Fever, diarrhea, vomiting, bleeding, organ failure.
- Fatality Rate: ~50%.

#### **Treatment**

- No cure available.
- FDA-approved monoclonal antibodies: Inmazeb& Ebanga (for Ebola Zaire strain).
- **Supportive care**: Fluids, electrolytes, blood transfusion.

## **Significance of Trial**

- Follows ring vaccination strategy for high-risk groups.
- Potential regulatory approval and improved outbreak response.
- Results expected within months.

## Jogighopa Inland Waterways Terminal: Boosting Trade and Connectivity

## **Context**

 Union Minister Sarbananda Sonowal inaugurated the Jogighopa Inland Waterways Terminal in Assam on February 18, 2025. This terminal is a crucial step in enhancing trade with Bangladesh and Bhutan, reinforcing India's commitment to sustainable logistics and regional connectivity.

## **Key Highlights**

## **First Shipment**

- The inaugural shipment included 110 metric tonnes of coal and stone chips, destined for Bangladesh.
- The cargo was transported via the MV Trishul, accompanied by barges Ajay and Dikshu.

## **Infrastructure & Capacity**

- Developed at a cost of ₹82 crore, the terminal boasts an RCC jetty and state-of-the-art cargo handling equipment, including Electric Level Luffing (ELL) cranes.
- Additional facilities include:
  - Administrative buildings
  - o Customs and immigration offices
  - o Truck parking zones
  - Extensive covered and open storage areas

## **Future Outlook**

By 2027, the terminal is projected to handle 1
million tonnes of cargo annually, significantly
enhancing trade efficiency and economic activity
in the region.

## **Additional Insights**

## Inland Waterways Authority of India (IWAI)

- Established: 1986
- Mandate: Development and regulation of inland waterways for navigation and shipping
- Governing Ministry: Ministry of Ports, Shipping & Waterways
- Key Functions:
  - o Maintenance of National Waterways
  - Development of navigation aids, terminals and river conservancy
- National Waterways Act, 2016: Grants IWAI the authority to declare and regulate National Waterways.

## PM Gati Shakti National Master Plan

- Launched: October 2021
- **Objective:** Integrated **multimodal connectivity** to enhance **logistics efficiency** and **reduce costs**
- Key Focus Areas:Roads, railways, waterways, aviation, telecom, energy and logistics
- Digital Integration: Uses a digital platform for streamlined infrastructure planning and execution
- Economic Impact: Aims to attract investments, enhance global competitiveness and drive economic growth.

Government reclassifies Barytes, Felspar, Mica and Quartz as Major Minerals





#### Policy Update

 The Ministry of Mines, Government of India, has reclassified barytes, felspar, mica and quartz from minor to major minerals through an amendment in the Mines and Minerals (Development and Regulation) Act, 1957. This move aims to enhance regulatory clarity, attract investment and boost mining sector growth.

#### **Significance of the Reclassified Minerals**

#### **Barytes**

- Used in: Oil & gas drilling, barium chemicals, paints, rubber industry.
- India's Role: A leading producer and exporter of barytes.

#### **Felspar**

- Used in: Ceramics, glass industry, tiles, sanitary ware, fiberglass.
- India's Strength: Substantial reserves, crucial for the ceramics and glass sector.

#### <u>Mica</u>

- Used in: Electrical insulation, electronics, paints, cosmetics.
- India's Status: One of the world's largest producers of mica.

#### Quartz

- Used in: Glass manufacturing, solar panels, semiconductors, ceramics, electronics.
- India's Advantage: Abundant reserves, supporting growing demand in technology sectors.

### India's first Ferret Research Facility launched

#### **Context**

 India inaugurated its first Ferret Research Facility at the Translational Health Science and Technology Institute (THSTI), Faridabad, Haryana.

#### **Purpose**

- Develop vaccines and therapeutics.
- Research emerging infectious diseases.
- Strengthen India's pandemic preparedness.
- Enhance India's position in global scientific research.

#### **Key Features**

- Adheres to highest biosafety and research standards
- Crucial for vaccine development, therapeutic testing and infectious disease research.

#### **Impact**

- Boosts India's biomedical research capabilities.
- Improves pandemic preparedness.

Strengthens public health innovation.

### BHU discovers new Fungal species affecting Vetiver

#### **Context:**

 Researchers at Banaras Hindu University (BHU),
 Varanasi, have discovered Epicoccum indicum, a new phytopathogenic fungus.

#### **Key Details**

- Fungus Name: Epicoccum indicum
- Plant Affected: Chrysopogonzizanioides (Vetiver)
- Disease Caused: Leaf Spot Disease

#### Significance of Discovery

- Vetiver is valuable for medicinal (pain relief, antiinflammatory, anti-infection) and environmental uses.
- Epicoccum indicum threatens its cultivation, making disease management essential.
- Helps develop early detection methods and sustainable agricultural solutions.

#### **Chain of Thought (COT)**

#### **Context:**

• New research reveals safety risks in the Chain of Thought reasoning model used by a top-ranking AI model DeepSeek.

#### **Key Details**

 Chain of Thought (CoT) is an AI reasoning technique that breaks down complex problems into step-by-step logical steps, improving accuracy in math, logic and multi-step decisionmaking.

#### **How Does CoT Work?**

- Step-by-Step Reasoning: AI thinks aloud, generating intermediate steps.
- Better Accuracy: Reduces errors in complex tasks.
- Transparency: Makes AI's logic more interpretable.

#### Michibiki No. 6 Satellite

#### **Context:**

 The Japan Aerospace Exploration Agency (JAXA) successfully launched the fifth H-3 rocket, carrying the Michibiki No. 6 satellite.

#### Michibiki 6

- Part of Quasi-Zenith Satellite System (QZSS), providing high-precision GPS augmentation.
- Position: 90.5° East in the geostationary belt (35,786 km above the equator).
- First Michibiki satellite launched in 2010; expansion to 11 satellites under consideration for





enhanced redundancy (Cabinet Office, 2024).

#### Aim & Purpose

- Enhance Japan's independent satellite navigation system.
- Improve GPS accuracy and reliability, especially in urban and mountainous areas.
- Support disaster management, autonomous driving and precision agriculture.
- Reduce dependence on the U.S. GPS for critical infrastructure.

#### **BIMCOIN**

#### **Context:**

 The Birla Institute of Management Technology (BIMTECH) has launched BIMCOIN, India's first blockchain-powered campus currency.

#### **Details**

- This digital currency is designed for secure, transparent and efficient transactions within the campus ecosystem, positioning BIMTECH as a pioneer among business schools in India.
- Blockchain-based: Utilizes a permissioned blockchain, ensuring decentralization and transparency.
- **Security**: **Advanced encryption** and **privacy protocols** guarantee secure transactions.
- Practical Learning: Offers students real-world experience in fintech, blockchain and digital currencies.

#### **Plasticizers**

- <u>Recent Research</u>: IIT Roorkee has developed bacterial enzymes to break down DEHP (diethyl hexyl phthalate), a harmful plasticizer, using the esterase enzyme from the bacterium Sulfobacillus acidophilus.
- Environmental Significance: This research
  presents a potential solution to address the
  environmental challenges posed by plasticizers,
  which are toxic and difficult to degrade.

#### In-Flight Wi-Fi

#### Context

 Air India is the first Indian airline to offer Wi-Fi connectivity on both domestic and international flights, enhancing the passenger experience.

#### **Details**

- Technologies:
  - Air-to-Ground (ATG) connects to ground towers for stable internet but has limitations over water bodies.
  - Satellite-based Connectivity offers broader coverage, especially over oceans and is more reliable.
- How It Works: Passengers connect to Wi-Fi via aircraft antennas, which communicate with satellites or ground towers to provide internet connectivity.

### **Cubic Kilometre Neutrino Telescope** (Km3net) **Projects**

#### Context

 A European research initiative deploying two neutrino telescopes under the Mediterranean Sea to detect high-energy neutrinos.

#### **Key Detectors:**

- ARCA Telescope: Located off Sicily, it searches for high-energy cosmic neutrinos, covering 87% of the neutrino sky.
- ORCA Telescope: Situated off France, it studies neutrinos created by cosmic rays in Earth's atmosphere.
- **Detection Method**: Uses thousands of optical sensors to detect faint light produced when neutrinos interact with seawater.
- Neutrinos: Subatomic, chargeless particles that rarely interact with matter, often called "ghost particles," and are abundant in the universe.



#### **BIOLOGY & ENVIRONMENT**

### **India's first White Tiger Breeding Centre Context**

 The Central Zoo Authority (CZA) has approved India's first white tiger breeding centre in Rewa, Madhya Pradesh.

#### **Details**

 The centre will be located in Govindgarh, near the Mukundpur White Tiger Safari, which is Madhya Pradesh's only white tiger tourism facility.

- The most famous white tiger, Mohan, was captured in 1951 by Maharaja Martand Singh of Rewa from the Sidhi forest, now part of Sanjay Dubri Tiger Reserve.
- All white tigers in zoos worldwide are descendants of Mohan.





#### White Tiger

- The white tiger is a leucistic variation of the Bengal tiger (Panthera tigristigris), characterized by a white or near-white coat with black stripes and blue eyes.
- The white coat results from a lack of pheomelanin, a pigment responsible for the orange color in regular Bengal tigers.
- Both parents must carry the recessive gene for a white tiger to be born, which naturally occurs once in 10,000 births.

#### India retains Third Position in Global LEED Green Building Certification in 2024 Context

India has maintained its third position in the U.S.
Green Building Council (USGBC) rankings for
Leadership in Energy and Environmental Design
(LEED) certifications in 2024. A total of 370
projects in India were certified, covering 5 million
gross square meters (GSM) (91.5 million square
feet).

#### **LEED Certification in India**

- Managed by Green Business Certification Inc. (GBCI), which works to accelerate the adoption of green buildings nationwide.
- Expanding beyond commercial spaces to include industrial, residential and educational sectors.
- The **real estate market** in India is increasingly aligned with **sustainable building practices**.

#### **LEED Certification Categories in India**

- Operations and Maintenance (O+M): 153 projects.
- Interior Design and Construction (IDC): 102 projects.
- Building Design and Construction (BDC): 61 projects.

#### **About USGBC and GBCI**

- U.S. Green Building Council (USGBC) (Founded 1993)
  - A non-profit organization promoting sustainable building design, construction and operation.

- Developer of the LEED rating system, a globally recognized green building certification.
- Hosts the annual Greenbuild International Conference and Expo, the world's largest event dedicated to green buildings.
- Green Business Certification Inc. (GBCI) (Founded 2008)
  - Independently verifies sustainability performance for LEED and other green certifications.
  - Administers certifications like EDGE, PEER, WELL, SITES, Parksmart and TRUE.
  - Operates globally with offices in China, Europe, India, Dubai and Mexico.

India's sustained focus on green architecture and sustainable development ensures its leadership in the global movement for eco-friendly infrastructure.

### India adds Four New Ramsar Sites, total now 89

#### Context

 On World Wetlands Day (February 2, 2025), India added four new wetlands to the Ramsar List, taking the total to 89 sites, the highest in Asia and third globally. Tamil Nadu leads with 20 Ramsar sites.

#### **Newly Added Ramsar Sites:**

- Sakkarakottai Bird Sanctuary (Tamil Nadu)
- Therthangal Bird Sanctuary (Tamil Nadu)
- Khecheopalri Wetland (Sikkim) Sikkim's first Ramsar site
- Udhwa Lake (Jharkhand) Jharkhand's first Ramsar site

#### What are Ramsar Sites?

- The Ramsar Convention (1971) protects wetlands vital for biodiversity, water security, flood control and carbon storage. India joined in 1982 and has been expanding its list.
- Sundarbans is the largest Ramsar Site of India.
- Chilika Lake (Orissa) and Keoladeo National Park (Rajasthan) were recognized as the <u>first Ramsar</u> <u>Sites of India.</u>
- Tamil Nadu has the highest number of Ramsar Sites in India with 20 Ramsar Sites.

S1.	Ramsar Site	State/UT	S1.	Ramsar Site	State/UT
1	Kolleru Lake	Andhra Pradesh	46	Kanjirankulam BS	Tamil Nadu
2	Deepor Beel	Assam	47	Karikili BS	Tamil Nadu
3	Kanwar (Kabar) Taal	Bihar	48	Koonthankulam BS	Tamil Nadu
4	Nanda Lake	Goa	49	Pallikaranai Marsh Reserve	Tamil Nadu





				Forest	
5	Khijadia WLS	Gujarat	50	Pichavaram Mangrove	Tamil Nadu
6	Nalsarovar BS	Gujarat	51	Point Calimere WLS & BS	Tamil Nadu
7	Thol Lake	Gujarat	52	SuchindramTheroor	Tamil Nadu
1	THOI Lake	Gujarat	32	Wetland Complex	Tallill Nadu
8	Wadhvana Wetland	Gujarat	53	Udhayamarthandapuram BS	Tamil Nadu
9	Bhindawas WLS	Haryana	54	Vaduvur BS	Tamil Nadu
10	Sultanpur NP	Haryana	55	Vedanthangal BS	Tamil Nadu
11	Chandra Taal	Himachal Pradesh	56	Vellode BS	Tamil Nadu
12	Pong Dam Lake	Himachal Pradesh	57	Vembannur Wetland	Tamil Nadu
12	1 Ong Dam Lake	Timachai i radesii	37	Complex	Tallill Nadu
13	Renuka Lake	Himachal Pradesh	58	Karaivetti Bird Sanctuary	Tamil Nadu
14	Ranganathituu BS	Karnataka	59	Longwood Shola Reserve	Tamil Nadu
11	Tunganamita 55	Ramataka		Forest	Turin Tudu
15	Magadi Kere Conservation	Karnataka	60	Rudrasagar Lake	Tripura
	Reserve				
16	Ankasamudra Bird	Karnataka	61	Hokera Wetland	UT of JK
	Conservation Reserve				
17	Aghanashini Estuary	Karnataka	62	Hygam Wetland CnR	UT of JK
18	Ashtamudi Wetland	Kerala	63	Shallbugh Wetland CnR	UT of JK
19	Sasthamkotta Lake	Kerala	64	Surinsar-Mansar Lakes	UT of JK
20	Vembanad-Kol Wetland	Kerala	65	Wular Lake	UT of JK
21	Bhoj Wetland	Madhya Pradesh	66	Tso Kar	UT of Ladakh
22	Sakhya Sagar	Madhya Pradesh	67	Tsomoriri	UT of Ladakh
23	Sirpur wetland	Madhya Pradesh	68	Bakhira WLS	Uttar Pradesh
24	Yashwant Sagar	Madhya Pradesh	69	Haiderpur Wetland	Uttar Pradesh
25	Lonar Lake	Maharashtra	70	Nawabganj BS	Uttar Pradesh
26	NandurMadhameshwar	Maharashtra	71	Parvati Arga BS	Uttar Pradesh
27	Thane Creek	Maharashtra	72	Saman BS	Uttar Pradesh
28	Loktak Lake	Manipur	73	Samaspur BS	Uttar Pradesh
29	Pala Wetland	Mizoram	74	Sandi BS	Uttar Pradesh
30	Ansupa Lake	Odisha	75	Sarsai Nawar Jheel	Uttar Pradesh
31	Bhitarkanika Mangroves	Odisha	76	Sur Sarovar (Keetham Lake)	Uttar Pradesh
32	Chilika Lake	Odisha	77	Upper Ganga River	Uttar Pradesh
33	Hirakud Reservoir	Odisha	78	Asan Barrage	Uttarakhand
34	Satkosia Gorge	Odisha	79	East Kolkata Wetlands	West Bengal
35	Tampara Lake	Odisha	80	Sundarban Wetland	West Bengal
36	Beas CnR	Punjab	81	Nagi Bird Sanctuary	Bihar
37	Harike Wetland	Punjab	82	Nakti Bird Sanctuary	Bihar
38	Kanjli Wetland	Punjab	83	Kazhuveli Bird Sanctuary	Tamil Nadu
39	Keshopur-Miani CmR	Punjab	84	Nanjarayan Bird Sanctuary	Tamil Nadu
40	Nangal WLS	Punjab	85	Tawa Reservoir	Madhya
	<b>*</b>				Pradesh
41	Ropar Wetland	Punjab	86	Therthangal Bird Sanctuary	Tamil Nadu
42	Keoladeo National Park	Rajasthan	87	Sakkarakottai Bird Sanctuary	Tamil Nadu
43	Sambhar Lake	Rajasthan	88	Khecheopalri Wetland	Sikkim
44	Chitrangudi BS	Tamil Nadu	89	Udhwa Lake	Jharkhand
45	Gulf of Mannar Marine BR	Tamil Nadu		1-	



#### **Indian Grey Wolf**

#### **Context:**

 Recently, aIndian Grey Wolf gave birth to eight pups at the Bankapur Wolf Sanctuary in Karnataka.

#### **Indian Grey Wolf:**

- Range: From Southwest Asia to the Indian subcontinent.
- **Behavior**: Travels in smaller packs, **less vocal**, **nocturnal** (hunts from dusk to dawn).
- **Appearance**: Medium-sized, between **Tibetan** and **Arabian** wolves. Lacks a **lush winter coat**.
- Habitat: Prefers scrub, grassland and semi-arid agroecosystems.
- Distribution: Widely found across the Indian subcontinent to Israel.
- Protection Status:
  - o IUCN: Least Concern
  - o **CITES**: Annex 1
  - o Nature Conservation Act 1972: Schedule I

#### Protected Areas and Wetlands in news

#### Sanjay Gandhi National Park

- Location: Borivali, Mumbai
- Key Features: Dense forests, birdlife, Kanheri Caves
- Fauna: Tigers, leopards, panthers, 251 bird species

#### **Shendurney Wildlife Sanctuary**

- Location: Kollam district, Kerala
- Flora: Tropical evergreen forests
- Fauna: Indian hornbill, Malabar hornbill, woodpeckers

#### Umred-Pauni-Karhandla Wildlife Sanctuary

- Location: Maharashtra
- Fauna: Tigers, leopards, sloths, wild dogs

#### **Desert National Park**

- Location: Jaisalmer, Rajasthan
- Fauna: Great Bustard, chinkara, Indian wolf

#### Hollongapar Gibbon Sanctuary

- Location: Jorhat, Assam
- Fauna: Hoolock gibbons, Bengal slow loris, Indian elephants

#### **Ranthambore Tiger Reserve**

- Location: Sawai Madhopur, Rajasthan
- Fauna: Bengal tigers, leopards, sloth bears

#### Shikari Devi Wildlife Sanctuary

- Location: Mandi, Himachal Pradesh
- Fauna: Snow leopard, Himalayan black bear, monal

#### **Chincholi Wildlife Sanctuary**

- Location: Kalburgi, Karnataka
- Fauna: Black buck, Indian wolf, Black Drongo

#### Asan Wetland

- Location: Dehradun, Uttarakhand
- Status: Ramsar site
- Birds: Bald eagle, Egyptian eagle, Marbled teal

#### Dhanauri Wetland

- Location: Greater Noida, Uttar Pradesh
- Species: Sarus Crane, Teal, Mallard

#### **Nahargarh Wildlife Sanctuary**

- Location: Jaipur, Rajasthan
- Fauna: Leopards, hyenas, wild boars

#### Surajpur Wetland

- Location: Greater Noida, Uttar Pradesh
- Fauna: Spot-billed duck, Red-crested pochard

#### **Sharavathy Lion-Tailed Macaque Sanctuary**

- Location: Karnataka
- Fauna: Lion-Tailed Macaque, tiger, leopard

### Global Plastic Action Partnership (GPAP) Context:

 The Global Plastic Action Partnership (GPAP), launched by the World Economic Forum, has reached a significant milestone by expanding its network to 25 countries, including Maharashtra (India).

#### About Global Plastic Action Partnership (GPAP)

- Launched: At the Sustainable Development Summit 2018 during WEF 2018.
- Purpose: Accelerates the circular economy and supports "Friends of Ocean" events.
- Current Members: 25 countries, including Maharashtra (India).

#### **Objectives:**

- Strengthen the global response to plastic pollution by uniting governments, businesses andcivil society.
- Promote a circular plastic economy to reduce emissions and protect ecosystems.

#### **Key Activities:**

- Assist countries in creating national action plans for plastic pollution control.
- Mobilize investments in waste management to enhance sustainability.

#### Blue Flag Certification

#### **Context:**

 Kerala's Kappad Beach in Kozhikode and Chal Beach in Kannur have been awarded the prestigious Blue Flag certification by the Foundation for Environmental Education (FEE) for meeting rigorous environmental and safety standards.





#### **About Blue Flag Certification**

- Awarded By: Foundation for Environmental Education (FEE), Denmark.
- Launched: France, 1985; expanded outside Europe in 2001.
- **Recognition**: A globally recognized **eco-label** for sustainable tourist beaches, marinas and boats.

#### Criteria for Award:

- Water Quality
- Environmental Management
- Environmental Education
- Safety

#### Mission:

 Promote sustainability in tourism through environmental education, protection and other sustainable practices.

#### Other Indian Beaches with Blue Flag:

 Shivrajpur (Gujarat), Ghoghla (Diu), Kasarkod and Padubidri (Karnataka), Rushikonda (Andhra Pradesh), Golden (Odisha), Radhanagar (Andaman and Nicobar), Kovalam (Tamil Nadu), Eden Beach (Puducherry), Minicoy Thundi Beach and Kadmat Beach (Lakshadweep).

#### Nimesulide

#### **Context:**

 India has officially banned Nimesulide, a toxic substance, following scientific research confirming its harmful effects on endangered vultures.

#### **About Nimesulide:**

- Type: Non-steroidal anti-inflammatory drug (NSAID).
- Uses: Relieves pain, inflammation and swelling.
   Commonly used to treat conditions like:
  - Fever, menstrual cramps, osteoarthritis and similar conditions.
- Impact on Vultures: In January 2025, India banned Nimesulide in veterinary medicine under Section 26A of the Drugs and Cosmetics Act, 1940, due to its toxicity to vultures.

#### India surpasses 100 GW Solar Power Capacity: A Leap Towards Green Energy

#### Context

 India's installed solar power capacity crossed 100 GW as of January 31, 2025, marking a transformative shift toward renewable energy.

#### **Growth Trajectory**

- Solar capacity surged by 3,450% in a decade, from 2.82 GW in 2014 to 100.33 GW in 2025.
- **5 GW** of solar capacity was added in **2024 alone**, doubling the previous year's installations.

 10 GW of projects are under implementation, with 47.49 GW tendered, pushing the total pipeline to 296.59 GW (including hybrid projects).

#### **State Contributions**

 Top-performing states include Rajasthan, Gujarat, Tamil Nadu, Maharashtra and Madhya Pradesh, driving utility-scale solar growth.

#### **Rooftop Solar Boom**

- 5.9 GW of rooftop solar was added in 2024 (53% YoY growth).
- PM Surya Ghar Muft Bijli Yojana (launched 2024) facilitated nearly 9 lakh household installations, democratizing clean energy access.

#### Solar Manufacturing Surge

- Module production capacity rose from 2 GW (2014) to 60 GW (2024).
- India aims for 100 GW solar module production by 2030, positioning itself as a global manufacturing hub.

#### **Other Important Aspects**

#### **Link to National Targets**

- Aligns with India's 500 GW non-fossil fuel target by 2030 (Paris Agreement commitment).
- Supports **Net Zero by 2070** and **energy independence goals**.

#### **Economic & Environmental Impact**

- Reduces reliance on coal, curbing CO<sub>2</sub> emissions and fossil fuel imports.
- Creates jobs in manufacturing, installation and R&D sectors.

#### **Policy Drivers**

- Solar Parks Scheme: Accelerating large-scale projects.
- PLI Scheme for Solar Modules: Boosting domestic manufacturing.
- Renewable Purchase Obligations (RPOs): Mandating DISCOMs to source renewable energy.

#### **Additional Information**

#### International Solar Alliance (ISA)

- The **International Solar Alliance (ISA)** is an **intergovernmental organization** dedicated to **promoting solar energy**.
- Launched in 2015 by India and France, it aims to reduce reliance on fossil fuels by facilitating solar deployment.
- With over 100 member countries, primarily within the Tropics, the ISA focuses on knowledge sharing, mobilizing investments and fostering collaboration for universal solar energy access.

#### **Solar Energy in India**

47% of India's renewable energy mix comes from





solar power.

• **Hybrid Projects**: Combine **solar with wind/storage** for **round-the-clock supply**.

#### **Global Context**

- India ranks 4th globally in solar capacity after China, the U.S. and Japan.
- Contributed to 17% of global solar capacity additions in 2024.



### **GENERAL SCIENCE [STATIC GK]**

#### **Meristematic Tissue**

Position	Origin	Function	Plane of division
Apical meristem	Primary Meristem	Protoderm	Mass meristem
Present in apices of root and	It is derived from	It gives rise to	It divides in all planes.
shoot. It is responsible for	embryonic stages and	epidermal tissue	Example:
increase in the length of the plant,	differentiated into	system and develops	endosperm,young embryo
it is called as primary growth.	primary permanent	into epidermis,	and sporangium
	tissues.	stomata and hairs.	
Intercalary meristem		Procambium	Rib meristem or File
Occurs between the mature		It gives rise to primary	meristem
tissues. It is responsible for		vascular tissues.	It divides antidinally in
elongation of internodes.		Example: xylem and	one plane. Example
	Secondary Meristem	phloem .	development of cortex and
	It is derived during		pith
Lateral meristem	later stage of	Ground Meristem	Plate meristem
Occurs along the longitudinal	development of the	It gives rise to all	It divides anticlinally in
axis of stem and root. It is	plant body. It produces	tissues except	two planes. Example:
responsible for secondary tissues	cork cambium and inter	epidermis and	development of epidermis
and thickening of stem and root.	fascicular cambium.	vascular strands.	
Example vascular cambium and			
cork cambium.			

MACRONUTRIENTS	MICRONUTRIENTS
Macronutrients are required in large quantities.	Micronutrients are required in small quantities
They are present in excessive concentration in plant.	They are present in low concentration in plant.
Also called as major elements	They are also called trace elements
They are usually not toxic to the cell if they are present in	They can be toxic for the plant if present excess in the
relatively higher concentration than the normal level.	cell than the required quantity.
Examples: C, H, O, N,P, K, Ca, S, and Mg.	Examples: Fe, Mn, Cu, Zn, Mo, B, CI, and Ni. All
	micronutrients are minerals.

	Red Cells	Cone Cells
Location in retina	Found around periphery	Found around centre (fovea)
Optimal light conditions	Dim light (night' vision)	Bright light ('day' vision)
Visual acuity	Low resolution (many rods: one bipolar cell)	High resolution (one cone : one bipolar cell)
Colour sensitivity	All wavelengths	Certain wavelengths (red, green, blue)
Type of vision	Achromatic (black and white)	Colour
Number of types	One (all contain rhodopsin)	Three different iodopsin pigments
Relative abundance	Many	Fewer

Differences between Ionizing and Non-Ionizing Radiation		
Ionizing Radiation	Non-Ionizing Radiation	
Ionizing radiation has a high energy	Non-Ionizing radiation has less energy than ionizing	



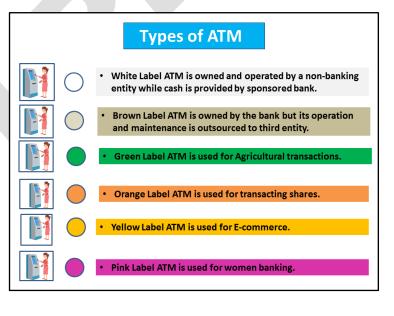


	radiation
Ionizing radiation can emit electrons or other	Non-Ionizing radiation cannot emit but excite electrons from
particles from atoms	ground level to a higher level
Ionizing radiation is non-electromagnetic radiation	Non-Ionizing radiation is electromagnetic radiation
Examples: Alpha, Gamma, X-rays	Examples: UV rays, Visible Microwave, Radio Waves
Ionizing radiation has a shorter wave length	Non-Ionizing radiation has a longer wave length
Ionizing radiation has high penetrating power	Non-Ionizing radiation has low penetrating power

Table 8.3: Chart showing the Digestive Enzymes

Digestive glands	Enzymes	Substrate (nutrient)	Product of digestion
Salivary glands	Ptyalin (Salivary amylase)	Starch	Maltose
Gastric glands	Pepsin	Proteins	Peptones
	Rennin (in infants)	Milk protein or	Curdles milk to produce casein protein
		caseinogen	
Pancreas	Pancreatic amylase	Starch	Maltose
	Trypsin	Proteins and peptones	Peptides and amino acids
	Chymotrypsin	Protein	Proteoses, Peptones, Polypeptide, tri
			and dipepetides
	Pancreatic lipase	Emulsified fats	Fatty acids and Glycerol
Intestinal glands	Maltase	Maltose	Glucose and Glucose
	Lactase	Lactose	Glucose and Galactose
	Sucrase	Sucrose	Glucose and Fructose
	Lipase	Fats	Fatty acids and Glycerol

A	Agriculture Revolution in India				
•	Black Revolution	OIL	Petroleum		
	Blue Revolution		Fish		
	Brown Revolution	4	Leather		
	Golden Revolution		Fruit / Honey		
	Green Revolution	Y	Food Grains		
	Grey Revolution	~	Fertilizer		
	Pink Revolution	•	Onion		
	Red Revolution		Meat / Tomato		
	Silver Revolution	min	Egg / Poultry		
0	White Revolution	-	Milk / Dairy		
	Yellow Revolution	THE	Oil Seeds		
	Evergreen Revolution	eco an	Overall Development		



#### **Tribal Movements**

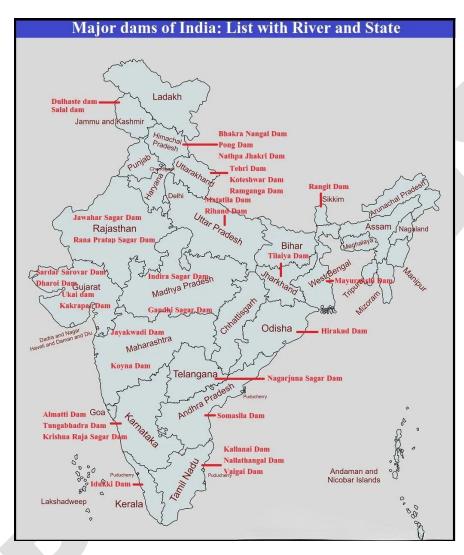
S1.	Movement	Period	Place	Leader
1	Chuar uprising	1768	Midnapur	Jagannath Singh, the
				zamindar of Ghatshila or the
				king of Dhalbhum
2	Halba rebellion	1774-79	Donger,	
			Chhatisgarh	
3	Chakma rebellion	1776-87	North East India	
4	PahariyaSardar's Revolution	1778	Chhotanagpur	Raja Jagganath
5	Tamar's revolution	1794-95	Chhotanagpur	Chief Bisoi
6	Bhopalpatnam Struggle	1795	Bhopalpatnam	-
7	Chuar rebellion in Bengal	1795-1800	Midnapur	Jagannath Singh,



				Dhadkar Shyamganjan and Durjol Singh
8	Kol Rebellion	1795-1831	Chhotanagpur	BirBudhu Bhagat, Joa Bhagat, JhindraiManki and
				Sui Munda
9	Tribal Revoltagainst the sale of Panchet estat	1798	Chhotanagpur	Raja Jagganath
10	Mizo Movement	1810	Mizoram	
11	Khurda Rebellion	1817	Orissa	
12	Kondhas Rebellion	1817	Orissa	-
13	Bhil Rebellion	1822-1857	Rajasthan, Madhya pradesh	BhagojiNaik and Kajar Singh
14	Paralkot Rebellion	1825	Bastar	Gend Singh
15	Khasi and Garo Rebellion	1829	Meghalaya	-
16	Tarapur Rebellion	1842-54	Bastar	-
17	Maria rebellion	1842-63	Bastar	-
18	Jharkhand Movement	1845	Jharakand	-
19	Kond Revolution	1850	Orissa	Chief Bisioi.
20	First Freedom Struggle	1856-57	Sidu Murmu and Kanu Murmu	-
21	Bhil rebellion	1858	Banswara	Tantya Tope
22	Koi Revolt	1859	Bastar	
23	Gond Rebellion	1860	Ramji Gond	Adilabad
24	Synteng Tribal	1860-62	North East India	-
25	Kuki Invasion	1860s	Manipur	-
26	Juang Tribal	1861	Orissa	-
27	Koya	1862	Andhra Pradesh	Tammandora
28	Bhuiyas Rebellion	1868	Keonjhar	-
29	Daflas Rebellion	1875	North East India	-
30	Rani of Nagas Rebellion	1878-82	Manipur	
31	1stRampa Rebellion	1879	Vizagapatnam (Visakhapatnam)	-
32	Naga Movement	1879	North East India	Tikendraji
33	Sentinelese Tribal People	1883	Andaman and Nicober Island	-
34	Santhal Revolt	1885-86	Dhanbad	Sidhu and kanhu
35	Muria Gond Rebellion	1886	Eastern Madhya Pradesh	-
36	Mundal Rebellion	1889	Orissa	Birsa Munda
37	Lushei Rebellion	1892	Tripura	-
38	Bhumkal	1910	BastarChattisgarh	-
39	Samp Sabha Movement	1913	Rajasthan	Guru Govind
40	Tana Bhagat Movement	1913-14	Jharkhand	Tana Bhagat
41	KuKi Movement	1917-19	Manipur	Chieftains called haosa
42	Tana and Bhagad Movement	1920-21	Jharkhand	Tana Bhagat
43	2 <sup>nd</sup> Rampa Rebellion	1921-23	Visakhapatnam	-
44	Koya Rebellion	1922	Andhra Pradesh	Alluri Sree Rama Raju
45	Naga Rebellion	1932	Nagaland	Rani Guidallo
46	Gond and the Kolam	1941	Adilabad in Andhra Pradesh	-
47	Koraput Revolution	1942	Orissa	Lakshmana Naik
48	Andamanese Revolution	1942-45	Andaman and Nicobar	-
49	Bodo Movement	1987	Assam	Upendranath
50	DongriaKondh Movement	2008	Odisha	-
				i .







Buddhist Site	Features			
Lumbini, Nepal	It is the place where Queen Mayadevi gave birth to Siddhartha Gautama.			
Kapilavastu, Uttar Pradesh	Kapilavastu was the capital of Shakya.			
	It was the was the childhood home of Gautama Buddha			
Bodh Gaya, Bihar	It is the place where Gautama Buddha is said to have obtained			
	Enlightenment. Mahabodhi Temple, located in Bodh Gaya, is a UNESCO			
	World Heritage Site.			
Sarnath, Varanasi, Uttar	The deer park in Sarnath is where Gautama Buddha first taught the Dharma.			
Pradesh	It is also where the Buddhist Sangha came into existence.			
	It was also the site of the Buddha's DhammacakkappavattanaSutta, which			
	was his first teaching after attaining enlightenment.			
Rajgir, Nalanda, Bihar	It was the first capital of the kingdom of Magadha.			
	The two rock-cut caves here, were the favourite retreats of the Buddha. It was			
	on Rajgir hill that Buddha preached two of his most famous sermons. Rajgir			
	is equally important for the Jains as well as Hindus.			
Shravasti, Uttar Pradesh	It is closely associated with the life of Gautama Buddha, who is believed to			
	have spent 24 Chaturmasas here.			
	Shravasti was the capital of the Kosala Kingdom.			



Vaishali, Bihar	Gautama Buddha gave his last sermon here.
Kushinagar, Uttar Pradesh	This is the place where Gautama Buddha attained Parinirvana after his death.

Name	Origin from	Falls into	Length (km)
Ganges	Combined Sources	Bay of Bengal	2,525
Satluj	Mansarovar Rakas Lakes	Chenab	1,050
Indus	Near Mansarovar lake	Arabian Sea	2,880
Ravi	Kullu Hills near Rohtang Pass	Chenab	720
Beas	Near Rohtang Pass	Satluj	470
Jhelum	Verinag in Kashmir	Chenab	725
Yamuna	Yamunotri	Ganga	1,375
Chambal	M. P.	Yamuna	1,050
Ghagra	Matsatung Glacier	Ganga	1,080
Kosi	Near Gosain Dham Peak	Ganga	730
Betwa	Vindhyanchal	Yamuna	480
Son	Amarkantak	Ganga	780
Brahmaputra	Near Mansarovar Lake.	Bay of Bengal	2,900
Narmada	Amarkantak	Gulf of Khambat	1,057
Tapti	Betul Distt. in M. P.	Gulf of Khambat	724
Mahanadi	Raipur Distt. in Chhatisgarh	Bay of Bengal	858
Luni	Aravallis	Rann of Kuchchh	450
Ghaggar	Himalayas	Near Fatehabad	494
Sabarmati	Aravallis	Gulf of Khambat	416
Krishna	Western Ghats	Bay of Bengal	1,327
Godavari	Nasik dist. in Maharashtra	Bay of Bengal	1,465
Cauvery	Brahmair Range of Western Ghats	Bay of Bengal	805
Tungabhadra	Western Ghats	Krishna river	

Mahajanapada	Capital	Present Location		
Kasi	Varanasi	Varanasi		
Kosala	Sravasti	Uttar Pradesh East		
Anga	Champa	Bhagalpur and Munger		
Magadha	Rajagriha	Gaya and Patna		
Vajji	Vaishali	Bihar		
Malla	Kusinara	Deoria and Uttar Pradesh		
Chedi	Sothivati	Bundelkhand, MP		
Vatsa	Kusambi	Prayagraj		
Kuru	Indraprastha	Meerut and Haryana		
Panchala	Kampliya	Uttar Pradesh West		
Matsya	Viratnagar	Jaipur		
Surasena	Mathura	Uttar Pradesh West		
Assaka	Paithan	Bank of Godavari		
Avanti	Ujjaini	Madhya Pradesh/Malwa		
Gandhara	Taxila	Rawalpindi		
Kamboja	Pooncha	Kashmir and Hindukush		

#### **International Sports Cups and Trophies**

Cups And Trophies	Sports Name
American Cup	Yacht Racing
The Ashes	Test Crickets (England & Australia)
Colombo Cup	Football (India, Pakistan, Sri Lanka and Myanmar )
Corbillon Cup	World Table Tennis (Women)
Davis Cup	Tennis (Men)
Lord Derby Cup	Rugby
Billi Jean King Cup	Tennis (Women)





Holker Trophy	Bridge
Jules Rimet Trophy	World Football (Soccer)
Merdeka Cup	Football (Asian Cup)
Ryder Cup	Golf (Men)
Solheim Cup	Golf (Women)
Sudirman Cup	Badminton
Sultan Azlan Shah Cup	Field Hockey (Men)
Swaythling Cup	World Table Tennis (Men)
Thomas Cup	Badminton (Men)
Tunku Abdul Rahman Cup	Asian Badminton
U. Thant Cup	Lawn Tennis
Uber Cup	Badminton (Women)
Yonex Cup	Badminton
Walker Cup	Golf
Wightman Cup	Tennis (Women)
William Jones Cup	Basketball
Wimbledon Trophy	Tennis
Prudential World Cup	Cricket

**National Sports Cups and Trophies** 

Sports Cup And Trophies	Sports
Beighton Cup	Hockey
Ezra Cup	Polo
Deodhar Trophy	Cricket
Dhyan Chand Award	Lifetime Achievement Sporting Honour in India
B. C Roy Trophy	Football (National Junior)
Duleep Trophy	First Class Cricket
Durand Cup	Football
Guru Nanak Dev Gold Cup	Hockey
Z. R. Irani Cup	Cricket
Maharaja Ranjit Singh Gold Cup	Hockey
Murugappa Gold Cup	Hockey
Nehru Trophy	Boat Race
Nizam Gold Cup	Horse Racing
Rangaswami Cup	Hockey (National Championship)
Ranji Trophy	Cricket (National Championship)
Rovers Cup	Football
Santosh Trophy	Football
Sheesh Mahal Trophy	Cricket
Subroto Mukherjee Cup	Football
Vittal Trophy	Football
Vijay Hazare Trophy	Cricket
Vizzy Trophy	Cricket
Yadavindra Cup	Hockey

#### Major Straits of the World

injor outling or the front	101 0111110 01 1110 11 0111				
Name Joins		Locations			
Malacca Strait	Andaman Sea & South China Sea	Indonesia - Malaysia			
Palk Strait	Palk Bay & Bay of Bengal	India-Sri Lanka			
Sunda Strait	Java Sea & Indian Ocean	Indonesia			
Yucatan Strait	Gulf of Mexico and Carribbean Sea	Mexico-Cuba			





Mesina Strait	Mediterranean Sea	Italy-Sicily	
Otranto Strait	Adriatic Sea & Ionian Sea	Italy-Albania	
Bab-el-Mandeb Strait	Red Sea & Gulf of Aden	Yemen-Djibouti	
Cook Strait	South Pacific Ocean	New Zealand (N & S islands)	
Mozambique Strait	Indian Ocean	Mozambique - Malagassy	
North Channel	Irish Sea & Atlantic Ocean	Ireland-England	
Taurus Strait	Arafura Sea & Gulf of Papua	Papua New Guinea - Australia	
Bass strait	Tasman Sea & South Sea	Australia	
Bering Strait	Bering Sea & Chuksi Sea	Alaska-Russia	
Bonne-Fasio Strait	Mediterranean Sea	Corsika-Sardinia	
Bosporous Strait	Black Sea and Marmara Sea	Turkey	
Dardenleez Strait	Marmara Sea and Agean Sea	Turkey	
Davis strait	Baffin Bay & Atlantic Ocean	Greenland-Canada	
Denmark strait	North Atlantic and Arctic Ocean	Greenland-Iceland	
Dover strait	English Channel & North Sea	England-France	
Florida Strait	Gulf of Mexico and Atlantic Ocean	USA-Cuba	
Hormuz strait	Gulf of Persia & Gulf of Oman	Oman-Iran	
Hudson strait	Gulf of Hudson & Atlantic Ocean	Canada	
Gibraltar Strait	Mediterranean Sea & Atlantic Ocean	Spain-Morocco	
Magellan strait	Pacific and South Atlantic Ocean	Chile	
Makkassar Strait	Java Sea & Celebeze Sea	Indonesia	
Tsungaru Strait	Japan Sea and Pacific Ocean	Japan (Hokkaido-Honshu island)	
Tatar Strait	Japan Sea & Okhotsk Sea	Russia (E Russia-Sakhalin Island)	



#### **DEFENCE & SECURITY**

#### Defence Budget in 2025-2026

#### **Context**

- The Union Budget 20-25-26 has <u>allocated ₹6.8 lakh crore to the defence sector, marking a 9% increase from the previous year's budget estimate of ₹6.22 lakh crore</u>.
- This allocation focuses on military modernization, self-reliance and operational readiness.

#### **Breakdown of the Defence Budget**

- Total Defence Outlay: ₹6.8 lakh crore (1.9% of GDP).
- <u>Capital Expenditure (Modernization & Procurement):</u> ₹1.8 lakh crore, emphasizing indigenous manufacturing under Aatmanirbhar Bharat.
- Revenue Expenditure: ₹3.11 lakh crore, covering salaries, maintenance and logistics.
- **Defence Pensions:** ₹1.6 lakh crore, ensuring financial security for retired personnel.

#### **Defence Allocation Year-Wise**

Category	FY2024-25 (BE)	FY2024-25 (RE)	FY2025-26 (BE)	Growth (%)
<b>Total Defense Budget</b>	₹6.22 lakh cr	₹6.41 lakh cr	₹6.8 lakh cr	+9%
<b>Modernization &amp; Procurement</b>	₹1.62 lakh cr	₹1.75 lakh cr	₹1.8 lakh cr	+8.8%
Revenue Expenditure	₹2.97 lakh cr	₹3.05 lakh cr	₹3.11 lakh cr	+4.9%
Pension Outlay	₹1.38 lakh cr	₹1.52 lakh cr	₹1.6 lakh cr	+14.5%
Defence Budget as % of GDP	1.8%	1.85%	1.9%	

### DRDO successfully conducts Three Vshorads Trials

#### **Context**

 The Defence Research and Development Organisation (DRDO) successfully conducted three consecutive flight trials of the Very ShortRange Air Defence System (VSHORADS) on February 1, 2025, at Chandipur, Odisha.

#### **Details**

 VSHORADS is a Man-Portable Air Defence System (MANPADS) designed for quick deployment by the Army, Navy and Air Force.





- The trials successfully intercepted and destroyed all targets.
- Developed by: Research Centre Imarat (RCI) and DRDO labs, under the Aatmanirbhar Bharat initiative.
- Significance: Enhances India's air defence capabilities and reduces dependence on foreign defence systems.

#### DRDO-IIT Hyderabad unveils Large Area Additive Manufacturing System

#### **Context**

 The Defence Research and Development Organisation (DRDO), in collaboration with IIT Hyderabad and industry partners, has developed a Large Area Additive Manufacturing (LAAM) system at the DRDO-Industry-Academia Centre of Excellence (DIA-CoE), IIT Hyderabad.

#### **Details**

- This system marks a major advancement in India's aerospace and defense manufacturing sectors by enabling the large-scale production of metal components through additive manufacturing technology.
- Technology Used:Powder-based Directed Energy Deposition (DED), utilizing laser and blownpowder techniques to manufacture metal parts.
- **Build Volume:1m x 1m x 3m**, making it one of India's largest metal 3D printing systems.
- Key Features:
  - Dual-head system for thermal balancing and high-speed deposition.
  - Complex geometries suitable for aerospace and defense applications.

- Successfully fabricated a 1-meter-tall rocket component.
- Significance:
  - Boosts self-reliance in defense and aerospace manufacturing.
  - Reduces dependence on traditional fabrication methods.
  - Strengthens India's additive manufacturing ecosystem.

#### Indian Navy's First Training Squadron Docks at Changi Naval Base

#### **Context**

The Indian Navy's First Training Squadron (1TS arrived at Changi Naval Base, Singapore, on 6th February 2025 as part of its Long-Range Training Deployment to Southeast Asia.

#### **Key Facts:**

- Squadron Name: First Training Squadron (1TS)
- Ships Involved:INS Sujata, INS Shardul and ICGS Veera
- Location: Changi Naval Base, Singapore
- Purpose:Maritime cooperation, professional exchanges and cross-training visits
- Strategic Importance:
  - Strengthens India-Singapore naval cooperation.
  - Reinforces SAGAR (Security and Growth for All in the Region).
  - Supports regional security and stability in the Indo-Pacific.

This visit **demonstrates India's commitment** to strengthening **defense diplomacy** and maintaining **strong maritime partnerships** in the Indo-Pacific region.

#### **Exercises in News**

Exercise	Context	Details				
EX Winged	The Indian Army and Indian Air	The exercise, focused on special airborne operations,				
Raiders	Force conducted a joint exercise,	involved personnel practicing airborne insertion				
	EX Winged Raiders.	techniques using fixed-wing and rotary-wing aircraft,				
		including the Chinook helicopter. This exercise aligns				
		with the Indian government's goal of establishing an				
		integrated theatre command to improve coordination and				
		mission readiness.				
Aero India	The 15th edition of Aero India,	Aero India, a biennial air show and aviation exhibition, is				
2025	themed 'The Runway to a Billion	organized by the Defence Exhibition Organisation,				
	Opportunities', was recently held	Ministry of Defence. Held in Bengaluru, it is India's				
	at Yelahanka Air Force Station,	flagship aerospace and defence event, showcasing global				
	Bengaluru.	aerospace vendors and thrilling the audience with				
		spectacular aerobatic flying displays by the Indian Air				
		Force (IAF).				





Exercise	The India-Egypt Joint Special	Exercise Cyclone is specifically designed to enhance		
CYCLONE-III	Forces Exercise CYCLONE-III	bilateral military cooperation between India and Egypt.		
	commenced on February 10, 2025,	First edition: Held in India.		
	at the Mahajan Field Firing	Second edition: Held in Egypt in January 2024.		
	Ranges in Rajasthan.	Third edition: Currently underway in Rajasthan.		
		This third edition aims to enhance military cooperation,		
		focusing on interoperability and special operations		
		tactics between both countries.		
TROPEX 25	TROPEX 25 was recently	The Theatre Level Operational Readiness Exercise		
	conducted from January to March	(TROPEX) is an annual inter-service military exercise		
	2025 in the Indian Ocean Region.	that involves all branches of the <b>Indian Armed Forces</b> —		
		the Indian Army, Air Force, Navy and the Coast Guard.		
		The exercise is designed to assess and enhance the <b>combat</b>		
		readiness of these forces, while improving		
		interoperability and joint operations in complex		
		scenarios.		
		Started in 2005, the exercise has been conducted almost		
		every year since, with exceptions in 2016 and 2018.		
		TROPEX 25 aims to validate naval strategies, enhance		
		operational accuracy, integrate cyber and electronic		
		warfare and strengthen inter-service coordination.		

#### **Indo-Tibetan Border Police (ITBP)**

#### **Context:**

 The ITBP has moved at least 33 border outposts (BOPs) closer to the India-China border as part of its forwardisation plan.

#### **ITBP**

- **Background:** Formed in 1962 post the Sino-Indian War, created for deployment along the India-China border.
- Legal Foundation: Initially under the CRPF Act, the ITBPF Act was passed in 1992, with rules framed in 1994.
- Full Fledged Status: Declared a full-fledged central armed police force in 2004 under the Ministry of Home Affairs.
- Motto: "Shaurya-Dridhata-Karma Nishtha" (Courage - Determination - Devotion to Duty).
- Guarded Area: Guards the 3,488 km long India-China border through 197 BOPs located at altitudes from 9,000 feet to 18,750 feet.
- **Specialization:** A specialized mountain force, with personnel trained as mountaineers and skiers.
- **Head of the Force:** Director General.
- **Nodal Ministry:** Ministry of Home Affairs.
- Headquarters: New Delhi.

#### **Pralay Missile**

#### **Context:**

 The inclusion of the Pralay missile underscores India's advancing capabilities in indigenous defence technology.

#### **Details**

- <u>Development:</u> An indigenously developed shortrange quasi-ballistic surface-to-surface missile by DRDO.
- <u>Purpose</u>: Designed for deployment along the Line of Actual Control (LAC) and Line of Control (LoC).
- <u>Engine</u>: Features a solid propellant rocket engine.
- Range: Has a range of 150-500 km.
- <u>Warhead:</u> Capable of carrying conventional warheads.
- <u>Trajectory:</u> Has the ability to alter its trajectory mid-flight.

#### **Armed Forces Tribunal (AFT)**

#### **Context:**

 The Supreme Court has suggested setting up Benches of the Armed Forces Tribunal (AFT) in Jammu and Kashmir and Himachal Pradesh to address the growing number of defence-related cases from these regions.

#### **About the Armed Forces Tribunal (AFT)**

- Established: Under the Armed Forces Act, 2007.
- Functions under: Ministry of Defence (MoD).
- Purpose: Resolves military disputes and appeals from courts-martial.

#### **Functions:**

 Disputes: Resolves issues related to service conditions, enlistment, commission, under the Army Act, Navy Act and Air Force Act.





- Appeals: Hears appeals from courts-martial.
- **Dismissal**: The tribunal can dismiss appeals if the court-martial's findings are justified.
- **Incidental Matters**: Deals with related matters arising from military laws.

The AFT has **original jurisdiction** in **service matters** and **appellate jurisdiction** in **court-martial** matters. Appeals from AFT decisions are heard by the **Supreme Court**.

#### **Benches:**

In addition to the main bench in **New Delhi**, AFT has regional benches in:

 Chandigarh, Lucknow, Kolkata, Guwahati, Chennai, Kochi, Mumbai, Jabalpur, Srinagar and Jaipur.

#### **Composition:**

- Judicial Members: Retired High Court Judges.
- Administrative Members: Retired Armed Forces personnel with a Major General rank or equivalent.
- **JAG**: Appointed as an **administrative member** for at least one year.

#### **Procedure:**

• The tribunal follows the **Armed Forces Tribunal** (Rules of Procedure) 2008.

 All proceedings are conducted in English and the tribunal follows procedures similar to High Courts.

### Ministry of Defence declares 2025 as 'Year Of Reforms'

#### **Context:**

• 2025 will focus on strengthening India's defense capabilities to ensure security and sovereignty.

#### **Key Areas for Intervention:**

- Integrated Theater Commands (ITC): Joint Army, Navy and Air Force commands for regional security.
- **Emerging Technologies:** Focus on cyber, space, AI/ML and hypersonics.
- Technology Transfer & Knowledge Sharing: Business facilitation, PPPs for innovation.
- Cooperation: Civil-military coordination and interagency training.
- **Defense Exports & R&D:** Enhance India's position as a defense exporter.

#### **Defense Modernization:**

- Private Sector Involvement: iDEX and SRIJAN portals for indigenization.
- **FDI Policy:** 74% FDI limit for defense, up to 100% for advanced tech.



#### **ECONOMICS**

### India's rise in Mobile manufacturing Context:

• India has emerged as a global leader in mobile manufacturing, transforming from an importdependent market to a self-reliant production hub. Driven by policy reforms, strategic investments and the 'Make in India' initiative, the sector has witnessed unprecedented growth, contributing to economic expansion and job creation.

#### **Transformation in Production Capacity:**

- From 2 to 300+ Units: India had just 2 mobile manufacturing units in 2014; today, the number has surged to over 300, driving domestic production.
- Local Production Surge: The share of India-made mobile phones has grown from 26% in 2014-15 to over 97% today.

#### **Economic Milestones:**

• Manufacturing Value Boom: Mobile manufacturing value skyrocketed from ₹18,900 crore (FY14) to ₹4,22,000 crore (FY24).

• Export Growth: From negligible exports in 2014 to ₹1,29,000 crore in FY24, reflecting India's strong global market presence.

#### **Employment and Industry Impact:**

- **Job Creation:** The sector has generated **12 lakh+ direct and indirect jobs** in the last decade.
- Value Chain Development: Focus on semiconductors and electronic components to deepen local manufacturing capabilities.

#### **Government Initiatives & Strategic Vision:**

- 'Make in India' has driven self-reliance and strengthened the domestic manufacturing ecosystem.
- India Semiconductor Mission & major projects (Micron, Tata Electronics, CG Power, Keynes) mark a shift towards chip and component production.

### **Rise in Female Labour Force Participation: Economic Survey 2024-25**

#### **Context**

• The Economic Survey 2024-25 has reported a





**significant increase** in India's **Female Labour Force Participation Rate (FLFPR)**, primarily driven by rural women entering the workforce.

#### **Key Highlights of the Survey**

#### **Increase in FLFPR**

- FLFPR rose from 23.3% (2017-18) to 41.7% (2023-24).
- 21 states report FLFPR between 30% and 40%.
- 7 states/UTs exceed 40% FLFPR, with Sikkim leading at 56.9%.

#### Rural Women's Participation

- Rural FLFPR <u>increased from 24.6% (2017-18) to 47.6% (2023-24).</u>
- Government schemes like Deendayal Antyodaya Yojana (DAY-NRLM) have been key in enhancing rural women's workforce participation.

#### Union Budget 2025-26

#### Context

 The Union Budget 2025-26, presented by Finance Minister Nirmala Sitharaman on February 1, 2025, outlines India's economic priorities and fiscal plans.

#### **Budget Estimates 2025-26**

- Total receipts (excluding borrowings): ₹34.96 lakh crore
- Total expenditure: ₹50.65 lakh crore
- Net tax receipts: ₹28.37 lakh crore
- Fiscal deficit:4.4% of GDP
- Capital expenditure: ₹11.21 lakh crore (3.1% of GDP)

	Actual 2023-24	Budgeted 2024-25	Revised 2024-25	Budgeted 2025-26	% change (2024-25 RE
		2021 20		2020 20	to 2025-26
					BE)
Defence	6.09,504	6,21,941	6,41,060	6,81,210	6.3%
Road Transport and Highways	2,75,986	2,78,000	2,80,519	2,87,333	2.4%
Railways	2,45,791	2,55,393	2,55,348	2,55,445	0.0%
Home Affairs	1,96,872	2,19,643	2,20,371	2,33,211	5.8%
Consumer Affairs, Food and Public Distribution	2,32,496	2,23,323	2,12,820	2,15,767	1.4%
Rural Development	1,63,642	1,80,233	1,75,878	1,90,406	8.3%
Chemicals and Fertilisers	1,91,165	1,68,500	1,86,653	1,61,965	-13.2%
Agriculture and Farmers' Welfare	1,18,147	1,32,470	1,41,352	1,37,757	-2.5%
Education	1,23,365	1,20,628	1,14,054	1,28,650	12.8%
Communications	1,11,339	1,37,294	1,50,201	1,08,105	-28.0%
Health and Family Welfare	83,149	90,959	89.974	99,859	11.0%
Jal Shakti	95,109	98,714	51,558	99,503	93.0%
Housing and Urban Affairs	68,565	82,577	63,670	96,777	52.0%
Other Ministries	19,28,316	22,10,838	21,33,030	23,69,358	11.1%
Total Expenditure	44,43,447	48,20,512	47,16,487	50,65,345	7.4%

#### **Key Growth Engines**

- <u>Agriculture:</u> Launch of **PM Dhan-Dhaanya Krishi Yojana** in 100 districts, KCC loan limit raised to ₹5 lakh and initiatives for pulses, vegetables and cotton productivity.
- <u>MSMEs:</u> Investment & turnover limits increased, loan schemes for women entrepreneurs, toy manufacturing hub and National Manufacturing Mission.
- <u>Investment:</u> ₹1.5 lakh crore in **interest-free loans** for states, **Atal Tinkering Labs** in 50,000 schools, BharatNet broadband expansion and ₹20,000 crore for R&D.
- Exports: Export Promotion Mission, BharatTrade Net and infrastructure support for fisheries and air cargo exports.

#### **Financial Sector Reforms**

- FDI in insurance raised to 100%
- High-Level Committee for regulatory reforms
- Investment Friendliness Index for states
- Jan Vishwas Bill 2.0 decriminalizing 100+ provisions

#### **Taxation & Fiscal Policy**

- Personal Income Tax: No tax up to ₹12 lakh, ₹75,000 standard deduction
- TDS/TCS Rationalization: Higher thresholds for senior citizens & rent





• <u>Indirect Tax Reforms:</u> Lower customs duty on lithium-ion batteries, fish, leather and lifesaving medicines fully exempted.

#### **New Tax Regime**

Income Slab	Individuals (Aged below 60 Yrs)	Senior Citizens (Aged 60 Yrs and above but below 80 Yrs)	Super Senior Citizens (Aged 80 Yrs and above)		
Up to Rs.2,50,000	Nil	Nil	Nil		
Rs.2,50,001 to Rs.3,00,000	5%	Nil	Nil Nil 20% 30%		
Rs.3,00,001 to Rs.5,00,000	5%	5%			
Rs.5,00,001 to Rs.10,00,000	20%	20%			
Rs.10,00,001 and above	30%	30%			
If you are NOT claiming deductions and exemptions					
Income Sla	ab	Income Tax Rate			
Up to Rs.4,00,000		Nil			
Rs.4,00,001 to Rs.	.8,00,000	5% (with Tax Rebate Under Sec.87A)			
Rs.8,00,001 to Rs.	12,00,000	10% (with Tax Rebate Under Sec.87A)			
Rs.12,00,001 to Rs	.16,00,000	15% ( (with Tax Rebate Under Sec.87A up to Rs.12.75 Lakh)			
Rs.16,00,001 to Rs.20,00,000		20%			
Rs.20,00,001 to Rs	.24,00,000	25%			
Rs.24,00,0	00	30%			

#### **Nuclear Energy Expansion**

• ₹20,000 crore allocated for Small Modular Reactors (SMRs)

### Cap on Health Insurance Premium hikes for Senior Citizens

#### Context

 The Insurance Regulatory and Development Authority of India (IRDAI) has put a cap on health insurance premium hikes for senior citizens.

#### **Details**

- The Insurance Regulatory and Development Authority of India (IRDAI) has mandated that health insurance premiums for policyholders aged 60 and above cannot increase by more than 10% per year without prior approval.
- This move aims to protect senior citizens from steep premium hikes, ensuring affordability and financial stability for elderly individuals who often rely on fixed incomes.

#### **Key Regulations for Insurers**

- Premium hikes <u>beyond 10% require IRDAI</u> <u>approval.</u>
- Withdrawal of senior citizen-specific insurance plans needs regulatory consent.
- Insurers encouraged to negotiate standardized hospital rates, similar to PMJAY, to control hospitalization costs.
- <u>Greater transparency</u> Insurers must publicize measures benefiting senior citizens.

#### Fiscal Health Index 2025

#### Context:

 Launched by the Chairman of the 16th Finance Commission, developed by NITI Aayog to assess the fiscal performance of Indian states.

#### **About the Fiscal Health Index 2025:**

- Evaluation Criteria: Assesses 18 major states based on five sub-indices: Quality of Expenditure, Revenue Mobilization, Fiscal Prudence, Debt Index and Debt Sustainability.
- **Data Source:** Uses data from the Comptroller and Auditor General (CAG) from 2014-15 to 2021-22.

#### **Key Highlights:**

 Odisha ranked first with a score of 67.8, excelling in debt sustainability, revenue mobilization and capital expenditure.

#### Unified Pension Scheme (UPS)

#### **Context:**

 The Union Government has introduced the Unified Pension Scheme (UPS) for central employees, to take effect from April 1, 2025.

#### **About UPS:**

 Objective: Address grievances related to the National Pension System (NPS) and to provide a balance between employee concerns and fiscal





responsibility.

#### Eligibility:

- Central Government Employees under NPS, who can opt for UPS.
- Retired Employees (since 2004) also eligible for UPS.
- **Pre-2004 Employees** will remain under the Old Pension Scheme (OPS).

#### **Key Features:**

- **Guaranteed Pension:** 50% of the last 12-month average basic pay after 25 years of service.
- **Proportionate Pension:** For service between 10-25 years.
- **Minimum Pension:** ₹10,000 per month for employees with at least 10 years of service.
- **Family/Survivor Pension:** 60% of last-drawn salary.
- CPI-IW Indexation: Pension adjusted for inflation.

#### **QS World Future Skills Index 2025**

#### **Context:**

 India ranks 2nd globally in the QS World Future Skills Index 2025, highlighting its potential in emerging sectors.

#### **About the Index:**

- Developed by **Quacquarelli Symonds (QS)**, the index evaluates countries based on:
  - 1. Skills Fit
  - 2. Academic Readiness
  - 3. Future of Work
  - 4. Economic Transformation

#### **Key Highlights of India's Performance:**

- <u>Global Ranking</u>: 2nd in job market preparedness.
- <u>Future of Work:</u> India ranks 2nd globally (99.1), just behind the United States.
- Overall: India ranks 25th, being recognized as a "future skills contender."

### RBI cuts Repo Rate by 25 bps: First Reduction in 5 Years

#### **Context**

The Reserve Bank of India (RBI) has cut the reporate by 25 basis points (bps) to 6.25%, marking the first reduction in five years. The Monetary Policy Committee (MPC) retained its neutral stance to balance growth and inflation risks.

#### **Key Highlights:**

- Repo Rate Cut: Reduced by 25 bps to 6.25%, the first since May 2020.
- Other Rate Adjustments:
  - Standing Deposit Facility (SDF): Reduced to 6.00%.

- Marginal Standing Facility (MSF) & Bank Rate: Lowered to 6.50%.
- GDP Growth Projections:
  - FY25: Revised to 6.4% (from 6.6%) due to moderated Q3/Q4 growth.
  - FY26: Projected at 7%, with quarterly estimates of 6.7% (Q1), 7.0% (Q2) and 6.5% (Q3 & Q4).
- Inflation Outlook:
  - o **FY25 CPI:** Estimated at **4.8**% (Q4 at **4.4**%).
  - FY26 CPI: Expected at 4.2%, driven by easing food inflation and favorable monsoon forecasts.

#### **Liquidity & Forex Measures:**

- LCR Norms: Implementation deferred to March 31, 2026, allowing banks a smooth transition.
- Forex Reserves:\$630.6 billion (as of Jan 31, 2025), covering 10 months of imports.

#### **Monetary Policy Committee (MPC):**

- What it is: A six-member committee responsible for setting policy rates.
- Composition:
  - o RBI Governor (Chairperson)
  - o RBI Deputy Governor
  - One RBI officer
  - Three external members appointed by the government
- Objective: Achieve price stability while promoting economic growth.
- Meetings: Held at least four times a year.

#### **Key Definitions:**

- Repo Rate: The interest rate at which RBI lends to banks.
- Liquidity Coverage Ratio (LCR): Ensures banks maintain high-quality liquid assets (HQLA) for 30-day stress scenarios.

### EPFO Achieves Record claim Settlements in FY 2024-25

#### Context

The Employees' Provident Fund Organisation (EPFO) processed claims for over 5 crore subscribers in the fiscal year 2024-25, disbursing ₹2.05 lakh crore. This surpasses the previous fiscal's 4.5 crore claims worth ₹1.82 lakh crore. The achievement is attributed to transformative reforms introduced by EPFO.

#### **Key Reforms Driving the Record Settlements**

- Automated Claim Settlements: Auto-settled claims doubled to 87 crore in FY 2024-25, up from 89.52 lakh in FY 2023-24.
- Streamlined PF Transfers:





- 8% of transfer claims now require employer attestation.
- 48% of claims are directly submitted by members.
- o 44% of transfers are automated.
- Simplified Member Profile Corrections:
  - 18% of corrections are self-approved by members.
  - o Only 1% require employer approval.
  - Minimal 4% need EPFO office intervention.

 Improved KYC Compliance: Faster approvals and reduced rejection rates (11% by employers, 0.21% by regional offices).

#### **EPFO: Role and Key Functions**

- Provident Fund Management: Timely collection and disbursement of EPF contributions.
- **Pension Scheme Administration**: Managing **retirement pensions** for employees.
- Insurance Scheme Management: Providing insurance benefits to employees and their families.



#### **SPORTS**

#### 38th National Games 2025

#### All about the 38th National Games

- Host State: Uttarakhand
- **Duration:** January 28 February 14, 2025
- Venue: Haldwani (Closing), Dehradun, Haridwar, Pithoragarh
- Theme: 'Green Games' (Sustainability focus)
- **Participants:** 10,000+ athletes, 37 teams
- **Sports Disciplines:** 35 sports, 4 demonstration events
- **Eco-friendly Initiatives:** E-waste medals, tree plantations for medalists, bamboo fiber water bottles, wheat fiber coffee mugs
- **Significance:** Boosted India's 2036 Olympics bid, promoted Uttarakhand as a sports hub

#### **National Games**

- India's first few Olympic Games, now renamed as National Games, were held in Lahore (now in Pakistan), Delhi, Allahabad, Patiala, Madras, Calcutta and Bombay.
- Motto: "Get Set Play"
- <u>First event:</u> 1924; 101 years ago
- The first Modern National Games on the lines of the Olympics were held in 1985 in New Delhi.
- Occur every: 2 years, sometimes uneven
- <u>Headquarters:</u> Olympic Bhawan, B-29, Qutub Institutional Area, New Delhi

### Cristiano Ronaldo: Highest-Paid Athlete Of 2025

#### **Key Pointers**

Top Earner: Cristiano Ronaldo – \$285M

#### **Other Top Earners:**

 Jon Rahm - \$218M, Lionel Messi - \$135M, LeBron James - \$128.7M, Neymar - \$110M

#### No Women in Top 100:

• Coco Gauff (\$30.4M) was the highest-paid female

athlete but below the \$37.5M threshold.

#### Babar Azam's Historic 6,000 Odi Runs Key Pointers

- Babar Azam (123 innings) equals Hashim Amla as the fastest to 6,000 ODI runs.
- Surpassed Virat Kohli's record as the fastest Asian to reach the milestone (Kohli took 136 innings).
- Achieved the feat during the ODI tri-series final vs New Zealand at National Stadium.

#### Shikhar Dhawan named ICC Champions Trophy 2025 Ambassador

#### **Tournament Details**

- <u>ICC Champions Trophy 2025:</u> February 19 March 9, 2025
- <u>Hosts</u>: Pakistan & Dubai
- Shikhar Dhawan appointed official event ambassador along with three other cricketing legends.

#### Shikhar Dhawan's Legacy in the Champions Trophy

- **Highest run-scorer for India** in Champions Trophy history (701 runs).
- Only player to win the Golden Bat twice consecutively (2013 & 2017 editions).
- Played a key role in India's success in both tournaments.

### **Champions Trophy: A Prestigious Cricket Tournament**

#### Introduction

 The Champions Trophy is an ICC-organized international cricket tournament featuring top teams in a limited-overs format. It is known for its intense competition and high stakes, making it a significant event in the cricketing calendar.





#### **History and Evolution**

- **Inception (1998):** Originally called the **ICC KnockOut**, featuring 8 teams.
- Renamed in 2002 as the Champions Trophy, evolving into a marquee event.
- Milestones:
  - o 1998: South Africa won the first edition.
  - o **2013:** India triumphed in a rain-affected final.
  - 2017: Pakistan secured a historic victory over India.

#### **Tournament Format**

- Typically features **8 teams** in a **round-robin format** followed by **semi-finals** and a **final**.
- Unlike the ICC World Cup (more teams, longer format) and T20 World Cup (shorter format), it maintains a concise yet highly competitive structure.

### Pankaj Advani clinches 36<sup>th</sup> National Title in Snooker

#### Context

 Pankaj Advani, secured his 36th national title and 10th men's snooker championship at the Yashwant Club, defeating Brijesh Damani in the final.

#### **Key Highlight**

• **Milestone Victory:** 36th national gold, 10th men's snooker title.

#### Significance:

• Qualified for Asian Snooker Championship (Feb 15, 2025).

### Meghalaya to host 39th National Games in 2027

#### Context

 The Indian Olympic Association (IOA) has officially announced Meghalaya as the host of the 39th National Games.

#### **Details**

- IOA President PT Usha confirmed this decision.
- 39th National Games is scheduled for February/March 2027.

#### **Recent and Upcoming Hosts**

- 35th Edition (2015): Kerala
- 36th Edition (2022): Gujarat
- 37th Edition (2023): Goa
- **38th Edition (2024):** Uttarakhand (**main venue: Dehradun**)
- 39th Edition (2027): Meghalaya

### Kyrian Jacquet wins 2025 Chennai Open, secures First ATP Title

#### Context

 French tennis player Kyrian Jacquet claimed his maiden ATP title by winning the 2025 Chennai Open men's singles.

#### **Details**

#### **Key Highlights**

- Champion: Kyrian Jacquet (France)
- Runner-up: Elias Ymer (Sweden)
- Final Score:7(7)-6(1), 6-4
- Event Type: ATP 100 Challenger Tournament
- Venue: SDAT Tennis Stadium, Nungambakkam, Tamil Nadu

#### **About the ATP Challenger Tour**

- Organized by: Association of Tennis Professionals (ATP)
- Second-tier competition below the ATP Tour
- Provides ranking points and serves as a pathway to ATP Tour events
- Chennai Open: ATP 100 event offering 100 points and \$17,500 prize money to the winner

#### Association of Tennis Professionals (ATP)

The Association of Tennis Professionals (ATP), founded in 1972, governs men's professional tennis through the ATP Tour and ATP Challenger Tour. It evolved from the Grand Prix tennis tournaments and World Championship Tennis. The global headquarters is in London, with regional offices in Florida, Monaco and Sydney.

#### Jil Teichmann wins 2025 Mumbai Open Context

 Swiss tennis player Jil Teichmann won the 2025 Mumbai Open, claiming the Women's Tennis Association 125 singles title by defeating Mananchaya Sawangkaew of Thailand in the final.

#### **Details**

The tournament, <u>India's only Women's Tennis</u>
 <u>Association event</u>, was held from 3 to 9 February
 2025 at the Cricket Club of India, Mumbai.

#### Key Highlights - 2025 Mumbai Open

- Winner: Jil Teichmann from Switzerland
- Runner-up: Mananchaya Sawangkaew from Thailand
- Final Score: 6-3, 6-4
- Venue: Cricket Club of India, Mumbai
- Category: Women's Tennis Association 125 event
- Surface: Outdoor Hardcourt
- Edition: Fourth edition (Previously held in 2017, 2018 and 2024)

#### **Prize Money and Ranking Points**

 Winner: Fifteen thousand dollars and one hundred twenty-five ranking points





 Runner-up: Eight thousand four hundred dollars and eighty-one ranking points

#### About the Mumbai Open

- First Held: 2017 (Winner: Aryna Sabalenka)
- India's only Women's Tennis Association event
- **Formats**: Singles and Doubles
- Surface: Hardcourt

#### About the Women's Tennis Association

- <u>Founded:</u> 1973 by Billie Jean King from the United States of America
- Headquarters: Florida, United States of America
- <u>Tournament Levels:</u> Women's Tennis Association 1000, Women's Tennis Association 500, Women's Tennis Association 250, Women's Tennis Association 125 (Mumbai Open is a Women's Tennis Association 125 event)

#### Rohit Sharma becomes Second-highest Sixhitter in One Day International Cricket history

#### Context

 India's captain Rohit Sharma delivered a remarkable performance in the second One Day International against England in Cuttack, leading India to a four-wicket victory while setting multiple records.

#### **Details**

His 119-run innings off 90 balls, featuring 12 fours and 7 sixes, helped him surpass Chris Gayle to become the second-highest six-hitter in One Day International history, trailing only Shahid Afridi. Additionally, Rohit overtook Sachin Tendulkar to become the second-highest runscorer for India as an opening batsman in international cricket.

#### **Dimuth Karunaratne Retires**

#### **Context**

 Former Sri Lankan captain Dimuth Karunaratne has announced his retirement from Test cricket after playing his 100th Test match against Australia in Galle.

#### **Details**

The 36-year-old opener ends his career with 7,222
Test runs, including 16 centuries, leaving behind a
legacy as one of Sri Lanka's finest Test openers.

# Varun Chakravarthy becomes India's Second-oldest One Day International debutant

#### **Context**

• At 33 years and 164 days, Varun Chakravarthy

became India's second-oldest cricketer to make a One Day International debut

#### Key Highlights of Varun Chakravarthy's Debut

- Age at debut: 33 years, 164 days.
- India's second-oldest One Day International debutant, behind Farokh Engineer.
- Took Phil Salt's wicket in his first spell.

#### Shrachi Rarh Bengal Tigers clinch Hockey India League Title

#### Context

• The Men's Hockey India League (HIL) 2024-25 season ended with an electrifying final.

#### **Details**

- Shrachi Rarh Bengal Tigers secured a 4-3 victory against Hyderabad Toofans at the Birsa Munda International Hockey Stadium, Rourkela.
- The closely contested match saw Jugraj Singh's hat trick and Sam Lane's decisive late goal sealing the title for the Tigers.

### Wriddhiman Saha retires from Cricket Context

Former India wicketkeeper-batter Wriddhiman
 Saha has retired from all formats of cricket at the age of 40.

#### **Details**

 Renowned for his exceptional wicketkeeping skills and resilience, Saha played his final match for Bengal against Punjab in the 2024-25 Ranji Trophy Elite Group C. He retired from international cricket in November 2024.

#### **Domestic and International Career**

- First-class debut in 2007.
- Played 142 first-class matches, scoring 7,169 runs at an average of 41.43, with 14 centuries and 44 fifties.
- Replaced MS Dhoni in Test cricket as India's first-choice wicketkeeper after Dhoni's retirement in 2014.

#### **Memorable Achievement**

• First Indian to score a century in an IPL final (2014, for Kings XI Punjab).

#### **Fastest Century in T20 International Cricket**

- Fastest T20I Century Sahil Chauhan (27 Balls)
- The record for the fastest T20I century is held by Sahil Chauhan of Estonia, who reached his 100 in just 27 balls against Cyprus on June 17, 2024.

Simona Halep retires at 33 after Two Grand Slam Titles





#### Context

 Simona Halep, a two-time Grand Slam champion and former World No. 1, has announced her retirement from professional tennis at the age of 33.

#### **Career Achievements**

- Former World No. 1 in WTA rankings (first reached in 2017).
- Grand Slam Titles:
  - $\circ$  French Open 2018 (defeated Sloane Stephens).
  - o Wimbledon 2019 (defeated Serena Williams).

#### R Praggnanandhaa wins Tata Steel Masters Chess Title

#### Context

 Indian chess prodigy R Praggnanandhaa clinched his first-ever Tata Steel Masters title on February 2, 2025, in the Netherlands, defeating D Gukesh in a thrilling 2-1 tie-breaker.

#### **Key Highlights of Tata Steel Masters 2025**

- Tournament Venue: Netherlands.
- **Final Standings:** Praggnanandhaa and Gukesh both finished with **8.5 points**, leading to a tiebreaker.

#### **Tie-Breaker Match**

- **Format:** Two rapid games followed by a suddendeath decider.
- **Final Score:** Praggnanandhaa won **2-1** to claim the title.

### India clinches Second consecutive ICC U19 Women's T20 World Cup Title

#### **Context**

 India U19 Women's Cricket Team won the ICC U19 Women's T20 World Cup 2025 by defeating South Africa by 9 wickets.

#### **Details**

- Venue: Bayuemas Oval, Kuala Lumpur, Malaysia.
- India's 2nd consecutive title, establishing dominance in youth women's cricket.
- Star Performer: Gongadi Trisha Player of the Tournament: Runs: 309 in 7 innings (highest scorer).
- Other Key Players: \*Sanika Chalke (28) \*\*, Kayla Reyneke (1/14).



#### **APPOINTMENTS**

Posts	Details			
IRS Officer Maimun Alam	Appointed as Director in the Ministry of Steel under the Central Staffing Scheme.			
K Balasubramanian	Named Citibank's India Subcontinent Sub-Cluster and Banking Head.			
Gopal Vittal	Gopal Vittal, the Vice Chairman and Managing Director of Bharti Airtel, took			
	over as the Acting Chair of the GSMA Board.			
Rajesh Nirwan	IPS officer Rajesh Nirwan is the new Director General (DG) of Bureau of			
	Civil Aviation Security (BCAS), approved by the Appointments Committee			
	of the Cabinet (ACC).			
Paul Kapur	Nominated by US President Donald Trump as the Assistant Secretary of State			
	for South Asian Affairs.			
Dr. Madhavankutty G	Canara Bank has appointed Dr. Madhavankutty G as its Chief Economist			
Tulsi Gabbard	Director of National Intelligence (DNI) of the United States.			
Ilie Bolojan	Romania's interim president			
Monika Rani	ni Appointed Director in the Department of Justice on central deputation			
IPS Sagar Singh Kalsi	r Singh Kalsi Appointed Director in the Ministry of Petroleum and Natural Gas.			
Abhinav Gupta	Additional Director General of the Directorate General of Foreign Trade			
	(DGFT).			
Alexander Lukashenko	Created history by winning the Belarus presidency for the seventh time			
M Mohan	New Director of the Liquid Propulsion Systems Centre.			
Micheál Martin	Reelected as Irish Prime Minister.			
Dhananjay Shukla	Appointed as the President of the Institute of Company Secretaries of India			
	(ICSI) for this year.			



Usha Vance	First Indian-American second woman as her husband J.D. Vance was sworn in as the 50th Vice President of the United States.	
Constantine Tassoulas	Elected as Greece's New President	
Jotham Napat	Elected as Vanuatu's new Prime Minister.	
Alexander Lukashenko	Re-elected as Belarus's president	



### **IMPORTANT DAYS**

Date	Important Day/News			
February 2	World Wetlands Day. Theme for 2025 'Protecting Wetlands for Our Common Future'			
February 3	Vasant Panchami			
February 4	World Cancer Day			
February 2 <sup>nd</sup> -8 <sup>th</sup>	International Development Week			
February 6	International Day of Zero Tolerance for Female Genital Mutilation			
February 8	National Opera Day			
February 10	National Deworming Day			
February 10	World Pulses Day			
February 10	International Epilepsy Day			
February 11	International Day of Women and Girls in Science			
February 11	Safer Internet Day			
February 12	Darwin Day			
February 12	Abraham Lincoln's Birthday			
February 12	National Productivity Day			
February 13	World Radio Day			
February 13	Sarojini Naidu Birth Anniversary			
February 14	World Congestion Heart Defect Awareness Day			
February 20	World Day of Social Justice			
February 21	International Mother Language Day			



### **IMPORTANT PERSONALITIES IN THE NEWS**

Personality	Details		
Shubhanshu Shukla	Will become the first Indian astronaut to visit the International		
	Space Station (ISS) aboard Axiom Mission 4.		
Sunita Williams	Broke the spacewalking record by surpassing Peggy Whitson's		
	total spacewalking time of 60 hours and 21 minutes		
Indonesian President Prabowo	Invited as the chief guest for India's 76th Republic Day celebrations		
Subianto	on January 26, 2025, marking his first official visit to India		
Yoon Suk Yeol	South Korea arrested impeached President Yoon Suk Yeol on		
	charges of insurrection.		
RBI Governor Shaktikanta Das	Named top central banker globally for the second consecutive year.		
Maria Branyas	World's Oldest Person		
Maharaja Bir Bikram Kishore	Architect of Modern Tripura		
Manikya Bahadur			







#### **AWARDS**

Award	Details					
NETPAC (Network for	Context:					
the Promotion of Asian	Varsha Bharath's directorial debut, Bad Girl, has won the prestigious NETPAC					
Cinema) Award	(Network for the Promotion of Asian Cinema) Award at the International Film					
	Festival Rotterdam (IFFR) 2025.					
	Details:					
	The NETPAC Award promotes Asian cinema by recognizing exceptional films and					
	discovering new talents. Established in 1990, it is given at prestigious international					
	film festivals like Rotterdam, Busan and Kerala. The award supports Asian					
	filmmakers, helping them gain global recognition.					
Sahitya Akademi Award	Context:					
2024 in Dogri	Late Chaman Arora was awarded Sahitya Akademi Award for his book Ik Hor					
	Ashwthama					
	Details:					
	The Sahitya Akademi Award is a prestigious literary honor in India, established in					
	1954 to recognize excellence in Indian literature. It is conferred annually by the					
	Sahitya Akademi on authors for the most outstanding books in any of the 22					
	languages of the 8th Schedule of the Indian Constitution, as well as English and					
	Rajasthani. The award includes a plaque and a cash prize of ₹1,00,000. The award					
	promotes literary excellence and acknowledges new trends in Indian writing. The					
	plaque, designed by filmmaker <b>Satyajit Ray</b> , replaced earlier marble versions due to					
	weight issues.					
67th Annual Grammy	Context:					
Awards	In 67th Annual Grammy Awards Beyoncé made history by winning Album of the					
	Year for her country album Cowboy Carter.					
	Details:					
	The Grammy Awards, presented by the Recording Academy since 1959, recognize					
	excellence in music and are considered the most prestigious awards in the music					
	industry. Known as "music's biggest night," the awards honor achievements across					
	94 categories.					
	Seven Indian films have made it to the Best Picture consideration for the 97th					
	<b>Academy Awards</b> , marking a historic moment for Indian cinema. The films under consideration are:					
	Kanguva					
	Aadujeevitham (The Goat Life)					
	Putul					
	• Santosh					
	Swatantrya Veer Savarkar					
	All We Imagine as Light					
	Girls Will Be Girls					



### **BOOKS & AUTHORS [CURRENT]**

Book	Author
The New Icon: Savarkar and the Facts	Arun Shourie
"I Am?"	Gopichand P. Hinduja
I Am a Soldier's Wife: The Life and Love of Toni Lidder.	Geetika Lidder





Indian Renaissance: The Modi Decade	Dr. Aishwarya Pandit	
Wild Fictions	Amitav Ghosh	
BRING IT ON: The Incredible Story of My Life	Dr. Deepa Malik	
How India Scaled Mt G20: The Inside Story of the G20 Presidency	Amitabh Kant	
Parliament: Powers, Functions & Privileges; a Comparative Constitutional	Dr. K.S. Chauhan	
Perspective		



#### **BOOKS & AUTHORS [STATIC GK]**

Book	Author	
Life of Pi	Yann Martel	
Interpreter of Maladies	Jhumpa Lahiri	
The Shadow Lines	Amitav Ghosh	
The Guide	R.K. Narayan	
India Unbound	Gurcharan Das	
India: The Emerging Giant	Arvind Panagariya	
Human Development in India	Naresh Gupta	
The Idea of India	Sunil Khilnani	
How India sees the World	Shyam Saran	
The Political Economy of Reform in India	Rahul Mukherji	



#### STATIC GK

- First woman to receive the Ashoka Chakra Neerja Bhanot
- First Indian woman to climb Mount Everest twice Santosh Yadav
- Who coined the term 'Hindu Rate of Growth' Raj Krishna
- "Ryotwari System" was first implemented in Madras Presidency
- Fault line associated with the Himalayan Mountain range's formation Main Central Thrust
- Scientific name of Vitamin B12
  Cobalamin

- Unit of measuring magnetic flux density Tesla
- Chemical formula of "laughing gas"

N2O - Nitrous oxide

- Gas is used in welding Acetylene
- In which sport is the term "alley-oop" used Basketball
- First Indian woman to win an Olympic medal Karnam Malleswari
- Largest volcano in Europe Mount Etna
- First Indian woman to win a medal at the Paralympics
  Deepa Malik

- Highest Navigable Lake in The World Lake Titicaca
- Largest Atoll in The World

Kwajalein Atoll

- Largest lagoon in India Chilika Lagoon
- The impression of an image persists on the retina for about

1/16th of a second.

- Nobel Prize is not given in which field?

  Mathematics
- When was the first agricultural census of India conducted?
  1970-71
- Vincent Van Gogh was a





#### Dutch painter

- Absorption of ink by a blotting paper is based on Capillary action
- Harshcharita and KadamBari are the works of Bana Bhatta
- War of Americans Independence 1776
- Judicial capital of South Africa

Bloemfontein

■ New name of Odisha's Secretariat.

Lok Seva Bhawan

- Location of Indian
  Institute of Petroleum
  Dehradun, Uttarakhand
- Regular census in India are held every
  10 years
- Organ that absorbs water from food.

Large Intestine

- Soil that is a mixture of sand, silt and clay Loam
- Napoleon of India Samudragupta (335-375 AD)
- Refractive index of water 1.33 at 20°C for visible light
- Lens used in magnifying glass

Convex lens.

**■** Photoelectric effect

Emission of electrons from a material caused by electromagnetic radiation such as ultraviolet light.

- Largest gland in the human body
  Liver
- Lifespan of red blood cells

Can vary from 70 to 140 days

■ Unit of luminous intensity

Candela (cd)

■ Which type of wave is sound?

Longitudinal Wave

Mirror is used in head lights of vehicles
Concave mirror

■ Oldest living tree
Methuselah (California, USA)

■ State flower of West Bengal

Night-flowering Jasmine

■ National Income in India is estimated by Central Statistical Office (CSO)

- City of Lakes Udaipur
- First woman Speaker of the Lok Sabha Meira Kumar



#### **CURRENT ONE LINER**

Corruption Perceptions Index (CPI) 2024 is released by Transparency International.

### Sovereign Green Bonds (SGrBs)

Debt issued by governments for sustainable projects like renewable energy and afforestation.

**■** Yalta Summit

Aimed to plan the post-war world, focusing on Germany and Eastern Europe.

#### **■** Einstein Ring

A ring of light formed around a massive object, like a galaxy or galaxy cluster, due to gravitational lensing.

■ Brahmagiri Wildlife Sanctuary

Situated in the Western Ghats in the Kodagu district, Karnataka.

**■** Muriate of Potash (MOP)

Contains chloride and is commonly used for carbohydrate-rich crops like wheat.

■ Sulphate of Potash (SOP)

Chloride-free and preferred for high-value crops like fruits and vegetables.

■ Cascade Range

Mountains found northwestern United States and southwestern Canada.

**■** Furlough

Temporary release from prison granted to convicts who have





served a portion of their sentence.

#### **■** Ambergris

Whale vomit (ambergris) is a rare and valuable substance produced by sperm whales, prized in the perfume industry for enhancing fragrance longevity.

#### Henipaviruses

Zoonotic RNA viruses that cause serious diseases in both humans and animals, including well-known viruses like Nipah and Hendra.

#### ■ Digital Payments Index (DPI)

Launched by RBI in 2021. A comprehensive tool to measure the extent of digitization of payments across India, with March 2018 as the base year.

#### **■** Extra-long staple (ELS) cotton

With fibers over 30 mm it is stronger, finer and comes from Gossypium barbadense (Egyptian or Pima cotton). It's grown in China, Egypt, Australia and Peru and in India, mainly in Maharashtra and Tamil Nadu.

#### ■ Green Cardamom

India is the second largest producer.

#### ■ Rusty-Spotted Cat

Smallest and lightest known cat in the world. Found in West Bengal's Purulia district. IUCN Red List: Near Threatened.

#### **■** Point Nemo

Located in Southern Pacific Ocean.

#### ■ Darfur region

In western Sudan.

#### **■** F11 Bacteria

A bacterium that degrades PFAS ("forever chemicals") by breaking carbon-fluorine bonds.
Polyfluoroalkyl substances (PFAS) contain ultra-stable carbon-fluorine bonds, resisting natural degradation.

#### **■** Geo-Economic Fragmentation

Refers to countries splitting into rival geopolitical camps (e.g., U.S.-led v/s China-led blocs), imposing trade curbs, tech bans and investment restrictions.







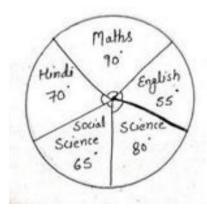


#### **OPSC PRELIMS MOCK TEST**

#### **TEST ID - 44**

#### Directions for the following 3(Three) items:

These questions are to be answered on the basis of the following pie chart which illustrates marks scored by a student in different subjects - English, Hindi, Mathematics, Science and Social Science in an examination. Assuming that the total marks obtained by the student in the examination are 540. Answer the following questions.



- Q1. The marks scored by the student in Hindi and Mathematics exceed the marks scored in English and Social Science by
  - a) 60
  - b) 75
  - c) 40
  - d) 30
- Q2. The subject in which the student scored 22.22%
- a) Hindi
- b) Science
- c) Social science
- d) English
- Q3. The subject in which the student scored 105 marks is
  - a) Mathematics
  - b) Hindi
  - c) Science
  - d) Math
- Q4. In a group of 120 persons, 80 are Indians and rest are foreigners. Further, 70 persons in the group can speak English. The number of Indians who can speak English is

- a) 20
- b) 30
- c) 30 or less
- d) 30 or more
- Q5. If  $4a^2 + 4ab + b^2 = 256$ , then what is the value of 2a + b?
  - a) 16
  - b) -256
  - c) 256
  - d) 128
- Q6. If  $a \ge 0$  and  $13a + 15 \le 41$ , then how many integer values can a have?
  - a) 0
  - b) 1
  - c) 2
  - d) 3
- Q7. The ratio of giraffes to monkeys at a certain zoo is 4:7. How many giraffes are there if the difference between both the animals is 63?
  - a) 147
  - b) 84
  - c) 21
  - d) 42
- Q8. The length of a rectangle is 3 times its width. What will be the ratio of its area to its length, if the width of the rectangle is a?
  - a) 1:a
  - b) 2:a
  - c) a:1
  - d) a<sup>2</sup>:1
- Q9. P, Q, R and S are four males. P is the eldest in the group but he is not the poorest, R is the richest but not the eldest, Q is elder than S but he is not elder than P or R, P is richer than Q but he is not richer than S. How the four persons can be arranged in decreasing order of their age and money?
  - a) PQRS, RPSQ
  - b) PRQS, RSPQ
  - c) PRQS, RSQP
  - d) PRSQ, RSPQ



- Q10. The minute hand of a clock faces east at 3:00 pm. If the clock is rotated 90q clock-wise, then in what direction will the minute hand be when the time is 6:00 pm?
  - a) North
  - b) South
  - c) East
  - d) West
- Q11. What will be the next term in the following series: 9, 13.5, 20.25, \_\_\_\_\_?
  - a) 25.5
  - b) 30.25
  - c) 26.75
  - d) 30.375

1

- Q12. A bag has 10 bats and 3 balls, how many bats must be added to make the ratio of bats to balls equal to 4:1?
  - a)
  - b) 2
  - c) 3
  - d) 4
- Q13. What will be the next term in the following series: 1, 3, 1, 1, -1, -3, \_\_\_\_?
  - a) 7
  - b) -7
  - c) 3
  - d) -3
- Q14. There is a 117 digit number which is formed by linear arrangement of first 63 natural numbers. If this number is divided by 8, what remainder it leaves?
  - a) 5
  - b) 6
  - c) 7
  - d) 8
- Q15. The places of a two-digit number are interchanged and subtracted with the original value. By what number is the resultant number always divisible?
  - a) 7
  - b) 9
  - c) 11
  - d) None of the above
- Q16. Vijay is facing west. He turns 45° in the anticlockwise direction and then another 180° in

the same direction and then 270° in the clockwise direction. Which direction is he facing now?

- a) North East
- b) North West
- c) South East
- d) South West

#### Q17. Statements:

A few of my friends are Officers.

All officers are rude.

Some rude persons are kind hearted.

Conclusions:

- I. A few of my friends are kind hearted.
- II. Some rude persons may not be officers.
- a) Conclusion I follows
- b) Conclusion II follows
- c) Both Conclusion I and II follows
- d) Neither Conclusion I nor II follows.

#### Passage:

One simple physical concept lies behind the formation of the stars: gravitational instability. The concept is not new. Newton first perceived it late in the 17th Century. Imagine a uniform, static cloud of gas in space. Imagine then that the gas is somehow disturbed so that one small spherical region becomes a little denser than the gas around it so that the small region's gravitational field becomes slightly stronger. It now attracts more matter to it and its gravity increases further, causing it to begin to contract. As it contracts its density increases which increases its gravity even more so that it picks up even more matter and contracts even further. The process continues until the small region of gas finally forms a gravitationally bound object.

#### Q18. The primary purpose of the passage is to:

- a) describe a static condition
- b) support a theory considered outmoded
- c) depict the successive stages of a phenomenon
- d) demonstrate the evolution of the meaning of a term
- Q19. It can be inferred from this passage that the author views the information contained within it as:
  - a) lacking in elaboration
  - b) original but obscure
  - c) speculative and unprofitable





- d) uncomplicated and traditional
- Q20. With which of the following words can you replace the word uniform as given in this passage?
  - a) Uniting
  - b) Varying
  - c) Gaseous
  - d) Unvarying
- Q21. What does the underlined word 'it' stand for in the passage?
  - a) Gravitational instability
  - b) Cloud of gas
  - c) Small spherical denser region
  - d) Matter.
- Q22. The author provides information that answers which of following questions?
  - What causes the disturbances that changes the cloud from its original static condition?
  - 2. How does this small region's increasing density affect its gravitational field?
  - 3. What is the end result of the gradually increasing concentration of the small region of gas?
  - a) 1 only
  - b) 2 only
  - c) 2 and 3 only
  - d) 1, 2 and 3

Directions for 23 and 24: In each of following questions, a statement is given followed by two assumptions numbered I and II. Consider the statement and the following assumptions and decide which of the assumptions is implicit. Give answer:

- (a) if only assumption I is implicit.
- (b) if only assumption II is implicit.
- (c) if both I and II are implicit.
- (d) if neither I nor II is implicit
- Q23. Statement: India must earn a lot of foreign exchange to achieve her target of economic development.

Assumptions:

- I. India desires to achieve the target of economic development.
- II. It is possible for India to earn more foreign exchange.

Q24. Statement: Central Bank, which is the largest bank in the country, has decided to reduce its workforce by 30 per cent so that its banks may work efficiently.

Assumptions:

- I. The Bank can perform all its activities after the reduction in workforce.
- II. The surplus employees may be asked to adopt early retirement scheme before leaving the bank.
- Q25. Directions: Each of the following questions consists of a statement followed by two arguments I and II. Give answer:
  - (a) If only argument I is strong;
  - (b) If only argument II is strong;
  - (c) If either I or II is strong;
  - (d) If neither I nor II is strong;

Statement: Should polythene bags be banned in India? Arguments:

- I. No. The polythene bags are very cheap and are very convenient.
- II. Yes. That is what many countries are doing.
- Q26. Directions: In each of the following questions, a statement is given followed by two conclusions I and II. Give answer:
  - (a) if only conclusion I follows;
  - (b) if only conclusion II follows;
  - (c) if either I or II follows;
  - (d) if neither I nor II follows;

Statement: The oceans are a storehouse of practically every mineral including uranium. But like most other minerals, it is found in extremely low concentration – about three gms per 1000 tonnes of water.

Conclusions:

- I. The oceans are a cheap source of uranium.
- II. The oceans harbour radiation hazards.
- Q27. Below is given passage followed by possible inference which can be drawn from the facts stated in the passage. You have to examine the inference in the context of the passage and decide upon its degree of truth or falsity. Mark answer
  - (a) if the inference is 'definitely true', i.e. it properly follows from the statement of facts given.
  - (b) if the inference is 'probably true' though





- not 'definitely true' in the light of the facts given.
- (c) if the 'data are inadequate', i.e. from the facts given you cannot say whether the inference is likely to be true or false.
- (d) if the inference is 'probably false' though not 'definitely false' in the light of the facts given.

#### **PASSAGE:**

Construction industry in India has always enjoyed a special position. We have proved that India is in tune with the times and has not left any stone untouched to compete against the best in international market. Yet, it is the time when other powers are paying attention developing this sector internationally status. Foundation of an economy lies on its infrastructure. Construction industry has to play a vital role in power, port, road, house construction, railways and industry. Labour-intensive Indian construction industry has to pass through acute changes although it is a bit late. It has to face challenges like advanced designing, odd decision and a growth of demand of work in time, greater mechanisation and intensive construction prevalent in developed countries. The emphasis, is laid on modern techniques adopted in construction and high quality in less time.

Statement: The construction industry of developed nations of better quality compared to India.

#### Q28. Stimulus Argument:

Three years after the Bhakra Nangal Dam was built, none of the six fish species native to the area was still reproducing adequately in the river below the dam. Because the dam reduced the average temperature range of the water from approximately 40° to approximately 10°, biologists have hypothesized that sharp increases in water temperature must be involved in signaling the affected species to begin their reproduction activities.

# Which of the following statements, if true, would most strengthen the scientists' hypothesis?

- a) The native fish species were still able to reproduce in nearby streams where the annual temperature range remains approximately 40°.
- b) Before the dam was built, the river annually overflowed its banks, creating

- temporary backwaters that were used as breeding areas for the local fish population.
- c) The lowest temperature ever recorded in the river prior to dam construction was 30°; whereas the lowest recorded river temperature after construction was completed has been 40°.
- d) Non-native fish species, introduced after the dam was completed, have begun competing with the native species for food.

# Q29. In the following questions, a statement is given followed by two courses of action numbered I and II. Decide which of the courses of action logically follows and give answer:

- (a) if only I follows
- (b) if only II follows
- (c) if either I or II follows
- (d) if neither I nor II follows

#### Statement:

The company 'X' has decided to give 10% increase in salary to its employees from next month.

#### Courses of action:

I. The accounts department will have to prepare new salary statement for all employees before due date.

II. Employees' association should ask for more rise in the salary considering the market condition.

### Directions for 30-31: Read the following information to answer the questions that follow.

For getting selected as a Marketing Manager in a company, a candidate must:

I. be a graduate with at least 50% marks.

II. have secured at least 40% marks in the Written Test. III. not be less than 24 years and more than 29 years as on October 10, 1997.

IV. should have work experience of atleast two years as an officer. However, if a candidate.

#### Conditions:

V. fulfils all other criteria except (IV) above but has a Diploma in Marketing Management, his/her case is to be referred to the Director, Marketing.

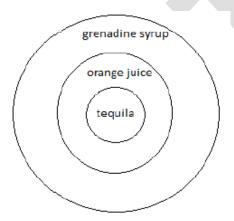
VI. fulfils all other criteria except (III) above but has worked as Marketing Officer atleast for three years, his/her case is to be referred to the Director, Markeing.





Based on the above criteria and the information given in each of the questions below you have to take the decision in respect of each case. You are not to assume anything. These cases are given to you as on October 10, 1997. Give answer

- (a) if the candidate is to be appointed.
- (b) if the candidate is not to be appointed.
- (c) if the data given are not sufficient to take the decision.
- (d) if to be referred to the General Manager, Marketing.
- Q30. Amit Khanna, born on 5 June, 1973, has done his Post-Graduation in Marketing Management with first class. He has secured 50% marks in the Written Test. He has been working in an organisation as a Marketing Officer for the last four years.
- Q31. Rohit Verma has been working in an organisation as on officer for the last ten years. His date of birth is 17 February, 1964. He has secured 60% marks in the Degree Examination and 40% marks in the Written Test.
- Q32. A machine is constructed to make the tequila sunrise cocktail. The three main ingredients of the cocktail are delivered to the glass through a pipe having three concentric layers as shown below:



The inner-most, middle and the outer-most parts of the pipe deliver tequila, orange juice and grenadine syrup respectively and have a radius of 1cm, 2cm and 3 cm respectively. If the fluids in all the three parts of the pipe are pushed at the rate of 2 cm/second, then what will be the ratio of tequila, orange juice and grenadine syrup in the cocktail made by the machine?

a) 5: 3: 2

- b) 1: 3: 5
- c) 2: 4: 5
- d) 1: 2: 5
- Q33. A person has to completely put each of three liquids: 403 litres of petrol, 465 litres of diesel and 496 litres of Mobile Oil in bottles of equal size without mixing any of the above three types of liquids such that each bottle is completely filled. What is the least possible number of bottles required?
  - a) 34
  - b) 44
  - c) 46
  - d) None of the above

#### Passage:

The Earth's climate has changed throughout history. Just in the last 650,000 years there have been seven cycles of glacial advance and retreat, with the abrupt end of the last ice age about 11,700 years ago marking the beginning of the modern climate era — and of human civilization. Most of these climate changes are attributed to very small variations in Earth's orbit that change the amount of solar energy our planet receives.

The current warming trend is of particular significance because most of it is extremely likely (greater than 95 percent probability) to be the result of human activity since the mid-20th century and proceeding at a rate that is unprecedented over decades to millennia.

Earth-orbiting satellites and other technological advances have enabled scientists to see the big picture, collecting many different types of information about our planet and its climate on a global scale. This body of data, collected over many years, reveals the signals of a changing climate. The heat-trapping nature of carbon dioxide and other gases was demonstrated in the mid-19th century. Their ability to affect the transfer of infrared energy through the atmosphere is the scientific basis of many instruments flown by various space agency.

There is no question that increased levels of greenhouse gases must cause the Earth to warm in response. Ice cores drawn from Greenland, Antarctica, and tropical mountain glaciers show that the Earth's climate responds to changes in greenhouse gas levels. Ancient evidence can also be found in tree rings, ocean sediments, coral reefs, and layers of sedimentary rocks.





This ancient, or paleoclimate, evidence reveals that current warming is occurring roughly ten times faster than the average rate of ice-age-recovery warming.

Answer following questions strictly based on the passage.

### Q34. On the basis of above passage following conclusion can be drawn-

- 1. Climate change is a age old phenomenon of earth.
- 2. Climate change is caused by human interference only.

#### Which of the above conclusion are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

# Q35. Which of the following is the most scientific rational interference that can be drawn from the above passage?

- a) Climate change is an integral process of earth's historical evolution. Recent technological has increased both the knowledge and worry about this.
- b) The earth's response of climate change is visible in tree rings, ocean sediment etc. These evidences show that present rate of global warming is nothing particular to worry about.
- c) Earlier change in climate was mainly attributed to very small variations in Earth's orbit. But the rate of present change in climate is very high and mainly because of anthropogenic reason.
- d) None of the above.

### Q36. Which of the following is most definitively implied by the above passage?

- a) Present change in climate is very much to worry about because it is mainly caused by anthropogenic reason.
- b) Present change in climate is a point of concern because of its rapid rate.
- c) Both A and B
- d) None of the above.
- Q37. The letters A, B, C, D and E are arranged in such a way that there are exactly two letters between A and E. How many such arrangements are possible?

- a) 12
- b) 18
- c) 24
- d) 36
- Q38. Satish lends an equal sum of money at the same rate of interest to Ravi and Ramu. The money lend to Ravi becomes thrice in 8 years at SI. Satish lends to Ramu for the first two years at CI and for the rest 6 years at SI. If the, difference between amounts of Ravi and Ramu after 8 years is Rs.13920. What is the sum lent by Satish to Ramu initially?
  - a) 14440
  - b) 14920
  - c) 15360
  - d) 16890
- Q39. In a family of four members -Father, Mother, Son, and Daughter the sum of their ages 8 years ago is 100. Today the daughter was married and left the family. If after 2 years son gets married and his wife will join the family then the sum of their ages is 137. If the sum of ages of Daughter and Son's wife is 41. Then what would be the age son's wife when daughter was married?
  - a) 21
  - b) 23
  - c) 20
  - d) 18

Directions for the following three (3) items:

Read the following 3 passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

#### Passage 1

87% of employees say that career development opportunities impact whether or not they will stay with an organization. Providing a clear career path with training opportunities improves employee motivation and builds trust with the organization. Rather than blindly finishing vaguely-related tasks, the employee experience is streamlined into meaningful career progression. As a result, they may be less likely to leave, even when offered a higher salary.

### Q40. According to the passage, how can organizations retain employees?

When assigned tasks form a part of



- meaningful career progression.
- Clarity about future intra organizational career path and opportunities.
- 3. Monetary rewards and motivation can encourage workers to stay.

Select the correct answer using the code given below.

- a) 1 and 2 only
- b) 2 only
- c) 2 and 3 only
- d) 1, 2, and 3

#### Passage 2

While we will not know the full implications of the COVID-19 pandemic for some time, one thing is already clear – the value of social protection has been unequivocally confirmed. The pandemic response generated the largest mobilization of social protection measures ever seen, to protect not just people's health but the jobs and incomes on which human well-being equally depends. As we seek now to create a human-centred recovery, it is imperative that countries deploy their social protection systems as a core element of their rebuilding strategies.

### Q41. Which of the following is/are valid inference/ inferences that can be made from the passage?

- Prior to the pandemic, the value of social protection was relatively unknown.
- 2. Rebuilding strategies can be effective if they rely upon social protection systems.

Select the correct answer using the code given below.

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Passage 3

Undernutrition goes beyond calories and signifies deficiencies in any or all of the following: energy, protein, or essential vitamins and minerals. Undernutrition is the result of inadequate intake of food in terms of either quantity or quality, poor utilization of nutrients due to infections or other illnesses, or a combination of these factors. These in turn are caused by a range of factors including household food insecurity; inadequate maternal health or childcare practices; or inadequate access to health services, safe water, and sanitation.

# Q42. According to the passage, which of the following is/are true with regards to undernutrition?

- 1. Lack of adequate care during childhood can cause undernutrition.
- 2. Illnesses such are diarrhoea can cause undernutrition.
- 3. Low energy is a symptom of undernutrition.

Select the correct answer using the code given below.

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2, and 3
- Q43. The ratio of the ages of Mithun and Amitabh, 5 years before was 9: 10. Five years from now, their age ratio will be 11: 12. What is Mithun's present age?
  - a) 45
  - b) 50
  - c) 55
  - d) 60
- Q44. A tea worth Rs.126 per kg and Rs.135 per kg are mixed with a third variety in the ratio of 1:1:2. If the mixture is worth Rs.153 per kg, the price of the third variety per kg will be:
  - a) Rs.175.5
  - b) Rs. 180.0
  - c) Rs. 169.5
  - d) Rs.170.0
- Q45. Pankaj is studying in class 7 presently. After 18 years his age will be 8 times of his age 10 years back. What will be his age when he will be in class 12 (assume Pankaj didn't repeat any of the classes)?
  - a) 17 years
  - b) 21 years
  - c) 14 years
  - d) 19 years
- Q46. A train from Mumbai to Delhi has two stops, which are Surat and Kota. On reaching Surat, one third of passengers got down and 120 passengers got in. At Kota, 50% of the passengers got down and 100 passengers got in. When the train reached Delhi, there were 360 passengers in the train. How many passengers



#### were there in the train when it started?

- a) 300
- b) 500
- c) 400
- d) 600
- Q47. A poacher fired two bullets from the same place at an interval of 6 minutes. A forest guard heard the sound of the first shot and started approaching the place. On hearing the second shot, the guard observed that 5 minutes and 52 seconds have elapsed from hearing the sound of the first shot. If the velocity of the sound is 330 m/sec and the poacher was still at the same location, find at what speed the guard was approaching to catch the poacher (in km/hr)?
  - a) 18
  - b) 27
  - c) 36
  - d) 30
- Q48. If (a-b) is 6 more than (x+y) and (a+b) is 3 less than (x-y), then which of the following is definitely true?
  - a) a is greater than x
  - b) a is less than x
  - c) a and x are equal
  - d) No relation can be established between a
- Q49. A tap A can fill a tank in 15 minutes and another tap B can fill it in 10 minutes. Both taps are opened to fill the empty tank. But after 4 minutes, a leak developed in the tank. The leak alone can empty the full tank in just 5 minutes. If both pipes were opened at 9 o'clock, then at what time will the tank be emptied?
  - a) 9:20
  - b) 9:30
  - c) 9:25
  - d) 9:40
- Q50. A small kid is asked to form a three digit number using the numbers 1, 2, 3, 4, 5 and 0 without repetition. What is the probability that the number he forms is divisible by 10?
  - a) 2/10
  - b) 5/36
  - c) 1/6
  - d) 3/7

- Q51. Rahul wants to go to the railway station and then return to his home on the same day. He has to change the bus at the city-bus terminal between his home and the railway station. There are five buses available from his home to city-bus terminal and four buses are available from city-bus terminal to railway station. If Rahul does not want to use a bus more than once, in how many ways can he make the round trip?
  - a) 100
  - b) 144
  - c) 120
  - d) 240
- Q52. Consider the following statements:

If n is a prime number such that (n+2) is also a prime number, then-

 $S1: \{n (n+2) + 1\}$  is a perfect square.

S2: (2n+2) is divisible by 6 if n is greater than 3.

Which of the statements given above is/are correct?

- a) Only S1 is correct.
- b) Only S2 is correct.
- c) Both S1 and S2 are correct.
- d) Both S1 and S2 are incorrect.
- Q53. The difference between two numbers is 2867.

  On dividing the larger number by the smaller, we get 13 as quotient and 11 as remainder.

  What is the sum of the digits of the smaller number?
  - a) 25
  - b) 24
  - c) 75
  - d) 13
- Q54. A box contains 5 apples and 5 oranges. A child picks 2 of the fruits randomly, one after the other without replacement. What is the probability of choosing 1 apple and 1 orange?
  - a) 5/9
  - b) 3/10
  - c) 9/19
  - d) 7/36
- Q55. In the district development council election, there are two candidates X and Y. During the election campaign 40% of the total voters decided to vote for X and the rest decided to





vote for Y. Due to the entry of star campaigners of both candidates in the last phase of campaign, the voters got influenced and changed their mind. On the day of voting, 15% of the voters who decided earlier to vote for X changed their mind and voted for Y. Similarly, 25% of the voters who decided earlier to vote for Y changed their mind and voted for X. After the counting, Y won by 2 votes. If all voters casted their vote, then calculate the total number of voters.

- a) 200
- b) 100
- c) 250
- d) 150

Passage: For more than three-fourths of known economic history, India has been the dominant economic power globally. During much of India's economic dominance, the economy relied on the invisible hand of the market for wealth creation. Specifically, the invisible hand of markets, as reflected in openness in economic transactions, was combined with the hand of trust by appealing to ethical and philosophical dimensions. The exponential rise in India's GDP and GDP per capita post liberalisation coincides with wealth generation in the stock market. The sectors that were liberalised grew significantly faster than those that remain closed.

#### Q56. The passage seems to imply that,

- a) Per-capita income rise in India has been occasioned by industrial policies that favoured the rise of rich business classes against social-friendly entrepreneurship.
- b) Pro-business policies should replace the leftover pro- crony policies after that continue despite economic reforms.
- c) Contemporary evidence following the liberalisation of the Indian economy support the economic model advocated in our traditional thinking.
- d) GDP growth of a sector is directly proportional to the influence of invisible hand and indirectly proportional to the role of hand of trust.

**Passage:** Agrobiodiversity refers to the variety of crops and livestock on which our lives depend. Farmers all over the world have been constantly improving it since agriculture began more than 10,000 years ago. This

diversity of crops and livestock adapted to local conditions has made it possible for millions of people in rural areas to survive under some extremely difficult ecological conditions. Traditional agrarian landscapes managed in accordance with conditions also provide a multiplicity of services for society as a whole, such as plant pollination and stable water catchment areas, and are thus critical to human life on earth. But this diversity is under threat. Like biological diversity, agricultural diversity disappearing at an alarming rate. Often it is the unsustainable production methods of these very same farmers which are responsible for the massive losses of species we are seeing today. This not only compromises the productivity of agriculture, but also its potential to adapt to changing conditions. In times of climate change in particular, the genetic diversity of plants and animals has a crucial role to play.

### Q57. Why conservation of agrobiodiversity is crucial as per the passage?

- It has been the practise of earliest humans who demonstrated such possibilities of survival.
- b) It acts as an insurance against future threats to the world's food supply.
- c) Without conserving agriculture, biodiversity cannot be conserved.
- d) It helps in increasing and sustaining the productivity levels of dry farming.

Passage: With the advent of social media, any piece of information can now get attention, whether it is true or false. Before, only media companies had reach, so it was harder for false information to spread. It could happen, but it was slow. Now anyone can share anything, and because people tend to believe what they see, false information can spread just as, if not more easily, than the truth. Also, everyone is their own media company, broadcasting to the particular set of people that follow them. It used to be that a major label signing you was the path to stardom. Now artists can build their own following online and break through that way.

#### Q58. The passage seems to imply that,

- Replacing social media is neither possible nor desirable since it has the attraction of equality of opportunity at unprecedented levels.
- 2. Social media has certainly made fame and





attention more democratic, though not always in a good way.

Select correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Directions for the following five (5) items:

Read the following 5 passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

#### Passage 1

Policy is usually focussed on reducing greenhouse gas (GHG) emissions from the electricity sector, transport and industry. There has, however, been a renewed interest in understanding how soils can serve as a sink for carbon dioxide since atmospheric concentrations of carbon dioxide have crossed 410 parts per million and oceans are already turning acidic. Besides, increasing soil carbon offers a range of co-benefits and this would buy us time before other technologies can help us transition to a zero-carbon lifestyle. Significant carbon pools on earth are found in the earth's crust, oceans, atmosphere and land-based ecosystems. Soil organic carbon (SOC) comes from plants, animals, microbes, leaves and wood, mostly found in the first metre or so. There are many conditions and processes that changes to SOC content including temperature, rainfall, vegetation, soil management and land-use change. Moreover, carbon sequestration in soils has the potential to offset GHG emissions from fossil fuels by up to 15% annually. In contrast, it has been estimated that SOC in India has reduced from 30% to 60% in cultivated soils compared with soils that are not disturbed.

### Q59. On the basis of above passage, following assumptions have been made:

- UNCCD resolutions for land degradation neutrality should be strictly followed
- 2. It is a win-win for farmers and overall ecology if soil organic carbon is conserved

#### Which of the above assumptions is/are valid?

- a) 1 only
- b) 2 only
- c) Both 1 & 2
- d) Neither 1 nor 2

#### Passage 2

One aspect is the idolised view of democracy as an inimitably just form of government where people have the right to equal share of political power that empowers the people. However, judging by the history of violence, this could be an absolutely off the mark argument within real-world politics. It only shows that political participation has the potential of making people more irrational, prejudiced and mean. It pulls apart, impedes the social order and creates antagonists of civic order.

### Q60. Which one of the following is best implied by the passage?

- Dispute resolution mechanisms need to be strengthened to resolve conflicts in democracy
- b) Deepening democracy can give solutions to all ills of the ideal
- c) For all problems of democracy, more and more democracy is the solution
- d) A higher form of life that democracy promises seems to evade the public

#### Passage 3

Returns from farm produce have shown fluctuation in India. This is the cumulative effect of unpredictable market prices, unstable yields and lack of policies for maintaining long-run price stability. Net returns from agriculture invariably follow the cobweb cycle—the wide fluctuations occurring in markets in which the quantity supplied by producers depends on prices in previous production periods.

# Q61. With reference to the above passage, which of the following is/are the most rational and practical implication/implications?

- Government should develop and disseminate technologies to improve farm output
- 2. Price support to the farmers should be made robust
- 3. Agriculture reforms by state government should be encouraged with performance grants by Union government

#### Select the answer using the code given below:

- a) 1 only
- b) 1 and 2 only
- c) 1 and 3 only
- d) All the above





#### Passage 4

Luck is not something you can mention in the presence of self-made men. Some people are of course quick to acknowledge the good fortune they've enjoyed along their paths to the top. But such people are in the minority. More commonly, successful people overestimate their responsibility for whatever successes they achieve. Even lottery winners are sometimes blind to luck's role. Most significantly, the successful people are much less likely to remember external events that may have helped them along the way.

### Q62. Which of the following best explains the crux of the passage?

- a) Luck is a silent partner of success.
- b) Success has a good tendency to show the future right path to the top.
- c) Success makes us arrogant about our capabilities.
- d) Lucky people should invest in lottery.

#### Passage 5

While the richest 10 percent accounted for 46 per cent of emissions growth, the poorest 50 per cent accounted for only 6 per cent. The global carbon budget is being rapidly depleted — not to afford communities around the world dignity and a decent standard of living — but to expand the consumption of the rich. Of this, the largest share of emissions by the rich was from their luxuries like flight travels. About half of the emissions of the richest 10 per cent are associated with North America and the European Union (EU). So, there is a need to focus on clipping emissions of the richest 10 percent.

# Q63. What could be the most important suggestion made by the author through the above passage for emission control?

- a) Eradication of poverty and making luxuries accessible to everyone.
- b) Imposition of taxes on sin goods like petrol.
- c) Wealth redistribution to fight climate change by eradicating income inequality.
- d) Ensuring accountability of western nations at United Nations.
- Q64. In a Kirana Store, it is observed that each slip of bill has the same amount as the bill number, like bill number 1 contains Rs. 1, bill number 2

contains Rs. 2, bill number 3 contains Rs. 3, bill number 4 contains Rs. 4 and so on. It is found that bill number 36 and 113 were cancelled due to cancellation of order. 135 slips were used. Find the total amount collected at the end of the day.

- a) Rs. 8950
- b) Rs. 9031
- c) Rs. 18360
- d) Rs. 9180
- Q65. Let 3546A and B3135 be five-digit numbers where each letter represents a different digit. If the sum of the numbers is 12A603, then what is the product of the values of A and B?
  - a) 36
  - b) 72
  - c) 96
  - d) 80
- Q66. Pragati visited a stationary store to purchase scales, pencils, and crayons. She decided to buy twice as many crayons as pencils and at least one more pencil than scales. The cost of pencils is three times that of scales, and scales are priced at half the rate of crayons. If each scale is priced at Rs. 2, and the total expenditure amounts to Rs. 94, determine the total number of items she bought.
  - a) 23
  - b) 25
  - c) 27
  - d) 29
- Q67. Two players A and B toss a coin alternatively, with A beginning the game. The players who first throw a head is deemed to be the winter. B's coin is fair and A's is biased and has a probability p showing a head. Find the value of p so that the game is equi-probable to both the players.
  - a) 1/2
  - b) ½
  - c) ½
  - d) 1/5
- Q68. Consider the following sequence of numbers: 20, 24, 33, 58, 107,...

Which number would appear in the sequence next?

a) 228



- b) 187
- c) 207
- d) 171

Q69. Hemant needs to travel 130 km downstream on a river. His rowing speed in still water is 4 km/hr. The river's usual flow rate is 2 km/hr, but every two hours, due to tides, the water speed doubles for a duration of 2 hours, after which it returns to 2 km/hr. If Hemant starts rowing just as the tide subsides (when the river flows at 2 km/hr), at what time will he reach his destination?

- a) 18 hours
- b) 18(3/4) hours
- c) 19(3/4) hours
- d) None of these

#### Passage:

For the past one and half decade as Indian industry went places, recording a hearty rate of growth, the story of Indian agriculture remained unchanged. Successive governments have put in plenty of effort but the results were still weak. This is surprising as in the same period except for 2008, the monsoon went through one of the longest periods of regular annual rainfall pattern. Despite this favourable initial condition, the rate of growth of the agriculture sector has been low. The one spoilsport in the agriculture story was of course the stagnant rate of public investment.

The state, hamstrung by vastly competitive demands on its resources, initially and also by the realisation that public investments in irrigation and others were not yielding quick results, moved the money elsewhere. But now, in the aftermath of the global meltdown, the consensus of informed opinion has switched to the view that consumption demand from rural India has been the great stabilizer for industry. The impetus for that rural consumption demand has to come from rising productivity in agriculture. In turn rising productivity can only come if adequate investment is made at all stages of agricultural operation. Not surprisingly the push for these improvements has come from one of the longest spells of rise in prices of food products- the persisting inflation in food that has just begun to soften. So, we have a fortuitous combination of circumstances that, if harvested, can create huge value upgradation for the Indian agriculture sector and in turn for the entire economy. The components of these improvements are well known like seed technology, better management of post-harvest operations like preservation of produce in warehouses and of agricultural marketing.

So even though it may seem of repeated, the time for an agricultural revolution is here. Probably the most important element of that will be the plans for a second green revolution. The government has already indicated that it is very keen to start it off in the dryland areas of the south and in the rich but weakly tapped soils of the eastern Indian states. A debate is already raging in the country, if such a rise in productivity will also necessarily entail a movement towards genetically modified crops.

The need of adequate grains to feed a vastly rising population is immediate and so the decision has to be made carefully, as the government has indicated. The associated issues are of infrastructure to run the crops from the farm gates to the market. Most of the states have a poorly developed set of roads and even less carriers to undertake the task. In this context the need for refrigerated trucks and cold storage chains across the country is an immense investment possibility as well as the need of the hour. The government has to also make changes in the law to allow for the trading of warehouse receipts and that of the agricultural produce marketing act that makes transport of most agricultural produce across state boundaries, a crime. The list is large, the need is to start moving right now.

# Q70. What according to the passage is/are the reason(s) for the weak performance of Indian agriculture in the past decade?

- 1. The monsoon has been weak during the decade especially during 2008.
- 2. Successive governments have not put in enough efforts to boast the of agriculture.
- 3. Stagnant public investment in the agriculture sector of India.

### Select the correct answer using the code given below:

- a) Only 1 and 2
- b) Only 2 and 3
- c) Only 3
- d) All 1, 2 and 3

#### Q71. What is the primary purpose of the passage?

To identify problems plaguing Indian economy.





- 2. To highlight the need of reforms in the agriculture sector.
- 3. To discuss the dismal performance of Indian agriculture in the last one and half decade.

Select the correct answer using the code given below:

- a) Only 1
- b) Only 2
- c) Only 3
- d) Only 2 and 3
- Q72. Why the author is skeptical about the debate on the genetically modified crops for the second green revolution?
  - The author is of the opinion that genetically modified crops would be used and this would be a threat to our environment.
  - 2. The author feels that in this debate the immediate need of poor people may be lost.

Select the correct answer using the code given below:

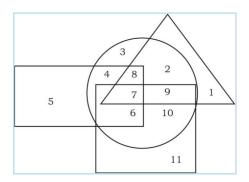
- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Directions: Read the following data carefully and answer the following questions based on that. Below given line graph says income and expenditure of a company during various years in hundreds.



- Q73. What is the ratio of total profit of company during 2010 and 2015 together to that of during 2011 and 2014 together?
  - a) 17:21
  - b) 13:16
  - c) 19:21

- d) 16:23
- Q74. Total Income of company during 2010 and 2012 is approximately what percent less than that during 2011 and 2015 taken together?
  - a) 26.2%
  - b) 24.5%
  - c) 32.3%
  - d) 28.7%
- Q75. If income and expenditure of company during 2016 is increased by 12% and 20% respectively with respect to that of in year 2015, then what is the approximate percent change in the profit of company from 2015 to 2016?
  - a) 34%
  - b) 32%
  - c) 35%
  - d) 36%
- Q76. Percent profit of the company is the lowest during which of the following year?
  - a) 2013
  - b) 2012
  - c) 2014
  - d) 2015
- Q77. Income of company during 2016 is increased by 16% with respect to the year 2015, out of which company spends 84% as expenditure. then what is the approximate percent change in the expenditure of company from 2014 to 2016?
  - a) 26%
  - b) 22%
  - c) 28%
  - d) 20%
- Q78. Rectangle, square, circle, and triangle represents the area of regions where the soil and other conditions are suitable for wheat, gram, maize and rice cultivations.





Find the land area that can be brought under wheat, gram and maize cultivation but not rice?

- a) 46
- b) 47
- c) 36
- d) 39

Directions for the following two (2) items:

Read the following passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

#### Passage-1

Although synthetic motor oil costs up to three times more than standard motor oil, synthetic motor oil resists viscosity degradation, cannot lubricate and protect the engine longer than standard motor oil. They also maintain maximum lubrication over a wider temperature range than their conventional counterparts. This provides a 66% delay in oil change times and provides greater protection during engine starting, where most engine wear is believed to occur.

### Q79. If the above statement is true, which of the following must be true?

- a) Cars using synthetic fuel have a longer lifespan than cars using conventional fuel.
- b) The benefits of certain types of fuel may justify their increased costs.
- Drivers who use synthetic fuel take more care of their cars than drivers who use conventional fuel.

d) Blended engine oils are a mixture of standard and synthetic oils that have poorer engine protection than synthetic oils.

#### Passage-2

Access to capital is only one of many factors necessary for business success. An appropriate pricing structure is equally important for distributing the product or service at a lower cost. As a result, many start-ups are forced to compete with manufacturers who can offer lower prices for the same products and services.

### Q80. If the above statements are true, then it must be true that:

- a) Price competition is a more common way to drive out market rivals than is a battle over product superiority.
- b) Recently-formed companies have higher operating costs than do established companies.
- c) Established businesses can drive competitors out of a given market by offering lower prices than their competitors can.
- d) Length of time serving a particular market may correlate with capital or cost advantages.

#### **ANSWERS**

	1. a	11. d	21. c	31. c	41. b	51. d	61. b	71. b
\	2. b	12. b	22. c	32. b	42. c	52. c	62. a	72. c
	3. b	13. b	23. с	33. b	43. b	53. d	63. c	73. a
	4. d	14. c	24. d	34. a	44. a	54. a	64. b	74. b
	5. a	15. b	25. a	35. c	45. d	55. b	65. b	75. c
	6. d	16. b	26. d	36. c	46. d	56. c	66. a	76. a
	7. b	17. b	27. с	37. с	47. b	57. b	67. b	77. a
	8. c	18. c	28. a	38. c	48. a	58. b	68. a	78. a
	9. b	19. d	29. a	39. d	49. a	59. b	69. b	79. b
	10. a	20. d	30. a	40. a	50. a	60. d	70. c	80. d

