

# APTI PLUS OAS GAZETTE

JANUARY 2025



## APTI PLUS

Academy for Civil Services Pvt. Ltd.  
CREATING CIVIL SERVANTS FOR THE NATION



Srimandir Parikrama  
Project



Odisha Shines At National  
Panchayat Awards  
2024



Odisha Niramaya  
Scheme



Paradip Port



Chilka Lake

*Disclaimer: Copyright infringement not intended.*

**COMPREHENSIVE COVERAGE OF CURRENT AFFAIRS FOR ODISHA STATE CIVIL SERVICES EXAMS**



## CONTENT

### ODISHA CURRENT AFFAIRS

SCHEMES IN NEWS	4
OTHERS	7

### OPSC CURRENT AFFAIRS

NATIONAL	24
INTERNATIONAL	28
SCIENCE & TECHNOLOGY	31
BIOLOGY & ENVIRONMENT	32
GENERAL SCIENCE [STATIC GK]	38
DEFENSE & SECURITY	39
MINISTRY OF DEFENSE YEAR END REVIEW 2024	41
ECONOMICS	43
SPORTS	48
APPOINTMENTS	54
IMPORTANT DAYS	56
IMPORTANT PERSONALITIES IN THE NEWS	58
AWARDS	58
BOOKS & AUTHORS [CURRENT]	62
BOOKS & AUTHORS [STATIC GK]	62
STATIC GK	63
CURRENT ONE LINER	65

### PRACTICE QUESTIONS

OPSC PRELIMS MOCK TEST ID 42	67
------------------------------	----



**APTI PLUS**  
Academy for Civil Services Pvt. Ltd.  
CREATING CIVIL SERVANTS FOR THE NATION

Outstanding Accomplishment by **APTI PLUS** Bhubaneswar in

**OAS 2022**

Triumphant Again...

**500+** Selections in **OPSC OCS 2022**

**7 SELECTIONS IN TOP 10**

**RANK 1**



Batch starts from **18th November 2024**  
Avail Best Faculty Members from **DELHI**

6 many more...

Big Congratulations to our **OAS 2022 TOPPERS**

Call: 9938386166,  
7327846166, 8260677707  
JAYDEV VIHAR, BHUBANESWAR

ADMISSIONS OPEN FOR  
**IAS & OAS**  
GRADUATES & 12th PASS CANDIDATES

Integrated & Foundation Courses

# Odisha Current Affairs

## SCHEMES IN NEWS

### Srimandir Parikrama Project

#### Context

- The Srimandir Parikrama Project holds immense significance in Odisha's religious and spiritual context.

#### Details

- It was initiated by Chief Minister Naveen Patnaik, who now serves as the Leader of Opposition, with a budget of Rs 800 crore.
- The project, inaugurated in January 2024, aimed to enhance facilities for devotees around the Shree Jagannath Temple in Puri.
- The project features a 75-metre-wide heritage corridor, including a green buffer zone, a reception area capable of accommodating 6,000 devotees, the Jagannath Ballav pilgrim centre, multi-level car parking, dedicated pedestrian pathways and public convenience zones. Successfully completed, the project has been widely appreciated for its **architectural beauty and functional design**.

#### Jagannath Temple, Puri

- The Shree Jagannath Temple, dedicated to Lord Jagannath (a form of Vishnu), is located in **Puri, Odisha** one of the **Char Dhams**—sacred pilgrimage sites for Hindus.
- Constructed in the 12th century CE by **King Anantavarman Chodaganga** of the Ganga dynasty, as mentioned in the Kendupatna copper-plate inscription of Narasimhadeva II.
- The temple is renowned for the **Ratha Yatra (Chariot Festival)**, where the deities are carried on elaborately decorated chariots.
- Saints Associated:** The temple is revered by Hindus, especially **Vaishnavas**. Saints like **Ramanujacharya, Madhvacharya, Nimbarkacharya, Vallabhacharya** and **Chaitanya Mahaprabhu** have strong ties to the temple.
  - Ramanuja** established the **Emar Mutt** near the temple.
  - Adi Shankaracharya** established the **Govardhana Mutt**, one of the four Shankaracharya seats.
  - Architecture:** Built in the **Kalinga Nagara style** (Odisha style), also known as the **White Pagoda**.

- It features the **Rekha Deula, Pidha Deula** and **Khakhra Deula** typologies.
- Prominent examples of **Rekha Deula** include the **Jagannath Temple in Puri** and the **Lingaraja Temple in Bhubaneswar**.

### Svavitva Scheme in Odisha

#### Context

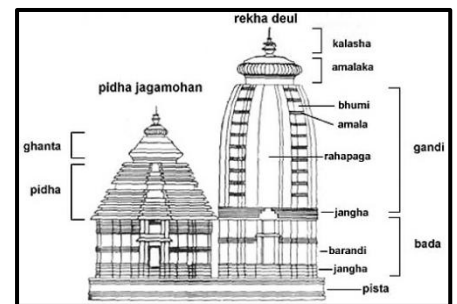
- The **SVAMITVA Scheme** has notified **3,094 villages** across five districts in Odisha.

#### SVAMITVA Scheme

- The **SVAMITVA Scheme** (Survey of Villages Abadi and Mapping with Improvised Technology in Village Areas) was launched in 2020.
- It is a **central-sector scheme** to promote **socio-economic empowerment** and build a **self-reliant rural India**.
- The scheme is a collaboration between the **Ministry of Panchayati Raj, Survey of India (SoI), Revenue and Panchayati Raj departments** and **National Informatics Centre (NIC)**.

#### Key Features:

- Targets **6.62 lakh villages** across India for surveys from **2021 to 2025** using advanced technologies like **drones** to collect property data.
- Aims to **reduce property disputes**, provide **accurate land records** and enhance **financial liquidity**.
- Facilitates **planning, revenue collection**, and informs residents of **property rights** in rural areas.



**Note:** Odisha signed the MoU on February 5, 2021, and since then, **2,724 villages** have undergone drone surveys. **1,785 maps** have been handed over to Odisha for **ground verification**. Out of **₹11.5 lakh** allocated for IEC activities and **State Project Monitoring Units (SPMU)**, the state has utilized **₹11,49,500** effectively. *The scheme is a step toward reducing land disputes and streamlining property management in rural India.*

## Odisha to implement Ayushman Bharat and Gopabandhu Jan Arogya Yojana

### Context

- The Odisha government has announced the implementation of **Ayushman Bharat Pradhan Mantri - Jan Arogya Yojana** and **Gopabandhu Jan Arogya Yojana (GJAY)** from February 2025.

### Key Highlights:

- Health Coverage:** Around **3.5 crore people** in Odisha will receive individual health cards, ensuring no one is excluded from health insurance benefits.

### Coverage Limits:

- Under **Ayushman Bharat Yojana**, beneficiaries can avail of healthcare services up to **₹5 lakh** in hospitals.
- Under **GJAY**, beneficiaries can access healthcare up to **₹5 lakh** in rural areas and **₹6 lakh** in urban areas.
- A **Memorandum of Understanding (MoU)** will be signed for smooth implementation.
- A **survey team from the Centre** has already completed groundwork for Ayushman Bharat Yojana in the state.

### Ayushman Bharat Pradhan Mantri - Jan Arogya Yojana

#### Launch Date

- September 23, 2018, in **Ranchi, Jharkhand** by Prime Minister **Narendra Modi**.

#### Coverage

- ₹5 lakh** per family per year for **secondary and tertiary care hospitalization** at **empanelled public and private hospitals**.

#### Family Floater System

- Allows a family to use the entire **₹5 lakh** coverage for any family member.

#### Beneficiary Selection

- Based on **Socio-Economic Caste Census (SECC) 2011**, covering households with deprivation criteria.

#### Cashless and Paperless Access

- Provides **cashless** and **paperless** access to medical services at empanelled hospitals nationwide.

#### No Restrictions

- No limitations on **family size, age or gender**.

#### Portability

- Benefits are **portable** across India, allowing services at any empanelled hospital.

#### Integration

- Subsumes the **Rashtriya Swasthya Bima Yojana (RSBY)**, incorporating previous beneficiaries.

#### Coverage of Pre-existing Conditions

- Includes coverage for **pre-existing conditions** from day one.

#### Covered Services

- Medical examination, treatment, and consultations
- Pre-hospitalization (up to 3 days)
- Post-hospitalization (up to 15 days)
- Non-intensive and intensive care services
- Diagnostic and laboratory services
- Implants, surgeries, and follow-up care

### Gopabandhu Jan Arogya Yojana (GJAY)

#### Scheme Name

- Gopabandhu Jan Arogya Yojana (GJAY)**

#### Launched By

- Odisha Government**, replacing the **Biju Swasthya Kalyan Yojana (BSKY)**.

#### Launch Date

- August 15, 2018** by former Chief Minister **Naveen Patnaik**.

#### Objective

- Universal Health Coverage for all Odisha residents, particularly targeting economically vulnerable families.
- Financial Protection to prevent financial constraints from hindering access to quality healthcare.

#### Key Features

- Free Health Services in government and select private hospitals.
- Insurance Coverage of up to **₹5 lakh per family per year in rural areas and ₹6 lakh in urban areas**.
- Enhanced Coverage for Women and Children up to **₹10 lakh per year**.
- Emergency Health Services ensuring timely medical intervention.

#### Implementation

- Convergence with Ayushman Bharat to ensure broader coverage and better resource utilization.
- Budget allocation of **₹5,450 crore** by the Odisha government for GJAY, and an additional **₹500 crore** for Ayushman Bharat.

#### Budget Allocation

- ₹5,450 crore** allocated for GJAY in the 2024-25 fiscal year.

#### Beneficiaries

- Over **96.50 lakh families** (both BPL and APL) are benefiting from the scheme in Odisha.

#### Cashless Treatment

- **Cashless treatment** at around **27,000 empanelled hospitals** across the state.

#### **BSKY Beneficiaries**

- Beneficiaries of **BSKY** will continue to avail benefits under **GJAY**.

#### **Key Focus Areas**

- Special focus on women and children with higher coverage.
- Emergency care and comprehensive healthcare accessibility for all families.

## **Odisha Niramaya Scheme**

### **Context**

- Public Enterprises Minister Dr. Krushna Chandra Mohapatra has directed government officials to keep 'Niramaya' centres in government hospitals open 24/7, ensuring timely medical assistance for patients.

### **Details**

- The **Odisha Niramaya Scheme**, launched in 2015, is a major healthcare initiative by the Odisha Government, aimed at providing essential medicines free of cost to the residents of the state.
- The scheme is implemented by the **Odisha State Medical Corporation Limited** and is also known as the **Free Medicine Distribution Scheme**.

- Under this scheme, more than **570 medicines and health-related items** are made available at no cost to the people of Odisha. These medicines are distributed through **1,102 Drug Distribution Centers** established across the state, including locations in Primary Health Centers, Community Health Centers, District Headquarters Hospitals, Sub-Divisional Hospitals and Medical Colleges.
- The centres operate 24/7 to ensure that residents can access medications at any time.
- To benefit from the scheme, residents of Odisha can visit government hospitals or medical colleges where they will receive a prescription from a doctor.
- They can then take the prescription to the Drug Distribution Center to collect the free medicines.
- There is no need for any application process and the scheme is open to all permanent residents of Odisha, excluding **state or central government employees**.
- The scheme provides a range of medicines, including general, surgical, anti-cancer, and child health items, among others.
- The only document required to access the medicines is an **Aadhar Card**, and if there are any grievances, beneficiaries can approach the **Medical Officer In-Charge** at the respective hospital or medical college.

## **ODISHA OTHERS**

### **Chilka Lake**

#### **Context:**

- The Ministry of Road Transport and Highways (MoRTH) has approved a two-lane national highway (NH) over **Chilika**, Asia's largest brackish water lake. Experts warn this development could damage the lake's **delicate ecosystem**.

#### **Further Details:**

- **Proposed Plan:** A 7.8-km stretch with a **right of way (RoW)** of 75 meters, part of the **Gopalpur-Satpada highway (NH-516A)** in **Krushnaprasad block, Puri district**.
- **Environmental Concerns:** Experts recommend an **alternative route** (Rambha-Balugaon-Tangi-Bhusandpur-Satpada) to safeguard the lake.
- **Ecological Importance:** **Chilika** is a critical habitat for **migratory birds, brackish water fish, marine life**, and endangered species. It holds **ecological**

and **socioeconomic significance** for local communities.

- **Threats to the Ecosystem:** The highway may exacerbate **air, water and noise pollution**, worsening the lake's existing **environmental and socioeconomic** challenges.

#### **All about Chilka Lake**

##### **About**

- **Chilika Lake** is the largest **brackish water lagoon** in **Asia** and the second-largest **coastal lagoon** in the world. It is one of the hotspots of **biodiversity** in the country.

##### **Location**

- Spread over the **Puri, Khordha, and Ganjam districts** of **Odisha** at the mouth of the **Daya River**, flowing into the **Bay of Bengal**. The north shore of the lake is part of **Khordha District** and the western shore is part of **Ganjam District**.

### Recognition

- Listed as a tentative UNESCO World Heritage site. In 1981, designated the first Indian wetland of international importance under the Ramsar Convention.

### Characteristics

- **Salinity** varies by region, from nearly freshwater to oceanic salinity levels due to tidal influx. It is an estuarine system in an ephemeral environment.

### Ground for Migratory Birds

- The largest wintering ground for migratory birds on the Indian subcontinent. Birds come from distant places like the Caspian Sea, Lake Baikal, Aral Sea, and various parts of Russia, Kazakhstan, and Central Asia.

### Flora and Fauna

- The lake is home to threatened species of plants and animals, including around 152 endangered Irrawaddy dolphins. Key species include green sea turtle (EN), dugong (VU), and blackbuck (NT).

### Flora

- Includes species like Leguminosae, Poaceae, Cyperaceae, endemic Cassipoureaceylanica, five species of seagrass, wild plants of horticultural importance, insectivorous plants, epiphytes, and mangrove associates.

### Geography and Topography

- A shallow bar-built estuary with large areas of mudflats. The western and southern margins are fringed by the Eastern Ghats hill range.

### Islands

- Major islands include Parikud, Phulbari, Berahpura, Nuapara, Nalbana, and Tampara. Other notable islands include Becon Island, Breakfast Island, Honeymoon Island, and more.

### Bird Sanctuary

- Mangalajodi is a famous bird sanctuary for sighting migratory birds.

### Support to Livelihood

- The lagoon's ecosystem sustains the livelihood of many fishermen who live in and near the lagoon, due to its rich fishery resources.

### Trivia

- Vembanad Lake is the longest lake in India (96.5 km) while Chilika Lake spans 64 kilometers in length.

## Quality of Life Initiative in Bhubaneswar

### Context:

- The Bhubaneswar Municipal Corporation (BMC), in collaboration with the United Nations Human Settlements Programme (UN-Habitat), launched an online survey to gather insights for improving the city's quality of life.

### Further Details:

- **Aim:** The survey seeks to enhance living conditions in Bhubaneswar through the 'Quality of Life' initiative, guiding BMC and UN-Habitat in implementing data-driven, people-centric solutions.
- **Survey Focus:** It aims to understand residents' experiences, challenges and priorities to develop actionable strategies aligned with their needs and aspirations.
- **Participation:** Citizens can participate by visiting the survey link, which includes 16 questions on housing, health, basic services, mobility, environment, economy, social cohesion and governance.
- BMC encouraged all residents to participate and shape the city's developmental journey.

### UN-Habitat

- UN-Habitat is the United Nations program for human settlements and sustainable urban development, established in 1977. Headquartered at the UN Office in Nairobi, Kenya, its mandate is to promote socially and environmentally sustainable towns and cities and provide adequate shelter for all. Its goals, derived from the Habitat Agenda (1996), include improving living conditions and creating sustainable human settlements.
- UN-Habitat operates in over 70 countries, focusing on areas like urban planning, housing, slum upgrading, and risk reduction. It works with local partners such as Doh Eain in Myanmar for urban regeneration.
- Its governance includes the UN-Habitat Assembly, an executive board, and a Committee of Permanent Representatives. The executive director is Anacláudia Rossbach, appointed in 2024.



## Singapore President to visit Odisha in January 2025

### Context:

- Singapore President Tharman Shanmugaratnam will visit Odisha in January 2025. This visit coincides with the celebration of 60 years of diplomatic relations between Singapore and India.

### Further Details:

- **Make in Odisha Conclave:** Singapore will be the first country partner for the Utkarsh Odisha-Make in Odisha (MIO) Conclave 2025, scheduled for January 28-29, focusing on investment and collaboration.
- **Collaboration Areas:** Discussions covered areas like petrochemicals, green energy, skills development, urban planning, tourism and renewable energy.
- **Bilateral Ties:** Singapore remains a key source of FDI in India, with strong ties in trade, defence, technology, and cultural exchange. The visit is expected to deepen these ties.

## APPOINTMENT

Odisha cadre IPS officer Dharendra Sambhaji Kutey has been appointed as inspector general (IG) of Border Security Force (BSF).

## Centre and Odisha collaborate on Mangrove Restoration

### Context:

- Union Minister Kirti Vardhan Singh highlighted significant conservation efforts undertaken by the Centre in collaboration with the Odisha government, including mangrove restoration in coastal and riverine ecosystems.

### Further Details:

- **Coastal Conservation:** As part of the Integrated Coastal Zone Management Project (ICZMP), mangrove rehabilitation and reforestation in the Bhitarkanika and Baitarani delta aim to safeguard biodiversity and mitigate cyclone impacts.
- **Mangrove Restoration Partnership:** The Centre has partnered with Odisha to enhance mangrove restoration efforts in the Bhitarkanika and Mahanadi landscape areas. Supported by the United Nations Development Programme (UNDP) and the Green Climate Fund, this project aims to plant mangroves over 1,000 hectares, boosting coastal resilience against climate change and natural disasters.
- **Sustainable Development Goals (SDGs):** The Odisha Sustainable Development Goals Indicator Framework (OSIF), developed by the Planning and Convergence Department, includes biodiversity-related indicators such as mangrove area changes and marine protected areas.
- **Biodiversity Metrics:** Key metrics for evaluating biodiversity conservation efforts include trends in populations of Olive Ridley turtles, Irrawaddy dolphins, estuarine crocodiles and horseshoe crabs.

- **Biodiversity Assessment:** The People's Biodiversity Register documents biodiversity across agricultural, marshy, and riverine lands, ensuring protection of critical habitats through planting indigenous species, forming VSSs and eco-development committees.

### Bhitarkanika National Park

- **Bhitarkanika:** India's second-largest mangrove ecosystem after the Sunderbans.
- A network of creeks and canals fed by Brahmani, Baitarani, Dhamra and Patasala rivers.
- Home to the largest population of endangered Salt Water Crocodiles in India.
- Hosts reptiles like monitor lizards and pythons.
- Other wildlife includes deer, hyenas, wild boars and migratory birds.
- The Bagadahana heronry near Surajpore creek, where thousands of birds perform aerial acrobatics.
- Home to eight species of Kingfishers, a rare phenomenon.
- The Maharaja's former hunting porch adds historical value.

### Types of Forests in Odisha:

- **Northern Tropical Semi-Evergreen Region:** Dense tree growth around Bonai.
- **Northern Tropical Moist Deciduous Region:** Dominated by Sal, covers 80% of Odisha's Forest area.
- **Northern Tropical Dry Deciduous Region:** Contains teak, found in upper basins like Tel, Nagavali, and Sabari.
- **Coastal Forests:** Rich in palm and coconut trees, adapted to cyclonic conditions, often referred to as 'Little Sunderbans'.

## Paradip Port

### Context:

- Paradip Port Authority (PPA), a key maritime hub in India, has marked a significant achievement by recording **100.13 MMT** (million metric tonnes) of cargo throughput for the **eighth consecutive year**, maintaining its leadership position in the Indian port sector.

### Details

- This achievement was accomplished **nine days earlier** than the previous fiscal year, reaching the **100 MMT** mark in just **253 days**, compared to **262 days** in FY 2022-23, setting a new record for the fastest 100 MMT milestone among Indian major ports.

### The port experienced notable growth across several key cargo categories:

- Iron ore and pellet exports** increased by **2.23%** year-on-year.
- Coastal thermal coal**, which makes up over **30%** of the total cargo volume, saw an increase of **3.57%**.
- Containerized cargo** surged by a remarkable **123.09%**, reflecting the port's expanding role in global supply chains.
- Handling of **gypsum** and **flux** saw a rise of **26.55%**, contributing further to the overall growth.



### Paradip Port

- Paradip Port is the **only major port in Odisha** and one of the key ports in India. The foundation stone was laid by **Jawaharlal Nehru**, the then Prime Minister of India in 1962.
- Paradip Port is a natural, deep-water port located on the **East coast of India**, 53 km from **Jagatsinghpur city** in Odisha. It lies at the confluence of the **Mahanadi river** and the **Bay of Bengal**.
- Administered by the **Paradip Port Authority (PPA)**, formerly the Paradip Port Trust, it is an autonomous corporation wholly owned by the **Government of India**.
- Broad-gauge electrified railway** connects Paradip Port with the **East-Coast Railway**, along with **National Highway 53** and **State Highway No. 12**.

## Odisha's Water Crisis: CAG Report exposes Health and Environmental Impact

### Context:

- Between **2017-18** and **2021-22**, nearly **half a crore** people in **Odisha** were affected by **acute diarrhoea, typhoid, hepatitis** and **renal diseases** due to the use of contaminated water, as revealed in a report by the **Comptroller and Auditor General (CAG)**.
- The CAG's **Performance Audit Report on Storm Water Drainage and Sewerage Management Systems** for municipal corporations highlighted the health impact, including **mental imbalance,**

**miscarriages** and **cancer**, attributed to poor sanitation practices and untreated wastewater.

### Key Findings:

- 42.23 lakh people** were affected by **acute diarrhoea** and **dysentery** in the period, with **Ganjam district** being the worst-hit, followed by **Khurda, Sundargarh, Cuttack, and Sambalpur**.
- Typhoid** impacted **4.62 lakh people**, with the highest number of cases reported in **Khurda, Sundargarh, Ganjam, Cuttack, and Sambalpur**.
- Hepatitis** affected **12,442 people**, while **renal diseases** affected **11,600 individuals**, particularly

in Khurda, Cuttack, Sundargarh, Ganjam, and Sambalpur.

- The health disorders also included issues related to **skin, digestive, respiratory, nervous systems,** and organs like the **kidneys, heart,** as well as **mental health** and **cancer.**

#### Environmental Impact:

- **Delayed sewerage projects** (9 to 14 years behind schedule) resulted in the **discharge of untreated wastewater** into **rivers** like **Mahanadi, Kathajodi,** and **Daya,** leading to **water contamination.**
- **Heavy metals** such as **nickel, lead,** and **cadmium** were found in **vegetable crops** grown using contaminated water. These metals pose serious health risks for both humans and animals.

#### Criticism by CAG:

- The **CAG** criticized the failure to implement sewerage projects fully, with none of the **five municipal corporations** meeting the deadline for sewerage treatment plants set by **NGT (2018).** The delay led to untreated wastewater contaminating water bodies.
- It also noted the **Odisha State Pollution Control Board's failure** to collect **environment compensation** of **Rs 1,239 crore** for non-compliance.

### **Sports Science India hosts prestigious award ceremony to celebrate Sporting Excellence**

#### Context

- Odisha-based **Sports Science India (SSI)** hosted a prestigious award ceremony at **Kalinga Stadium,** aimed at promoting sports culture in India.
- The event recognized the achievements of over 17 international-level athletes, highlighting their dedication and contribution to Indian sports.

#### Details

- This year's **SSI Karna Award** was conferred on **Aneesh S Gowda,** a swimmer from Karnataka, **Arjuna awardee Sathish Sivalingam,** a weightlifter, **Swasti Singh,** an Odia cyclist, **Aditya Thakur,** a racer, **Sandeep Kumar** and **Sneha SS,** sprinters, **Pranati Nayak,** an Olympian gymnast, and **Anmol Kharb,** a badminton sensation.
- Additionally, the **SSI Milkha Singh Sprint Champion Award** was presented to **Lalu Prasad**

**Bhoi** and **Nithya Gandhe,** while **SSI Emerging Player Award** was given to **Animesh Kujur,** a sprinter from Chhattisgarh.

- The **Dilip Tirkey Hockey Best Player Award** was received by **Shilana Lakra,** and the **SSI Paika Team Award** was conferred on the **Indian Hockey Team.**
- In recognition of outstanding coaching, the **SSI Best Coach Award** was awarded to **Vimal Kumar,** the national badminton coach, and the **SSI Grassroots Coach Award** was given to **Abdul Hakim Giri,** the coach of the Indian women's Ice Hockey team.
- **SSI Sports Development Award** was received by **JSW Sports,** and **SSI Sports Journalism Award** went to **Dipti Ranjan Samal.**

### **Revival of Belaguntha's Brass Fish Art**

#### Context:

- Belaguntha in Ganjam district, once known for its unique **brass fish art,** is set to revive the craft that faded due to neglect. Artisans are now working to restore this heritage by training local women.

#### Brass Fish Art

- Dating back to the **9th century** during the reign of the **Bhanja kings,** this ancient craft is known for its lifelike flexibility and intricate design.
- The brass fish, locally called **pitalamacha,** are not just decorative items but hold **cultural significance,** symbolizing **peace** and **auspiciousness.** They are often included in a bride's trousseau.

#### Details:

- Under **master artisan Sushant Kumar Sahu,** 25 women from **Palaksandha village** are learning the craft through **Jay Ganesh Pitala Macha WSHG.** The handmade brass fish, with intricate details and vibrant red stones for eyes, become more **flexible** and **durable** with use.
- Despite past popularity, the art's decline was due to **lack of promotion,** rising material costs and fewer artisans. The **Handicrafts Directorate** is now supporting its revival and encouraging young talent.
- To further revitalize the art, the **Odisha state handicraft department** has applied for a **Geographical Indication (GI) tag** for **Belaguntha's flexible brass products.**

## GI TAGS OF ODISHA

GI Tag	Category	GI Tag	Category
Kotpad Handloom Fabric	Handicraft	Orissa Pattachitra (Logo)	Handicraft
Orissa Ikat	Handicraft	KandhamalHaladi	Agricultural
Konark Stone Carving	Handicraft	Odisha Rasagola	Food Stuffs
Orissa Pattachitra	Handicraft	KendraparaRasabali	Food Stuffs
Pipli Applique Work	Handicraft	Lanjia Saura Painting	Handicraft
Khandua Saree and Fabrics	Handicraft	Dungaria Kondh Embroidered Shawl	Textiles
Gopalpur Tussar Fabrics	Handicraft	Dhenkanal Magji	Food Product
Ganjam Kewda Rooh	Manufactured	Mayurbhanj Kai Chutney	Food Product
Ganjam Kewda Flower	Agricultural	NayagarhKanteimundi Brinjals	Agricultural
Dhalapathar Parda & Fabrics	Handicraft	Koraput Kalajeera Rice	Agricultural
Sambalpuri Bandha Saree & Fabrics	Handicraft	Gajapati Date Palm Jaggery	Agricultural
Bomkai Saree & Fabrics	Handicraft	Cuttack Rupa Tarakasi (Silver Filigree)	Handicraft
Berhampur Patta (Phoda Kumbha) Saree & Joda	Handicraft	Habaspuri Saree & Fabrics	Handicraft

### Mayurbhanj plans to combat Similipal Forest Fires

#### Context:

- The **Mayurbhanj administration**, in collaboration with the **Forest department** and **police**, held a meeting to plan for the prevention of **forest fires** as winter approaches.

#### Details:

- Similipal**, a **tropical semi-evergreen** and **humid mixed forest**, becomes highly **vulnerable to fire** due to leaf shedding from **December to March**, leaving the forest dry. Once a fire starts, it spreads quickly, making it difficult to control. To prevent this, the meeting focused on **awareness campaigns** in **local villages**, including **photography**, **video competitions** and **social media engagement**. Additionally, **football competitions** will be organized to raise awareness.
- Key causes of fires include **poor awareness**, **shifting cultivation**, **burning of paddy stubble** and **illegal encroachment**. Similipal spans over **3,000 sq km**, with **973 fire points**, mostly caused by **human activities**.

#### SIMILIPAL TIGER RESERVE

##### Location and Geography

- Similipal, named after the **Simul (Silk Cotton) tree**, is a national park and **Tiger Reserve** in **Mayurbhanj district**, Odisha. The reserve spans **2750 sq km** and features stunning waterfalls like **Joranda** and **Barehipani**. Surrounded by high plateaus, the reserve's highest peaks are **Khairiburu** and **Meghashini**. It is traversed by twelve rivers, including **Burhabalanga**, **Palpala Bandan**, **Salandi**, **Kahairi**, and **Deo**, all draining into the **Bay of Bengal**.

##### Flora and Fauna

- Similipal's vegetation includes **tropical moist deciduous forests** and semi-evergreen patches, with **Sal trees** dominating. The park has extensive grasslands for herbivores and is rich in plants with **medicinal** and **aromatic properties**. Known for its **tiger** population, the reserve also hosts **elephants**, **leopards**, **sambar**, **barking deer**, **gaur**, and more. Birdlife includes **grey hornbill**, **Indian pied hornbill**, and **Malabar pied hornbill**. The park is home to **King cobra**, **Tricarinate hill turtle**, and flourishing **mugger crocodiles** due to the **Mugger Management Programme**.

##### History and Significance

- Similipal began as a royal hunting ground and was officially declared a **tiger reserve** in 1973 under **Project Tiger**. It became a **wildlife sanctuary** in 1979 and a **National Park** in 1980. In 1994, it was designated a **biosphere reserve** by the Government of India, and UNESCO recognized it in 2009. The reserve is also part of the **Mayurbhanj Elephant Reserve**, encompassing **Hadgarh** and **Kuldiha Wildlife Sanctuaries**. The region around Similipal is inhabited by tribes such as **Kolha**, **Santhala**, **Bhumija**, **Bhatudi**, **Gondas**, **Khadia**, **Mankadia**, and **Sahara**.

- To counter these, **fire lines** will be created across **7,731.54 sq km** of forest. The **Forest department** will also conduct **road shows, dramas and traditional art forms** like **Pala and Dasakathia** in **734 villages** near the **Similipal biosphere reserve**. **Self-help groups, PRI members and volunteers** will be trained through **54 workshops**.

## Odisha shines at National Panchayat Awards 2024

### Context

- Odisha won accolades in seven categories under the **National Panchayat Awards**, securing a total prize of **Rs 8.5 crore**. The awards were presented by **President Droupadi Murmu** in New Delhi.

### Key Awardees

- Rangailunda block's Keluapalli gram panchayat** in Ganjam district was recognized as the **second-best healthy panchayat** with a prize of **Rs 75 lakh**.
- Sahapur gram panchayat** in Hinjilicut block won **Rs 75 lakh** for being the **second self-reliant gram panchayat** in infrastructure under the **Deen Dayal Upadhyay Panchayat Satat Vikas Puraskar**.
- Koraput district** was named the **second-best zilla parishad** under the **Nanaji Deshmukh Sarvottam Panchayat Satat Vikas Puraskar**, winning **Rs 3 crore**.
- Chatrapur block** in Ganjam district received **Rs 2 crore** as the **best panchayat samiti**.
- Kendrikela gram panchayat** in Sundargarh district secured the **second position** in the **Carbon Neutral Vishesh Panchayat Puraskar**, earning **Rs 75 lakh**.
- Kashira gram panchayat** placed **third** in the **Gram Urja Swaraj Vishesh Panchayat Puraskar**, receiving **Rs 50 lakh**.

### Institutional Recognition

- The **State Institute for Rural Development and Panchayati Raj** in Odisha was awarded the **second-best institution** for panchayat skill development, under the **Panchayat Kshamta Nirmaan Sarvottam Sansthan Puraskar**, with a prize of **Rs 75 lakh**.

## National Panchayat Awards 2024

### Overview

- The **National Panchayat Awards** are celebrated annually on **April 24th** coinciding with **National Panchayati Raj Day** which marks the enactment of the **73rd Constitutional Amendment Act 1992**.
- This Act granted Panchayats constitutional status as institutions of **local self-governance**.

- The day celebrates Panchayats' crucial role in **rural development** and **India's democratic structure**.

### Participation and Selection

- This year **1.94 lakh Gram Panchayats** participated with **42%** of the award-winning Panchayats led by women. The selection process assessed Panchayats' performance in alignment with the **Localization of Sustainable Development Goals (LSDGs)** involving committees from **Block to National level**. This process emphasizes **transparency** and promotes competition among **Panchayati Raj Institutions (PRIs)** and **Rural Local Bodies (RLBs)** aiming to inspire **resilient rural communities**.

### Categories of the National Panchayat Awards

- Deen Dayal Upadhyay Panchayat Satat Vikas Puraskar (DDUPSVP)**: Recognizes the top 3 Gram Panchayats in each of the **9 LSDGs thematic areas**.
- Nanaji Deshmukh Sarvottam Panchayat Satat Vikas Puraskar**: Awarded to the top 3 Gram Panchayats, **Block Panchayats** and **District Panchayats** with the highest average scores across all themes.
- Gram Urja Swaraj Vishesh Panchayat Puraskar**: Recognizes top Panchayats for their contributions to **renewable energy** adoption.
- Carbon Neutral Vishesh Panchayat Puraskar**: Given to top Panchayats for achieving **net-zero carbon emissions**.
- Panchayat Kshamta Nirmaan Sarvottam Sansthan Puraskar**: Awarded to institutions providing **exemplary institutional support** to Panchayats.
- These awards also focus on the role of Panchayats in achieving the **United Nations Sustainable Development Goals (SDGs)** particularly the **Localization of SDGs** in local governance.

### Selection Process

- The awards involved a **multi-level evaluation** across **9 LSDG themes**. Panchayats filled out detailed questionnaires and the selection was done by committees at **Block, District, State/UT** and **National levels** ensuring a fair transparent process.
- The competition aimed to promote collaboration and excellence in **governance** and **service delivery** in rural areas.

### Key Features of the Awards

- **Multi-level Structure:** Evaluation at Block, District, State and National Levels.
- **Transparent Evaluation:** Focus on performance in 9 thematic areas of the Localization of SDGs.
- **Best Practices Promotion:** Encourages **competition** fostering excellence in **governance** and **service delivery**.

### Conclusion

- The **National Panchayat Awards 2024** reaffirm the Government of India's commitment to recognizing and empowering **Panchayati Raj Institutions** as **drivers of rural development**.
- By celebrating their achievements these awards inspire **inclusive growth** and **sustainable development** across rural India motivating Panchayats to contribute to the **Localization of SDGs** and a **sustainable inclusive rural future**.

## **Raimati Gheuria: Odisha's 'Millet Queen'**

### Context

- Raimati Gheuria known as **'Mandia Rani'** or **'Millet Queen'** was recently conferred with an honorary doctorate by the Odisha University of Agriculture and Technology (OUAT) for her extraordinary work in agriculture.

### Conservation of Traditional Crops

- Raimati has successfully **conserved 72 varieties of traditional rice and 30 types of millet**, preserving valuable indigenous knowledge and promoting biodiversity.
- Her efforts aim to **protect these crops from extinction**, which are vital to the cultural and agricultural heritage of her community.
- Despite lacking formal education and working as a daily laborer, Raimati's passion for preserving traditional farming methods led her to become a custodian farmer.

### Mentorship and Global Recognition

- Raimati's journey was **guided by MS Swaminathan**, a prominent agronomist, who mentored her on promoting millets within her community and globally.
- She was invited to present **traditional millet varieties and tribal farming methods at the G20 Summit in February 2024**, which further showcased her contributions to sustainable agriculture on the international stage.

### Training and Empowerment of Farmers

- Over the years, **Raimati has trained over 2,500 farmers in techniques such as millet intensification, line transplanting, intercropping and organic pest management.**
- Her efforts in promoting the **Odisha Millet Mission (OMM)** have enhanced millet production and quality in her district since 2017.

### Economic Impact and Women Empowerment

- Raimati has also focused on **value addition to millet farming, encouraging processing activities and the use of drudgery-reducing implements for women farmers.**
- These initiatives have not only **improved food security but have also created economic opportunities for women and farmers in tribal regions of Odisha.**

### Conclusion

- Raimati Gheuria's contributions to sustainable agriculture, particularly her work in millet conservation, training farmers and empowering women, reflect the transformative **potential of combining traditional knowledge with modern agricultural practices.**
- Her recognition at both national and international platforms highlights her role as a leader in the global movement for sustainable farming and biodiversity conservation.

## **The ISLRTC ISI Dictionary is now in Odia and 9 other languages**

### Context

- The **Indian Sign Language Research and Training Centre (ISLRTC)** has translated the **Indian Sign Language Dictionary** into **10 regional languages**, including **Odia**, to improve accessibility.

### Indian Sign Language Research and Training Centre (ISLRTC)

- The **Indian Sign Language Research and Training Centre (ISLRTC)** plays a vital role in promoting **Indian Sign Language (ISL)** as a medium of education for **deaf students** across **primary, secondary and higher education** levels.
- As a key agency, ISLRTC facilitates the development of educational resources, organizes training programs, and works towards making **Indian Sign Language** accessible and widely accepted.

### Sign Language and its Importance

- **Sign language** is a **visual-gestural manual language** that uses **hand movements, facial expressions** and **head/body positions** to communicate linguistic messages.
- It is the primary form of communication for individuals who are **deaf** or **hard of hearing**, and it plays a crucial role in **education, social interaction**, and **professional engagement** for this community.

### Prevalence of Hearing Disabilities in India

- According to the **Census 2011**, **2.68 crore** persons in India were reported as having disabilities, with **19%** of these individuals experiencing **hearing disabilities**.
- This statistic highlights the growing need for accessible **communication solutions** and inclusive education systems for those with **hearing impairments**.

### Expansion of Sign Language Education

- Over the years, the number of institutes offering **Diploma in Sign Language Interpretation (DISLI)** and **Diploma in Teaching Indian Sign Language (DTISL)** has significantly increased:
  - The number of institutes offering **DISLI** courses has risen from **20** to **42**.
  - The number of institutes offering **DTISL** courses has expanded from **7** to **13** by 2024-25.

### ISLRTC's Awareness Campaigns and Initiatives

- Currently, **665 students** are enrolled in **DISLI** and **DTISL** training programs at **National Institutes** and **Composite Regional Centres** under the Department of Empowerment of Persons with Disabilities.
- ISLRTC has organized **free awareness sessions** across various platforms, such as **corporations, colleges, and universities**, sensitizing more than **1,000 participants** about the importance of **deafness** and **Indian Sign Language**.
- To increase accessibility, the **ISL Dictionary** developed by ISLRTC has been translated into **10 regional languages**, in addition to **English** and **Hindi**. These languages include **Assamese, Bengali, Gujarati, Kannada, Malayalam, Marathi, Odia, Punjabi, Tamil** and **Telugu**.

### Conclusion

- Through its various initiatives, ISLRTC is striving to bridge communication gaps for the deaf community in India, ensuring **inclusive education** and empowering individuals with **hearing impairments**.
- By expanding training opportunities, raising awareness, and making resources like the **ISL Dictionary** accessible in regional languages, ISLRTC is actively contributing to a more **inclusive society** for individuals with hearing disabilities.

### Indian Sign Language Research and Training Centre (ISLRTC)

The **Indian Sign Language Research and Training Centre (ISLRTC)** is an autonomous organization, registered under the **Societies Registration Act XXI of 1860**, functioning under the **Department of Empowerment of Persons with Disabilities (Divyangjan)**, **Ministry of Social Justice and Empowerment**. Established in 2015, ISLRTC plays a pivotal role in **research, training, curriculum development, resource development** and **advocacy** for the **deaf community**.

### Satkosia Tiger Reserve and Baisipalli Wildlife Sanctuary

#### Context:

- The **Ministry of Tourism** has announced a ₹200 crore initiative to develop tourism infrastructure at **Satkosia Tiger Reserve** and **Hirakud Dam** in Odisha. This ambitious project aims to transform these locations into prominent tourist destinations, enhancing Odisha's status in the tourism sector.

#### Satkosia Tiger Reserve

- **Location:** Satkosia Tiger Reserves lies on the border of **Angul** and **Nayagarh districts** in Odisha.

#### History:

- **Satkosia Gorge Wildlife Sanctuary** and **Baisipalli Wildlife Sanctuary** merged in 2007 to form Satkosia Tiger Reserve.
- **Terrain:** Situated where the **Mahanadi River** flows through a **22 km gorge** in the **Eastern Ghats**.
- **Wildlife:** Located in the **Eastern Highlands moist deciduous forests** ecoregion.
- **Flora:** Features **mixed deciduous forests** with **Sal (*Shorea robusta*)** and **riverine forests**.

#### Fauna:

- **Mammals:** Leopard, wild dog, wild boar, striped hyena, sloth bear, leopard cat, jungle cat.

- **Herbivores:** Asian elephant, deer species, langurs, porcupines, pangolins.
- **Reptiles:** Mugger crocodile, gharial, Indian python.
- **Other:** Indian giant squirrel, catfish (up to 30 kg).

### **Baisipalli Wildlife Sanctuary**

- **Location:** Baisipalli Wildlife Sanctuary is situated in Nayagarh, Odisha, adjacent to Satkosia Gorge Wildlife Sanctuary.
- **History:** Established in 1981, it became part of the Satkosia Tiger Reserve in 2007.
- **Terrain:** Located where the Mahanadi River passes through a gorge in the Eastern Ghats, with elevations ranging from sea level to 900 metres.
- **Wildlife:** Home to bear, elephant, leopard, sambar deer and spotted deer.
- **Flora:** Characterized by mixed deciduous forests and riverine forests, with predominant species like Sal (*Shorea robusta*).

### **Rising Sea Levels threaten Kendrapara District**

#### **Context**

- The rising sea levels due to climate change have become a growing concern for residents in Kendrapara district, particularly in the coastal villages of Satabhaya and Pentha in the Rajnagar block.

#### **Details**

- These areas are increasingly threatened by the advancing sea, with ageo-synthetic wall built in 2014 now showing signs of deterioration.
- This half-kilometre-long geo-synthetic wall, constructed at a cost of around **Rs 33 Crore** as a pilot project to protect against high tides, is no longer effective.
- The wall, which was once a bulwark, is breaking apart, with gabion boxes disintegrating and stones being swept away.
- The structure, which extended 505 metres, has failed to hold back the sea, causing panic among locals, who now witness the sea moving closer to their homes, which were previously located about **five kilometres inland**.
- Residents are now calling for **swift repairs** and intervention from local authorities, as the situation in **Rajnagar block** worsens.
- The district administration has assured that **rapid measures** will be undertaken to fortify coastal defences.

- The natural vulnerability of the region to **coastal erosion** but committed to taking **appropriate actions** to address the issue in the future.
- As climate change intensifies, the threat of rising sea levels remains a critical concern for coastal communities like those in Kendrapara.

### **South Odisha Development Council (SODC) set in motion**

#### **Context**

- **Chief Minister Mohan Charan Majhi** initiated the formation of the **South Odisha Development Council (SODC)**.
- A **13-member high-level task force** has been established, led by **School and Mass Education Minister Nityanand Gond**, to finalize the roadmap and modalities for the body.

#### **Key Functions of SODC:**

- **Inclusive development** of all sections of people within the jurisdiction of the SODC.
- **Recommendations** on the council's jurisdiction, structure and operational modalities.

#### **Task Force Composition:**

- **Ministers:** **Bibhuti Bhusan Jena**, **Gokulananda Mallik**.
- **MPs:** **Balabhadra Majhi** (Nabarangpur), **Sukant Kumar Panigrahi** (Kandhamal).
- **MLAs:** **Siddhant Mohapatra** (Digapahandi), **Narasingh Madkani** (Malkangiri), **Rupesh Kumar Panigrahi** (Paralakhemundi), **Uma Charan Mallik** (Phulbani), **Rama Chandra Kadam** (Pottangi).

#### **Ex-officio Members:**

- Revenue Divisional Commissioners of **Southern and Central Divisions**.
- Managing Director of **Western Odisha Development Council**.

### **Progress on North Odisha Development Council (NODC):**

- Chief Minister also announced the **formation of NODC**, which will be completed within **two to three months**.
- This initiative aims to accelerate the development of both **South and North Odisha**, ensuring a **more inclusive and region-specific approach to governance and development**.



## BSF pledges to eradicate Naxalism in Odisha by March 2026

### Context

- **BSF (Border Security Force)** has pledged to eradicate **Naxalism** in Odisha by **March 2026** through enhanced coordination with **Odisha police, intelligence agencies** and the deployment of advanced technology, such as **drones** and **satellite surveillance**.

### Current Situation:

- According to **BSF Odisha**, there are **60 to 70 active Maoists** in the state, mostly from neighboring states.
- **Challenges** remain in the **dense forests** of **Kalahandi, Kandhamal** and **Boudh**, where Maoist presence and **IED threats** continue.
- **Maoist-linked narcotics trafficking**, particularly **ganja cultivation**, is emerging as a new challenge in these regions.

### BSF's Achievements and Contributions

- Since its deployment, **BSF**, with the support of **Odisha police**, has been a **game-changer** in the fight against **Maoists**.

### Key accomplishments include:

- Neutralization of **three top Maoist leaders**.
- **Surrender of 24 hardcore Maoist cadres**.
- Recovery of **34 IEDs, 117 grenades** and a **large cache of arms and ammunition**.

### Martyrs Remembered:

- **14 BSF officers and personnel** have made the ultimate sacrifice since 2010 while combating **Maoists** in Odisha.

### Swabhiman Anchal Transformation:

- **BSF** played a crucial role in transforming the **cut-off area**, a once-Maoist stronghold, into the **Swabhiman Anchal**.
- The **Gurupriya bridge**, inaugurated in 2018, connected **151 villages**, benefiting over **31,000 residents**.

### Infrastructure Development:

- Since 2010, **BSF** has contributed to the socio-economic development in **Maoist-affected regions**, including:
  - Construction of **12,116 schools** and **1,037 hospitals**.
  - Building **152 small bridges** and **63 roads**.
  - Installation of **99 mobile towers** to improve connectivity.

### BSF's Role in Human Rights and Development:

- From being the **nemesis of Maoists** to becoming the **liberators of Swabhiman Anchal**, **BSF's** efforts have fostered **stability, human rights preservation** and **development** in the region.

## Odisha witnesses decline in Birth Rate

### Context

- According to the **2020 Sample Registration Survey (SRS)**, **Odisha** has seen a steady decline in its **birth rate**, which is recorded at **17.7**—significantly lower than the national average of **19.5**.
- **Odisha's** position is **19th among 29 states** in terms of birth rate.

### Factors Behind the Decline

#### Family Planning Initiatives:

- The decline in birth rate is due to the state's **effective family planning programs**.
- **Comprehensive family planning measures** across **Odisha** have significantly contributed to the trend.

#### Future Projections:

- The birth rate is expected to continue its decline in the coming years as family planning efforts persist, contributing to **population stabilization**.

### Odisha's Commitment to National Demographic Goals

- **Odisha's** progress in reducing its birth rate reflects its commitment to achieving **national demographic goals**.
- The state's successful population management strategies position it as a **model** for effective **population control** and **health interventions** in **India**.

## Odisha targets Zero HIV infections by 2030

### Context

- The number of **HIV-positive individuals** in **Odisha** has increased from **60,886** (Nov 2023) to **63,437** (Oct 2024), including **20,935 women**, with **2,551 new cases** reported in a year.
- **Ganjam district** leads with **19,155 cases**, followed by **Cuttack** (7,994) and **Khurda** (4,210), among others. **Boudh, Subarnapur, and Deogarh** reported the lowest cases.

### HIV Prevalence and Demographic Breakdown

#### Prevalence Rate:

- The state's **HIV prevalence rate** is **0.12%**, lower than the national average of **0.2%**.
- **47,508 people** are currently living with **HIV/AIDS**, with **12,629 deaths** recorded. **394 cases** of vertical

transmission (from mother to child) have been reported.

#### Affected Demographics:

- Youths (37% of cases) and inmates (1.9% prevalence) have notably higher incidences.
- **Anti-retroviral therapy (ART)** centres have registered **50,784 people**, though **11,000+** have lost follow-up treatment.

#### Government's Target and Initiatives

##### Goal for 2030:

- The Odisha government has set an ambitious goal to achieve **zero new HIV infections by 2030**.
- Health Minister **Mukesh Mahaling** emphasized the state's focus on reducing the prevalence rate below the national average with **targeted measures for migrants, sex workers, youths, and students**.

##### World AIDS Day Observance:

- The **Odisha State AIDS Control Society (OSACS)** organized a **World AIDS Day** event, recognizing districts like **Ganjam, Khurda, and Balasore** for their efforts in raising awareness during a **two-month drive** initiated by **NACO**.

##### Focus on High-Risk Groups

##### Key High-Risk Groups:

- **Jail inmates** (1.9% prevalence) have higher infection rates than groups like **female sex workers** (1.85%), **truckers** (1%), and **migrants** (0.89%).
- The state's strategic focus on **awareness drives, treatment adherence, and targeted public health measures** aims to curb the growing challenge of HIV while working towards a **future free from new infections**.

## **NGT issues Notices on Encroachment of Luna River Bed in Kendrapara**

### Context

- A petition has been filed alleging **continuous encroachment over 18 acres** of land on the **Luna River bed** in **Badapal, Kendrapara district**, under **Marshaghai tehsil**.
- The **National Green Tribunal (NGT)** has sought replies from state authorities regarding the **illegal encroachment**.

### Key Issues Raised

#### Impact on Ecosystem:

- The petition claims the encroachments, including **labour huts, material stockyards, camp offices and vehicle parking**, have adversely affected the **riverine ecosystem** and obstructed the **free flow of the Luna River**.
- **Illegal sand extraction** from the river bed near **Badapal** has also been highlighted as a concern.

#### Lack of Permissions:

- It is alleged that the construction company has encroached on the **floodplain** without the required permissions from the **Water Resources Department** or the **tehsildar of Marshaghai**.
- Information obtained through an **RTI application** shows that the company has not been issued a **Consent to Establish (CTE)** or **Consent to Operate (CTO)** from the authorities.

#### NGT's Response

- The **NGT's East Zone bench in Kolkata** issued notices to several authorities.
- The **NGT's intervention** highlights growing concerns over the **illegal encroachments** and their **environmental impact**, with the tribunal seeking prompt responses to address the situation.

### Luna River

- The **Luna River**, a key tributary of the **Mahanadi River** in Odisha, originates from **Guali/Salepur** and flows through **Kendrapara district**. Known for its sandy bed, it plays a vital role in supporting agriculture, especially **sugarcane, paddy, and groundnut** cultivation.

### National Green Tribunal (NGT)

- The **National Green Tribunal (NGT)**, established under the **NGT Act, 2010**, is a statutory body focused on ensuring **environmental justice**. It operates outside the Code of Civil Procedure, guided by the principles of **natural justice**, and aims to dispose of applications within **6 months**. The NGT consists of **10 judicial members** and **10 expert members** (with the provision to expand up to 20 of each). The Chairman can only be a **Supreme Court Judge** or a **Chief Justice of a High Court**, and members are selected by a committee headed by a sitting **SC judge**. Judicial members are appointed from serving or retired **High Court judges**, while expert members are experienced **bureaucrats**, preferably with a **doctorate** in relevant fields. Their tenure lasts for **5 years**, without reappointment eligibility. The NGT has the authority to pass orders or grant compensation under various environmental laws, including the **Water Act, Air Act, Forest Conservation Act** and **Environment Protection Act**. It has established **five regional sittings** in **New Delhi, Bhopal, Pune, Kolkata and Chennai**.

## Odisha's progress in tackling AIDs

### Context:

- Odisha has reported a notable decrease in AIDS cases.
- State Health Minister Mukesh Mahaling shared the data on Sunday.

### Details:

- Odisha currently has around 50,000 individuals living with AIDS.
- Ganjam district remains the most affected, with approximately 20,000 cases.
- Sonapur has the fewest cases, recording around 50.
- Odisha has set a target to eliminate AIDS by 2030.
- HIV Estimations 2019 reported around 23.48 lakh PLHIV in India.
  - The most affected states:
    - ✓ Maharashtra (3.96 lakh)
    - ✓ Andhra Pradesh (3.14 lakh)
    - ✓ Karnataka (2.69 lakh)
    - ✓ Uttar Pradesh (1.61 lakh), etc.
  - West Bengal, Delhi, Punjab, and Odisha contribute 18% of the total PLHIV in India.
- Odisha will soon launch the Ayushman Bharat Yojana, benefiting 3.5 crore people in the state.
- The scheme will provide healthcare access at 27,000 hospitals across the country.

## 'Diamond Triangle'

### Context

- Union Minister for Culture and Tourism, informed the Lok Sabha that there is currently no proposal to include the Buddhist sites of Ratnagiri, Udayagiri, Langudi, and Lalitgiri in UNESCO's World Heritage List.

### Details

- These sites, collectively known as the 'Diamond Triangle', are located in Jajpur district and are under the protection of the Archaeological Survey of India (ASI).
- The Buddhist sites are of immense historical significance, having been visited by Chinese traveller Hieun Tsang. These sites were major centres of learning, rivaling Nalanda and Taxila.
- Archaeological discoveries at these sites have been noteworthy:
- **Lalitgiri (1985-1991):** Uncovered a massive hilltop stupa and an apsidal Chaitya Griha. The discovery of a golden casket containing relics

believed to be of Lord Buddha and his disciple was a key finding.

- **Udayagiri:** Excavations revealed a monastic complex with a Mahastupa and a monastery featuring a large Buddha statue.
- **Langudi:** Identified as the ancient 'Pushpagiri', referenced in Hieun Tsang's accounts.
- Currently, Konark's Sun Temple is Odisha's only site listed in the UNESCO World Heritage List.

## Key infrastructure projects in North Odisha

### Context

- President Droupadi Murmu on Saturday laid the foundation stone for three new railway line projects in north Odisha.

### Details

The Projects are:

- **Badampahar-Kendujhargarh:** Connecting Keonjhar district with Mayurbhanj district, this 82 km rail line will be built at an estimated cost of Rs 2,107 crore.
- **Bangiriposi-Gorumahisani:** A vital link between Odisha's northern part and Jharkhand, this 86 km project will be developed at Rs 2,549 crore.
- **Buramara-Chakulia:** A 60 km line connecting northeastern Odisha with the Howrah-Mumbai main line, with an estimated cost of Rs 1,639 crore.
- The total estimated cost for the three railway projects is Rs 6,295 crore.
- Additionally, President Murmu laid the foundation for the following:
  - Tribal Research and Development Centre.
  - Development of Dandbose Airstrip at Rairangpur.
  - A 100-bed hospital at Rairangpur Sub-Divisional Hospital, with an estimated cost of Rs 52.4 crore.

## Odisha promotes Cruelty-Free 'Karuna Silk' at IITF 2024

### Context

- Odisha's initiative to promote cruelty-free and chemical-free 'Karuna Silk' has become a highlight at the India International Trade Fair (IITF) 2024, held at Bharat Mandapam, New Delhi.

### Details

- 'Karuna Silk', meaning compassion in Odia, represents a sustainable and ethical approach to silk production.

- Unlike traditional silk production, where live silkworms are boiled, 'Karuna Silk' allows the silkworms to complete their life cycle and emerge as butterflies before their cocoons are collected for thread extraction.
- **Live demonstrations by weavers from Gopalpur in Jajpur** displayed the process of silk production, from rearing silkworms to weaving garments. **Finished products**, including sarees, cloth materials, and modern jackets, are available.
- The state has also integrated 'Karuna Silk' into the traditional **Khandua Patta** used in **Jagannath Temple, Puri**.
- The silks, inscribed with **verses from Jayadev's Geeta Govinda**, are produced by weavers in the **Rautapada** region near **Khurda**.

## Odisha Elephant Census 2024 (Winter) Report

### Context

- The **All-Odisha Elephant Census 2024 (Winter)** was conducted from **November 14 to November 16, 2024**, across 48 forest divisions in 28 districts of Odisha. The census showed a **marginal increase in the state's elephant population**.

### Details

- **Total Elephant Population:** 2013 elephants recorded in 38 forest divisions, marking a marginal increase from the previous census.
- **Census Breakdown (Winter 2024):**
  - **Total Elephants:** 2103
  - **Adult Tuskers:** 334
  - **Adult Makhnas:** 12
  - **Adult Females:** 678
  - **Sub-adult Tuskers:** 186
  - **Sub-adult Makhnas:** 4
  - **Sub-adult Females:** 305
  - **Juveniles:** 181
  - **Calves:** 403
- **Elephant Mortality:** 48 elephants have died between the Summer and Winter census of 2024.

AOEC-2024 (Winter)-November, 2024			AOEC-2024 (Summer)-May, 2024	
Sl. No.	Name of Division	Total No. of Elephants	Name of Division	Total No. of Elephants
1	Dhenkanal	291	Dhenkanal	239
2	Keonjhar	160	Athgarh	178
3	Athgarh	124	Satkosia WL	138
4	Deogarh	123	Keonjhar	135
5	Angul	117	Bonai	121

### Key Observations:

- **Elephant Presence:** Evidence of elephant presence was not found in 13 divisions during this census.

- **Marginal Population Increase:** Only 5 more elephants were recorded compared to the previous census in May 2024 (2098 elephants).
  - **Significant Population Increase:** Notable increase in elephant numbers in divisions like **Rourkela, Bhawanipatna Circle, Dhenkanal, Deogarh, Keonjhar and Sambalpur**, among others.
  - **Decrease in Numbers:** Reduced numbers observed in divisions such as **Similipal North, Satkosia, and Raygada**.
- Elephant Distribution and Movement:**
- **Male, Female, and Juvenile Ratios:**
    - **Summer 2024:** Male:Female:Juvenile ratio was 1:2.17:1.25
    - **Winter 2024:** Male:Female:Juvenile ratio was 1:1.83:1.08, indicating an increase in the number of **males** in the sub-adult category.
  - **Inter-State Movement:** Observed movement of elephants from **Jharkhand, West Bengal, Andhra Pradesh, and Chhattisgarh** into Odisha during the winter months.

### Conclusion:

- The **All-Odisha Elephant Census 2024 (Winter)** shows that Odisha continues to maintain a **large, well-established elephant population**, with a normal age distribution. The population remains relatively stable, with significant inter-division and inter-state movements noted during the winter months.

## Odisha's Milk Production Goals

### Context

- The Odisha government has set a target to **double its milk production** in the next **five years**, aiming for **150 lakh litres per day** by 2030.

### Details

- The current production stands at **72 lakh litres per day**.
- **Current Situation:** The **per capita requirement** is **300 ml of milk per day**, but the state is only producing about **160 ml per person**.

### Government Initiatives:

- The **Mukhyamantri Kamadhenu Yojana** has been launched with a budget of **₹1,423.47 crore** over five years to enhance milk production and promote dairy farming.
- Financial assistance of up to **₹1 crore** is being provided for setting up **dairy units and milk processing plants** under the **Mukhyamantri Krishi Udyog Yojana**.

- **314 mobile veterinary units** have been deployed to improve **livestock healthcare services** in rural areas.
- The government is promoting **artificial insemination** using **sex-sorted semen** to increase the profitability of dairying.
- Dairy farmers are being supported with **assistance for fodder cultivation, vaccination, and deworming** of animals.
- **Tribute to White Revolution:** On **National Milk Day**, the minister paid tribute to **Varghese Kurien**, the father of India's White Revolution, and encouraged farmers and unemployed youths to take advantage of these schemes to boost milk production.
- **Revamping OMFED:** OMFED (Odisha State Cooperative Milk Producers' Federation) is being revamped to benefit more farmers, with over **3 lakh dairy farmers** currently being supported through **3,700 cooperative societies**.
- **Awards and Recognition:** **Bhaskar Pradhan** from **Subarnapur** received the **National Gopal Ratna Award-2024** for his work in **artificial insemination**, marking the **third consecutive year** Odisha has received this prestigious award.

*These efforts align with the state's goal to strengthen its dairy sector and increase milk production to meet the growing demand.*

## Odisha's Supplementary Budget for Public Welfare

### Context:

- Odisha Chief Minister's Supplementary Budget for Public Welfare.

### Details

- Chief Minister **Mohan Majhi** presented a **supplementary budget of ₹12,156 crore** in the state assembly, augmenting the earlier **annual budget outlay of ₹2.65 lakh crore** announced in July.

### Key Allocations:

- **Subhadra Yojana:** An additional **₹1,196 crore** has been allocated to the **Subhadra Yojana**, a cash incentive scheme for women, increasing its total outlay to **₹11,196 crore**. This scheme provides **₹10,000 annually** in two instalments to eligible women. The government plans to reach out to **1 crore women** within the current financial year for disbursement of the first instalment.
- **Healthcare Funding:** **₹644 crore** has been earmarked for the **Gopabandhu Jana Arogya**

**Yojana**, the state's healthcare programme, increasing the total allocation for the scheme to **₹6,094 crore** after adding the previously allocated **₹5,450 crore**.

- **Pravasi Bharatiya Divas:** **₹125 crore** has been allocated for organizing the **Pravasi Bharatiya Divas** in Bhubaneswar from **January 8 to 10**, marking the first time the event will be held in Odisha.

### Fiscal Discipline and Budget Strategy:

- The budget aims to **maintain fiscal discipline**, with an emphasis on meeting public welfare needs while ensuring the state's financial health.
- The budget is **FRBM-compliant** (Fiscal Responsibility and Budget Management), projecting a **revenue surplus** and a **fiscal deficit** of around **3% of GSDP**.
- **Financing of the Budget:** The supplementary budget will be financed through **₹3,236 crore** in tied-up resources and additional revenue collection, with the remaining amount covered through savings.
- **Debt-to-GSDP Ratio:** As of October, Odisha's **debt-to-GSDP ratio** stands at **10.12%**, well below the **25%** mandated limit.

### Expenditure Breakdown:

- **₹10,155 crore** has been allocated for **programme expenditure**.
- **₹1,685 crore** is for **administrative expenditure**.

*This supplementary budget highlights the state government's focus on public welfare, particularly for women, healthcare, and cultural events, while keeping fiscal health in check.*

## Laxman Nayak

### Context

- Rich tributes were paid to freedom fighter **Sahid Laxman Nayak** at the circle jail where he was hanged to death by the British.

### Laxman Nayak: A Tribal Freedom Fighter of Odisha

#### Early Life and Background:

- **Laxman Nayak** (22 November 1899 – 29 March 1943), a revered tribal civil rights activist, hailed from the **Bhumia tribe** of Odisha.
- Born in **Tentuliguma village**, Malkangiri district, his father, **Padlam Nayak**, was a tribal chief and 'Mustadaar' under the **Jeypore Samasthanam** in the Madras Presidency.

#### Struggle Against Exploitation:

- Tribals in the region were subjected to **oppression and exploitation** by revenue officials, forest

guides, and police constables under British administration.

- Laxman Nayak organized **rebellions** against these injustices, earning recognition as a prominent tribal leader.
- He joined the **Indian National Congress**, broadening his perspective through training at the **Naupuri training centre**, where he embraced **Gandhian principles** of truth, nonviolence, and peaceful non-cooperation.

#### Contributions to Tribal Welfare:

- Nayak promoted **adult education, alcohol abstinence**, and the use of the **charkha**, bringing a significant transformation in rural tribal life.
- He spearheaded the Congress campaign in the **Koraput Sub-division** during the 1936 elections.

#### Role in the Freedom Movement:

- Responding to **Mahatma Gandhi's** call during the Quit India Movement, Nayak led a peaceful demonstration at the **Mathili Police Station** on **21 August 1942**.
- The police opened **indiscriminate fire** on the demonstrators, killing **40 people** and injuring over **200**.
- He was **framed** in a false murder case and sentenced to death on **13 November 1942**.

#### Martyrdom:

- Laxman Nayak was **hanged** on **29 March 1943** in **Berhampur Jail**, becoming a **martyr** for India's freedom struggle.
- Nayak's sacrifice remains a source of inspiration, particularly for the tribal communities of Odisha, symbolizing resistance against oppression and commitment to justice.

## APAAR ID Generation

### Context

- Odisha has performed poorly in APAAR ID generation.

### Details

- The **Automated Permanent Academic Account Registry (APAAR) IDs** initiative was launched under the '**One Nation, One Student ID**' programme.
- It aligns with the **National Education Policy (NEP) 2020**, aiming to provide every student with a unique academic identification.
- APAAR IDs are crucial for tracking academic records, reducing dropout rates, and offering educational benefits.

### Recent Findings

- Odisha has performed poorly in APAAR ID generation, with only **10% completion** statewide, ranking **18th nationally**.
- Out of **8,41,718 students** in Classes XI and XII registered through the SAMS portal, only **84,677 IDs** have been created.

### District-wise performance:

#### Low performers:

- **Ganjam:** 5% ID generation despite **69,487 enrollments**.
- **Koraput:** 3% ID generation.
- **Mayurbhanj:** 4% ID generation.
- **Other lagging districts:** Balasore, Boudh, Cuttack, Khurda, and Puri.

#### High performers:

- **Jharsuguda:** 41% ID generation.
- **Angul:** 22% ID generation.
- Improvement also observed in Kalahandi, Keonjhar, Dhenkanal, and Sambalpur.
- The **DHSE** has urged all higher secondary schools in the state to expedite ID generation for Classes XI and XII students.

### Significance of APAAR IDs:

- Enable comprehensive tracking of students' academic journeys.
- Reduce dropout rates and help identify out-of-school children.
- Integrate with **Digi Locker** for digital storage of academic achievements, exam results, and extracurricular records.

### DO YOU KNOW?

launched **Operation 'Whitewash 1.0'** to ensure a crime-free city. The initiative involves enhanced enforcement, including executing warrants, arresting absconders, and curbing illicit liquor and drug sales. **20 teams** have been mobilized, leading to the arrest of **74 miscreants**, including 29 property offenders, as part of tightened security measures.

# Odisha Current Affairs



## NATIONAL

### Railways (Amendment) Bill 2024 Passed

#### Context:

- The Lok Sabha passed the **Railways (Amendment) Bill, 2024** amid disruptions. Union Minister **Ashwini Vaishnaw** dismissed privatisation concerns as unfounded.

#### Key Highlights

- **Statutory Powers:** Empowers the Railway Board with greater authority.
- **Simplified Framework:** Merges the Railway Board Act, 1905, into the Railways Act, 1989.
- **Better Connectivity:** Boosts superfast train operations and regional links like Thawe Junction in Bihar.

#### Minister's Clarifications

- **No Privatisation:** Railways will remain government-owned.
- **Decentralisation:** Full tendering powers given to zonal managers.
- **Passenger Focus:** 13,000 new trains and 10,000 coaches planned for low-income travellers.

#### Legislative Need

- The amendment unifies old laws into a single framework, enhancing operational efficiency.

### Indian Heritage at UNESCO Awards 2024

#### Context

- Two Indian projects were honoured at the UNESCO Asia-Pacific Awards for Cultural Heritage Conservation 2024.

#### Details

##### Abathsahayeswarar Temple, Tamil Nadu

- **Award of Distinction:** Recognized for combining **traditional craftsmanship** with modern techniques to restore this 7<sup>th</sup>-century temple, mentioned in the Tamil text **Thevaram**.

##### BJPCI School, Maharashtra

- **Award of Merit:** Celebrated for restoring the **1908 Gothic-style building**, preserving its heritage while ensuring modern functionality.

#### About the Awards

- Established in **2000** to honor excellence in **heritage conservation**.
- Categories include **Excellence, Distinction, Merit and Sustainable Development**.

### India Maritime Heritage Conclave 2024

#### Context:

- The 1<sup>st</sup> India Maritime Heritage Conclave (IMHC 2024) was hosted by the Ministry of Ports, Shipping and Waterways (MoPSW).

#### Details

- India is the **16<sup>th</sup>-largest maritime country** with a coastline of **7,516.6 km**.
- The country has **12 major ports** and over **200 minor and intermediate ports**.
- **95% of India's trade by volume** and **70% by value** is handled through maritime transport.
- **100% FDI** is allowed under the automatic route for port and harbour construction and maintenance.
- A **10-year tax holiday** is offered to enterprises developing, maintaining and operating ports and inland waterways.
- In FY24, India's key ports handled **817.97 million tonnes (MT)** of cargo- a **4.45% increase** from FY23.

### Centre launches e-Maap Portal for Fair Trade and Consumer Protection

#### Context

- **National Legal Metrology Portal (eMaap) Portal** was recently launched to promote **fair trade and consumer protection** by Ministry of Consumer Affairs.

#### Features

- Offers **one-stop digital platform** for businesses and consumers.
- **Automated workflows** for faster processing and real-time compliance tracking.
- Simplifies **registration, licensing and certification** for businesses.
- Provides **consumer grievance redressal** for measurement issues.

### Viksit Panchayat Karmayogi

#### Context

- On **Good Governance Day** (December 25, 2024), Union Minister **Dr. Jitendra Singh** launched the '**Viksit Panchayat Karmayogi**' initiative to empower grassroots governance, focusing on strengthening **Panchayati Raj Institutions (PRIs)**.

#### Details

- The initiative is part of the broader '**Prashasan Gaon Ki Aur**' campaign aimed at enhancing governance at the village level.



- **Objective:** To build capacity in **Panchayati Raj Institutions (PRIs)** by equipping elected representatives and officials with tools for **effective governance and participatory planning.**

#### Focus Areas:

- **Capacity-building** through **e-learning platforms, AI-powered chatbots and mobile apps.**
- Promotes **decentralized governance and citizen-centric decision-making.**
- **Pilot States:** Odisha, Assam, Gujarat and Jharkhand Pradesh.
- **Launch Details:** Launched by Dr. Jitendra Singh on the occasion of **Atal Bihari Vajpayee's 100<sup>th</sup> birth anniversary, marking Good Governance Day.**
- **Aligning with Mission:** The initiative supports the government's broader vision of decentralizing governance and fostering **equitable and sustainable development** across rural India.

#### Other Key Initiatives Unveiled

##### **iGOT Karmayogi Platform Enhancements:**

- Introduction of a new **dashboard** and the **1600<sup>th</sup> e-learning course.**
- Enhances the **monitoring and progress** of training efforts in government ministries.

##### **CPGRAMS Annual Report 2024:**

- Review of the **Centralized Public Grievance Redress and Monitoring System (CPGRAMS).**
- **Resolution of 25 lakh grievances** annually with **multilingual support and advanced tracking.**

##### **Single Simplified Pension Application Form:**

- Combines **nine separate forms** into one streamlined digital format.
- **Real-time tracking** and **Aadhaar-based e-signatures** to simplify pension processing.

##### **Compendium of Pension Related Instructions, 2024:**

- Consolidates all pension rules, ensuring clarity and simplicity in the process.

## **Foundation stone for Ken-Betwa River Linking Project**

#### Context

- **Prime Minister Narendra Modi** laid the foundation stone for the **Ken-Betwa river linking project** in **Khajuraho.**

#### Details

- The Project is aimed to channel excess water from the **Ken river** in **Madhya Pradesh** into the **Betwa river.**
- The project is expected to bring **new prosperity** to the **Bundelkhand region** by addressing water scarcity and boosting regional development.

#### Historical Background

- The idea for this project was first proposed following a feasibility study by the **National Water Development Authority (NWDA)** in **1995**, initially estimated at a cost of **₹1998.74 crore.**
- A **Memorandum of Understanding (MOU)** was signed in **2005** between **Madhya Pradesh, Uttar Pradesh** and the **Union Government** for a **detailed feasibility report**, which was completed in **2014.** **Environmental approval** was finally granted in **2023**, clearing the way for the project's implementation.

#### Project Overview

- The project is set to benefit **nearly 4.4 million people** across **12 districts of Madhya Pradesh** and **2.1 million people** in **10 districts of Uttar Pradesh** by providing **drinking water.** With an estimated cost of **₹44,605 crore**, it will also support irrigation for over **1 million hectares of farmland** across **2,000 villages.**
- The project is expected to generate **103MW of hydropower** and **27MW of solar energy**, making it a significant step in improving **water management and energy production** in the region.

## **Go-To Global Destinations for 2025**

#### Context

- Madhya Pradesh has been recognized by the **Wall Street Journal** as one of the **"Go-To Global Destinations for 2025".**

#### Details

- This recognition highlights the state's rich heritage, unmatched wildlife and stunning natural beauty.
- With **14 UNESCO World Heritage Sites** (including **3 permanent** and **11 tentative**), **9 Tiger Reserves** and a vibrant cultural landscape, Madhya Pradesh offers travellers unique and unforgettable experiences.
- The **Wall Street Journal** specifically highlights **Khajuraho, Panna** and **Bandhavgarh** for their cultural significance, exceptional wildlife and scenic landscapes, showcasing the state's diverse tourism offerings.

## **Youngest Female to complete the Seven Summits Challenge**

#### Context

- **Kaamya Karthikeyan**, a 17-year-old from Mumbai, made history on **December 24, 2024**, as the youngest female to complete the **Seven Summits**

Challenge, scaling the highest peaks across all seven continents.

**Summit Sequence:**

- Mount Kilimanjaro (Africa)
- Mount Elbrus (Europe)
- Mount Kosciuszko (Australia)
- Mount Aconcagua (South America)
- Mount Denali (North America)
- Mount Everest (Asia)
- Mount Vinson (Antarctica)

**Final Antarctic expedition:**

- Challenging journey
- Undertaken with her father, Commander S Karthikeyan

## Scrapping of 'No-Detention Policy' in Schools

**Context:**

- The Central Government has abolished the 'No-Detention Policy' for class 5 and 8 students who fail exams.

**Background**

- In 2023-24, Delhi scrapped the 'no-detention' policy, marking the first academic year without it.
- This decision follows the amendment of the Right to Education (RTE) Act in 2017, which gave states and the Centre the authority to retain or remove the policy.

**Details:**

**No-Detention Policy:**

- Introduced under the RTE Act (2009) to prevent holding back or expelling students until Class 8.
- Aimed at reducing dropouts and promoting inclusivity by allowing students to complete elementary education without the fear of failure.

**RTE Act Amendment (2017):**

- Allowed states and the Centre to decide on detaining students. If a student fails in Classes 5 or 8, they get a re-exam within two months. If they fail again, they are held back.

**Reasons for Amendment:**

- Concerns over poor academic performance and lack of assessments under the no-detention policy.

**States Retaining vs. Scrapping Policy:**

- **Retained:** States like Andhra Pradesh, Kerala, Maharashtra, and Karnataka.
- **Scrapped:** Delhi, Punjab, MP, Rajasthan, **West Bengal**, Bihar and Gujarat.

**Delhi's Experience:**

- In 2023-24, nearly 20% of Class 8 students in Delhi failed after the policy was scrapped.

## India's first Bio-Bitumen-based National Highway Stretch

**Context:**

- Union Minister for Road Transport and Highways, Nitin Gadkari, inaugurated India's first bio-bitumen-based National Highway stretch on NH-44 in Mansar, Nagpur, Maharashtra.
- This project is a significant step towards sustainability in road construction.

**Details:**

**Bio-Bitumen Stretch:**

- India's first bio-bitumen-based National Highway stretch developed on NH-44 **using lignin-based bio-bitumen technology.**

**Technology and Sustainability:**

- **Lignin, a sustainable binder, replaces traditional bitumen**, addressing bitumen scarcity and reducing dependence on imports (currently 50% of total supply).
- This innovation helps meet global sustainability goals by mitigating stubble burning, generating revenue for bio-refineries and reducing greenhouse gas emissions by 70% compared to fossil-based bitumen.

**CNG from Biomass:**

- 400 projects across India to produce CNG from biomass, particularly rice straw, which helps reduce pollution and provides a cheaper alternative to petrol.
- These projects also benefit farmers by creating value from agricultural waste, reducing stubble burning, and promoting sustainable farming practices.

## New Nyaya Sanhita

**Context:**

- The New Nyaya Sanhita aims to improve the efficiency of the Indian legal system by ensuring quicker and fairer justice delivery through specific timelines for various legal processes.

**Details:**

**Faster and Fair Resolution:**

- **The new laws ensure timely resolution of cases with defined time limits:**
  - Preliminary enquiry: 14 days
  - Further investigation: 90 days
  - Document supply to victim/accused: 14 days
  - Commitment for trial: 90 days
  - Filing discharge applications: 60 days
  - Framing of charges: 60 days
  - Judgment pronouncement: 45 days

- Mercy petitions: 30 days before Governor, 60 days before President

#### Fast-Track Investigations:

- Offences against women and children will be investigated within 2 months of the information being recorded.

#### Limited Adjournments:

- Courts can grant a maximum of two adjournments to prevent delays.

## Bharatiya Vayuyan Vidheyak Bill passed

### Context:

- The Parliament passed the **Bharatiya Vayuyan Vidheyak Bill 2024** to streamline and improve the licensing processes for aviation personnel, enhancing the governance of the civil aviation sector in India.

### Highlights of the Bill:

#### Replacement of the Aircraft Act, 1934:

- The bill replaces the Aircraft Act of 1934, updating the legal framework governing the civil aviation sector.

#### Statutory Authorities:

- The bill establishes three key statutory authorities:
  - **Directorate General of Civil Aviation (DGCA):** Responsible for regulatory functions and overseeing aviation safety.
  - **Bureau of Civil Aviation Security (BCAS):** Responsible for overseeing aviation security.
  - **Aircraft Accidents Investigation Bureau:** Responsible for investigating aircraft accidents.

#### Union Government's Role:

- The bill empowers the **Union government** to issue directions to these authorities and review their orders in the public interest.

#### Empowerment to the Central Government:

- The central government is authorized to make rules related to:
  - **Regulation of aircraft-related activities** such as licensing, certification, and inspection.
  - **Regulation of air transport services.**
  - **Implementation of the International Civil Aviation Convention of 1944.**
  - **Regulation of radio telephone operator certificates** and licenses under the International Telecommunication Convention.

#### Appellate Mechanism:

- Retains provisions for penalties from the **Aircraft Act, 1934**, for rule violations and the appointment of adjudicating officers.

- Introduces a **two-tier appellate system**: Appeals from the **First Appellate Officer** will be heard by a **Second Appellate Officer** of higher rank.
- **Central government** will handle appeals against orders issued by **DGCA** or **BCAS**. No further appeals will be allowed against the central government's orders.
- This bill aims to provide a modernized, efficient and robust regulatory framework for India's fast-growing aviation sector.

## Atal Innovation Mission

### Context

- Atal Innovation Mission has been extended till 2028.

### All about Atal Innovation Mission (AIM)

- The Atal Innovation Mission was **launched by NITI Aayog in 2016** to foster innovation and entrepreneurship across India.
- The primary goal of AIM is to create an ecosystem for innovation and entrepreneurship at various levels, including schools, universities, research institutions, MSMEs and industries.

### Atal Tinkering Labs (ATLs)

- ATLs are established to promote creativity and an innovative mindset in schools.
- These labs are equipped with cutting-edge technologies such as **3D printers, robotics and the Internet of Things (IoT)**.
- AIM is setting up state-of-the-art ATLs in schools across all districts in India to ensure widespread access.

### Atal Tinkering Challenges

- Regular challenges are conducted at schools and through AIM to encourage students to develop innovative solutions to address local and national issues.
- These challenges aim to keep students actively involved in creating real-world solutions and fostering problem-solving skills.

### Atal Incubators

- Atal Incubators are established in universities and industries to promote entrepreneurship.
- These incubators support startups by providing resources, mentorship **and a conducive environment for innovation and growth.**

### Atal Community Innovation Centres (CICs)

- CICs are set up to extend the benefits of technology to underserved regions, **including Tier 2 and Tier 3 cities, aspirational districts, tribal, hilly and coastal areas.**

- The aim is to bridge the gap and promote inclusive growth in these regions.

#### **Mentor of Change Program**

- The Mentor of Change initiative encourages collaboration between government bodies,

academic institutions, industry leaders, individuals and NGOs with a societal focus.

- The program aims to create a vibrant innovation ecosystem by leveraging the expertise and resources of various stakeholders.



## INTERNATIONAL

### **UK Universities set to establish Campuses at Gift City, Gujarat**

#### **Context**

- UK'S **Queen's University Belfast** and **Coventry University** have applied to set up international campuses in GIFT City.

#### **About GIFT City**

- GIFT City is a **financial and technology hub in India that aims to be a global business district.**
- It is India's first operational **Greenfield Smart City** and international financial services centre, promoted by the Government of Gujarat. GIFT City is located on the **banks of the Sabarmati River.**
- It includes **commercial, financial and residential complexes.**

### **World's Largest Dam on Brahmaputra by China**

#### **Context:**

- China has approved the construction of the **world's largest dam on the Brahmaputra River (YarlungZangbo)** in Tibet, near India's border, raising regional concerns over water flow and stability.
- **Location:** Planned at a massive gorge in Tibet, where the Brahmaputra makes a U-turn before entering **Arunachal Pradesh.**

#### **Concerns for India:**

- Control over Brahmaputra's flow, affecting downstream nations like India and Bangladesh.
- Risk of **flooding border areas** during potential hostilities.
- Strategic implications for water resources and security.

#### **Significance for China:**

- Hydropower potential equivalent to **three Three Gorges Dams.**
- Revenue generation: **20 billion yuan annually** for Tibet.
- Strategic importance for **energy, national security and South Asia cooperation.**

### **India to Chair the 68<sup>th</sup> Session of The Commission on Narcotic Drugs (CND)**

#### **Context:**

- India has been chosen to chair the **68<sup>th</sup> Session of the Commission on Narcotic Drugs (CND)**, marking the first time it has held this important position.
- The CND is the principal policy-making body of the United Nations (UN) on drug-related matters.

#### **Details:**

##### **Chairmanship of Shambhu S. Kumaran:**

- **Shambhu S. Kumaran**, India's Permanent Representative to the United Nations in Vienna, has assumed the CND chairmanship.

##### **CND's Role:**

- The CND monitors global drug trends, supports balanced drug policies, and oversees the implementation of international drug control conventions.
- It operates under the **United Nations Economic and Social Council (ECOSOC)** and serves as the governing body of the **United Nations Office on Drugs and Crime (UNODC).**

##### **Purpose of CND:**

- The CND reviews global drug issues and takes action through **resolutions and decisions.**
- It was established in **1946** by the **United Nations Economic and Social Council (ECOSOC)** to supervise the application of international drug control treaties and later became the governing body of the **United Nations Office on Drugs and Crime (UNODC)** in 1991.

##### **CND Structure:**

- The CND is composed of **53 Member States** elected by ECOSOC for a four-year term.
- The seats are distributed among regional groups, including **African States, Asian States, Latin American and Caribbean States, Eastern European States, and Western European and other States.**
- **India's Role and Challenges:**

- India's fight against narcotics involves **law enforcement, advanced detection technologies, and international cooperation.**
- Evolving trends in **drug trafficking** and the emergence of **new psychoactive substances** require continuous adaptation and innovation in **enforcement strategies.**

## UN Peace building Commission (PBC)

### Context

- India has been re-elected to the UN Peacebuilding Commission (PBC) for the 2025–2026 term.
- India's current term was set to expire on December 31.
- As a founding member and major contributor to UN Peacekeeping, India remains committed to global peace and stability.

### Role of the UN Peacebuilding Commission (PBC)

- The United Nations Peacebuilding Commission (PBC) is an **intergovernmental advisory body supporting peace efforts in conflict-affected countries.**
- **Established in 2005** it enhances international capacity for peacebuilding. **Currently chaired by Mr. Sérgio França Danese (Brazil).**
- PBC is **focused on post-conflict recovery and rebuilding institutions in conflict-affected countries.**
- **Composed of 31 member states,** elected from the General Assembly, the Security Council, and the Economic and Social Council.
- Tasks include advising on and proposing strategies for sustainable peace, reconstruction, and recovery.

### Focus areas include:

- Supporting reconstruction and institution-building.
- Ensuring predictable financing for early recovery activities.
- Promoting integrated approaches to security, development, and human rights.
- Coordinating efforts among relevant actors to extend attention to post-conflict recovery.

### India's Contribution to UN Peacekeeping

- India is one of the largest contributors of uniformed personnel to UN Peacekeeping missions.
- **Currently, India deploys approximately 6,000 military and police personnel to UN operations in:**
  - Abyei
  - Central African Republic

- Cyprus
- Democratic Republic of the Congo
- Lebanon
- Somalia
- South Sudan
- Western Sahara

- India's contributions underscore its leadership in global peace efforts and commitment to post-conflict recovery.

### India's Continued Engagement with the PBC

- With this re-election, India continues to contribute to the PBC's core mandate of fostering post-conflict recovery and promoting sustainable development.
- India's engagement helps enhance global efforts towards lasting peace and stability in conflict-affected regions.

## Moldova joins International Solar Alliance (ISA)

### Context

- Moldova signed the ISA Framework Agreement to highlight its commitment to expanding renewable energy and solar initiatives globally.

### International Solar Alliance (ISA)

- **Global Initiative:** Formed to promote solar energy solutions and address climate change.
- **Founding:** Collaboration between India and France during COP21 in Paris (2015).
- **Treaty-Based Organisation:** Includes 104 member countries and 16 signatory countries, primarily located between the Tropics of Cancer and Capricorn.
- **Framework Agreement:** Came into force in 2017 and amended in 2020 to allow all UN member states to join.
  - Non-tropical countries can join but lack voting rights.
- **Headquarters:** Gurugram, Haryana, India.
- **Mission:** Guided by the 'Towards 1000' strategy:
  - Mobilize USD 1,000 billion in solar energy investments.
  - Provide energy access to 1,000 million people.
  - Install 1,000 GW of solar energy capacity by 2030.

### About Moldova

- **Location:** Landlocked country in Eastern Europe, bordered by Romania (west) and Ukraine (east).
- **Geographical Features:**
  - Prut River forms the western border.
  - Dniester River forms the eastern border.

- 88% of the country lies in the Bessarabia region.
- **Capital City:** Chişinău – Moldova’s largest city, home to about one-third of the population.
- **Economic Status:** Europe’s second-poorest country in GDP per capita, after Ukraine.

## Golan Heights

### Context

- Israel's government has approved a plan to encourage the expansion of settlements in the occupied Golan Heights.

### Golan Heights

- **Location:** A rocky plateau in southwestern Syria, 60 km south of Damascus.
- **Borders:** Jordan River, Sea of Galilee, Mount Hermon, Wadi Al-Ruqqd River, and Yarmouk River.
- **Size:** Covers 1,150 sq km, approximately 44 miles (71 km) north-south and 27 miles (43 km) east-west.



### Source of Contention

- Syria controlled the Golan Heights until 1967.
- During the **Six-Day War** (1967), Israel occupied and annexed the Golan in 1981.
- **Druze** offered **Israeli citizenship** but the majority refused, maintaining **Syrian identity**.
- Approximately **20,000 Israeli settlers** live there.
- **Israel’s annexation** is not internationally recognized; **Syria** seeks the return of the territory.
- **Syria** attempted to reclaim it during the **1973 Middle East conflict** but was unsuccessful.
- The region has been mostly peaceful since the **1974 peace treaty**.

- High-level discussions in **2000** failed to resolve the issue.

### Claims to the Golan Heights

- Both sides seek control due to the **Golan's water resources** and **fertile land**.
- **Israel** views it as a **buffer zone** amidst **Syria's civil conflict** and concerns over **Iranian** presence.
- **Syria** insists the Golan is **occupied territory** and demands its return.

### UN Arrangement

- The **UN Disengagement Observer Force (UNDOF)** monitors the region with support from **UNTSO**.
- A **400 sq km “Area of Separation”** divides **Israeli** and **Syrian** forces.
- The **1974 Separation of Forces Agreement** established the **Alpha** and **Bravo Lines** for Israeli and Syrian troops.
- The **Area of Limitation** extends **25 km** beyond the Separation Area, restricting troops and weaponry.
- One **crossing point** connects both sides, primarily used by **UN forces** and limited civilians before the **Syrian civil war**.

### Strategic Importance

- Over **30 Israeli settlements** are in the Golan, considered illegal under **international law**.
- The land is **fertile**, ideal for **agriculture**.
- The Golan’s **water resources** supply **one-third of Israel's water**.
- **Damascus**, the **Syrian capital**, is visible from the Golan Heights.

## Switzerland to suspend MFN Clause for India under DTAA from January 1, 2025

### Context

- Switzerland suspended the Most Favored Nation (MFN) clause under the Double Taxation Avoidance Agreement (DTAA) with India.

### Details

- **Most Favoured Nation (MFN)** is a status in international trade where a country agrees to treat another country equally, offering the lowest tariffs, highest import quotas, minimal trade barriers, and other favorable terms, ensuring that no country is treated less advantageously than others with MFN status, as per the principle of **non-discrimination**.
- The MFN clause in the India-Switzerland DTAA is a provision that ensures equal treatment for both countries in the context of tax benefits. Under this clause, if India or Switzerland enters a DTAA with a third country and grants that country a more favorable tax rate or benefit, the same advantage

must automatically be extended to the other partner (in this case, India or Switzerland).

- For instance, if Switzerland agreed to a reduced withholding tax rate on dividends, interest, or

royalties with another country (say 5 percent), India would automatically be entitled to the same lower rate under the MFN clause.

## SCIENCE & TECHNOLOGY

### Kisan Kavach

#### Context

- Dr. Jitendra Singh, Union Minister of State (Independent Charge) for Science and Technology revealed **Kisan Kavach**, India's **first indigenous anti-pesticide bodysuit**.

#### Details

- This innovation, developed by **BRIC-inStem** in collaboration with **Sepio Health Pvt. Ltd.**, provides comprehensive protection with a full-body suit, mask, headshield and gloves.
- Priced at ₹4,000, it is washable, **reusable and can last up to two years with 150 washes**.
- The suit's advanced fabric deactivates harmful pesticides upon contact, ensuring maximum safety.

#### Pesticides: A Double-Edged Sword

- **Need for Pesticides:** Pesticides are essential to address challenges like shrinking land and crop pests, which cause 15-25% yield loss in major crops.
- **Adverse Impacts:** Improper use of pesticides poses significant risks to human health, particularly through skin contact during spraying, leading to fatalities. Between 2015 and 2018, pesticide misuse caused 442 fatalities.

#### Reducing Pesticide Usage: Key Government Strategies

- **Insecticides Act (1968):** Regulates pesticide use to protect human and animal health. The Central Insecticides Board (CIB) guides technical aspects, and harmful pesticides can be banned.
- **Good Agricultural Practices (GAP):** Focus on sustainability, food safety and product quality to improve farming practices and working conditions.
- **Promoting Bio-pesticides:** The government encourages biopesticides like *Bacillus thuringiensis* and *Trichoderma* for sustainable crop protection, with simplified registration guidelines.
- **Integrated Pest Management (IPM):** Focuses on sustainable pest control methods, including biological control and plant-origin pesticides like neem formulations.

#### Conclusion:

- The Kisan Kavach suits, along with efforts to reduce chemical pesticide use and promote biopesticides, mark significant progress towards a safer and more sustainable agricultural future in India.



Pesticides Banned for manufacture, import and use			
1	Alachlor	24	Lindane
2	Aldicarb	25	Linuron
3	Aldrin	26	Maleic Hydrazid
4	Benzene Hexachloride	27	Menazon
5	Benomy	28	Methoxy Ethyl Mercury Chloride
6	Calcium Cyanide	29	Methyl Parathion
7	Carbaryl	30	Metoxuron
8	Chlorbenzilate	31	Nitrofen
9	Chlordane	32	Paraquat Dimethyl Sulphate
10	Chlorofenvinphos	33	Pentachloro Nitrobenzene
11	Copper Acetoarsenite	34	Pentachlorophenol
12	Diazinon	35	Phenyl Mercury Acetate
13	Dibromochloropropane	36	Phorate
14	Dichlorovos	37	Phosphamidon
15	Dieldrin	38	Sodium Cyanide
16	Endosulfan	39	Sodium Methane Arsonate
17	Endrin	40	Tetradifon
18	Ethyl Mercury Chloride	41	Thiometon
19	Ethyl Parathion	42	Toxaphene
20	Ethylene Dibromide	43	Triazophos
21	Fenarimol	44	Tridemorph
22	Fenthion	45	Trichloro acetic acid
23	Heptachlor	46	Trichlorfon

## Geoscience Museum

### Context

- Vice President Jagdeep Dhankhar inaugurated the Geological Survey of India's (GSI) state-of-the-art Geoscience Museum at the Victoria Market Building in Gwalior, Madhya Pradesh.

### Highlighting Earth's Geological Marvels

- The Gwalior Geoscience Museum features two galleries:
- **Gallery I: Planet Earth: Its Uniqueness in Diversity**, showcasing natural phenomena such as volcanoes, meteorites, and magnetic fields, with rare specimens like Antarctic rocks, Himalayan fossils, dinosaur eggs, and volcanic rocks from Japan.
- **Gallery II: Evolution of Life on Earth**, documenting ancient ecosystems, evolutionary milestones, and extinction events using fossils and immersive exhibits.

### Geological Survey of India (GSI)

The Geological Survey of India (GSI) established in 1851 under the Ministry of Mines is a scientific organization headquartered in Kolkata. Its primary functions include geological mapping mineral exploration geotechnical studies natural hazard assessments and geo-environmental research. GSI provides crucial geological information for mineral exploration and use planning disaster management and infrastructure development. It also conducts studies on geodynamic processes like plate tectonics earthquakes and climate change. GSI has significantly contributed to India's development by mapping the country assessing mineral resources such as coal iron ore and gold and exploring the geological evolution of the Indian subcontinent. Additionally, GSI maintains a national geoscience museum and promotes public awareness about geology.

## India's First Diabetes Biobank

### Context:

- India has established its first diabetes biobank. The Indian Council of Medical Research (ICMR) partnered with the Madras Diabetes Research Foundation (MDRF) to set up this biobank in Chennai.

### Details

- The diabetes biobank is a vital repository of population-based biological samples intended to support scientific research on diabetes and related disorders.
- This initiative is aimed at advancing the understanding of diabetes, particularly the various types of diabetes prevalent in India and will play a crucial role in scientific research related to the disease.
- **Objective:** To gather, process, store, and distribute biospecimens for diabetes research with ICMR's oversight.

- **Key Studies:** ICMR-INDIAB: A national study (2008-2020) on diabetes prevalence across India.
- **Registry of Youth-onset Diabetes:** Focuses on Type 1 and Type 2 diabetes in young individuals.
- **Biobank Role:** Helps identify biomarkers for early diagnosis and personalized treatments. Supports longitudinal studies on diabetes progression.
- **Technological Integration:** Essential for specimen storage, data management, and sharing.
- **Global Comparison:** Similar to the UK Biobank, but focused on India's specific diabetes challenges.

### Further Information:

- **ICMR-INDIAB Findings:** 10.1 crore Indians have diabetes; high rates of metabolic NCDs; need for increased physical activity and awareness.
- **Registry Study:** 5,546 youth participants show a high prevalence of T1D and T2D with early complications.
- **Future Impact:** The biobank will enable better diabetes management and contribute to global research.



## BIOLOGY & ENVIRONMENT

## 10<sup>th</sup> International Forest Fair

### Context:

- The 10<sup>th</sup> International Forest Fair began in Bhopal, Madhya Pradesh, on December 17, 2024. The event focuses on sustainable forestry practices,

community empowerment, and stakeholder collaboration in the forestry sector.

### Details:

- **Event Duration:** The fair runs from December 17 to December 23, 2024, in Bhopal, Madhya Pradesh.



- **Theme:** "Women Empowerment through Minor Forest Produce." Highlights the role of women, who make up 50% of the workforce in managing minor forest produce.
- **Focus:** Promotes sustainable forest practices, empowers local communities, and facilitates discussions among government officials, traders, producers, scientists, and policymakers.

## First-ever Satellite Tagging of a Ganges Dolphin

### Context:

- In a **historic move for wildlife conservation**, the first-ever **Ganges River Dolphin** has been tagged in Assam.
- This initiative is part of **Project Dolphin**, aimed at understanding and conserving the species, and is funded by the **Ministry of Environment, Forest and Climate Change (MoEFCC)** and the **National CAMPA Authority**.

### Details:

#### Tagging Event:

- The first **Ganges River Dolphin** was tagged in Assam as part of a collaborative effort by the **MoEFCC, Wildlife Institute of India (WII), Assam Forest Department** and **Aaranyak**.
- The tagging, a **first for the species**, marks a significant step in **conservation efforts**.

#### Tagging Purpose:

- The **satellite tagging** aims to gather data on the dolphin's **movement patterns, seasonal migration, range** and **habitat utilization**, especially in **disturbed river systems**.
- This information will help fill crucial **knowledge gaps** about the species.

#### Ecology of Ganges River Dolphin:

- India's **National Aquatic Animal**, the **Ganges River Dolphin**, is nearly blind and relies on **echolocation**.
- It resides predominantly in India, but its population has drastically **declined**.
- The species is **elusive**, surfacing for only brief moments, making it challenging to study.
- **IUCN Status:** Endangered, listed in **Schedule-I** of the **Wildlife (Protection) Act** and included in **CITES Appendix I**, which covers the most endangered species.

#### Project Dolphin:

- The tagging is part of **Project Dolphin**, supported by **MoEFCC** and **National CAMPA Authority**.
- This project aims to develop a **conservation action plan** and address **knowledge gaps** to ensure the **long-term survival** of the species.

#### Significance of Tagging:

- The tagging will contribute to **evidence-based conservation strategies** for the dolphin, an **apex predator** and **umbrella species** in river ecosystems.
- The dolphin's health is crucial for maintaining the **entire river ecosystem**.

## 57<sup>th</sup> Tiger Reserve in India

### Context:

- India's **57<sup>th</sup> tiger reserve has been established at the Ratapani Wildlife Sanctuary in Madhya Pradesh** after receiving approval from the Union Ministry of Environment, Forest, and Climate Change.

### Details:

- **Tiger Reserves in India:** These are areas designated under Project Tiger (1973) for tiger conservation, focusing on preserving tigers and their habitats. They include core and buffer zones, with the core area legally designated as a national park or sanctuary.
- **Current Status:** India has 57 tiger reserves, covering about 82,000 sq km, home to 3,167 tigers, **over 70% of the global tiger population**.

#### Formation of Tiger Reserves:

- Identified based on viable tiger populations and suitable habitats.
- Proposals undergo ecological assessments and are **submitted to the National Tiger Conservation Authority and Ministry of Environment for approval**.
- Once approved, the reserve is **notified under the Wildlife Protection Act** and receives funding and technical support from the Project Tiger initiative.

#### Further Information:

- **Project Tiger's Origin:** Launched in 1973 to counter the tiger population decline due to poaching and habitat loss. It started with nine reserves and has expanded over the years.
- **Environmental Impact:** A 2023 study found tiger reserves helped prevent over 5,800 hectares of forest loss, reducing 1 million metric tons of CO<sub>2</sub> emissions between 2007-2020.

**List of other 56 Tiger Reserves in India**

Sl.	Tiger Reserves in India (Name)	State/Uts	Sl.	Tiger Reserves in India (Name)	State/Uts
1	Bandipur Tiger Reserve	Karnataka	29	Satpura Tiger Reserve	Madhya Pradesh
2	Corbett Tiger Reserve	Uttarakhand	30	Anamalai Tiger Reserve	Tamil Nadu
3	Amanagarh Buffer Tiger Reserve	Uttar Pradesh	31	Udanti Sitanadi Tiger Reserve	Chhattisgarh
4	Kanha Tiger Reserve	Madhya Pradesh	32	Satkosia Tiger Reserve	Odisha
5	Manas Tiger Reserve	Assam	33	Kaziranga Tiger Reserve	Assam
6	Melghat Tiger Reserve	Maharashtra	34	Achanakmar Tiger Reserve	Chhattisgarh
7	Palamu Tiger Reserve	Jharkhand	35	Kali Tiger Reserve	Karnataka
8	Ranthambore Tiger Reserve	Rajasthan	36	Sanjay Dhubri Tiger Reserve	Madhya Pradesh
9	Simlipal Tiger Reserve	Orissa	37	Mudumalai Tiger Reserve	Tamil Nadu
10	Sunderban Tiger Reserve	West Bengal	38	Nagarhole Tiger Reserve	Karnataka
11	Periyar Tiger Reserve	Kerala	39	Parambikulam Tiger Reserve	Kerala
12	Sariska Tiger Reserve	Rajasthan	40	Sahyadri Tiger Reserve	Maharashtra
13	Buxa Tiger Reserve	West Bengal	41	Biligiri Ranganatha Temple Tiger Reserve	Karnataka
14	Indravati Tiger Reserve	Chhattisgarh	42	Kawal Tiger Reserve	Telangana
15	Namdapha Tiger Reserve	Arunachal Pradesh	43	Sathyamangalam Tiger Reserve	Tamil Nadu
16	Nagarjunsagar Tiger Reserve	Andhra Pradesh	44	Mukundara Tiger Reserve	Rajasthan
17	Dudhwa Tiger Reserve	Uttar Pradesh	45	Nawegaon Nagzira Tiger Reserve	Maharashtra
18	Kalakad Mundanthurai Tiger Reserve	Tamil Nadu	46	Amrabad Tiger Reserve	Telangana
19	Valmiki Tiger Reserve	Bihar	47	Pilibhit Tiger Reserve	Uttar Pradesh
20	Pench Tiger Reserve	Madhya Pradesh	48	Bor Tiger Reserve	Maharashtra
21	Tadoba Andhari Tiger Reserve	Maharashtra	49	Rajaji Tiger Reserve	Uttarakhand
22	Bandhavgarh Tiger Reserve	Madhya Pradesh	50	Orang Tiger Reserve	Assam
23	Panna Tiger Reserve	Madhya Pradesh	51	Kamlang Tiger Reserve	Arunachal Pradesh
24	Dampa Tiger Reserve	Mizoram	52	Srivilliputhur Megamalai Tiger Reserve	Tamil Nadu
25	Bhadra Tiger Reserve	Karnataka	53	Guru Ghasidas National Park	Chhattisgarh
26	Pench Tiger Reserve	Maharashtra	54	Veerangana Durgavati Tiger Reserve	Madhya Pradesh
27	Pakke Tiger Reserve	Arunachal Pradesh	55	Dholpur Karauli	Rajasthan
28	Nameri Tiger Reserve	Assam	56	Guru Ghasidas-Tamor Pingla Tiger Reserve	Chhattisgarh

**Ratapani Tiger Reserve**

The **Ratapani Tiger Reserve**, located in the **Raisen district** of **Madhya Pradesh**, in the **Vindhya Range** in central India, is one of the finest **teak forests** in the state and is less than 50 kilometres from the capital **Bhopal**. It has been a **wildlife sanctuary** since 1976. The total **forest area** is around 824 square kilometres, and the landscape is undulating, with **hills, plateaus, valleys and plains**. Two large **reservoirs**, namely **Barna Reservoir** and **Ratapani Dam** (Barrusot lake), are among the major **waterbodies** adjacent to or inside the sanctuary. The forest of Ratapani is **dry deciduous** and **moist deciduous**, with **teak (Tectona grandis)** as the main tree species. About 55% of the area is covered by teak. The remaining mixed forests consist of various **dry deciduous** species. **Bamboo (Dendrocalamus strictus)** overlaps the two aforementioned forest types and covers about one-quarter of the forest area. **Bhimbetka rock shelters** are located within this tiger reserve. These **rock shelters** were inhabited by man hundreds of thousand years ago, and some of the **rock paintings** of the **Stone Age** are more than 30,000 years old. It has been declared a **World Heritage Site** by **UNESCO**. The tourist places include **Bhimbetka, Delawari, Ginnorhgarh Fort, Ratapani Dam, KairiMahadeo and Kherbana Mandir**.

## India's Tiger Population

### Context:

- India's tiger population has witnessed a significant rise, reaching 3,682 in 2022, up from 2,967 in 2018.
- This reflects a 6% annual increase in consistently monitored areas, marking a key achievement in wildlife conservation.

### Highlights of the Increase in Tiger Population:

#### Growth in Tiger Numbers:

- The tiger population grew by 6% annually, with consistent monitoring since 2018.
- The total tiger count rose from 2,967 in 2018 to 3,682 in 2022.

#### Regional Growth:

##### Central Indian and Eastern Ghats Landscape Complex:

- Tiger numbers increased from 1,033 in 2018 to 1,439 in 2022.
- States involved: Andhra Pradesh, Telangana, Chhattisgarh, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, and Jharkhand.

##### Shivalik-Gangetic Plain Landscape Complex:

- Tiger population rose from 646 in 2018 to 819 in 2022.
- States involved: Uttarakhand, Uttar Pradesh, and Bihar.

##### Sundarbans:

- Tiger population increased from 88 to 101.

### Challenges:

- Decline in tiger population observed in **Odisha, Telangana, Chhattisgarh, Jharkhand, and Arunachal Pradesh** (from 29 to 9 tigers in 2022).
- However, growth in **Madhya Pradesh** (from 526 to 785 tigers) and **Maharashtra** (from 312 to 444 tigers).

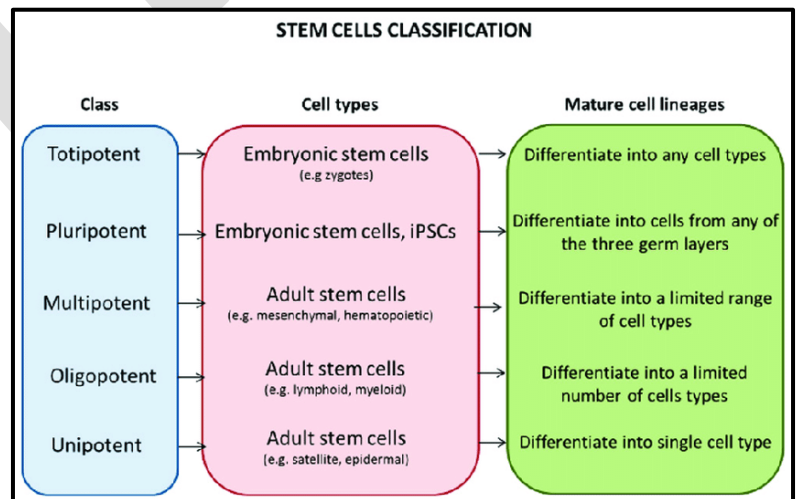
## Stem Cells

### Stem Cells:

- About:** Stem cells are unique cells capable of developing into specialized cell types in the body.
- Production:** Blood stem cells are produced in the bone marrow, generating any blood cell type required by the body. They constantly divide and replace older blood cells, producing billions of new cells daily.
- Inadequate production:** Insufficient stem cell production can lead to health issues such as infections, anemia, or bleeding.

### Stem Cell Transplantation (SCT):

- About:** SCT, or bone marrow transplant, involves transferring healthy stem cells to replace damaged ones in a patient.
- Engraftment:** After infusion, the stem cells travel to the bone marrow, forming new blood cells (white, red, platelets), a process known as "engraftment."



**C3 VS C4 PLANTS**






Characteristic	C3 Plants	C4 Plants
Definition	Utilize the C3 pathway or Calvin cycle for the dark reaction of photosynthesis	Employ the C4 pathway or Hatch-Slack Pathway for the dark reaction of photosynthesis
Season	Cool-season plants, commonly found in cool and wet areas	Warm-season plants, commonly found in dry areas
Product	Produces a 3 carbon compound - phosphoglyceric acid	Produces a 4 carbon compound - Oxaloacetic acid
Presence	Comprise approximately 95% of total green plants on Earth	Account for about 5% of plants on Earth
Conditions	Abundant in temperate conditions	Abundant in tropical conditions
Kranz anatomy	Leaves do not have Kranz anatomy	Leaves possess Kranz Anatomy
Chloroplast	Bundle sheath cells do not contain chloroplasts	Bundle sheath cells contain chloroplasts
CO2 Acceptors	Possess only one CO2 acceptor	Possess two CO2 acceptors
Secondary Acceptor	Do not consist of secondary CO2 acceptor	Consist of secondary CO2 acceptor
Photosynthesis	Occurs only when stomata are open	Occurs even when stomata are closed
Peripheral Reticulum	Chloroplasts do not consist of the peripheral reticulum	Chloroplasts consist of the peripheral reticulum
Temperature	Optimum temperature for photosynthesis is very low	Optimum temperature for photosynthesis is high
Efficiency	Less efficient in photosynthesis	More efficient in photosynthesis
Photorespiration	High photorespiration rate	Absence of photorespiration
CO2 Fixation	Slow CO2 fixation	Comparatively faster CO2 fixation
Mesophyll Cell	Dark reaction occurs only in mesophyll	Initial steps occur in mesophyll cells, and main steps take place in bundle sheath cells
CO2 Composition Point	High carbon dioxide composition point	Low carbon dioxide composition point
Growth	Occurs when the soil temperature is between 4-7 degrees	Occurs when the soil temperature is between 16-21 degrees
Examples	Wheat, Oats, Rice, Sunflower, Cotton	Maize, Sugarcane, Amaranthus

**Basic differences in National Parks, Wildlife Sanctuaries and Biosphere Reserves**

**Distinction Between National Park, Sanctuary and Biosphere**

National Park	Sanctuary	Biosphere Reserve
Habitat for particular wild animal species	Generally species-oriented such as citrus, pitcher plant etc.	Hitched to the whole ecosystem, i.e. totality of all forms of life, i.e. ecosystem-oriented.
In India, most common average size is 100-500 sq. km. (in about 40 per cent cases) and 500-1000 sq. km. (about 15 per cent cases). The general size range is 0.04 to 3162 sq. km.	Size range is 0.61 to 7818 sq. km. Most common (in about 40 per cent) is 100-500 sq. km. in 25 per cent, the size varies between 500 and 1000 sq. km.	Size range over 5670 sq. km.
Boundaries fixed by legislation.	Boundaries are not sacrosanct	Fixed by legislation
Except the buffer zone, no biotic interference	Limited biotic interference	Except the buffer zone, no biotic interference
Tourism permissible	Permissible	Normally not permissible
Research and scientific management lacking	Lacking	Managed
So far no attention to gene pools and conservation	So far no such attention	Attention given

**PLANT HORMONES**

PLANT HORMONES		
HORMONE	FUNCTION	LOCATION
 Gibberellins	Increase the speed of seed germination; promote stem elongation; induce early blooming of flowers; increase fruit size	Shoot and root apical meristems; seeds
 Auxins	Stimulate stem elongation; control seedling orientation; stimulate root branching; promote fruit development	Apical meristems; immature plant tissue
 Ethylene	Increases the speed at which fruit ripens; stimulates leaf dropping and the death of flowers	All parts of the plant including the fruits
 Abscisic acid	Inhibits growth and reproduction; inhibits seed germination; stimulates closure of stomata	Leaves; fruits; root tips; seeds
 Cytokinins	Cause rapid cell division, in conjunction with auxin; induce seed germination; initiate new branches from lateral buds	Roots and fruits, primarily

**ENZYMES**

Enzyme	Activity
Protease	Breaks down protein to peptides and amino acids.
Amylase	Breaks down carbohydrates, starches, and sugars.
Lipase	Breaks down fats and oils to be absorbed in the intestine.
Lactase	Breaks down lactose that is found in milk sugars.
Alpha Galactosidase	Breaks down complex polysaccharide sugars found in legumes and cruciferous vegetables that can cause bloating and gas.
Cellulase	Breaks down fiber to help digest fruits and vegetables.
Maltase	Breaks down maltose sugars to glucose for energy.
Sucrase	Breaks down sucrose to fructose and glucose for energy.

**INNATE VS ADAPTIVE IMMUNITY**

**Innate immunity**

First line of defence against pathogens  
Acts rapidly (hours/days), vital to triggering of adaptive responses  
Triggered by threat/damage  
Activated by microbial general patterns and damage  
Acts through pathogen class-specific mechanisms of neutralisation/control  
No recall response on subsequent exposure to same threat

**Adaptive immunity**

Second line of defence against pathogens  
Relatively slow to develop (days/weeks)  
Triggered by exposure to specific antigen  
Very focused, targets a specific pathogen  
Acts through antigen-specific and non-specific effectors  
Rapid recall response on subsequent exposure to same antigen (immunological memory)

Excel Your Performance in  
OPSC Mains 2023 with

**OPSC OAS OPTIONAL  
TEST SERIES 2023**

4 Sectional Tests | 2 Full Length Tests

Tests are prepared by Ex OPSC  
Members & Senior Faculties

Batch starts from  
**5th January 2025**

Call: 9938386166, 7327846166, 8260677707

**Subjects Offered**

-  Anthropology
-  Geography
-  Pol. Science
-  Philosophy
-  Home Science
-  Sociology
-  Pub. Ad.
-  History

Course  
Fees  
**₹2500**



**GENERAL SCIENCE [STATIC GK]**

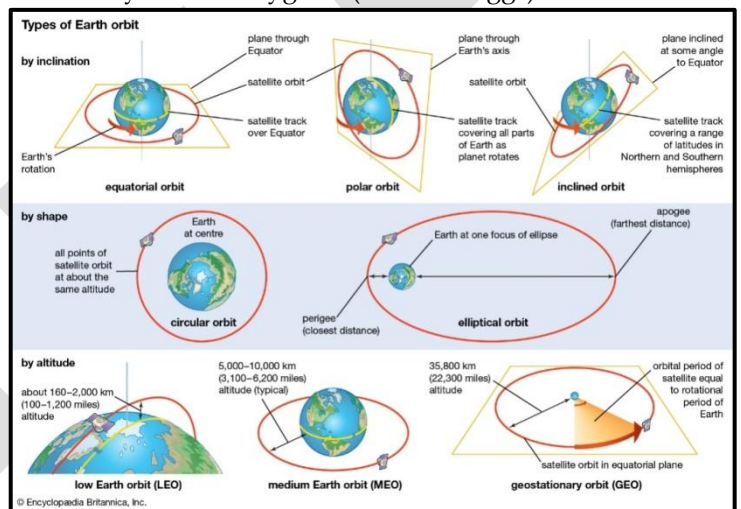
- **Quantum Tunnelling:** Tunnelling is a quantum phenomenon where an object, like an electron or atom, passes through an energy barrier it classically shouldn't be able to, due to its insufficient energy, owing to the wave nature of matter.
- **Neutron Star:** The dense remnant of a star that has exploded in a supernova, composed almost entirely of neutrons and possessing extreme gravitational forces.
- **Metamaterials:** are synthetic materials with unique properties that are not found in nature. They manipulate electromagnetic waves to create phenomena like invisibility cloaks and superlenses.
- **Chimera:** An organism or tissue that contains at least two different sets of DNA, most often originating from the fusion of as many different zygotes (fertilized eggs).

### Dark Energy Vs Dark Matter

<p><b>68.3 %</b></p> <p>&gt; <b>Single largest</b> constituent of the Universe.</p> <p>&gt; Tends to drive <b>Universe apart</b>.</p> <p>&gt; <b>No interaction</b> with Normal Matter.</p> <p>&gt; Can be thought as <b>5th Fundamental force</b>.</p>	<p><b>26.8 %</b></p> <p>&gt; <b>Second largest</b> constituent of the Universe.</p> <p>&gt; Tends to drive <b>Universe together</b>.</p> <p>&gt; <b>Interacts</b> with Normal matter by Gravity (<b>Gravitational Lensing</b>).</p> <p>&gt; Dark matter is <b>Not Antimatter</b> or <b>Black Holes</b>.</p>
---	---

@science\_cosmo

- **Pheromones:** Chemical substances secreted by animals or insects to communicate and trigger behaviors like mating, marking territory or signaling danger, as seen in ants creating trails, moths attracting mates and honeybees alerting threats.
- **Synchrotron Radiation:** Emitted when charged particles are accelerated in circular paths, used in material analysis and medical imaging.



- **Tardigrades:** Microscopic organisms capable of surviving extreme conditions, including space exposure.
- **Exoplanets:** Planets outside our solar system, many of which are potential candidates for hosting life.
- **When light enters a denser medium,** its speed decreases, and it bends towards the normal due to refraction.
- **Magnetic field strength around a current-carrying wire decreases** as the distance from the wire increases.
- **Doubling the amplitude of a sound wave** increases its energy by a factor of four.
- **Supersonic Boom** is the shockwave produced when a jet plane exceeds the speed of sound, creating a loud explosive noise.
- **Ramjets** use the forward motion of the aircraft to compress air without moving parts, effective at high speeds.

### WHAT IS LIGO?

The advanced Laser Interferometer Gravitational Wave Observatory (or LIGO) is at the centre of the path-breaking find:

The LIGO experiment is an example of extreme engineering chasing an impossible dream

The twin LIGO installations – one in Livingston, Louisiana, and the other in Hanford, Washington – are located 3,000km apart

Two "blind" L-shaped detectors with 4km long vacuum chambers that can accommodate 11 Boeing 747-400 commercial airliners

When a gravitational wave comes through, it stretches space in one direction, and squeezes space in the other direction

By measuring the interference of the laser as they bounce between the different point, physicists can measure very precisely whether the space in between has stretched or compressed

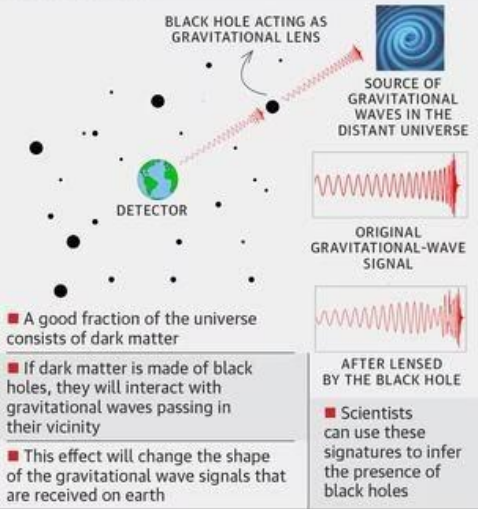
- Built 3,000km apart, operating in unison
- To make the smallest measurement ever attempted by science – a motion 10,000 times smaller than an atomic nucleus
- Caused by the most violent and cataclysmic events in the Universe occurring millions of light years away
- Can detect gravitational waves in a volume of 1 billion cubic light years – covering about 1 million Milky Way type galaxies
- To detect a gravitational wave we should be able to tell when something changes in length by a few parts in 10 to the power 23
- LIGO makes the smallest measurement ever attempted – a motion 10,000 times smaller than an atomic nucleus
- It's like trying to hear a song being hummed in a very, very noisy party

Source: TNM, phdcomics.com, LIGO, Scientific American, phys.org, sbs.org, symmetrymagazine.org

- **Mach Number** is the ratio of an object's speed to the speed of sound in the surrounding medium.

**How gravitational microlensing works**

When a gravitational wave approaching the earth is interrupted by the presence of a black hole, the signal gets modified as shown.



**WHAT ARE GRAVITATIONAL WAVES?**  
Ripples in space time, that carry gravitational energy in space

**HOW WERE THEY DETECTED?**  
Using (LIGO), scientists detected the collision of two massive black holes

**WHAT CAUSES THEM?**  
Acceleration or deceleration of massive cosmic objects.

**SIGNIFICANCE OF THE DISCOVERY?**  
A brand new way to study the universe

**FEW OF THE THINGS SCIENTISTS HOPE TO OBSERVE THANKS TO THE GRAVITATIONAL WAVES**

- Stars Exploding
- Black holes colliding
- Rate at which the universe is expanding
- Possibly the origin of the big bang which created the universe

 **DEFENCE & SECURITY**

**Exercises in News**

Exercise	Details
<b>SLINEX 24</b>	<ul style="list-style-type: none"> <li>• SLINEX 24 (Sri Lanka - India Exercise 2024) was conducted from 17th to 20th December 2024 at Visakhapatnam under the aegis of the Eastern Naval Command.</li> <li>• <b>Initiated in 2005</b>, SLINEX is a bilateral naval exercise between India and Sri Lanka. The 11th edition took place in 2024.</li> <li>• Activities included <b>replenishment at sea, VBSS drills, surface firing, flying operations and asymmetric threat response.</b></li> <li>• 2024 exercise was conducted from <b>Visakhapatnam.</b></li> <li>• <b>INS Sumitra and SLNS Sayura</b> took part in the exercise.</li> </ul>
<b>CINBAX Joint Exercise</b>	<ul style="list-style-type: none"> <li>• The first edition of CINBAX, a Joint Table Top Exercise, has begun between the Indian Army and the Cambodian Army at the Foreign Training Node, Pune.</li> </ul> <p><b>About CINBAX</b></p> <ul style="list-style-type: none"> <li>• CINBAX is a planning-based exercise designed to simulate joint Counter Terrorism (CT) operations under Chapter VII of the United Nations Charter.</li> <li>• The exercise will focus on the creation of a Joint Training Task Force for Intelligence, Surveillance, and Reconnaissance, along with planning operations in a Counter Terrorism environment.</li> <li>• Additionally, it will highlight Indian-made weapons and equipment, promoting 'Atmanirbharta' (self-reliance) and indigenous defense capabilities.</li> </ul>
<b>AGNI WARRIOR (XAW-2024) Joint Exercise</b>	<ul style="list-style-type: none"> <li>• The 13th edition of AGNI WARRIOR (XAW-2024), a bilateral military exercise between the Indian Army and Singapore Armed Forces, concluded at the Field Firing Ranges, Devlali (Maharashtra).</li> </ul> <p><b>Participants:</b></p> <ul style="list-style-type: none"> <li>• Indian Army: Personnel from the Regiment of Artillery</li> <li>• Singapore Armed Forces: Personnel from the Singapore Artillery</li> </ul> <p><b>Objective:</b></p> <ul style="list-style-type: none"> <li>• To enhance mutual understanding of drills and procedures, aiming to achieve jointness as a multinational force under the United Nations Charter.</li> </ul> <p><b>Key Focus Areas:</b></p> <ul style="list-style-type: none"> <li>• Joint firepower planning and execution</li> <li>• Utilization of New Generation Equipment by both armies</li> </ul>

<p><b>'Poorvi Prahar' Tri-Service Exercise</b></p>	<ul style="list-style-type: none"> <li>The Indian Army is conducting a high-intensity tri-service exercise, 'Poorvi Prahar', in the forward areas of Arunachal Pradesh.</li> <li><b>Location:</b> Forward areas of Arunachal Pradesh.</li> <li><b>Objective:</b> Enhance combat readiness in mountainous terrain and explore Army-Navy coordination.</li> <li><b>Focus:</b> Operational readiness, modern warfare simulations.</li> <li><b>Technologies Used:</b> Swarm Drones, First Person View (FPV) Drones, Loitering Munitions</li> <li><b>Benefits:</b> Improves real-time awareness, precise strikes, mission flexibility.</li> <li><b>Key Outcome:</b> Strengthened India's Armed Forces' ability to conduct integrated joint operations across all domains (land, air, sea) with enhanced communication and decision-making capabilities.</li> </ul>																								
<p><b>Exercise Desert Knight</b></p>	<ul style="list-style-type: none"> <li>India, France, and the UAE have launched the Desert Knight air combat exercise over the Arabian Sea.</li> <li><b>Exercise Desert Knight</b> is a trilateral initiative born from a framework established in 2022 by the foreign ministers of the three countries. The exercise involves advanced aircraft, including <b>Sukhoi-30MKIs, Rafael</b> and <b>F-16s</b>, engaging in large-force operations and intensive combat manoeuvres, conducted 350-400 km southwest of Karachi. This exercise is part of a broader strategic collaboration that spans <b>defence, technology, energy, and the environment</b> and aims to strengthen defense ties, particularly in the <b>Indo-Pacific</b> and <b>Persian Gulf</b> regions.</li> </ul>																								
<p><b>Sanyukt Vimochan 2024</b></p>	<ul style="list-style-type: none"> <li>The Indian Army successfully conducted the Multilateral Annual Joint Humanitarian Assistance and Disaster Relief (HADR) Exercise, Sanyukt Vimochan 2024, in Ahmedabad and Porbandar.</li> </ul> <p><b>Sanyukt Vimochan 2024 Humanitarian Assistance and Disaster Relief (HADR) Exercise</b></p> <ul style="list-style-type: none"> <li><b>Event:</b> Multilateral annual joint Humanitarian Assistance and Disaster Relief (HADR) exercise.</li> <li><b>Conducted By:</b> Konark Corps, Indian Army.</li> <li><b>Location:</b> Ahmedabad &amp; Porbandar, Gujarat.</li> <li><b>Objective:</b> Enhance interagency cooperation and disaster response.</li> <li><b>Activities:</b> Tabletop exercise on cyclone scenarios, multi-agency demonstration at Porbandar beach.</li> </ul>																								
	<ul style="list-style-type: none"> <li><b>Participants:</b> Indian Army, Indian Navy, Indian Air Force, Indian Coast Guard, National Disaster Response Force (NDRF), State Disaster Response Force (SDRF), and international officials from nine countries.</li> <li><b>Significance:</b> Strengthened national disaster response and contributed to global HADR dialogue.</li> </ul> <p><b>Command Structure of the Indian Army</b></p> <table border="1" data-bbox="461 1505 1315 1805"> <thead> <tr> <th>Serial Number</th> <th>Operational Command</th> <th>Headquarters</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Central Command</td> <td>Lucknow, Uttar Pradesh</td> </tr> <tr> <td>2</td> <td>Eastern Command</td> <td>Kolkata, West Bengal</td> </tr> <tr> <td>3</td> <td>Western Command</td> <td>Chandi Mandir, Haryana</td> </tr> <tr> <td>4</td> <td>South Western Command</td> <td>Jaipur, Rajasthan</td> </tr> <tr> <td>5</td> <td>Northern Command</td> <td>Udhampur, Jammu and Kashmir</td> </tr> <tr> <td>6</td> <td>Southern Command</td> <td>Pune, Maharashtra</td> </tr> <tr> <td>7</td> <td>Training Command</td> <td>Shimla, Himachal Pradesh</td> </tr> </tbody> </table>	Serial Number	Operational Command	Headquarters	1	Central Command	Lucknow, Uttar Pradesh	2	Eastern Command	Kolkata, West Bengal	3	Western Command	Chandi Mandir, Haryana	4	South Western Command	Jaipur, Rajasthan	5	Northern Command	Udhampur, Jammu and Kashmir	6	Southern Command	Pune, Maharashtra	7	Training Command	Shimla, Himachal Pradesh
Serial Number	Operational Command	Headquarters																							
1	Central Command	Lucknow, Uttar Pradesh																							
2	Eastern Command	Kolkata, West Bengal																							
3	Western Command	Chandi Mandir, Haryana																							
4	South Western Command	Jaipur, Rajasthan																							
5	Northern Command	Udhampur, Jammu and Kashmir																							
6	Southern Command	Pune, Maharashtra																							
7	Training Command	Shimla, Himachal Pradesh																							



# Ministry of Defence YEAR END REVIEW 2024

## Aatmanirbharta In Defence

- **Positive Indigenisation List (PIL):** The fifth PIL, released in July 2024, includes 346 critical items for import substitution. Over 2,972 items from previous PILs, worth ₹3,400 crore, have already been indigenized.
- **Record Defence Production:** Indigenous defence production reached ₹1,26,887 crore in FY 2023-24, marking a 16.7% growth. The private sector contributed 20.8%, with a target of ₹3 lakh crore by 2029.
- **Record Defence Exports:** Exports hit ₹21,083 crore in FY 2023-24, a 32.5% increase, with contributions from the private sector (60%) and DPSUs (40%). The target is ₹50,000 crore by 2029.

## Indian Light Tank 'Zorawar'

- Designed by DRDO and manufactured by L&T, the Indian Light Tank 'Zorawar' excelled in high-altitude and desert trials, showcasing precision and operational efficiency.

## Major Inductions

### INS Arighaat

- Commissioned on August 29, 2024, this advanced Arihant-class submarine features cutting-edge indigenous systems, surpassing its predecessor in technology and engineering.

### INS Tushil

- Commissioned on December 9, 2024, in Russia, this stealth-guided missile frigate of the Krivak III class is equipped for blue water operations across all naval dimensions.

### LCH Prachand

- Fully inducted by February 2024, the Light Combat Helicopters showcased exceptional performance during Ex Gagan Shakti in April 2024.

## Defence Budget

- In the **Union Budget** for FY 2024-25, the **Ministry of Defence (MoD)** was allocated ₹6.22 lakh crore (approx. \$75 billion), the highest allocation among all Ministries. This represents an 18.43% increase from FY 2022-23 and 4.79% more than FY 2023-24.

### Breakdown:

- 27.66% for capital expenditure.
- 14.82% for revenue expenditure on sustenance and operational preparedness.
- 30.66% for pay and allowances.
- 22.70% for defence pensions.
- 4.17% for civil organisations under MoD.

### Highlight:

- 75% of the capital procurement budget is earmarked for the domestic industry, reinforcing the push for self-reliance in defence.

## OROP 10<sup>th</sup> Anniversary

### Context

- On November 7, 2024, India celebrated the 10th anniversary of One Rank One Pension (OROP).

### Details

- Implemented as a response to a long-standing demand, OROP honours the **veterans and ex-service personnel** for their sacrifices in safeguarding the nation.
- Over the last decade, **lakhs of pensioners and their families** have benefited from this landmark initiative, reaffirming the **government's commitment to the well-being of the armed forces.**

## Defence Appointments in 2024

Appointee	Designation	Key Statement/Details
Shri Rajnath Singh	Raksha Mantri (Defense Minister)	Assumed charge for a second consecutive term. Focus on strengthening security, achieving self-reliance in defence manufacturing, modernisation of Armed Forces and welfare of soldiers.
Shri Sanjay Seth	Minister of State, Ministry of Defence	Strived to fulfill several initiatives aimed at strengthening the nation's security.
General Upendra Dwivedi	Chief of the Army Staff	Took over as the Chief of the Army Staff.
Admiral Dinesh K Tripathi	Chief of the Naval Staff	Took over as the Chief of the Naval Staff.
Air Chief Marshal AP Singh	Chief of the Air Staff	Took over as the Chief of the Air Staff.
Shri Rajesh Kumar Singh	Defence Secretary	Assumed the office of Defence Secretary.
Shri Sanjeev Kumar	Secretary (Defence Production)	Took over as Secretary (Defence Production).
DG Paramesh Sivamani	Director General of Indian Coast Guard (26th)	Took over as the 26th Director General of Indian Coast Guard.

## Border Roads Organisation

### Sela Tunnel:

- Dedicated to the nation by the **Prime Minister** during the **Viksit Bharat Viksit North East programme** in **Itanagar, Arunachal Pradesh**, March 2024.
- Constructed at **13,000 feet altitude** on the road connecting **Tezpur, Assam**, to **Tawang, Arunachal Pradesh**.
- Built at a cost of **Rs 825 crore**, it provides **all-weather connectivity** to Tawang across **Sela Pass** on the **Balipara-Chariduar-Tawang Road**.
- Enhances **Armed Forces' preparedness** and boosts **socio-economic development** in the border region.

### Shinkhun La Tunnel:

- The **Prime Minister** witnessed the first blast of the tunnel during the **25th Kargil Vijay Diwas** at the **Kargil War Memorial, Dras, July 2024**.
- Features a **4.1 km Twin-Tube tunnel** at **15,800 feet** on the **Nimu-Padum-Darcha Road**.
- Once completed, it will be the **world's highest tunnel**.
- Facilitates efficient **armed forces movement** and supports **Ladakh's economic and social development**.

### Mudh-Nyoma Airfield:

- **Foundation stone** laid by **Raksha Mantri** in **September 2023**.
- Located **46 km** from the **LAC** at an altitude of **13,700 feet**.
- The **2.7 km airfield** will be one of the **world's highest fighter bases** upon completion in **November 2025**.

### Nimmu-Padum-Darcha Road:

- **Connectivity established** in **March 2024** on the **298-km route**, providing an **alternate path to Leh from Manali**.
- Approximately **201 km** of the road has been **black-topped**.

## Launch of 'Rashtraparv' Website & Mobile App

### Context

- The **Ministry of Defence** launched the **'Rashtraparv' website** and **mobile app** to provide citizens with easy access to information about national festivals organized by the ministry.

### Details

- The platform aims to offer a **convenient and efficient** way for the public to stay informed about various **national events** and celebrations, making details accessible at their fingertips.

### Features and Purpose

- The website and app will provide real-time updates and comprehensive information on national festivals, enhancing the **user experience** with a **user-friendly interface**. The initiative focuses on keeping the public informed about significant events, ensuring **national participation** and promoting **national pride**.

## Republic Day 2025 Tableaux

### Context:

- The **Ministry of Defence** has announced the theme for the Republic Day 2025 tableaux as **"Swarnim Bharat: Virasat aur Vikas"** (**Golden India: Heritage and Development**).
- This theme will be reflected in the creative and cultural exhibits displayed during the Republic

Day Parade on Kartavya Path, showcasing India's rich cultural heritage and its development journey.

**Details:**

**Participating States and Union Territories:**

- Only 15 states and Union Territories have been selected to showcase their tableaux:
- Andhra Pradesh, Bihar, Chandigarh, Dadra and Nagar Haveli & Daman and Diu, Goa, Gujarat, Haryana, Jharkhand, Karnataka, Madhya Pradesh, Punjab, Tripura, Uttarakhand, Uttar Pradesh and West Bengal.

**Union Ministries and Departments:**

- 11 ministries and departments of the Union government will also present their tableaux during the parade.

**States and UTs not selected:**

- These states and UTs will have the opportunity to showcase their displays at *Bharat Parv*, an event held at the Red Fort from January 26 to 31, 2025.

**Selection Process:**

- The selection process was conducted fairly, transparently and on a merit-based system.
- Proposals were invited from all states, Union Territories and Union government ministries.
- An Expert Committee, consisting of professionals in art, culture, music, architecture and choreography, evaluated the entries.
- Criteria for selection included originality, creativity, aesthetic composition and a balance between heritage and development. Proposals with repetitive ideas were excluded.



## ECONOMICS

### Indian Banking and Financial Sector in 2023-24

**Context**

- The Reserve Bank of India (RBI) reported that banks' profitability increased for the sixth consecutive year.

**Details**

- The financial position of Indian banks remained good in 2023-24.
- The RBI reported that banks' profitability increased for the sixth consecutive year.
- This was **supported by declining non-performing assets (NPAs) and robust macroeconomic fundamentals.**
- The banking and non-banking financial sectors showed strong growth in credit as well as deposits. This underscores their resilience in challenging global conditions.

**Key Findings**

**Profitability Metrics**

- Banks' profitability improved for the **sixth consecutive year** in 2023-24.
  - **Return on Assets (RoA):** 1.4% in H1:2024-25.
  - **Return on Equity (RoE):** 14.6% in H1:2024-25.
  - Scheduled commercial banks' net profit grew by **32.8%** to ₹3,49,603 crore.

**Asset Quality**

- Gross NPAs declined to a **13-year low of 2.7%** by March 2024 and further to **2.5%** by September 2024.
- Net NPAs reduced to **0.57%** by September 2024, supported by improved loan-loss buffers.
- NBFCs' GNPA ratio dropped to **3.4%** by September 2024.

**Sector Growth**

- Consolidated balance sheet of scheduled commercial banks (excluding RRBs) increased by **15.5%** in 2023-24.
- NBFCs exhibited **double-digit credit growth**, with stronger balance sheets and improved profitability.

**Capital Strength**

- Banks maintained strong capital and liquidity buffers, with CRAR well above regulatory requirements.
- Satisfactory leverage ratios reflect financial stability.

**Sector Composition**

- The commercial banking sector included **141 banks:** 12 PSBs, 21 PVBs, 45 FBs, 12 SFBs and others.
- Of these, **137 banks** were classified as scheduled banks.

**Regulatory Measures**

- RBI tightened rules for credit cards, personal loans and NBFC borrowing.
- Banks addressed bad loans by selling them to asset reconstruction companies or writing them off.
- Emphasis on strengthening **risk management, IT governance** and vigilance against suspicious activities.

## Outlook

- RBI stressed the need for **prudent growth strategies** for banks and NBFCs.
- NBFCs were urged to enhance customer grievance mechanisms and avoid exorbitant interest rates.

## Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI)

### Context

- The Reserve Bank of India (RBI) has announced the formation of an eight-member committee, **FREE-AI**.

### Details

- **Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI)** is tasked with developing a framework for the responsible and ethical use of artificial intelligence (AI) in the financial sector.
- The committee aims to study AI adoption, review global regulatory approaches and recommend governance measures for ethical AI integration in financial services.

### Details

- **Committee Name:** FREE-AI
- **Chairperson:** Pushpak Bhattacharyya, Department of Computer Science and Engineering, IIT Bombay
- **Committee Mandate:**
  - Study current AI adoption levels in financial services.
  - Review global regulatory and supervisory approaches on AI in the financial sector.
  - Recommend a framework for responsible and ethical adoption of AI, focusing on governance.
  - Identify potential risks associated with AI in the financial sector and propose frameworks for evaluation, mitigation and monitoring.
- **Report Submission Deadline:** Within **six months** from the first meeting of the committee.

## India's rankings across Key Global Economic Indexes in 2024

The following table summarizes India's performance across key global economic indexes for 2024:

Global Index 2024	India's Global Rank	Data	Source
Largest Global Economy	5	<b>GDP:</b> \$3.94 billion thousand	IMF
Global (Military) Power Ranking	4	<b>Power Score:</b> 0.1023; <b>Military Spending:</b> \$74.0 billion	Global Firepower Military Strength
Largest Gold Reserves	8	<b>Gold Reserves (in tonnes):</b> 840.76	World Gold Council
Global Wealth Report: Countries with growing millionaire population	11	<b>Growth percentage:</b> 22%	UBS
Sustainable Trade Index	23	<b>Sustainability Score:</b> 24	IMD and Hinrich Foundation
Global Competitiveness Index	39	<b>Competitiveness Score:</b> 57.17	IMD
Global Innovation Index	39	-	WIPO
World Talent Ranking	58	<b>Talent Score:</b> 40.47	IMD
Largest Stock Exchange (as per market cap)	5	<b>Market Cap:</b> \$5,055,163.02	WFE

## India's Electronics and Smartphone Sector

### Context:

- CRISIL a credit rating agency highlighted the growth of India's electronics and smartphone export sector.
- Despite strong growth in exports India's share of the global electronics market remains small with the country heavily dependent on imports particularly from China.

### Details:

#### Smartphone Exports:

- India's smartphone exports grew at a **50% CAGR between 2019 and 2023** making it the **second-largest mobile handset manufacturer by volume.**

#### Global Electronics Market:

- The global electronics market is **valued at \$4.3 trillion in 2023 with China dominating over 50% of global exports.** India's share is currently less than 1% but it is expected to rise to 6% by 2030.

#### Electronics Exports Growth:

- Mobile phone **exports in fiscal 2024 grew by 40% reaching \$15 billion**. India's total electronics exports including components like semiconductors are steadily increasing.

#### Market Segments:

- **Mobile Phones & Accessories:** 43% of India's electronics market.
- **Consumer Electronics:** 12% (includes TVs, refrigerators, air conditioners etc.).
- **Semiconductors & Components:** 11% (driven by demand in mobile and consumer electronics).
- **Automotive Electronics:** 12% with growth expected from EV adoption.
- **Industrial Electronics:** 12% including power electronics and automation.
- **Other Segments:** LED lighting (3%), IT hardware (4%) and strategic electronics (16%).

#### Import Dependence:

- India remains heavily reliant on imports especially components like integrated circuits. **Between fiscal 2018 and 2023 electronics imports** grew at a 12% CAGR with China holding a 70-75% share.

#### PLI Schemes Impact:

- The **PLI scheme for electronics manufacturing** launched in 2020 attracted ₹11,324 crore in investment with ₹8,282 crore invested by June 2024.
- The **PLI scheme for IT hardware** launched in 2021 saw investments from 27 companies totalling ₹2,955 crore with ₹464.66 crore invested by June 2024.

#### Outlook:

- The growing investment and increasing domestic production signal reduced reliance on imports and stronger confidence in India's electronics manufacturing capabilities.

## India's First-ever Taxonomy of Green Steel

#### Context:

- India is on a path to decarbonize its steel sector, aligning with its broader target of achieving net-zero emission intensity by 2070.
- In line with this commitment Union Minister of Steel and Heavy Industries, unveiled India's Taxonomy of Green Steel at an event held at Vigyan Bhavan.

#### Salient Features of the Green Steel Taxonomy:

- **Definition of Green Steel:** Steel produced with CO<sub>2</sub> equivalent **emission intensity below 2.2 tonnes per tonne of finished steel (tfs)**.

#### Greenness Rating:

- **Five-star:** Emission intensity lower than 1.6 t-CO<sub>2</sub>e/tfs.
- **Four-star:** Emission intensity between 1.6 and 2.0 t-CO<sub>2</sub>e/tfs.
- **Three-star:** Emission intensity between 2.0 and 2.2 t-CO<sub>2</sub>e/tfs.
- Steel with emissions higher than 2.2 t-CO<sub>2</sub>e/tfs is ineligible for green rating.
- **Review of Star Rating:** The threshold for defining star ratings **will be reviewed every three years**.

#### Scope of Emissions:

- **Scope 1 and 2:** Direct emissions from operations and energy consumption.
- **Limited Scope 3:** Includes emissions from processes like sintering, pellet making, and the embodied emissions in purchased raw materials. Excludes upstream mining, downstream emissions, and transportation.

#### Measurement, Reporting, and Verification (MRV):

- The **National Institute of Secondary Steel Technology (NISST)** will be the nodal agency for MRV and issuing green steel certificates and ratings.
- Certificates will be issued on a yearly basis, with more frequent MRV allowed as per plants' needs.

#### National Mission on Green Steel and Green Steel Public Procurement Policy:

- **Stakeholder Consultation:** A draft of the National Mission on Green Steel (NMGS) and Green Steel Public Procurement Policy (GSPPP) was presented during the event.

#### Importance of Green Steel:

- Green steel is crucial for reducing the carbon footprint of the steel industry, which is one of the largest industrial emitters of CO<sub>2</sub>.
- The taxonomy defines clear benchmarks for steel producers to follow, providing clarity and consistency in the industry's sustainability efforts.
- It also opens up new opportunities for India's steel sector in the global market by aligning with international low-carbon standards.

## Windfall Tax

#### Context:

- The Indian government has announced the immediate removal of the windfall tax on aviation turbine fuel (ATF), crude oil, petrol, and diesel. This decision is aimed at providing relief to oil producers and refiners.

#### What is a Windfall Tax?

- A **windfall tax** is an additional levy on unexpected or extraordinary profits made by companies.

- India introduced this tax in July 2022 in response to the sharp rise in global crude oil prices.
- The goal was to capture excess revenue generated by oil companies due to unexpectedly high profits.

#### Expected Outcomes:

- The scrapping of the tax is expected to improve the financial performance of oil companies and could potentially incentivize higher production.
- The move aligns with the government's broader strategy to support growth in the **energy sector** and enhance exports.

### **Cabinet Committee on Economic Affairs (CCEA) approval for PAN 2.0 Project**

#### Context

- The Cabinet Committee on Economic Affairs (CCEA), chaired by Prime Minister Narendra Modi, has approved the PAN 2.0 project for the Income Tax Department.

#### Key Benefits of the PAN 2.0 Project

- **Ease of Access and Speedy Service Delivery:** Improved quality and faster service delivery for taxpayers.
- **Single Source of Truth and Data Consistency:** Ensures accurate and consistent data management.
- **Eco-friendly Processes and Cost Optimization:** The project promotes sustainable practices and reduces costs.
- **Security and Infrastructure Optimization:** Enhances security and ensures infrastructure is more agile.

#### Technology-Driven Transformation

- The PAN 2.0 project aims to re-engineer taxpayer registration services with a focus on technology, transforming PAN/TAN services for a better digital experience.

#### Upgrading PAN/TAN Ecosystem

- The project upgrades the current PAN/TAN 1.0 ecosystem, consolidating core and non-core activities, including PAN validation services.

#### Alignment with Digital India Vision

- The PAN 2.0 project aligns with the government's Digital India vision by enabling PAN as a universal identifier across all digital systems of specified government agencies.

#### All about PAN Card

- PAN (Permanent Account Number) is a **10-digit unique alphanumeric number** assigned by the Income Tax Department to track financial activities of individuals and entities.
- **Purpose:** PAN is mandatory for all types of payment and serves as a proof of identity. It is

permanent and remains valid regardless of changes in address or employment status.

#### Issuance of PAN Card

- **Issuing Authorities:** PAN cards are issued by the Income Tax Department in collaboration with authorized PAN agencies such as UTI ITSL and Protean eGov Technologies Limited.
- **Process:** The issuance operates on a Public-Private Partnership (PPP) model to maintain efficiency and effectiveness in managing and processing PAN applications.

#### Structure of a PAN Card

- **Format:** The PAN consists of 10 characters in the format AAAAXXXXB.
  - First 3 characters: Alphabetic series (AAA to ZZZ).
  - Fourth character: Cardholder type (e.g., 'P' for individuals, 'C' for companies).
  - Fifth character: Surname or entity name.
  - Last 4 digits: Numeric sequence.
  - Final character: Check alphabet.

#### Types of PAN Cards

- **For Organizations/Companies:** Includes company name, PAN, hologram and QR code without photograph.
- **For Individuals:** Includes the individual's photograph, signature, date of birth, and PAN details.
- **For Trusts and Societies:** Includes entity name and other details without individual identifiers.

#### History of PAN in India

- **Pre-PAN Era:** The GIR number was used, which was only valid within specific wards and not nationally.
- **Introduction of PAN:** Introduced in 1972 and made mandatory for tax-paying individuals in 1976. The system evolved in 1995 to include centralized records and prevent duplication.

#### Eligibility for PAN Card

- **Indian Residents:** Professionals, businessmen, taxable individuals, import/export persons, registered associations, and trusts are eligible.
- **NRIs and Foreigners:** Non-Resident Indians (NRIs), Overseas Citizens of India (OCIs), and foreigners eligible under the Income Tax Act can apply.
- **Minors:** Parents can apply for PAN on behalf of their minor children.

#### Jurisdiction and PAN Assignment

- **Jurisdiction:** PAN is linked to an Assessing Officer code, defining the jurisdiction for tax purposes.

- **Obligations:** Individuals, businesses, trusts, and any tax-liable persons must apply for PAN as per the Income Tax Act, Section 139A.

#### Consequences of Not Having a PAN Card

- **Tax Implications:** Those without PAN face a flat 30% tax on income and wealth.
- **Restrictions:** Without PAN, individuals cannot purchase high-value items like vehicles or properties, open bank accounts, or engage in large financial transactions.

#### New Design of PAN Cards (Post-2017)

- **QR Code:** A Quick Response code is included for easy verification.
- **Updated Layout:** Changes include the location of PAN, signature, and additional details like the cardholder's father's name and date of birth.

#### PAN Application Fees

- **Domestic Applications:** ₹93 (excluding GST) for an Indian communication address.
- **International Applications:** ₹864 (excluding GST) for a foreign communication address.

## Coking Coal and Critical Minerals

### Context

- NITI Aayog suggested the government include coking coal in the list of critical minerals and give special dispensation to its mining to enhance domestic production and provide coking coal security for India's steel sector.

### Coking Coal

- A type of bituminous coal with high carbon, low ash, and low moisture, used to produce metallurgical coke for steelmaking.

### Global Production

- **China:** 62% of global production (2022)
- **Australia:** 15%
- **Russia:** 9%
- **USA:** 5%

### Coking Coal in India

- India holds vast reserves but depends on imports for 85% of its demand.
- **Challenges**
- **Public Sector:** PSU washeries operate at <32% capacity, with low yields (35-36%).
- **Private Sector:** Private washeries use >75% capacity, yielding higher returns.
- **Imports:** ISPs imported 58 million tonnes in FY 2023-24, spending ₹1.5 lakh crore.

### Critical Minerals

- Critical minerals are essential for economic development and national security. Their limited

availability or concentration in specific regions can lead to supply chain vulnerabilities.

### List of Critical Minerals

- *Antimony, Beryllium, Bismuth, Cobalt, Copper, Gallium, Germanium, Graphite, Hafnium, Indium, Lithium, Molybdenum, Niobium, Nickel, PGE, Phosphorus, Potash, Rare Earth Elements (REE), Rhenium, Silicon, Strontium, Tantalum, Tellurium, Tin, Titanium, Tungsten, Vanadium, Zirconium, Selenium, and Cadmium.*

### Significance

- **Economic Growth:** Minerals like cobalt, nickel, and lithium are crucial for industries such as telecommunications and electric vehicle batteries. Lithium demand grew by 30% in 2023.
- **Clean Energy:** Rare Earth Elements are key for green technologies like solar panels, wind turbines and batteries.
- **National Security:** Cobalt is vital in military technologies like smart bombs, aircraft and missiles.

### Concerns

- **Geopolitical Risks:** A few countries dominate extraction and processing. China controls 60% of rare earths and 50-70% of lithium and cobalt processing.
- **Supply Chain Vulnerabilities:** Critical mineral dependencies, such as the Lithium Triangle (Argentina, Chile, Bolivia), pose risks.
- **Unsustainable Mining:** Mining and processing practices may not be sustainable, raising concerns about environmental and social impacts.

### India's Scenario

- **Import Dependence:** India relies heavily on imports for critical minerals like lithium, cobalt, and nickel.
- **Critical Mineral Deposits:** India has significant reserves of ilmenite, graphite, lithium (Jammu & Kashmir), and nickel (Odisha), but still faces challenges in exploration and extraction.
- **Challenges:** Lack of data, technological limitations (e.g., lithium extraction from clay), and limited domestic reserves hinder India's ability to exploit its critical minerals fully.

### Initiatives for Critical Minerals

- **India-Australia Partnership:** Focused on critical minerals investment.
- **Mineral Security Partnership (MSP):** India joined to ensure a stable supply of energy minerals.
- **KABIL:** A joint venture to acquire critical mineral assets abroad, including lithium brine in Argentina.

- **Regulatory Changes:** Mines and Minerals Amendment Act (2023) to auction critical mineral

areas.



## SPORTS

### Bumrah breaks record for Fastest 200 Wickets by an Indian

#### Context

- **Jasprit Bumrah** became the fastest Indian bowler to reach 200 Test wickets during the Border-Gavaskar Trophy at the MCG in Melbourne.

#### Details

- **Achievement:** Fastest Indian to 200 Test wickets (44 Tests).
- **Record:** Surpassed Mohammed Shami's record.
- **Performance:** Key role in Boxing Day Test, including four wickets.
- **Milestone:** Reached 200 wickets in 8484 deliveries.
- **Bowling Average:** Sub-20 (19.56), first to do so.
- **Global Ranking:** 4th fastest to 200 wickets (behind Waqar Younis, Dale Steyn, Kagiso Rabada).
- **World Test Championship:** 151 wickets, among top takers.

### King Cup International Badminton Open

#### Context

- Lakshya Sen secured third place at the inaugural King Cup International Badminton Open in Bangkok, Thailand.

#### Details

- He defeated French player **Alex Lanier** in straight games.
- **Prize:** ₹36 lakh
- **Semifinals:** Lost narrowly to China's **Hu Zhe'an** (19-21, 19-21)
- **Bronze Match:** Dominated Lanier 21-17, 21-11
  - Started strong with a 6-1 lead.
  - After Lanier's comeback, Sen regained control, closing the first game 21-17 and the second game 21-11.
- Sen's performance underscored his resilience and solidified his position on the international stage, showing a bright future in badminton.

### Koneru Humpy Clinches Second Women's World Rapid Chess Title

#### Context

- **Koneru Humpy**, at 37, clinched her second Women's World Rapid Chess Championship title in New York, defying doubts of retirement. Her journey highlights resilience, balancing motherhood, and family support.

#### Details

- **Event:** 2024 Women's World Rapid Championship
- **Performance:**
  - Day 1: 2.5/4 points
  - Day 2: Won all 4 matches to take the joint lead
  - Final Score: 8.5/11 points, defeating Irene Sukandar in the last round
- **Significance:**
  - Second world title, tied with Ju Wenjun
  - Inspiration for young Indian chess players
  - Credits family for support through her career and motherhood

#### Indian Women's Results:

- Divya Deshmukh: 21st place (7 points)
- Padmini Rout: 26th place (6.5 points)

#### Open Event:

- Winner: Volodar Murzin (Russia) with 10 points
- Top Indian: Arjun Erigaisi (5th place with 9 points)

### Sachin Tendulkar named Honorary Cricket Member of Melbourne Cricket Club

#### Context

- Sachin Tendulkar has been named an Honorary Cricket Member of the Melbourne Cricket Club (MCC) in recognition of his legendary 24-year international career

#### About MCC Membership

- MCC is one of the most prestigious sports clubs worldwide.
- It manages the MCG, a world-renowned sporting venue.
- Honorary Membership is awarded for exceptional contributions to cricket.

#### Sachin Tendulkar's Cricketing Achievements

##### Test Career:

- Debuted at 16 against Pakistan in Karachi (November 1989).
- Played 200 Tests, scoring 15,921 runs at an average of 53.78.
- Holds the record for 51 Test centuries and 68 half-centuries.
- Took 46 Test wickets, earning the nickname "golden arm."

##### ODI Career:

- Debuted against Pakistan in Gujranwala (December 1989).



- Played 463 ODIs, scoring 18,426 runs at an average of 44.83.
- Notched 49 centuries and 96 half-centuries.
- Played his last ODI against Pakistan in March 2012.

#### **T20 Career:**

- Appeared in one T20I against South Africa in Johannesburg (December 2006).

#### **Post-Retirement Contributions:**

- Plays charity matches with other retired players.
- Continues to inspire as a global ambassador for cricket.

### **India wins Under-19 Women's T20 Asia Cup 2024**

#### **Context**

- India emerged as champions of the inaugural ACC Under-19 Women's T20 Asia Cup, defeating Bangladesh by 41 runs in the final at Kuala Lumpur, Malaysia.

#### **Key Highlights**

- **Player of the Match & Player of the Series:** Gongadi Trisha (India) scored 52 runs off 47 balls in the final and topped the tournament with 159 runs in five innings.
- **Tournament Format:** Six teams were divided into two groups, with India and Bangladesh advancing to the final from the Super Four stage.
- **Group Stage:** India defeated Pakistan by 9 wickets in their group match.
- **Teams:** Bangladesh, Malaysia, Sri Lanka (Group A); India, Pakistan, Nepal (Group B).

### **India to host 2025 ISSF Junior World Cup**

#### **Context**

- India has been selected to host the 2025 International Shooting Sport Federation (ISSF) Junior World Cup for Rifle, Pistol, and Shotgun events.

#### **Key Details**

- India was officially confirmed as the host on December 20, 2024. This milestone underscores India's growing prominence in shooting sports and marks the ninth top-level ISSF event in the country over the past decade.
- **Previous Events:** India has hosted numerous ISSF events, including the 2023 Senior ISSF World Cup and the 2024 ISSF World Cup Final.
- **Significance:** The 2025 Junior World Cup will be the first of its kind in India, enhancing the country's reputation as a global shooting sports hub.

### **New Delhi to host 2025 Para Athletics World Championships**

#### **Context**

- New Delhi's Jawaharlal Nehru Stadium has been confirmed as the venue for the 2025 Para Athletics World Championships, scheduled from September 26 to October 5, 2025.
- This marks the first time India will host this prestigious event, the largest in para-athletics.

#### **Key Details**

- **Date & Venue:** 26 September – 5 October 2025 at Jawaharlal Nehru Stadium.
- **Significance:** This is the 12th edition of the championships and the fourth time it will be held in Asia.
- **Pre-Event:** A World Para Athletics Grand Prix will also be held from March 11–13, 2025, at the same venue, serving as a trial event.

### **Richa Ghosh equals Record for Fastest Fifty in Women's T20Is**

#### **Context**

- Richa Ghosh smashed a blistering fifty off just 18 balls during the 3rd T20I against West Indies at Navi Mumbai's Dr DY Patil Sports Academy.
- With this, she joined Australia's Phoebe Litchfield and New Zealand's Sophie Devine as the record-holder for the fastest fifty in women's T20Is.

#### **Key Highlights**

- **Record Knock:** 18-ball 50, equaling the record for the fastest in women's T20Is.
- **Final Score:** Richa was dismissed for 54 off 21 balls, including 3 fours and 5 sixes.
- **India's Total:** India posted 217/4, their highest-ever T20I score, surpassing their previous best of 201/5.
- **Captain's Contribution:** Smriti Mandhana's 77 anchored India's innings.
- **Dominant Finish:** Richa's explosive knock helped India finish strong with a strike rate of 257.14, setting a challenging target for the West Indies.

### **World Basketball Day: Celebrating unity and the legacy of Dr. James Naismith**

#### **Context**

- Observed annually on December 21, World Basketball Day honors the sport's development and its impact on millions globally. It highlights basketball's role in promoting unity, teamwork, and peace through collaboration, transcending boundaries of culture, language, and geography.

#### **History and Significance**

- **Invented by Dr. James Naismith:** On December 21, 1891, Naismith, a Canadian physical education instructor, created basketball at the International YMCA Training School in Springfield, Massachusetts, to keep students active during winter.
- **United Nations Recognition:** In 2023, the UN declared December 21 as World Basketball Day to celebrate the sport's ability to unite people across nationalities and cultures.
- **Promotion of Peace and Diplomacy:** The day focuses on how basketball fosters cooperation, promotes peace, and encourages understanding and friendship through sport.

#### Basketball's Global Impact

- **450 Million Players:** Today, basketball is played by over 450 million people worldwide, with strong followings in North America, Europe, and Asia.
- **Olympic History:** First introduced in the 1936 Berlin Olympics, basketball became a regular part of the Games. Women's basketball debuted in the 1976 Montreal Games.
- **Growing in Africa:** The Basketball Africa League (BAL), founded in 2019, is expanding the sport's reach across the continent.

#### Interesting Facts

- **Women in Basketball:** Women started playing basketball just a year after its invention in 1892.
- **Basketball's Origins:** Initially, fruit baskets were used to catch the ball, and a soccer ball was used. This changed in 1900 when backboards and string baskets were introduced to prevent interference from spectators.
- **Global Sport:** Basketball remains a grassroots sport, enjoyed by people of all ages and skill levels.

#### Timeline

- **1891:** Naismith coined the term "basketball."
- **1895:** The first intercollegiate basketball competition was played between Minnesota School of Agriculture and Hamline College.
- **1949:** The NBA was formed after the merger of the Basketball Association of America and National Basketball League, with 17 teams in its inaugural season.
- World Basketball Day not only celebrates the game's legacy but also its enduring power to connect and inspire people across the globe.

## India climbs to 5<sup>th</sup> in FIH Hockey World Rankings after Champions Trophy Silver

### Context

- India's men's hockey team has risen to 5th position in the International Hockey Federation (FIH) World Rankings after a strong performance at the 2024 Champions Trophy, according to the International Hockey Federation (FIH). India finished as runners-up in the tournament held in Breda, Netherlands, marking their second consecutive silver medal in the prestigious event.

### Key Points

- **Australia** remains at the top with 1906 points, 23 points ahead of **Argentina** in second (1883 points).
- **Belgium** is third with 1709 points, and the **Netherlands** is fourth with 1654 points.
- **India**, with 1484 points, has moved up to 5th, surpassing **Germany**, who now sit in 6th place with 1456 points.
- Teams in the top 20 generally remain unchanged, with **Austria** and **Egypt** moving up to 18th and 19th, respectively, while **France** has dropped to 20th.

### Champions Trophy Final

- India lost 1-3 to Australia in a shootout after a 1-1 draw at the end of regulation time.
- Australia's **Blake Govers** scored in the 24th minute, and **Vivek Prasad** equalized for India in the 42nd.
- Australian goalkeeper **Tyler Lovell** made three crucial saves in the shootout to secure the title for Australia.
- This marks India's second consecutive silver medal in the tournament, with **Netherlands** securing the bronze.

## 38th National Games: Mascot, Logo, and Key details unveiled

### Context

- The mascot for the 38th National Games, named "Mauli," was revealed at Maharana Pratap Sports College in Raipur, Dehradun.
- "Mauli" is inspired by the Monal, the state bird of Uttarakhand, symbolizing the state's unique heritage and motivating athletes to aim for greatness.

### Logo and Tagline:

- The logo, also inspired by the Monal, reflects the natural beauty and diversity of Uttarakhand.
- The Games' official tagline, "Sankalp Se Shikhar Tak" (From Resolve to Zenith), was also unveiled, emphasizing determination and excellence.

### Event Details:

- Uttarakhand will host the **38th National Games from January 28 to February 14, 2025.**
- Over 10,000 athletes, officials, and coaches from across India, including institutional teams like the Services, will compete in 38 sports.

### Inclusion of Traditional Sports:

- Indian Olympic Association President PT Usha announced the inclusion of traditional sports like yoga and mallakhamb in the Games.
- This decision was approved after a request from Uttarakhand Chief Minister Pushkar Singh Dhama.

## **Nat Sciver-Brunt sets record for Fastest Century in Women's Test Cricket**

### Context

- Nat Sciver-Brunt scored the fastest century in Women's Test history on Day 1 of Test between England and South Africa at Mangaung Oval, Bloemfontein.
- She reached her three-figure score in just 96 balls, making her the first batter to score a Test century in under 100 balls.

### Breaking Previous Record:

- Sciver-Brunt surpassed Chamani Seneviratna's previous record of 106 balls, set in 1998 against Pakistan.
- Shafali Verma holds the third spot, with a century off 113 balls against South Africa earlier in 2024.

## **Bumrah surpasses Kapil Dev for Most Wickets against Australia in Australia**

### Context

- **Jasprit Bumrah** overtook **Kapil Dev** to become the Indian bowler with the most international wickets against Australia in Australia.
- Bumrah achieved this milestone during the fourth day of the fourth Test at **Melbourne Cricket Ground (MCG).**

### Details

#### Bumrah's Performance:

- Bumrah took **4/56** in 24 overs at an economy rate of **2.33** in Australia's second innings.
- He dismissed **Sam Konstas, Travis Head, Mitchell Marsh, and Alex Carey.**

#### Stats Comparison:

- **Bumrah** has taken **75 wickets** in **21 matches** in Australia at an average of **19.74**, with best figures of **6/33** and three five-wicket hauls.
- **Kapil Dev** took **72 wickets** in **31 matches** in Australia at an average of **25.44**, with best figures of **8/106** and five five-wicket hauls.

## **Indian Women's Hockey team defends Junior Asia Cup Title**

### Context

- India defeated China 3-2 in a penalty shootout in the final of the Women's Junior Asia Cup in Muscat.

### Details

- Indian Captain: **Jyoti Singh**
- After a 1-1 draw in regular time, **Kanika Siwach** scored for India, while **Jin Zhuang Tan** netted for China.
- Goalkeeper **Nidhi's** three crucial saves in the shootout secured the win.
- India's reward: **Rs 2 lakh** per player and **Rs 1 lakh** per support staff.

## **D. Gukesh becomes Youngest-ever World Chess Champion**

### Context

- At 18, **D. Gukesh** defeated China's **Ding Liren** in the 14th round to win the 2024 World Chess Championship in Singapore.

### Details

- **Record-Breaking Victory:** Gukesh surpasses **Garry Kasparov** to become the youngest-ever World Chess Champion, at 18—four years younger than Kasparov's record age of 22.
- **Kasparov's Legacy:** Kasparov's reign as the youngest champion lasted nearly 40 years and he remains a chess legend for his dominance and influence on the game.

## **Shaheen Afridi becomes Youngest Bowler to reach 100 Wickets in all formats**

### Context

- **Shaheen Afridi** became the youngest bowler to complete 100 wickets in all formats of cricket (Tests, ODIs, T20Is) at 24 years and 248 days.

### Details

- **T20I Achievement:** Afridi took 3 wickets in the first T20I against South Africa in Durban, reaching 100 T20I wickets in his 74th match. He is now the third-quickest to reach this milestone, behind **Haris Rauf (71)** and **Mark Adair (72).**
- **Record:** Afridi is the fourth bowler to achieve 100 wickets in all formats, following **Lasith Malinga, Tim Southee, and Shakib Al Hasan.**
- **Other Notable Achievements:** Afridi became the fastest fast bowler from a Full-Member Nation to reach 100 ODI wickets in the 2023 World Cup.

## FIFA announces hosts for 2030 and 2034 World Cups

### Context:

- Morocco, Portugal and Spain will co-host the 2030 FIFA World Cup, marking the first time three countries will collaborate to host the tournament.

### Details

- **Centenary Edition:** To celebrate 100 years since the inaugural World Cup in Uruguay, Argentina, Paraguay and Uruguay will each host one of the first three matches of the 2030 edition.
- **2034 World Cup:** Saudi Arabia will host the 2034 World Cup, which will be the first to feature 48 teams, expanding the tournament's format.
- **2026 World Cup:** The 2026 World Cup will be the first to be held in Canada, Mexico and the United States, with the new 48-team format.

## India finishes sixth at the Asian Women's Handball Championship 2024

### Context

- India secured **sixth place** at the **Asian Women's Handball Championship 2024**, matching their best-ever finish, after a **41-30 loss** to **China** in the 5th/6th playoff at **New Delhi's Indira Gandhi Arena**.

### Details

- **Japan** stunned the reigning champions **South Korea** in a thrilling final, overturning a 12-9 deficit to win **25-24** and claim their second title, ending South Korea's seven-title streak.
- India, hosting the tournament for the first time, showed competitive spirit but fell short of their medal target, with standout performances from **Bhawana Sharma** and goalkeeper **Nina Shil**.
- **Kazakhstan** won **bronze** with a **28-22** victory over **Iran**, while **Hong Kong China** defeated **Singapore** 33-18 to secure **7th place**.
- The top four teams (**Japan**, **South Korea**, **Kazakhstan**, and **Iran**) qualified for the **IHF World Women's Handball Championship 2025** in Germany and the Netherlands.

## Kush Maini secures FIA Constructors' Championship with Invicta Racing

### Context

- **Kush Maini** finished **13th** in the **2024 Formula 2** standings but made history by helping **Invicta Racing** secure the **FIA Constructors' World Championship** at the **Abu Dhabi Grand Prix**.

### Details

- Maini became the **first Indian** to win the **Constructors' Championship**, with **five podiums** and a **race win** in **Hungary**.
- The Constructor's Championship – or, the FIA Formula One World Championship for Constructors – is one of the two world championships contested in Formula 1.
- The F1 team with the most championship points at the end of the season becomes the world champions.

## Nine-year-old Aarit Kapil defeats Grandmaster Raset Ziatdinov

### Context

- **Aarit Kapil**, a **9-year-old** from **Delhi**, made history by defeating **Grandmaster Raset Ziatdinov** of the U.S. at the **KIIT International Open** in **Bhubaneswar**.

### Details

- At **9 years, 2 months, and 18 days**, Aarit became the **youngest Indian** to defeat a **Grandmaster** in a classical match and the **third youngest globally**.
- In a challenging game lasting **63 moves**, Aarit capitalized on a **critical mistake** by Ziatdinov to claim victory.
- Aarit's next challenges include the **Under-13 National Championship** and **Under-9 Nationals**.
- **Top Three Youngest to Defeat a Grandmaster:**
  1. Ashwath Kaushik (Singapore) – 8 years 2 months
  2. Leonid Ivanovic (Serbia) – 8 years 11 months
  3. Aarit Kapil – 9 years 2 months

## Bangladesh retain Asian Cricket Council Under-19 Men's Asia Cup Title

### Context

- **Bangladesh** defeated **India** by 59 runs to retain the **Asian Cricket Council Under-19 Men's Asia Cup** title.

### Details

- **India** opted to field first and bowled well, dismissing **Bangladesh** for 198 runs in 49.1 overs. Key bowlers: **Yudhajit Guha** (2 wickets for 29 runs), **Chetan Sharma** (2 wickets for 48 runs), and **Hardik Raj** (2 wickets for 41 runs).
- In reply, **India** was bundled out for 139 runs in 35.2 overs.
- **Mohamed Amaan** top-scored with 26 runs.
- **Iqbal Hossain Emon** (3 wickets for 24 runs) was the standout bowler for **Bangladesh**.

### Brief Scores:

- **Bangladesh:** 198 all out (49.1 overs)
- **Rizan Hossan 47, Mohammad Shihab James 40**
- **India:** 139 all out (35.2 overs)
- **Mohamed Amaan 26, Hardik Raj 24**

## Men's Junior Asia Cup 2024

### Context:

- In the **Men's Junior Asia Cup 2024** final, the **Indian hockey team** defeated **Pakistan** 5-3 to claim their **record-extending fifth title** in Muscat, Oman.

### Details:

- **Pakistan** took an early 3-1 lead, with **Sufyan Khan** scoring twice and **Hannan Shahid** adding another. However, **India** fought back, with **Araijeet Singh Hundal** playing a pivotal role. Hundal scored **four goals**, while **Dilraj Singh** added a fifth, bringing India to a 5-3 victory.
- This victory further solidified India's dominance in **junior international hockey**, with **Araijeet Singh Hundal's** performance being the highlight.

## Sindhu and Lakshya Sen clinch titles at Syed Modi India International 2024

### Context:

- **PV Sindhu** and **Lakshya Sen** emerged victorious at the **Syed Modi India International World Tour Super 300** Championship in Lucknow, with Sindhu claiming her third title and Lakshya winning his maiden crown.

### Details:

- **PV Sindhu** defeated China's **Wu Luo Yu** 21-14, 21-16 in 47 minutes, marking her first title since the **2022 Singapore Open**.
- In **men's singles**, **Lakshya Sen** dominated **Jia Heng Jason Teh** 21-6, 21-7 in just 31 minutes to claim his first **Syed Modi** title.
- In **women's doubles**, **Trisha Jolly** and **Gayatri Gopichand Pullela** made history as the first Indian pair to win the title, beating China's **Bao Li Jing** and **Li Qian** 21-18, 21-11.
- In **mixed doubles**, Thailand's **Dechapol Puavaranukroh** and **Sapsiree Taerattanachai** defeated India's **Dhruv Kapila** and **Tanisha Crasto** 18-21, 21-14, 21-8.

## Jay Shah becomes the Youngest ICC Chairman in history

### Context:

- **Jay Shah** took over as the **International Cricket Council (ICC) Chairman**, becoming the youngest-

ever and the **fifth Indian** to hold this prestigious position.

### Details:

- At **36**, **Jay Shah** succeeded **Greg Barclay** of New Zealand, who completed his four-year tenure. Elected unopposed in **August**, Shah's rise marks the third Indian in the last four ICC chairmanships.
- Since becoming **BCCI Secretary** in 2019, Shah has been pivotal in restoring India's influence in the ICC.
- His leadership helped India's board contribute **85% of ICC's global revenue**, a key factor in cricket's inclusion in the **Los Angeles 2028 Olympics**.
- He is expected to unlock new **revenue-generation** avenues for ICC's **108 member nations**.

## Divith Reddy wins Under-8 World Cadets Chess Championship

### Context:

- **Divith Reddy**, an eight-year-old chess prodigy from **Hyderabad**, made headlines by winning the **Under-8 World Cadets Chess Championship**.

### Details:

- Divith secured an impressive **9/11 points**, tying with **Satshetwik Swain**, but clinched the **gold** based on a superior **tiebreak score**.
- This victory adds to **India's growing reputation** in the world of chess, showcasing the nation's emerging young talent.

## Bihar to host Khelo India Youth Games 2025 and Para Games

### Context:

- **Bihar** will host the **Khelo India Youth Games 2025** in **April**, marking the state's debut on the Khelo India map. This event will also feature the **Khelo India Para Games** for the first time.

### Details:

- The **Khelo India Youth Games** will be a landmark event in **Bihar**, which has also been chosen to host the **Khelo India Para Games**. The two games will be held with a **10-15 day gap**, following the model of the Summer Olympics. The **first Para Games** were held in Delhi last year.
- There are **38 Khelo India Centres** and a **State Centre of Excellence** in Bihar, supporting athlete development at all levels. This marks another significant step in **Bihar's contribution to India's sporting future**.

## ‘Know Your Medicine (KYM)’ App

### Context:

- **Dr. Mansukh Mandaviya**, Union Minister for Youth Affairs & Sports, has launched a nationwide initiative to combat doping in sports by promoting the ‘**Know Your Medicine (KYM)**’ app developed by the **National Anti-Doping Agency (NADA) India**.

### Details:

- **KYM app** is a tool designed to help athletes avoid inadvertent doping by providing critical information on medicines and their ingredients.
- The app is part of **NADA India’s mission** to raise awareness about anti-doping.
- It allows users to verify whether a specific medicine or its ingredients contain any substances prohibited by the **World Anti-Doping Agency (WADA)**.
- The KYM app offers unique features such as **image and audio search** and allows users to select their **sport category** for more relevant information, making it a convenient and accessible resource for athletes to maintain ethical sportsmanship.

## West Bengal wins 4<sup>th</sup> National Finswimming Championship 2024

### Context:

- The **4th National Finswimming Championship 2024** concluded in New Delhi, with swimmers from across India showcasing their talents.

### Details:

- Held at the **Syama Prasad Mookerjee Swimming Pool**, the event featured **1500 participants** from **26 states and Union Territories**.
- **West Bengal** dominated, winning the **team title** with **151 medals** (67 gold, 43 silver, 41 bronze). **Karnataka** was the runner-up with **50 medals**.

## Kho Kho World Cup

### Context:

- India is set to host the **inaugural Kho Kho World Cup** from **January 13 to January 19, 2025**, at the **Indira Gandhi Indoor Stadium** in New Delhi and **Noida Indoor Stadium**.
- This historic tournament will feature **24 countries** competing for the title of **Kho Kho World Champions**.

### Details:

- The tournament will include teams from **24 countries**, such as the **USA, England, Germany, Australia, and Brazil**, competing in a **league-cum-knockout format** for both men’s and women’s teams.
- Notably, **Indonesia** will field only a women’s team, while others will have both squads.



## APPOINTMENTS

Posts	Details
51st Chief Justice of India	<p><b>Context</b></p> <ul style="list-style-type: none"> <li>• Justice Sanjiv Khanna was sworn in as the <b>51st Chief Justice of India</b>, succeeding Justice D.Y. Chandrachud. His term ends on <b>May 13, 2025</b>.</li> </ul> <p><b>Key Facts on CJI Appointment:</b></p> <ul style="list-style-type: none"> <li>• No constitutional procedure exists for CJI appointment.</li> <li>• <b>Article 124(1):</b> Establishes the Supreme Court with a Chief Justice.</li> <li>• <b>Article 124(2):</b> Judges, including the CJI, are appointed by the President based on convention.</li> <li>• <b>Landmark Judgments by Justice Sanjiv Khanna:</b></li> <li>• Upheld <b>EVM sanctity</b>, scrapped <b>electoral bonds scheme</b>, supported <b>Article 370 abrogation</b>. Granted interim bail to ex-Delhi CM <b>Arvind Kejriwal</b>.</li> </ul>
Prime Minister of Japan	<p><b>Context</b></p> <ul style="list-style-type: none"> <li>• Shigeru Ishiba has been re-elected as <b>Prime Minister of Japan</b>.</li> </ul> <p><b>Details</b></p> <ul style="list-style-type: none"> <li>• He was <b>elected by Japanese Diet</b>. The <b>Japanese Parliament</b> is referred to as <b>Diet</b>.</li> </ul>
New Comptroller and Auditor General (CAG) of India	<p><b>Context</b></p> <ul style="list-style-type: none"> <li>• <b>K Sanjay Murthy</b> has been appointed as the next <b>CAG of India</b>.</li> </ul> <p><b>Details</b></p> <ul style="list-style-type: none"> <li>• He has been appointed under <b>Article 148(1)</b> of the Constitution, succeeding <b>Girish Chandra Murmu</b>. He will serve a term of six years or until the age of 65, whichever is earlier.</li> </ul>

<p><b>New Secretary General of Interpol</b></p>	<p><b>Context</b></p> <ul style="list-style-type: none"> <li>• <b>Valdecy Urquiza</b>, Brazilian Federal Police Commissioner, has been elected as the new <b>Secretary General of Interpol</b> at its 92nd General Assembly in Glasgow, Scotland.</li> </ul> <p><b>Interpol</b></p> <ul style="list-style-type: none"> <li>• <b>International Criminal Police Organization (Interpol)</b>, headquartered in <b>Lyon, France</b>, was founded in <b>1923</b>, has <b>195 member countries</b>, and aims to facilitate international police cooperation and combat transnational crime.</li> </ul>
<p><b>CEO-Professional Golf Tour of India</b></p>	<p><b>Context</b></p> <ul style="list-style-type: none"> <li>• <b>Amandeep Johl</b> will assume the role of <b>Chief Executive Officer (CEO)</b> of the <b>Professional Golf Tour of India (PGTI)</b> in January 2025, succeeding <b>Uttam Singh Mundy</b>.</li> </ul> <p><b>PGTI</b></p> <ul style="list-style-type: none"> <li>• Established in <b>2006</b> as the successor to the Indian PGA Golf Tour (1997–2006), the <b>Tata Steel Professional Golf Tour of India</b> is a premier men's golf tour in India and has been a member of the <b>International Federation of PGA Tours</b> since <b>2009</b>.</li> </ul>
<p><b>Tourism Advisor for Thailand</b></p>	<ul style="list-style-type: none"> <li>• <b>Sonu Sood</b>, renowned actor and philanthropist, has been appointed as the <b>Brand Ambassador and Honorary Tourism Advisor for Thailand</b>.</li> </ul>
<p><b>President-FICCI</b></p>	<ul style="list-style-type: none"> <li>• <b>Harsha Vardhan Agarwal</b> has been announced as the <b>President-Elect</b> of the <b>Federation of Indian Chambers of Commerce and Industry (FICCI)</b>.</li> </ul> <p><b>FICCI:</b></p> <ul style="list-style-type: none"> <li>• Established in <b>1927</b>, FICCI is India's <b>largest and oldest apex business organization</b>, headquartered in <b>New Delhi</b>, with a historic role in the country's independence and industrialization.</li> </ul>
<p><b>MCX MD and CEO</b></p>	<p><b>News</b></p> <ul style="list-style-type: none"> <li>• <b>Praveena Rai</b> has assumed office as the <b>Chief Executive Officer (CEO) and Managing Director (MD)</b> of the <b>Multi Commodity Exchange of India (MCX)</b> for a five-year term.</li> </ul> <p><b>MCX:</b></p> <ul style="list-style-type: none"> <li>• Established in <b>2003</b> and headquartered in <b>Mumbai</b>, MCX is India's largest <b>commodity derivatives exchange</b>, offering contracts in metals, energy, and agricultural products, and playing a key role in the country's financial markets.</li> </ul>
<p><b>Secretary General of the World Agriculture Forum (WAF)</b></p>	<p><b>News</b></p> <ul style="list-style-type: none"> <li>• <b>Dr. Jacqueline d'Arros Hughes</b>, outgoing Director General of ICRISAT, has been appointed as the <b>Secretary General of the World Agriculture Forum (WAF)</b>.</li> </ul> <p><b>WAF</b></p> <ul style="list-style-type: none"> <li>• WAF, a global platform, brings together governments, agribusinesses, experts and development institutions to foster agricultural development through <b>policy advocacy, trade facilitation, and technology-driven solutions</b>, aiming for a <b>resilient, food-secure future</b>.</li> </ul>
<p><b>WAF Board Member Nomination</b></p>	<ul style="list-style-type: none"> <li>• <b>Suresh Prabhu</b>, former Union Minister and Rajya Sabha member, has been nominated to the <b>World Agriculture Forum (WAF) Board</b>.</li> </ul>
<p><b>New Defence Secretary</b></p>	<ul style="list-style-type: none"> <li>• <b>Rajesh Kumar Singh</b>, a 1989-batch IAS officer, has assumed charge as the <b>Defence Secretary at South Block, New Delhi</b>, succeeding <b>Giridhar Aramane</b>.</li> </ul>
<p><b>Chairman of the Airports Authority of India (AAI)</b></p>	<p><b>News</b></p> <ul style="list-style-type: none"> <li>• <b>Vipin Kumar</b>, a 1996-batch IAS officer, has officially assumed charge as the <b>Chairman of the Airports Authority of India (AAI)</b>. Prior to this, he served as the <b>Additional Secretary in the Department of School Education &amp; Literacy</b>, Ministry of Education, Government of India.</li> </ul> <p><b>AAI</b></p> <ul style="list-style-type: none"> <li>• Established in <b>1995</b>, AAI manages <b>133 airports</b>, including operational &amp; non-operational ones, and provides <b>air navigation services</b> across <b>2.8 million square nautical miles</b>.</li> </ul>
<p><b>MD of NAFED</b></p>	<p><b>News</b></p> <ul style="list-style-type: none"> <li>• <b>Deepak Agarwal</b> has been appointed as the new <b>Managing Director (MD)</b> of the <b>National Agriculture Cooperative Marketing Federation of India Ltd (NAFED)</b>.</li> </ul>

	<p><b>National Agriculture Cooperative Marketing Federation of India Ltd(NAFED)</b></p> <ul style="list-style-type: none"> <li>Established in <b>1958</b>, NAFED works as a cooperative marketing. <b>Operating under the Ministry of Agriculture and Farmers' Welfare</b>, NAFED focuses on <b>price stabilization</b> for key agricultural commodities.</li> </ul>
Director General of ICRISAT	<p><b>News</b></p> <ul style="list-style-type: none"> <li><b>Dr. Himanshu Pathak</b> has been appointed <b>Director General-designate</b> of ICRISAT.</li> </ul> <p><b>International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)</b></p> <ul style="list-style-type: none"> <li>Established in <b>1972</b>, ICRISAT focuses on improving <b>dryland farming</b> and tackling issues like hunger, malnutrition, and poverty in <b>Asia</b> and <b>Sub-Saharan Africa</b>.</li> <li>ICRISAT has made significant innovations, such as mapping the groundnut genome and introducing biofortified crops. ICRISAT has offices in <b>Africa</b> and is recognized under the <b>UN (Privileges and Immunities) Act, 1947</b>.</li> </ul>
DG of the Indian Coast Guard	<p><b>News</b></p> <ul style="list-style-type: none"> <li><b>S. Paramesh</b> has officially assumed charge as the <b>Director General (DG)</b> of the <b>Indian Coast Guard</b> at its headquarters in <b>New Delhi</b>.</li> </ul> <p><b>ICG</b></p> <ul style="list-style-type: none"> <li>Established in 1977, operates over 150 ships and 60+ aircraft, headquartered in New Delhi, ensuring India's maritime security.</li> </ul>
President of the Indian Newspaper Society (INS)	<p><b>News</b></p> <ul style="list-style-type: none"> <li><b>MV Shreyams Kumar</b> has been elected as the new <b>President of Indian Newspaper Society</b>.</li> </ul> <p><b>INS</b></p> <ul style="list-style-type: none"> <li>Founded in <b>1939</b>, INS is the central organization representing the <b>Press of India</b>, responsible for authenticating circulation figures&amp; advocating for the <b>freedom of the press</b>. <b>HQ: Rafi Marg, New Delhi</b>, it comprises owners, proprietors and publishers of print media.</li> </ul>



## IMPORTANT DAYS

Date	Important Day/News
November 15	Guru Nanak Dev Ji's <b>555th birth anniversary</b> .
November 15	<b>Birsa Munda Jayanti</b> , also called <b>Janjatiya Gaurav Divas</b> or <b>Tribal Pride Day</b> , celebrates the birth anniversary of <b>Birsa Munda</b> , a prominent tribal leader and freedom fighter.
November 15	Jharkhand Foundation Day. This day marks the formation of <b>Jharkhand</b> as the <b>28th state</b> of India in <b>2000</b> .
November 20	Awaas Diwas 2024- 8th anniversary of Pradhan Mantri Awas Yojana - Gramin (PMAY-G)
November 21	World Fisheries Day. Celebration began in 1997 with the establishment of the World Forum of Fish Harvesters & Fish Workers in New Delhi.
November 21	National Philosophy Day/World Philosophy Day. Celebrated every year on the third Thursday of November. Established by <b>UNESCO in 2002</b> .
November 21	World Television Day. Proclaimed by the <b>UN</b> in <b>1996</b> , following the inaugural <b>World Television Forum</b> on <b>November 21-22</b> .
24th November	Guru Tegh Bahadur Martyrdom Day
November 25	International Day for the Elimination of Violence Against Women. <b>2024</b> marks <b>25 years</b> since the <b>UN's</b> official designation of the day.
November 26	Constitution Day or Samvidhan Diwas. Marks the adoption of the Indian Constitution in 1949.
November 26	National Milk Day - Marks the birth anniversary of Dr. Verghese Kurien-the Father of the White Revolution in India.
25 to 29 November	<b>Aviation Safety Awareness Week</b> . <u>Trivia</u> : <b>Airports Authority of India (AAI) Chairman: Vipin Kumar</b>
November 30	Day of Remembrance for All Victims of Chemical Warfare. Established at the 20th Session of the Conference of States Parties to the Chemical Weapons Convention, this day honors victims and reinforces global commitment to eradicating chemical weapons.



November 29	International Jaguar Day. Commemorates the adoption of the Jaguar Corridor Initiative, protecting jaguar habitats across 18 countries from Mexico to Argentina. Jaguar: Near Threatened on the IUCN Red List since 2002.
December 01	World AIDS Day. Inception in <b>1988</b>
December 02	International Day for the Abolition of Slavery
December 3	140th birth anniversary of Dr. Rajendra Prasad, India's first President.
December 03	International Day of Persons with Disabilities
December 3	Death anniversary of <b>Major Dhyhan Chand</b> , India's legendary hockey player and <b>three-time Olympic gold medalist</b> , known as the " <b>Hockey Wizard</b> ".
December 4	<b>Indian Navy Day</b> commemorates the success of <b>Operation Trident</b> during the <b>1971 Indo-Pak War</b> .
December 4	International Cheetah Day. Established by the <b>Cheetah Conservation Fund (CCF)</b> , the day honors <b>Khayam</b> , a cheetah cub rescued by <b>Dr. Laurie Marker</b> .
December 04	International Day of Banks
December 05	World Soil Day. The <b>UN General Assembly</b> designated <b>5th December 2014</b> as the first <b>World Soil Day</b> , honoring the birth anniversary of <b>King Bhumibol Adulyadej</b> of Thailand, a key supporter of the cause.
December 05	International Volunteer Day for Economic and Social Development
December 6	Mahaparinirvan Diwas. Marks the death anniversary of <b>Dr. Bhimrao Ramji Ambedkar</b> .
December 6	All India Civil Defence and Home Guards Day. Marks the formation of the <b>Home Guard force</b> . It was first established in the Bombay Province on December 6, 1946.
December 7	<b>Armed Forces Flag Day</b> . Honours Army, Navy and Air Force personnel.
December 7	<b>International Civil Aviation Day</b> . First celebrated in 1994 to mark the <b>50th anniversary</b> of the Chicago Convention, which set international aviation standards.
December 9	International Day of Commemoration and Dignity of the Victims of the Crime of Genocide and of the Prevention of This Crime.
December 9	International Anti-Corruption Day. The <b>UN General Assembly</b> designated <b>December 9</b> as <b>International Anti-Corruption Day</b> through <b>Resolution 58/4</b> , adopting the <b>UNCAC</b> .
December 10	World Human Rights Day. On <b>December 10, 1948</b> , the <b>UN General Assembly</b> adopted the <b>Universal Declaration of Human Rights</b> .
December 11	<b>International Mountain Day</b> , established by the UN in <b>2003</b> .
December 11	<b>78th UNICEF Foundation Day</b> marks the anniversary of the establishment of the UNICEF.
December 12	International Day of Neutrality for promoting global peace and security.
December 12	Universal Health Coverage (UHC) Day. Global movement advocating for <b>Health for All</b> , initiated by the <b>World Health Organization (WHO)</b> .
December 14	National Energy Conservation Day. Introduced in 1991 by the <b>Bureau of Energy Efficiency (BEE)</b> to promote energy conservation.
December 16	Vijay Diwas. Commemorates India's victory over Pakistan in the 1971 Indo-Pak War.
December 17	Pensioners Day in India: Honouring D.S. Nakara's Fight for Pension Rights
December 18	International Migrants Day. 2024 <b>Theme</b> : "Honouring the contributions of migrants and respecting their rights."
December 18	Minorities Rights Day to commemorate the adoption of the United Nations' 1992 Statement on the Rights of Individuals belonging to Religious or Linguistic National or Ethnic Minorities.
December 19	Goa Liberation Day. Marks the freedom of Goa from Portuguese rule in 1961.
19 to Dec. 24	Good Governance Week 2024
December 20	International Human Solidarity Day
December 20	61st Raising Day of Sashastra Seema Bal (SSB)
19 to Dec. 24	Good Governance Week 2024
December 21	First-Ever World Meditation Day. Established by the UN General Assembly in 2005.
December 22	National Mathematics Day- the birth anniversary of Srinivasa Ramanujan.
December 23	The National Farmers Day in India is also known as Kisan Divas is celebrated every year on 23 December, <b>on the birthday of the 5th Prime Minister of India, Choudhary Charan Singh</b> , also a farmer's leader, who introduced many policies to improve the lives of the Indian farmers.
December 24	National Consumer Day in India - commemorates the enactment of the Consumer Protection

	Act of 1986. <b>2024 Theme:</b> Virtual Hearings & Digital Access to Consumer Justice
December 25	<b>Good Governance Day</b> , also known as <b>Sushashan Diwas</b> . Aims to raise awareness about the importance of accountability in government.
December 26	Day of Valor and Righteousness to honor the heroic sacrifice of Sahibzada Zorawar Singh and Sahibzada Fateh Singh, the young sons of Guru Gobind Singh.
December 27	International Day of Epidemic Preparedness. It highlights the <b>urgent need to invest in systems that can prevent, detect and respond to infectious disease outbreaks</b> .

## **IMPORTANT PERSONALITIES IN THE NEWS**

Personality	Details
Aisake Valu Eke	Tonga government elected Aisake Valu Eke as new Prime Minister.
Osamu Suzuki	Osamu Suzuki, the visionary leader of Suzuki Motor has passed away.
Nirmala Sitharaman, Roshni Nadar Malhotra and Kiran Mazumdar-Shaw	Forbes 2024 list of The World's 100 Most Powerful Women
Mikheil Kavelashvili	Mikheil Kavelashvili becomes Georgia's New President
MT Vasudevan Nair	Noted writer and Jnanpith award winner MT Vasudevan Nair who created timeless classics passed away.
Manmohan Singh passed away	India's 13th Prime Minister from 2004 to 2014, is credited with major achievements like liberalizing India's economy, overseeing significant GDP growth, and improving India's global standing, while being the fourth longest-serving Prime Minister in Indian history. He played a pivotal role in the historic Indo-US nuclear deal in 2008.
Jimmy Carter passed away	39th President of the United States from 1977 to 1981.
Shyam Benegal Passes Away	Shyam Benegal is regarded as one of the greatest filmmakers. He was honoured with the Dadasaheb Phalke Award in 2005 and the Padma Shri (1976) and Padma Bhushan (1991) for his contributions to the arts. His films, including <i>Ankur</i> (1973), <i>Nishant</i> (1975), <i>Manthan</i> (1976), and <i>Bhumika</i> (1977), made him a key figure in the new wave film movement. His "Muslim Women Trilogy" ( <i>Mammo</i> , <i>Sardari Begum</i> , <i>Zubeidaa</i> ) won National Film Awards for Best Feature Film in Hindi.
Easterine Kire	Easterine Kire has bagged the Sahitya Akademi award for 2024 for her English work of fiction, <i>Spirit Nights</i> (Simon & Schuster). Kire's tale is inspired by a story of darkness narrated by the Rengma Naga and Chang Naga tribes of Nagaland.
Michelle Bachelet	Michelle Bachelet, former president of Chile, has been awarded the 2024 Indira Gandhi Prize for Peace, Disarmament, and Development, by the Indira Gandhi Memorial Trust.
Pooja Sharma	Pooja Sharma, who has performed funeral rites for over 4000 people, has been named on BBC's list of 100 inspiring and influential women across the globe for the year 2024. Her name features alongside the likes of Indian-origin NASA astronaut Sunita Williams, actor Sharon Stone and Olympic athletes Rebeca Andrade and Allyson Felix.
Yamandú Orsi	Yamandú Orsi has been elected as Uruguay's next president.
Duma Boko	Duma Boko, from the Umbrella for Democratic Change (UDC), has been announced as Botswana's new president.

## **AWARDS**

AWARD	DETAILS
Pradhan Mantri Rashtriya Bal Puraskar	<ul style="list-style-type: none"> <li>President Droupadi Murmu presented the Pradhan Mantri Rashtriya Bal Puraskar</li> <li>The <b>Pradhan Mantri Rashtriya Bal Puraskar</b> celebrates accomplishments in <b>seven categories</b>:</li> </ul>

	<ol style="list-style-type: none"> <li>1. Art and Culture</li> <li>2. Bravery</li> <li>3. Innovation</li> <li>4. Science and Technology</li> <li>5. Social Service</li> <li>6. Sports</li> <li>7. Environment</li> </ol> <p><b>Award Recipients:</b></p> <ul style="list-style-type: none"> <li>• The honorees include <b>seven boys and ten girls</b> from <b>14 states and Union Territories</b>. Each awardee was presented with a <b>medal, certificate and citation booklet</b>.</li> <li>• <b>Keya Hatkar (14)</b>, recognized for her advocacy in disability awareness and inclusivity.</li> <li>• <b>Ayaan Sajad (12)</b>, honored for his contributions to <b>Kashmiri music</b> as a Sufi singer.</li> <li>• <b>Vyas Om Jignesh (17)</b>, lauded for memorizing over 5,000 Sanskrit <b>shlokas</b>.</li> <li>• <b>Saurav Kumar (9)</b>, recognized for saving three girls from drowning.</li> <li>• <b>Ioanna Thapa (17)</b>, honored for rescuing 36 residents from a fire.</li> <li>• <b>Sindhoora Raja (15)</b>, awarded for creating self-stabilizing devices for Parkinson's patients.</li> <li>• <b>Risheek Kumar (17)</b>, recognized for launching Kashmir's first <b>cybersecurity firm</b>.</li> <li>• <b>Hembati Nag</b>, a judo player from a <b>Naxal-affected area</b>, who won a <b>silver medal</b> at the <b>Khelo India National Games</b>.</li> <li>• <b>Anish Sarkar</b>, a <b>chess prodigy</b> and the youngest FIDE-ranked player at just <b>three years old</b>.</li> </ul>
<p><b>Sri Chandrasekarendra Saraswathi Award for Leadership</b></p>	<ul style="list-style-type: none"> <li>• S. Jaishankar was honored with the Sri Chandrasekarendra Saraswathi National Eminence Award</li> <li>• External Affairs Minister S. Jaishankar was honored with the Sri Chandrasekarendra Saraswathi National Eminence Award for Public Leadership by the South Indian Education Society for his exceptional contributions to India's foreign policy and global leadership.</li> </ul>
<p><b>Order of Mubarak Al-Kabeer Award</b></p>	<ul style="list-style-type: none"> <li>• PM Narendra Modi received Order of Mubarak Al-Kabeer from Kuwait.</li> <li>• The Order of Mubarak Al-Kabeer is the <b>highest national award of Kuwait</b>. It is conferred by the Kuwaiti government on Heads of State, Sovereigns of foreign countries and on members of foreign royal families as a sign of friendship and goodwill.</li> </ul> <p><b>PM Modi's International Awards</b></p> <ul style="list-style-type: none"> <li>• <b>Freedom of Barbados (2024)</b>: Strengthening India-Barbados ties.</li> <li>• <b>Order of Excellence (Guyana, 2024)</b>: Pandemic contributions and Caribbean relations.</li> <li>• <b>Dominica Award of Honour (2024)</b>: Advancing diplomacy.</li> <li>• <b>Order of the Niger (Nigeria, 2024)</b>: Boosting bilateral cooperation.</li> <li>• <b>Order of St. Andrew (Russia, 2024)</b>: Strengthening strategic ties.</li> <li>• <b>Order of the Druk Gyalpo (Bhutan, 2024)</b>: Enhancing India-Bhutan friendship.</li> <li>• <b>Grand Cross of Honour (Greece, 2023)</b>: Strengthening diplomacy.</li> <li>• <b>Legion of Honour (France, 2023)</b>: Deepening Indo-French ties.</li> <li>• <b>Order of the Nile (Egypt, 2023)</b>: Promoting peace and cooperation.</li> <li>• <b>Order of Logohu (PNG, 2023)</b>: Strengthening Indo-Pacific ties.</li> <li>• <b>Legion of Merit (USA, 2020)</b>: Advancing strategic cooperation.</li> <li>• <b>Order of the Renaissance (Bahrain, 2019)</b>: Commerce and cultural ties.</li> <li>• <b>Order of Zayed (UAE, 2019)</b>: Enhancing bilateral ties.</li> <li>• <b>Nishan Izzuddeen (Maldives, 2019)</b>: Maritime cooperation.</li> <li>• <b>Grand Collar (Palestine, 2018)</b>: Strengthening relations.</li> <li>• <b>Amir Amanullah Khan Award (Afghanistan, 2016)</b>: Developmental contributions.</li> <li>• <b>King Abdulaziz Sash (Saudi Arabia, 2016)</b>: Strengthening ties.</li> </ul>
<p><b>Miss India USA 2024</b></p>	<ul style="list-style-type: none"> <li>• Caitlin Sandra Neil, was crowned Miss India USA 2024</li> <li>• Caitlin Sandra Neil, a Chennai-born Indian American teenager, was crowned Miss India USA 2024 at the annual pageant held in New Jersey. Miss India USA, established in 1980 by Dharmatma Saran's India Festival Committee, is a beauty pageant for Indian-origin women in the U.S. The winner represents the U.S. at Miss India</li> </ul>

	Worldwide.
'Rashtriya Tansen Samman.'	<ul style="list-style-type: none"> <li>• Padma Shri Pt. Swapan Chaudhuri, an eminent tabla player from Kolkata, received the 2023 'Rashtriya Tansen Samman.'</li> <li>• The Tansen Sangeet Samaroh in Gwalior, celebrating its 100th anniversary, honors Hindustani classical music legend Tansen. It features the Tansen Award, <b>established in 1980</b>, with a <b>Rs. 5 lakh prize</b>. The Raja Mansingh Tomar Samman was also awarded to Sanand Nyas Sanstha of Indore for 35 years of promoting classical music and culture.</li> </ul>
Best FIFA Football Awards 2024	<p>The Best FIFA Football Awards 2024 were held in Doha, Qatar.</p> <p><b>The Best FIFA Awards</b></p> <ul style="list-style-type: none"> <li>• <b>Men's Player:</b> Vinicius Jr (48 points), Rodri (43), Bellingham (37)</li> <li>• <b>Women's Player:</b> Aitana Bonmati (52 points), Barbra Banda (39), Hansen (37)</li> <li>• <b>Men's Goalkeeper:</b> Emiliano Martinez (26 points), Ederson (16), Simon (13)</li> <li>• <b>Women's Goalkeeper:</b> Alyssa Naeher (26 points), Cata Coll (22), Earps (11)</li> <li>• <b>Men's Coach:</b> Carlo Ancelotti (26 points), Xabi Alonso (22), de la Fuente (11)</li> <li>• <b>Women's Coach:</b> Emma Hayes (23 points), Jonatan Giraldez (20), Elias (13)</li> <li>• <b>Puskás Award:</b> Alejandro Garnacho (26 points), Benzia (22), Omedi (16)</li> <li>• <b>Marta Award:</b> Marta (22 points), Oshoala (20), Karchaoui (16)</li> <li>• <b>Fan Award:</b> Guilherme Gandra Moura</li> <li>• <b>Fair Play Award:</b> Thiago Maia</li> </ul> <p><b>Best FIFA Men's 11, 2024</b></p> <ul style="list-style-type: none"> <li>• <b>Goalkeeper:</b> Emiliano Martinez</li> <li>• <b>Defenders:</b> Dias, Carvajal, Rudiger, Saliba</li> <li>• <b>Midfielders:</b> Bellingham, Rodri, Kroos</li> <li>• <b>Forwards:</b> Haaland, Yamal, Vinicius Jr</li> </ul> <p><b>Best FIFA Women's 11, 2024</b></p> <ul style="list-style-type: none"> <li>• <b>Goalkeeper:</b> Alyssa Naeher</li> <li>• <b>Defenders:</b> Paredes, Batlle, Bronze, Girma</li> <li>• <b>Midfielders:</b> Bonmati, Horan, Portilho, Guijarro</li> <li>• <b>Forwards:</b> Hansen, Paralluelo</li> </ul>
Jamsetji Tata Award	<ul style="list-style-type: none"> <li>• <b>Kiran Mazumdar-Shaw, Chairperson of Biocon Group</b>, was awarded the prestigious <b>Jamsetji Tata Award</b> by the Indian Society for Quality (ISQ).</li> <li>• She was awarded the Jamsetji Tata Award for her outstanding contributions to India's biosciences sector. <b>Instituted by ISQ in 2004</b> and named after Tata Group founder Jamsetji Tata, the award honors business leaders for exceptional quality, innovation and societal commitment.</li> </ul>
'Sword of Honour' Award	<ul style="list-style-type: none"> <li>• The Ram temple project in Ayodhya has received the 'Sword of Honour' from the British Safety Council for excellence in safety standards.</li> <li>• The Ram temple project in Ayodhya has received the 'Sword of Honour' from the British Safety Council for excellence in safety standards. It recognizes outstanding safety management and compliance with global safety standards.</li> </ul>
34th Vyas Samman 2024	<ul style="list-style-type: none"> <li>• Hindi writer Suryabala has been awarded the 34th Vyas Samman 2024.</li> <li>• She was awarded for her novel Kaun Des Ko Vasi: Venu Ki Diary. Published in 2018, the novel explores cultural conflicts and identity struggles of Indian youth in America.</li> <li>• The Vyas Samman, established in 1991 by the KK Birla Foundation recognizes exceptional Hindi literary works from the last decade with a ₹4 lakh prize, citation and plaque.</li> <li>• <b>KK Birla Foundation also offers:</b> <ul style="list-style-type: none"> <li>○ <b>Saraswati Samman:</b> ₹15 lakh for exceptional literary works in any Schedule VIII language, published in the last 10 years.</li> <li>○ <b>Bihari Puraskar:</b> Recognizes outstanding literary contributions by Indian authors.</li> </ul> </li> </ul>
Global Sustainability Film Awards (GSFA)	<ul style="list-style-type: none"> <li>• The Kumbaya Story, an Indian film, won the Transforming Society Short Film category at the 13th tve Global Sustainability Film Awards, hosted at BAFTA, London.</li> <li>• The tve Global Sustainability Film Awards (GSFA) honors exceptional films from the business, non-profit, media and creative sectors that inspire audiences with real-world solutions for a sustainable future.</li> </ul>

<p><b>UNESCO Asia-Pacific Awards 2024</b></p>	<ul style="list-style-type: none"> <li>• Two Indian heritage conservation projects – the Abathsahayeswarar Temple in Tamil Nadu and BJPCI in Maharashtra – won the 2024 UNESCO Asia-Pacific Awards for Cultural Heritage Conservation.</li> <li>• <b>Established in 2000</b>, these awards recognize efforts to restore and conserve heritage structures, highlighting sustainability, technical excellence and cultural significance.</li> <li>• <b>Award Categories</b> <ul style="list-style-type: none"> <li>○ Award of Excellence</li> <li>○ Award of Distinction</li> <li>○ Award of Merit</li> <li>○ Award for New Design in Heritage Contexts</li> <li>○ Special Recognition for Sustainable Development</li> </ul> </li> </ul>
<p><b>National Panchayat Awards 2024</b></p>	<ul style="list-style-type: none"> <li>• The National Panchayat Awards 2024 honored 45 outstanding Panchayats for their contributions to sustainable and inclusive growth.</li> <li>• The awards mark the <b>73rd anniversary of the 1992 Constitutional Amendment Act</b>, which granted Panchayats constitutional status as local self-governance institutions.</li> </ul>
<p><b>2024 Champions of the Earth</b></p>	<ul style="list-style-type: none"> <li>• The 2024 Champions of the Earth were awarded to six individuals and organizations for their leadership and sustainable solutions to combat land degradation, drought and desertification.</li> <li>• The <b>Champions of the Earth</b>, the UN's top environmental honor, recognizes leaders across sectors. Awarded annually since 2005. The 2024 focus is on combating land degradation, desertification and drought.</li> </ul>
<p><b>JC Daniel Award 2023</b></p>	<ul style="list-style-type: none"> <li>• Filmmaker <b>Shaji N Karun</b> has been awarded the <b>JC Daniel Award 2023</b> for his lifetime contributions to Malayalam cinema.</li> <li>• The J.C. Daniel Award, Kerala's highest honor in Malayalam cinema, was established by the Kerala government <b>in 1992</b>. Presented annually by the Kerala State Chalachitra Academy, it recognizes individuals for their exceptional contributions to Malayalam cinema. Recipients are selected by a jury appointed by the Academy and the Department of Cultural Affairs.</li> </ul>
<p><b>Golden Globe Nomination</b></p>	<ul style="list-style-type: none"> <li>• Payal Kapadia is the first Indian director to earn a Golden Globe nomination for Best Director (Motion Picture).</li> <li>• “All We Imagine As Light” is nominated for Best Motion Picture (Non-English Language).</li> <li>• The Golden Globe Awards, <b>established in 1944</b>, recognize excellence in international film and television. Presented by the Golden Globe Foundation, which represents international journalists covering American entertainment, the ceremony funds entertainment-related charities and scholarships including the Young Artist Awards.</li> </ul>
<p><b>ISSA Good Practice Award for Asia and Pacific 2024</b></p>	<ul style="list-style-type: none"> <li>• India has been awarded the prestigious ISSA Good Practice Award for Asia and Pacific 2024.</li> <li>• India has received the prestigious ISSA Good Practice Award for Asia and Pacific 2024, presented by Dr. Mohammed Azman, President of the International Social Security Association, at the Regional Social Security Forum in Riyadh. The Employees' Provident Fund Organization (EPFO) also earned five Certificates of Merit for its innovative social security practices, enhancing service delivery, communication and inclusivity for its diverse workforce.</li> </ul>
<p><b>55th International Film Festival of India (IFFI)</b></p>	<ul style="list-style-type: none"> <li>• The 55th International Film Festival of India took place from 20 to 28 November, 2024 at Panaji, Goa.</li> <li>• <b>Awards &amp; Winners</b></li> <li>• <b>Golden Peacock (Best Film):</b> <i>Toxic</i> - Saulė Bliuvaitė (Lithuania)</li> <li>• <b>Silver Peacock (Best Director):</b> <i>The New Year That Never Came</i> - Bogdan Muresanu (Romania)</li> <li>• <b>Silver Peacock (Best Actor – Male):</b> <i>Holy Cow</i> - Clément Faveau (France)</li> <li>• <b>Silver Peacock (Best Actor – Female):</b> <i>Toxic</i> - Vesta Matulytė, Ieva Rupeikaitė (Lithuania)</li> <li>• <b>Special Jury Award:</b> <i>Holy Cow</i> - Louise Courvoisier (France)</li> <li>• <b>Best Debut Feature Film:</b> <i>Familiar Touch</i> - Sarah Friedland (USA)</li> <li>• <b>Best Debut Director of Indian Film:</b> <i>Gharat Ganapati</i> - Navjyot Bandiwadekar (India)</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>ICFT-UNESCO Gandhi Medal:</b> <i>Crossing</i> - Levan Akin (Georgia)</li> <li>• <b>Best Web Series (OTT):</b> <i>Lampan</i> - Nipun Dharmadhikari (India)</li> <li>• <b>Indian Film Personality of the Year:</b> Vikrant Massey (India)</li> </ul>
<b>2024 OPCW-The Hague Award</b>	<ul style="list-style-type: none"> <li>• Indian Chemical Council (ICC) was awarded the prestigious 2024 OPCW-The Hague Award.</li> <li>• The Indian Chemical Council (ICC) received the 2024 OPCW-The Hague Award at the 29th OPCW Conference in The Hague. This is the first time the award has been given to a chemical industry body, highlighting India's commitment to chemical safety and compliance with the Chemical Weapons Convention (CWC). The award recognizes significant contributions to CWC goals.</li> </ul>
<b>Ustad Bismillah Khan Yuva Puraskar For 2022 and 2023</b>	<ul style="list-style-type: none"> <li>• The Ustad Bismillah Khan Yuva Puraskar for 2022 and 2023 was awarded to 82 young artists in music, dance, and theatre.</li> <li>• Notable awardees include Samit Mallick, Mandakranta Roy, and Beluru Raghunandan among others.</li> <li>• The <b>Ustad Bismillah Khan Yuva Puraskar (UBKUP)</b>, established by the Sangeet Natak Akademi in 2006, honors exceptional young performing artists across India. Named after Bharat Ratna Ustad Bismillah Khan, the award recognizes talent in music, dance, drama, folk and tribal arts, puppetry and other performing arts, aiming to inspire and encourage young practitioners. Eligibility: Artists up to the age of 40 years.</li> </ul>
<b>Coal India Limited Honoured with Green World Environment Award 2024</b>	<ul style="list-style-type: none"> <li>• <b>Context:</b></li> <li>• Coal India Limited (CIL), under the Ministry of Coal, has proudly won the 2024 Green World Environment Award in the Corporate Social Responsibility (CSR) category.</li> <li>• The award was given by The Green Organization, which began in 1994 and is an independent, non-political, non-profit environment group, dedicated to recognizing, rewarding and promoting environmental best practices and CSR around the world.</li> </ul>
<b>43rd India International Trade Fair (IITF)</b>	<ul style="list-style-type: none"> <li>• 43rd India International Trade Fair (IITF) was held recently.</li> <li>• The Ministry of Health and Family Welfare's '<b>One Health' Pavilion</b> at the 43rd India International Trade Fair (IITF) in New Delhi won a Special Appreciation Medal for its innovative design and impactful presentation of India's healthcare initiatives.</li> </ul>

## BOOKS & AUTHORS [CURRENT]

BOOK	AUTHOR
The Unyielding Judge: The Life and Legacy of Justice A.N. Grover	Gauri Grover
BRING IT ON: The Incredible Story of My Life	Para-athlete, Dr. Deepa Malik.
Dalai Lama's Secret to Happiness	Dr. Dinesh Shahra
Beyond the Higgs Boson : The W Boson and Dr Ashutosh Kotwal's Quest for the Unknown	Manik Kotwal Jerry Pinto
Why Bharat Matters	External Affairs Minister Dr. S. Jaishankar

## BOOKS & AUTHORS [STATIC GK]

Book	Author	Publication Year
The Discovery of India	Jawaharlal Nehru	1946
The Argumentative Indian	Amartya Sen	2005
India After Gandhi	Ramachandra Guha	2007
Freedom at Midnight	Larry Collins & Dominique Lapierre	1975
The Wonder That Was India	A.L. Basham	1954
The Partition of India	K.K. Aziz	1989
In the Footsteps of the Buddha	J. C. Sarkar	1940
My Experiments with Truth	Mahatma Gandhi	1927

Wings of Fire	Dr. A.P.J. Abdul Kalam	1999
The God of Small Things	Arundhati Roy	1997
Train to Pakistan	Khushwant Singh	1956
Indira Gandhi: A Biography	Pupul Jayakar	1982
Gitanjali	Rabindranath Tagore	1910
The White Tiger	Aravind Adiga	2008
A Fine Balance	Rohinton Mistry	1995
The Last Mughal	William Dalrymple	2006
India: A Million Mutinies Now	V.S. Naipaul	1990
Untouchable	Mulk Raj Anand	1935
Midnight's Children	Salman Rushdie	1981
The Inheritance of Loss	Kiran Desai	2006
India Unbound	Gurcharan Das	2000
The Elephant Vanishes	Haruki Murakami	1993 (translated from Japanese to English)



## STATIC GK

### ■ Largest National Park in India

**Hemis National Park**, the largest in India at 3,350 sq. km, is located in Eastern Ladakh and is known for its wildlife, including snow leopards, leopards, Asiatic ibex, Tibetan wolves, Eurasian brown bears and red foxes.

### ■ First Indian woman to climb Mount Everest

Bachendri Pal was the first Indian woman to summit Mount Everest on May 23, 1984.

### ■ First Indian to win an Oscar for Best Actor

Bhanu Athaiya for Gandhi (1982) – First Indian to win an Oscar in a competitive category.

### ■ Largest producer of milk in India

Uttar Pradesh is the largest milk producing state in India, contributing around 18% of the country's total milk production. In the financial year 2023, Uttar Pradesh produced over 36 million metric tons of milk.

### ■ India's First Green Express Highway

The 135 km-long Eastern Peripheral Expressway is also called the Kundli-Ghaziabad-Palwal Expressway and is the first green national highway in the country.

### ■ First woman president of the Indian National Congress

Sarojini Naidu was elected as the President of the Indian National Congress Party in 1925, the first ever woman to assume that position.

### ■ First city to host the G20 summit in India

New Delhi, 2023

### ■ First female astronaut of India

Kalpana Chawla was the first Indian-born woman to travel to space.

### ■ India's first and largest solar park

Bhadla Solar Park in Rajasthan is India's largest solar park and the world's largest solar power plant at a single location.

### ■ Largest zoo in India

Arignar Anna Zoological Park in Chennai

### ■ Largest state by area in India

Rajasthan

### ■ Most ancient language of India

Sanskrit

### ■ Longest-running film in India

In 2001, Dilwale Dulhania Le Jayenge overtook Sholay (1975), which had run for over five years at the Minerva theatre, as the longest-running film in Indian cinema history.

### ■ First Indian woman to win the Booker Prize

Arundhati Roy was the first Indian woman to win the Booker Prize in 1997 for her debut novel, The God of Small Things.

### ■ Largest producer of spices in India

Madhya Pradesh is the largest producer of spices in India, with a production volume of over 3 million metric tons in 2023.

### ■ Largest river island in India

Majuli, Assam

■ **India's first and only UNESCO Global Geopark**

Dinosaur Fossil National Park in Bagh, Madhya Pradesh.

■ **First Indian to win a Wimbledon title**

Leander Paes(1996) and Mahesh Bhupathi were the first Indian tennis players to win at Wimbledon.

■ **First Indian to receive the Bharat Ratna**

C. Rajagopalachari (1954)

Country with which India shares the longest border  
Bangladesh

■ **Largest dam in India**

Tehri Dam (height - 260.5 meters) of Uttarakhand on the Bhagirathi River.

■ **World's tallest statue**

Statue of Unity, Gujarat (182 meters)

■ **India's first supercomputer**

Param 8000 developed by the Centre for Development of Advanced Computing(CDAC) in 1991.

■ **First cricket stadium in India**

Eden Gardens, Kolkata (established in 1864)

■ **Highest railway station in India**

Ghum Railway Station in West Bengal is India's highest railway station, standing at an altitude of 2,258 meters (7,407 ft).

■ **India's first wind-solar hybrid project**

In Jaisalmer, Rajasthan in May 2022.

■ **First nuclear test conducted by India**

Conducted on May 18, 1974 in Pokhran, Rajasthan, and was codenamed Operation Smiling Buddha.

■ **India's first integrated steel plant**

Rourkela Steel Plant (RSP)

■ **India's first multilingual newspaper agency**

Hindusthan Samachar

■ **First woman Chief Minister of an Indian state**

Sucheta Kripalani (Uttar Pradesh, 1963)

■ **Largest delta in the world**

Sundarbans, India-Bangladesh

■ **First Indian to win an Olympic gold medal**

Abhinav Bindra (2008, Beijing Olympics, Shooting)

■ **First Indian to reach Mount Everest without supplementary oxygen**

Phu Dorjee

■ **First female combat pilot in India**

Squadron Leader Avani Chaturvedi

■ **World's largest producer of Tea**

China

■ **First Himalayan State To Have Atlas For Disaster Management**

Himachal Pradesh

■ **World's first woman and youngest pilot to fly solo across both the Atlantic and Pacific Oceans in a light-sport aircraft**

Aarohi Pandit

■ **India's longest tunnel**

The Chenani-Nashri Tunnel (Dr. Syama Prasad Mookerjee Tunnel) is India's longest road tunnel at 9.28 km, located on National Highway 44 in Jammu & Kashmir, and the first with a fully integrated tunnel control system.

■ **World's highest railway station,**

Tanggula Railway Station is situated in Amdo County of the Tibet Autonomous Region

■ **Highest battle ground in the world**

Siachen Glacier, Jammu and Kashmir  
State with the highest number of national parks  
Madhya Pradesh

■ **Smallest district in India by area**

Mahe (Union Territory of Puducherry)

■ **State with the highest forest cover in India**

Madhya Pradesh - a total area of 94,689 sq km, which constitutes 30.7% of the state's overall geographical expanse.

■ **Largest saltwater lake in India**

Chilika Lake, Odisha

■ **Largest producer of pulses in India**

Rajasthan

■ **Largest coalfield in India**

Jharia coalfield, located in Jharia, Dhanbad, Jharkhand.





## CURRENT ONE LINER

### ■ Ashtalakshmi Mahotsav 2024

A three-day cultural festival showcasing Northeast India's heritage, will be held at Bharat Mandapam, New Delhi, from December 6-8, organized by NEHHDC: North Eastern Handicrafts & Handlooms Development Corporation Limited and CPSE: Central Public Sector Enterprise

### ■ Mass Varmam Therapy

An ancient Indian practice focused on manipulating vital energy points in the body, believed to regulate physical and mental health by targeting 108 points, categorized into 12 major (Padu Varmam) and 96 minor (Thodu Varmam) points, crucial for energy flow and organ function.

### ■ Ocean Anoxic Event 1a

Occurred during the Cretaceous period (145-66 million years ago), marking the time when Earth's oceans became depleted of oxygen. This has led to severe disruption of marine ecosystems.

### ■ Tirzepatide

Tirzepatide, sold under the brand name Zepbound, is the first drug approved for the treatment of Obstructive Sleep Apnea (OSA)

### ■ Dark Comets

Celestial bodies that lack the characteristic bright tails of traditional comets.

### ■ Opinion Trading

A platform where users may gamble real money on the outcome of future events such as

sports scores, election results or cryptocurrency trends.

### ■ Automated & Intelligent Machine-aided Construction (AIMC)

The system combines smart machines and real-time data sharing.

### ■ Trichloroethylene (TCE) and Perchloroethylene (PCE)

The US EPA has banned trichloroethylene (TCE) and perchloroethylene (PCE) under the Toxic Substances Control Act to reduce health and environmental risks, aligning with President Biden's Cancer Moonshot initiative.

### ■ Shanan Hydel Project

India's first megawatt-capacity hydroelectric project located in Joginder Nagar in Mandi District, Himachal Pradesh and built on the Uhl River, a tributary of the Beas.

### ■ Abathsayeshwarar Temple

The 1,300-year-old Abathsayeshwarar Temple in Thukkatchi, Tiruvarur district, Tamil Nadu, built by the Cholas and later renovated during the Nayak period, has been awarded the UNESCO Asia-Pacific Award of Distinction 2023 for its exemplary cultural heritage conservation.

### ■ India's e-waste

According to data presented by the Union Ministry of Housing and Urban Affairs, India witnessed a surge in electronic waste (e-waste) generation over the past five years, rising from

1.01 million metric tonnes (MT) in 2019-20 to 1.751 million MT in 2023-24.

### ■ Henderson Doctrine

States that all issues arising from the same subject matter in litigation should be resolved in a single suit.

### ■ Dulcibella camanchaca

A new predatory amphipod species that has been classified in the Eusiridae family.

### ■ Atacama Trench

Peru-Chile Trench, also known as the Atacama Trench, is an oceanic trench in the eastern Pacific Ocean, about 160 kilometers off the coast of Peru and Chile.

### ■ Disease X

Disease X is not a specific illness but represents an unknown pathogen that could cause a significant health crisis and the term was introduced after the West African Ebola epidemic (2014-2016)

### ■ FIDE or the International Chess Federation

FIDE, the International Chess Federation founded in 1924 and based in Switzerland, governs international chess competitions and unites nearly 200 national federations under the motto "Gens una sumus" ("We are one family").

### ■ Social Dialogue Report

International Labour Organisation (ILO) released the Social Dialogue Report.

■ **International Fund for Agricultural Development (IFAD)**

Founded in 1977, the International Fund for Agricultural Development (IFAD), an UN-specialized agency headquartered in Rome, aims to improve rural livelihoods through investments in agriculture, food security, and income generation.

■ **Lonar Lake**

Lonar Lake, located in Buldhana district, Maharashtra, is an alkaline lake and lagoon formed in a meteorite impact crater

■ **Golan Heights**

A rocky plateau in the Levant region of Western Asia that was captured by Israel from Syria in the 1967 Six-Day War. The location is a hilly area overlooking the upper Jordan River Valley to the west, bordered by the Jordan River and the Sea of Galilee to the west, Mount Hermon to the north, the seasonal Wadi Al Ruqqād River to the east, and the Yarmūk River to the south.

during the Pleistocene Epoch, with evidence of impact confirmed by plagioclase transformation into maskelynite.

■ **Subaru Telescope**

The Subaru Telescope, located at Mauna Kea Observatory in Hawaii, is an 8.2-meter telescope of the National Astronomical Observatory of Japan, named after the Pleiades star cluster, and held the largest monolithic primary mirror until 2005.

■ **Sjögren’s Disease**

Sjögren’s disease is an autoimmune disorder that targets

moisture-producing glands, causing dry eyes, mouth, joint pain, fatigue, and potential complications in organs like the lungs, kidneys, and nervous system. It affects 1 in 1,000 people globally, with a higher prevalence in women and typically in those aged 30-40. Diagnosis can be delayed, often leading to prolonged suffering. Treatment focuses on symptom management, including salivary stimulants, lubricating drops, and immunosuppressive drugs for systemic issues, but hormone therapy is ineffective.





# All Odisha OAS Mains Test Series 2023

27 Tests | 17 Tests | 7 Tests



Advanced Full Length Tests



Master Classes on Answer Writing



Full Spectrum Performance Analysis



Post Exam Feedback & Analysis



All Odisha Rankings



One to One Personalized Mentoring



Previous Year Questions

Mode: **Online / Offline**



For more information: 9938386166, 7327846166, 8260677707 [www.aptiplus.in](http://www.aptiplus.in)

## OPSC PRELIMS MOCK TEST

TEST ID - 42

**Q1.** A pot contains Liquid 1 and Liquid 2 mixture in the ratio 11 : 5 respectively. The capacity of the pot is 208 litres and it is completely filled. '8x' litres of mixture is taken out of the pot and replaced with '3x - 4' litres of Liquid 2 so that the ratio of Liquid 1 to Liquid 2 in the pot becomes 4 : 3 respectively. Find the difference between the final quantities of Liquid 1 and Liquid 2 in the pot.

- a) 20 litres.
- b) 22 litres.
- c) 24 litres.
- d) 26 litres.

**Q2.** In an exam Hrithik scored 80 marks out of 150 in Civics and 95 marks out of 120 in Economics. If he wants to score 70% marks in 3 subjects, find the minimum marks he should score in Geography out of 100.

- a) 83
- b) 84
- c) 85
- d) 86

**Direction for the following five (5) items:**

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

### Passage-1

There's a new chapter in the saga of over-enthusiastic researchers trying to make the Matrix a reality. Scientists at Kyoto University are training an AI-powered robot to laugh. This is, of course, a difficult project – one that could take decades to become a true success. Yet, if a machine can mimic the myriad ways in which human beings laugh, it may finally be able to cross the Uncanny Valley – that eerie feeling of uneasiness when an AI-enabled creature can copy human behaviour, but somehow feels unnatural and alien in interactions. The questions which arise from this desire to play God's understudy. First, can the changing contextual nuances of what makes people chuckle, giggle and guffaw be programmed? And is it worth the effort?

**Q3.** Which one of the following statements best reflects the most critical inference that can be made from the passage given above?

- a) The scientists at Kyoto University are attempting to create an AI-powered robot

that can mimic human laughter, a project that may take decades to achieve.

- b) The ability for an AI-powered robot to accurately replicate human laughter may help it to overcome the Uncanny Valley and appear more natural in interactions.
- c) It is uncertain whether or not the contextual nuances of human laughter can be programmed into an AI-powered robot, and whether the effort involved in doing so is worthwhile.
- d) The pursuit of creating an AI-powered robot that can laugh like a human may raise ethical concerns about the desire to play God and the worthiness of such an endeavour.

### Passage-2

Repetition and difference are the twin concepts that underlie all of existence, shaping and reshaping reality at every moment. Repetition creates patterns and structures, while difference introduces variation and unpredictability. Together, they create a dynamic system in which the past is constantly being transformed by the present and the future. But this system is not without its dangers. Repetition can lead to stagnation and inertia, while difference can bring chaos and disorder. The challenge, then, is to find the right balance between repetition and difference, to use them in a way that allows for growth and creativity without sacrificing stability and continuity.

**Q4.** What is the most crucial inference that can be drawn from the passage?

- a) Repetition and difference are inherently contradictory concepts that cannot coexist.
- b) Repetition is superior to difference for maintaining a stable reality.
- c) The optimal balance between repetition and difference is necessary for growth and creativity,
- d) Existence is a static system dominated by repetition and difference.

### Passage-3

Each TV program was like a small world that would spin around once or twice, then stop. And there was always a person, ideally a good-looking one, who would enter and begin to speak. And it was our job as citizens to listen to that person, as they were wiser and better than we were, and had devoted their entire lives to thinking about things that we had spent only a few

seconds. And so, we listened, and we learned, and we were made wiser by the people on the TV, who were so good at their jobs that sometimes they would cry, and sometimes they would even laugh, but mostly they would just talk, and talk, and talk.

**Q5. What is the most logical corollary of the above-given passage?**

- a) Television programs provide valuable insights and wisdom from experts who are more knowledgeable than the average citizen.
- b) The emotional reactions of TV personalities are what make the content truly educational.
- c) Television programs are an ineffective source of learning due to the lack of diversity in topics.
- d) The majority of TV programs are focused on entertainment rather than education.

#### Passage-4

The jolting cry of a cockerel, the comforting smell of manure and the rumbling of tractors – the idyllic sensory landscape of rural France has been the source of much civil strife in recent years. An increasing number of city slickers have vacation homes in rural areas, to enjoy peace and serenity. As it turns out, rural life is full of activity, and at least in France, not amenable to change for the comfort of strangers. There have been several complaints about the noise and smells from animals and churches in the last few years. Maurice, the rooster, became a symbol for this conflict when his neighbours went to court against his owners in 2019, chagrined at being woken up by the cockerel's cry at dawn. French legislators have finally put the matter to rest by passing a law to protect the countryside's "sensory heritage".

To be fair, there is something gnawing about being woken up when it's still dark outside by the shrill crowing of a rooster. But the entitlement to comforts the wealthy thought money can buy at their weekend chalets, are at odds with the choices of empowered rural residents. Unlike the luxury stores at the Champs-Élysées, rural France has refused to serve the interests of tourists. France – both culturally and economically – is still strongly agricultural. The campaign for the law was based on the principle that the countryside is more than a scenic landscape, and living there means accepting that fact. Their "sensory heritage" safeguarded, French country folk must not get complacent. Soundscapes are fragile things, as Indians are well aware. A loudspeaker and an upcoming election can drown out the sounds of a homestead a lot faster than the complaints of bratty

neighbours. But in the meanwhile, at least, the Maurices of France are free to make a morning racket.

**Q6. Which of the following statements best reflects the central idea of the passage on protecting rural France's heritage?**

- a) The increasing number of vacation homes in rural France has resulted in conflicts over noise and smells, particularly regarding animals and churches. Legislation has been passed to protect the "sensory heritage" of the countryside.
- b) Rural life in France is full of activity and not amenable to change for the comfort of city dwellers with vacation homes. Legislation has been passed to protect the "sensory heritage" of the countryside.
- c) The passing of the law to protect the sensory heritage of rural France is a positive development that reflects the need for balance between the needs of different groups of people.
- d) The campaign for legislation to protect rural France's "sensory heritage" was based on the recognition that the countryside is more than just a scenic landscape and that living there requires accepting its sensory characteristics.

**Q7. Which of the following assumptions best justifies the reason for rural France's continued protection of its sensory heritage?**

- a) To ensure that tourism does not compromise the natural environment.
- b) To preserve the longstanding agricultural way of life in these areas.
- c) Protecting sensory heritage is a crucial responsibility of both the French people and government.
- d) The sounds and smells of rural life are integral to French culture and history.

**Q8. A train travels from City A to City B at a speed of 60 km/h and returns from City B to City A at a speed of 75 km/h. The train stops at City B for 30 minutes before starting the return journey. If the total time taken for the round trip is 8 hours and 30 minutes, what is the distance between City A and City B?**

- a) 240 km
- b) 267 km
- c) 360 km
- d) 400 km

**Q9. Two equal sums of money are lent at the same time at 8% and 7% per annum simple interest.**

The former is recovered 6 months earlier than the later and the amount in each case is Rs. 2,560. The sum and the time for which the sums of money are lent out are:

- a) Rs. 1,500, 3.5 years and 4 years
- b) Rs. 2,000, 3.5 years and 4 years
- c) Rs. 2,000, 4 years and 5.5 years
- d) Rs. 3,000, 4 years and 4.5 years

**Q10.** What is the smallest number that should be added (or subtracted) to 89355 to make it divisible by 9?

- a) 3
- b) 4
- c) 5
- d) 6

**Q11.** Three containers (equal in measurements) are filled with a mixture of spirit and water in the ratio 2:1, 3:1 and 1:1 respectively. The contents of the three containers are emptied into a single empty vessel. What is the proportion of spirit in the final solution?

- a) 23:13
- b) 23:36
- c) 39:52
- d) 52:39

**Q12.** The total number of ways in which letters of the word ACCOST can be arranged so that the two C's never come together will be:

- a) 120
- b) 240
- c) 360
- d) 720

**Q13.** Choose the correct analogy from the given options:

**HEIGHT: ACROPHOBIA?**

- a) Heart: Cardiology
- b) Kidney: Morphology
- c) Worms: Ornithology
- d) Snakes: Ophidiophobia

**Q14.** Find the value of a+b.

1.  $12a + 5b = 90$

2.  $b = 18 - 2.4a$

Select the correct answer using the code given below:

- a) If the data in Statement I alone are sufficient to answer the question.
- b) If the data in Statement II alone is sufficient to answer the question.
- c) If the data even in both Statements I and II together are not sufficient.

- d) If the data in both Statements I and II together are necessary.

**15.** Tushar can do a piece of work in 10 days. Richa is 25% more efficient than Tushar. What is the number of days taken by Richa to do the same piece of work?

- a) 6 days
- b) 7.5 days
- c) 8 days
- d) 8.33 days

**Q16.** A cube has all its faces painted with different colours. It is cut into smaller cubes of equal sizes such that the side of the small cube is one-fourth the big cube. The number of small cubes with only two of the sides painted is:

- a) 24
- b) 12
- c) 9
- d) 6

**Q17.** AB is a pole with A, where the base of the pole touches the ground. Due to a storm, the pole has been broken at C which is at a height of 8 metres, the broken part is partially attached to the vertical portion of the trunk at C. If the end of the broken part B touches the ground at D which is at a distance of 6 metres from A, then the original height of the electrical pole is:

- a) 16 m
- b) 18 m
- c) 20 m
- d) 24 m

**Q18.** The door of Sumit's house is in the east. He walked straight 50 yards outside the building, then turned right and walked another 50 yards. Finally he turned left and stopped after walking 25 metres. Now, Sumit is in which direction from the starting point?

- a) South-east
- b) North-east
- c) South-west
- d) North-west

**Q19.** A game of chance is played at the carnival. The rules are as follows: you choose a number from 1 to 6 and the operator rolls three dice. If the number you picked comes up on all the three dice, the operator will pay you Rs.3; if it comes up on the two dice, you are paid Rs.2; and if it comes up on just one dice, you are paid Rs. 1. You have to pay Rs.1 to the operator only if the number you selected never comes. The

probability that you will win money playing in this game is

- a) 0.52
- b) 0.753
- c) 0.42
- d) 0.33

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

So, will we allow an accident in Japan, in a 40- year-old reactor at Fukushima, arising out of extreme natural stresses, to derail our dreams to be an economically developed nation? When a few European countries, particularly Germany, decide to phase out nuclear power that should not become a blanket argument to take a view against our nuclear programme.

The decision of Germany suits its current scenario. It is a relatively power-sufficed nation and economically developed – so it can afford to lose a few plants. More importantly, Germany has completely exhausted its nuclear resources. Thus, nuclear energy never fits into its goal of energy independence. India, on the other hand, is the leader of the new resource of nuclear fuel called Thorium, which is considered to be the nuclear fuel of the future.

The Indian population is misled when it is said that some Western nations have ended their nuclear programme, or that Japan is reconsidering nuclear power plant expansion. The study indicates that most of the prosperous nations are extracting about 30-40 percent of power from nuclear power. In India, we are not generating even 5000 MW of nuclear power from the total of about 150 GW of electricity generation, most of it coming from coal.

We should be careful not to be carried away by the barrage of anti-nuclear news. What is needed for our India, we Indians have to decide.

India is blessed with the rare, and very important, nuclear fuel of the future – Thorium. We cannot afford to lose the opportunity to emerge as the energy capital of the world. India has the potential to be the first nation to realize the dream of a fossil fuel-free nation, which will also relieve the nation of about \$100 billion annually which we spend on importing petroleum and coal. Besides, we are also importing millions of tonnes of CO<sub>2</sub> and other greenhouse gasses, which are a hazard to the environment and human health.

The greenest sources of power are definitely solar and wind. But solar and wind power are not stable and are

dependent excessively on weather and sunshine conditions. Nuclear power, on the other hand, provides a relatively clean, high-density source of reliable energy with an international presence. Today, there are 29 countries operating 441 nuclear power plants, with a total capacity of about 375 GWe). The industry now has more than 14,000 reactor-years of experience. Sixty more units, with a total target capacity of 58.6 GW, were under construction.

Much of the destructive power of nuclear accidents is compared against the benchmarks of the atomic bombing of Japan by the U.S. forces during the Second World War. Pictures of mushroom clouds looming over cities, charred buildings, and massive death scenes are awakened to form our opinion of nuclear disasters. But that is far from the reality. You cannot compare a nuclear bomb with a nuclear power plant. Civilian nuclear applications in the form of a power plant are designed to deliver small amounts of energy in a sustainable manner over a far larger time frame.

**Q20. What does the author want to say through the passage?**

- 1. To highlight the importance of nuclear energy for India.
- 2. To discuss India's energy security.
- 3. To answer the propaganda against India's nuclear energy program.
- 4. To make people aware of the advantages and disadvantages of nuclear power.

Select the correct answer using the code given below:

- a) Only 1
- b) 1, 3 and 4 only
- c) 1 and 3 only
- d) 2 and 4 only

**Q21. Why, according to the author, India is blessed?**

- 1. India has the freedom to make their decisions.
- 2. Ample fuel for nuclear energy is available in India.

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

**Q22. According to the author, why is the development of nuclear energy important, when wind and solar energy sources are available?**

- 1. Wind and solar energy means clean and reliable, but their technology is expensive.

2. Nuclear energy not only for energy security but is also essential for the development of India.

Select the correct answer using the code given below:

- a) Only 1  
b) Only 2  
c) Both 1 and 2  
d) None of the above

**Q23. What does the author want to say through the last paragraph?**

1. It is not comparable between nuclear energy and nuclear bombs.  
2. It is wrong to compare India's nuclear program with a thing of the past.

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

**Q24. Consider the information given below:**

**Amit, Bikram, Charan and Deepak stay from First to Fourth floors of a multi storey housing building and each one of them prefers a particular brand of watch from Time, Rado, Tommy and Fossil (not necessarily in the mentioned order).**

1. Amit takes either the 4th or 3rd floor and prefers Rado.  
2. Bikram stays just above the person who likes Fossil.  
3. Person who likes Tommy stays on the 4th floor.  
4. Deepak stays on a higher floor than Charan.

**Who prefers Fossil?**

- a) Amit  
b) Bikram  
c) Charan  
d) Deepak

**Passage:**

What carmakers often mean when they say a car is well-designed, is that it appeals to men, particularly to their less noble instinct. 'beautiful body'. 'she must move like a dream'. But auto-macho is going out of style. In America, 47% of new private cars are bought by women, up from 36% in 1989. Add the influence women have on a family's car-buying, and it is probable that women are more influential overall in choosing cars than men. So, carmakers are learning to create designs that appeal to them. Women tend to buy cheaper cars, largely because working women

tend to have lower income. In America, they buy 55% of the small cars, 44% of medium sized ones, but only 28% of large and luxurious models. They put more store on reliability than men do-probably a hidden reason for the rise in Japanese imports. American carmakers are now tailoring certain versions of their cars with women in mind. And they are learning that design can sway even normally pragmatic women as a comparison between Ford's Thunderbird and Mercury Cougar demonstrates. The Thunderbird is a high performance car - i.e., it goes fast and is styled to look aggressive. Less than 40% of Thunderbirds are bought by women. But the same car with a more sedate body, a different name (The Cougar) and different advertising is as popular with women as it is with men.

**Q25. The cars that are most likely to sell would be:**

- a) sedate, reliable, less macho  
b) reliable, cheaper, less macho  
c) sedate, cheaper, less macho  
d) smooth, sedate, less macho

**Q26. Which of the following can be inferred from the passage?**

- a) Sedate cars with different advertising register more sales  
b) Small cars are gaining sales  
c) Medium cars are gaining sales  
d) Luxurious cars are not selling at all

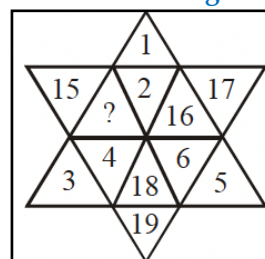
**Q27. Suppose VX 1000 is a new car that is taking away customers from Japanese cars. Our closest hypothesis would be VX 1000 :**

- a) must be less macho  
b) might be cheaper  
c) might be better advertised  
d) might be more reliable

**Q28. Which of the following statements is false?**

- a) Auto macho is passe  
b) High performance cars are losing out among women  
c) Japanese cars are considered more reliable  
d) Japanese imports are rising

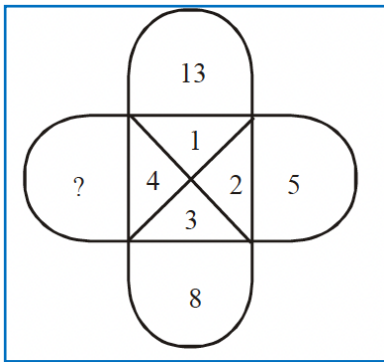
**Q29. Find the missing number:**



- a) 13

- b) 14
- c) 20
- d) 21

**Q30. Find the missing number:**



- a) 10
- b) 11
- c) 12
- d) 13

**Q31. Which number replaces the question work?**

10	
8	13
16	6
4	19
22	?

- a) 0
- b) 6
- c) 2
- d) 8

**Q32. Statements:**

- (1) Some flowers are rods.
- (2) Some rods are doors.
- (3) Some doors are house.

**Conclusions:**

- I. Some houses are flowers.
- II. Some doors are flowers.
- III. Some flowers are doors.
- IV. No house is flower.

**Which of the following is/are correct on the basis of above information?**

- a) I and II follow.
- b) I and IV follow.
- c) II and IV follow
- d) None of these.

**Q33. Examine the following statements:**

- 1. Pictures can tell a story.
- 2. All story books have pictures.
- 3. All story books have words.

**Which one of the following conclusions can be drawn from the above statements?**

- a) Pictures can tell a story better than words can.
- b) The stories in story books are very simple.
- c) Some storybooks have both words and pictures.
- d) None of the above.

**Q34. Consider the sequence**

A \_ BC \_ BCD \_ ABC \_ EFG that follows a certain pattern.

**Which one of the following completes the sequence?**

- a) DACB
- b) CDEB
- c) AAED
- d) DDCE

**Q35. Consider the following:**

- 1.  $A + B$  means A is not greater than B
- 2.  $A - B$  means A is neither greater nor equal to B
- 3.  $A \times B$  means A is neither smaller nor equal to B
- 4.  $A \# B$  means A is not smaller than B
- 5.  $A \% B$  means A is neither smaller nor greater than B

Statement:  $P \% Q, P - T, T + R, R \# S$

Conclusion 1:  $Q \times S$

Conclusion 2 :  $T \% Q$

**Which of the following is correct with respect to the above statement and the conclusions?**

- a) Only Conclusion-1 follows from the Statement.
- b) Only Conclusion-2 follows from the Statement.
- c) Both Conclusion-1 and Conclusion-2 follow from the Statement.
- d) Neither Conclusion-1 nor Conclusion-2 follows from the Statement.

**Q36. A bag of 4 mosambi, 8 bananas and 12 apples costs the same as a bag of 2mosambi, 8 bananas and 16 apples, or a bag of 16 bananas and 14 apples. Then the number of apples in a bag of apples that has the same cost as the other bags is**

- a) 26
- b) 28
- c) 30
- d) 13

**Q37. If twice the area of an equilateral triangle with a side length of 12 cm is the same as the area of a regular hexagon, then what is the length, in centimeters, of each side of the hexagon?**

- a)  $4 * \sqrt{3}$  cm



- b)  $4 * \sqrt{2}$  cm
- c) 8 cm
- d) 10 cm

- a) 5 lakhs
- b) 10 lakhs
- c) 9 lakhs
- d) 7.5 lakhs

**Q38.** How many three-digit numbers exhibit a property where their digits, when arranged in reverse order, result in an increase of 297 compared to the original number?

- a) 55
- b) 65
- c) 60
- d) 70

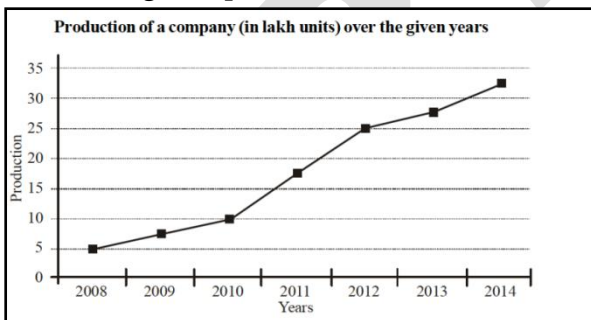
**Q39.** Two trains traveling in opposite directions on parallel tracks take 32 seconds to pass each other. The faster train, which is 170 meters long, crosses a lamp post in 20 seconds. The other train's speed is 9 km/hr slower than the faster train's speed. What is the length, in meters, of the second train?

- a) 290 m
- b) 300 m
- c) 292 m
- d) 294 m

**Q40.** Suman's birthday fell on a Friday in 2018. Considering he wasn't born in January or February, in which year will his birthday next land on a Wednesday?

- a) 2021
- b) 2022
- c) 2024
- d) 2023

**Directions (for 41 to 43):** Study the following graph to answer the given questions.



**Q41.** The production in 2014 is what per cent of production in 2008?

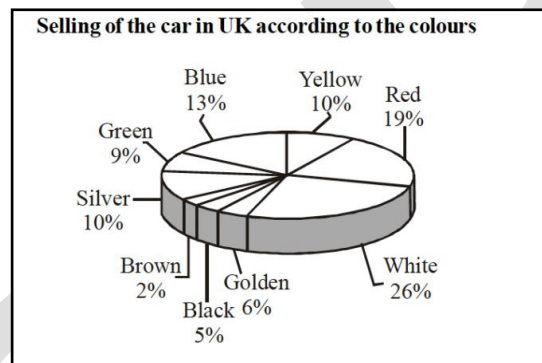
- a) 650%
- b) 550%
- c) 325%
- d) 320%

**Q42.** Which of the following is the highest difference in production between two adjacent years?

**Q43.** Which year had the highest per cent increase in production over the previous year?

- a) 2012
- b) 2011
- c) 2014
- d) 2009

**Directions (for 44 to 48):** Study the chart and give the answer of following questions



**Q44.** 50% of all the cars consisted of which colours of car?

- a) Black, Golden, Blue, Red
- b) Blue, Black, Red, Silver
- c) White, Golden, Blue, Black
- d) White, Blue, Green, Black

**Q45.** Cars of which colour are 20% less popular than white coloured cars?

- a) Black
- b) Golden
- c) Red
- d) Blue

**Q46.** Cars of which colour are 13% less popular than white cars?

- a) Blue
- b) Green
- c) Silver
- d) Yellow

**Q47.** Cars of which colour when increased by two per cent and then combined with that of red cars will make 30 per cent of the total?

- a) Golden
- b) Blue
- c) Black
- d) None of these

**Q48. If in a certain period the total production of all cars was 95400 then how many more blue cars were sold than green?**

- a) 2580
- b) 3618
- c) 2850
- d) 3816

**Q49. A certain code is prepared such that two letters are skipped in between any two adjacent letters. Which of the following series may be an output of this coding technique?**

- a) MPSVYBE
- b) QSVYZCF
- c) EIMQV
- d) ZCGKMPR

**Q50. There is a road beside a river. Two friends John and David started from a place A, moved to another place B and then returned to place A again (assume that the river and the road have the same course between the places A and B). John took a bicycle while David took a boat for their respective journeys through the road and the river respectively. John moved with a uniform speed of 9 km/h. The boat had a speed of 10 km/h (in still water). If the river current had a speed of 4 km/h, then which of the two friends returned to place A first (assume that the boat is sailing either up or down the river stream)?**

- a) John
- b) David
- c) Both reached at the same time
- d) Cannot be determined

**Directions (Q. Nos. 51 to 53):** Read the following passage and answer the questions that follow. Your answer to these questions should be based on the passage only.

There are limits to the population that our environment can sustain in the long-run, particularly in view of our desire to achieve higher standards of living. There is widespread consensus that population stabilisation entails a holistic, comprehensive approach towards education and health care. We need to invest in educating the girl child and improving her health and social status. In a country where credible social safety nets are absent, it is children who form the main pillar of support to their parents in their old age. This, coupled with high infant mortality rates, compels families to have more children. There has to be a concerted campaign to improve the health and educational status of the entire population in general. Regional imbalances exist.

It is necessary to integrate our population policy with our health and education policy as well as a social empowerment policy. We have to pursue a more balanced policy of regional development so that adequate employment opportunities are made available in the more populated regions of the country.

The approach of focused attention on women and girls, a general enhancement of educational and health levels and balanced regional development must be the core of any population stabilization strategy. For far too long has the health sector been addressed through a series of vertical, disease based programmes. The vertical and horizontal fragmentation of health programmes, coupled with a target driven approach to population stabilisation has distanced the entire gamut of health services from the common man. Investing in human capabilities converts human liabilities into human assets. Therefore, even as our population policy focusses on population stabilisation, it must also focus on altering the skill.

**Q51. Which of the following does the author cite as being responsible for population explosion?**

1. Lack of educational and health facilities for the masses especially for women.
2. High infant mortality rate that forces the poor to beget more children out of fear.
3. Regional development policies that failed to achieve their targets.

**Select the correct answer using the codes given below**

- a) Only 1
- b) Only 2
- c) Only 3
- d) All of these

**Q52. By creating new employment opportunities in less developed regions, our Government aims to**

1. bring about all-round progress in areas like health, education, etc.
2. increase the participation of women in work to facilitate a better standard of living.
3. empower the poor to make better informed choices.

**Select the correct answer using the codes given below**

- a) Only 1
- b) 2 and 3
- c) Only 3
- d) None of these

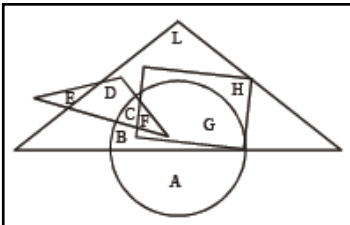
**Q53. Apart from population stabilisation, the population policy must also focus on**

1. empowerment of people so that they become assets and not liabilities.
2. ensuring a decent standard of living to everybody.
3. programmes that help better the rate of achievement of targets.
4. evolving a development strategy that focuses on elimination of poverty.

Select the correct answer using the codes given below

- a) Only 1
- b) 2 and 3
- c) 3 and 4
- d) None of these

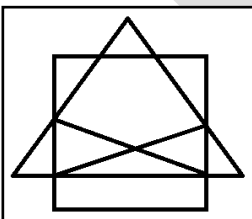
**Q54.** In the following figure, the smaller triangle represents teachers; the big triangle represents politicians; circle represents graduates and rectangle represents members of Parliament. Different regions are being represented by letters of English alphabet.



Which among the following regions represent the graduates or teachers but not politicians?

- a) B, G
- b) G, H
- c) A, E
- d) E, F

**Q55.** Find the number of triangles in the given figure:



- a) 13
- b) 10
- c) 9
- d) 12

**Q56.** Which year will have the same calendar as that of 2005?

- a) 2006
- b) 2007
- c) 2008
- d) 2011

**Q57.** A sold a chair to B at 10% profit. B sold it to C at 20% profit. If C bought it for Rs. 660, find the price at which A bought the chair.

- a) 1200
- b) 1000
- c) 500
- d) 700

**Q58.** Find the next number in the given series: 1, 2, 10, 37, 101?

- a) 402
- b) 206
- c) 226
- d) 320

**Q59.** The average of runs of a cricket player of 10 innings was 32. How many runs he make in his next innings so as to increase his average of runs by 4?

- a) 76
- b) 79
- c) 85
- d) 87

**Q60.** There are six persons S, T, U, V, W and X, who have different weight. S is heavier than U and X only. T is lighter than W, who is not the heaviest. The Second heavier person is of 92 kgs.

How many persons are heavier than U?

- a) Four
- b) Two
- c) Five
- d) Can't be determined

**Q61.** In a cricket tournament, a bowler's average economy rate is 4.8 runs per over. During the final match, the bowler concedes 32 runs without taking any wickets. As a result, his average economy rate increases by 0.3 runs per over. How many overs did the bowler bowl in the tournament before the final match?

- a) 70 overs
- b) 80 overs
- c) 90 overs
- d) 100 overs

**Q62.** When a producer allows 36% commission on retail price of his product, he earns a profit of 8.8%. What would be his profit % if the commission is reduced by 24%?

- a) 40.8%
- b) 49.6%
- c) 60%
- d) 62%

**Q63.** The average age of a class of 39 students is 15 years. If the age of the teacher be included, then the average increases by 3 months. Find the age of the teacher.

- a) 25
- b) 35
- c) 20
- d) 15

**Q64.** The ratio of the present age of Monu to that of Wadud is 4: 11. Wadud is 10 years younger than Ritika. Ritika's age after 9 years will be 85 years. What is the present age of Monu's father, who is 25 years older than Monu?

- a) 43 year
- b) 67 year
- c) 49 year
- d) 69 year

**Q65.** Akash, Chad, Tom, Cherry, Sam, Monty, Bikram and Sarah are sitting around a circular table facing the center. Sarah is third to the right of Tom and second to the left of Sam. Chad is not an immediate neighbour of Sarah and Tom. Monty is second to the right of Cherry and is an immediate neighbour of Tom. Bikram is not the neighbour of Sam. Who among the following is second to the right of Tom?

- a) Sarah
- b) Bikram
- c) Monty
- d) Sam

**Q66.** Consider the following table which shows the sales of five different products (A, B, C, D, and E) over a period of five years (2018- 2022). The sales are represented in thousands of units sold.

Year	A	B	C	D	E
2018	120	75	100	80	65
2019	140	90	110	96	78
2020	168	108	121	115	94
2021	202	130	145	138	113
2022	242	156	174	165	135

Based on the table above, which of the following statements is correct?

- a) The average annual growth rate of product A is more than product B.
- b) The average annual growth rate of product E is more than product C.
- c) Product D has the highest total sales over the five- year period.
- d) Product B has the lowest average annual growth rate.

**Q67.** Which among the following numbers is the largest of all:

$$4^{79}, 128^{23}, 2^{156}, 8^{54}$$

- a)  $4^{79}$
- b)  $128^{23}$
- c)  $2^{156}$
- d)  $8^{54}$

**Q68.** A milkman sells milk at the rate of Rs 50 per litre. Upon investigation, it was found that the milk contains 25% water. Assuming that the cost of the milk is Rs. 48 per litre, what is the profit per litre made by the milkman?

- a) 12
- b) 13
- c) 14
- d) 15

**Q69.** In a class of 20 students, the average age of the students is 15 years. When the teacher's age is also included, the average age of the class increases by 1 year. What is the age of the teacher?

- a) 33
- b) 34
- c) 35
- d) 36

**Direction for the following 4 (four) items:**

Read the information carefully and answer the questions that follow.

Eight people M, N, O, P, Q, R, S and T were born on the same date and month of these different years: 1972, 1975, 1980, 1985, 1987, 1992, 1997 and 2003, not necessarily in the same order. Their age is noted on the same date and month of 2018. Q was born on 1997. The sum of the ages of S and P is equal to the age of T. The difference in ages of S and M is less than 5 years. The difference in the ages of M and N is 10 years, and N is older than M. O is 5 years older than Q.

**Q70.** Who among the following is the youngest person?

- a) M
- b) N
- c) S
- d) P

**Q71.** What is the age of O?

- a) 33 years
- b) 31 years
- c) 26 years
- d) 21 years

**Q72.** The sum of the ages of S and P is:

- a) 46 years
- b) 44 years
- c) 43 years
- d) 45 years

**Q73. Which of the following was born before 1987?**

- a) S
- b) O
- c) Q
- d) M

**Q74. A Statement followed by Conclusion-I, Conclusion-II, Conclusion III and Conclusion IV is given below. You have to take the Statement to be true even if it seems to be at variance from commonly known facts. Read all Conclusions and then decide which of the given Conclusion(s) logically follows/follow from the Statement, disregarding commonly known facts.**

Statement: All garden are ground. Game are not ground

Conclusion I: Garden are not game.

Conclusion II: All ground are garden.

Conclusion III: Garden are game.

Conclusion IV: No ground is game.

**Which one of the following is correct?**

- a) Only III and IV follow
- b) Only I and II follow
- c) Only I and IV follow
- d) None of the above follows

**Q75. Two alloys are formed by mixing metals A and B. The ratio by weight of A: B in the first alloy is 6:5 and that in second is 7:13. 29 kg of metal A must be melted along with 11 Kg of first alloy and 20 Kg of the second so as to produce a new alloy. Find percentage of metal B in the final alloy?**

- a) 18%
- b) 20%
- c) 25%
- d) 30%

**Q76. It takes Bob 2t minutes to complete form A, which has k questions, and 3t minutes to**

**complete form B which has k/2 questions. If Bob answers all the questions, how much more time does he take on an average to answer a form B question than he takes to answer a form A question?**

- a) 2t/k
- b) 8t/k
- c) 4t/k
- d) t/k

**Q77. A grocer buys 300 oranges at 25p per dozen and sells them at 5 for 17 p. How much profit has he made?**

- a) Rs.3.95
- b) Rs. 4.50
- c) Rs. 4.95
- d) Rs. 8.76

**Q78. Find the largest four digit natural number N which when divided by 45, 60 and 72 leaves a remainder of 33, 48 and 60 respectively.**

- a) 9348
- b) 9528
- c) 9708
- d) 9888

**Q79. A lady has a total of Rs. 75 in her purse. If the total amount she has is in denominations of 10 paise, 25 paise and 50 paise coins, and the ratio of 10 paise and 25 paise coins is 5: 3 and that of 25 paise and 50 paise coins is 6: 5; what is the total number of 25 and 50 paise coins?**

- a) 75
- b) 90
- c) 150
- d) 165

**Q80. A beats B by 15 sec in a 200 m race, B beats C by 25 sec in a 500 m race, C beats D by 32 sec in 800 m race and D beats E by 35 Sec in a 1km race. What must be the speed of A in order to beat E by 800 m in a 2 km race?**

- a) 2.5 m/s
- b) 3.33 m/s
- c) 5 m/s
- d) 6.66 m/s

**ANSWERS**

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