Daily PIB Summary

28th February

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1.Prime Minister Congratulates Jammu & Kashmir Team on Historic Ranji Trophy Victory

- The Jammu & Kashmir team clinched their maiden title in the prestigious **Ranji Trophy**.
  The Prime Minister praised the team's dedication, resilience, and sporting excellence.
- The win is seen as a boost to sports culture and youth aspirations in the region.
- It reflects the growing depth of cricketing talent beyond traditional strongholds.
- The achievement carries symbolic importance for national integration through sports.
- It also underscores government efforts to promote sports infrastructure and youth engagement.
- The victory is expected to inspire grassroots cricket development in the region.

BACKGROUND / CONTEXT

Ranji Trophy

The **Ranji Trophy**:

- Is India's premier domestic first-class cricket championship.
- Administered by the **Board of Control for Cricket in India (BCCI)**.
- Named after Maharaja Ranjitsinhji.
- Serves as a talent pipeline for the national team.

Jammu & Kashmir in Domestic Cricket

- Represents the Union Territory in BCCI tournaments.
- Has shown consistent improvement in recent seasons.
- Victory marks a milestone in regional sporting history.

Sports as Nation-Building

- Sports promote youth empowerment and social cohesion.
- Government initiatives like Khelo India encourage grassroots talent.
- Infrastructure expansion in remote regions supports inclusive development.

KEY HIGHLIGHTS

- **Historic Milestone:** First Ranji Trophy win for Jammu & Kashmir.
- **Prime Minister's Message:** Recognition at national level.
- **Regional Empowerment:** Boost to youth sports culture.
- **Talent Diversification:** Expanding cricket excellence across India.
- **Nation-Building Role:** Sports as a unifying force.
- **Grassroots Impact:** Encourages infrastructure and academy growth.
- **Way Forward:** Sustained investment in coaching and facilities.

PRELIMS BOOSTER BOX

- **Ranji Trophy:** India's premier domestic first-class cricket tournament.
- **Administered by:** BCCI.
- **First-class Cricket:** Multi-day format recognized at domestic level.
- **Khelo India Programme:** Promotes grassroots sports development.
- **Union Territory of J&K:** Reorganized in 2019.
- **Cricket Structure:** Domestic → IPL → National Team pathway.

PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. The Ranji Trophy is India's premier domestic first-class cricket tournament.
2. The tournament is administered by the Board of Control for Cricket in India (BCCI).
3. First-class cricket matches are typically limited to 20 overs per side.

Which of the statements given above is/are correct?

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

Answer: (a)

2.Valedictory Ceremony of Instrument Rating & Examiners' Course

Directorate General of Civil Aviation (DGCA)

- The Instrument Rating & Examiners' Course focuses on advanced flight operations under instrument meteorological conditions (IMC).
- It enhances pilot capability to operate aircraft safely without visual references.
- The program also certifies aviation professionals as examiners to assess pilot competency.
- Such courses are crucial for maintaining international civil aviation standards.
- The initiative contributes to strengthening aviation safety and regulatory compliance.
- It aligns with India's expanding civil aviation sector and rising air traffic demand.
- From a governance perspective, it reinforces quality assurance in pilot licensing and evaluation systems.

BACKGROUND / CONTEXT

Instrument Rating (IR)

Instrument Rating allows pilots to:

- Fly under low visibility conditions.
- Navigate using cockpit instruments and radio aids.
- Operate in controlled airspace safely during adverse weather.

Regulatory Framework

The **Directorate General of Civil Aviation (DGCA)** regulates pilot licensing, training, and certification in India.

DGCA ensures:

- Compliance with International Civil Aviation Organization (ICAO) norms.
- Standardized training modules.
- Periodic skill checks and examinations.

Importance of Examiners

- Examiners evaluate pilot competence.
- Conduct proficiency checks and skill tests.
- Ensure adherence to safety protocols.

Civil Aviation Growth Context

India is among the fastest-growing aviation markets globally.
Enhanced pilot training standards are vital for safety amid fleet expansion and airport development.

KEY HIGHLIGHTS

- **Advanced Training:** Focus on instrument-based flight proficiency.
- **Safety Enhancement:** Reduces risks during poor visibility operations.

- **Examiner Certification:** Strengthens assessment credibility.
- **Regulatory Alignment:** Complies with ICAO aviation standards.
- **Capacity Building:** Supports India's growing aviation sector.
- **Operational Excellence:** Improves air navigation accuracy.
- **Way Forward:** Simulator-based training expansion and digital evaluation systems.

PRELIMS BOOSTER BOX

- **DGCA:** India's aviation safety regulator.
- **Instrument Meteorological Conditions (IMC):** Weather conditions requiring instrument-based navigation.
- **ICAO:** UN specialized agency for civil aviation.
- **Instrument Rating (IR):** Qualification for flying without visual ground reference.
- **Proficiency Check:** Mandatory periodic pilot assessment.
- **Air Navigation Aids:** VOR, ILS, GPS-based systems.
- **Civil Aviation Expansion:** Driven by UDAN and airport modernization.

PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. Instrument Rating allows pilots to operate aircraft in low-visibility conditions using cockpit instruments.
2. The Directorate General of Civil Aviation regulates pilot licensing in India.
3. ICAO is a private aviation company headquartered in India.

Which of the statements given above is/are correct?

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

Answer: (a)

3.Union Environment Minister Welcomes 9 Cheetahs from Botswana at Kuno National Park

- Nine African cheetahs were relocated to Kuno National Park to strengthen the reintroduction initiative.
- The project aims to restore the cheetah population in India after its extinction in 1952.
- The translocation enhances genetic diversity and long-term viability of the species in India.
- The initiative is part of India's broader wildlife conservation strategy.
- It supports ecological restoration of grassland ecosystems.
- The project demonstrates international cooperation in biodiversity conservation.
- Strategically, it reinforces India's commitment to wildlife protection and species revival.

BACKGROUND / CONTEXT

Cheetah Reintroduction Programme

- Cheetahs became extinct in India in 1952.
- Reintroduction approved by the Supreme Court in 2020.
- First batch of cheetahs brought from Namibia in 2022.
- Subsequent translocations from South Africa and Botswana.

Kuno National Park

Located in Madhya Pradesh, it was selected due to:

- Suitable grassland habitat.
- Prey base availability.
- Low human disturbance.

It was upgraded from a wildlife sanctuary to a national park to support large carnivore conservation.

Ecological Significance

- Cheetahs are apex predators in open grassland ecosystems.
- Help maintain prey population balance.
- Support biodiversity restoration.

International Cooperation

The relocation was conducted in collaboration with Botswana authorities and conservation experts.

KEY HIGHLIGHTS

- **Species Revival:** Restores cheetahs after seven decades of extinction in India.

- **Habitat Restoration:** Revives grassland ecosystem importance.
- **Genetic Strengthening:** Enhances population sustainability.
- **International Partnership:** Cooperation with Botswana.
- **Scientific Monitoring:** Radio-collaring and tracking mechanisms.
- **Conservation Diplomacy:** Strengthens global biodiversity ties.
- **Way Forward:** Expansion to additional protected landscapes.

PRELIMS BOOSTER BOX

- **Cheetah Status (IUCN):** Vulnerable.
- **Extinction in India:** Officially declared in 1952.
- **Kuno National Park:** Located in Madhya Pradesh.
- **Apex Predator:** Species at the top of food chain.
- **Translocation:** Movement of species from one habitat to another.
- **Supreme Court Approval:** Granted in 2020 for reintroduction.
- **Grassland Ecosystems:** Often termed 'neglected ecosystems' in India.

PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. Cheetahs were declared extinct in India in 1952.
2. Kuno National Park is located in Madhya Pradesh.
3. Cheetahs are primarily forest-dwelling animals adapted to dense rainforest ecosystems.

Which of the statements given above is/are correct?

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

Answer: (a)

4.Cervical Cancer Vaccination Campaign Launched

- The campaign focuses on vaccinating eligible adolescent girls against HPV, the primary cause of cervical cancer.
- It strengthens India's preventive healthcare framework under the National Health Mission.
- Early vaccination significantly reduces the risk of developing cervical cancer later in life.
- The programme emphasizes awareness, screening, and immunization as a three-pronged strategy.
- It aligns with the WHO's global strategy to eliminate cervical cancer as a public health problem.
- The campaign also promotes gender-sensitive healthcare interventions.
- Strategically, it enhances women's health outcomes and long-term productivity.

BACKGROUND / CONTEXT

Cervical Cancer

- Caused primarily by persistent infection with high-risk HPV strains.
- One of the most common cancers among women in India.
- Preventable through vaccination and early screening (Pap smear, HPV test).

HPV Vaccine

- Protects against high-risk HPV types (e.g., HPV-16 and HPV-18).
- Most effective when administered before onset of sexual activity.
- Typically recommended for adolescent girls (and increasingly boys in some countries).

Public Health Framework

The campaign is implemented through:

- National Health Mission (NHM)
- Universal Immunization Programme (UIP) (in phased integration)
- School-based and community outreach vaccination drives

Global Context

WHO aims to eliminate cervical cancer through:

- 90% vaccination coverage of girls by age 15
- 70% screening coverage
- 90% treatment coverage for detected cases

KEY HIGHLIGHTS

- **Preventive Focus:** Targets HPV infection before exposure.
- **Adolescent Health Priority:** Focus on school-age girls.
- **Gender Equity:** Strengthens women-centric health policy.
- **Awareness Integration:** Combines vaccination with screening education.
- **Public Health Impact:** Reduces long-term cancer burden.
- **WHO Alignment:** Supports global elimination targets.
- **Way Forward:** Expand screening infrastructure and cold-chain capacity.

PRELIMS BOOSTER BOX

- **HPV:** Human Papillomavirus, major cause of cervical cancer.
- **High-Risk Strains:** HPV-16 and HPV-18.
- **Pap Smear Test:** Screening method for early detection.
- **NHM:** National Health Mission.
- **UIP:** Universal Immunization Programme.
- **Preventive Oncology:** Focus on early detection and vaccination.
- **WHO Elimination Strategy:** 90–70–90 targets.

PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. Persistent infection with high-risk HPV strains is the primary cause of cervical cancer.

2. HPV vaccination is most effective when administered before exposure to the virus.
3. Cervical cancer is a communicable airborne disease.

Which of the statements given above is/are correct?

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

Answer: (a)

5.The Evolving Spectrum of Energy Sources

- The energy mix has evolved from traditional biomass to coal, oil, and gas, and now towards renewables and clean technologies.
- Fossil fuels historically powered industrialization but contribute significantly to greenhouse gas emissions.
- Renewable sources like solar, wind, hydro, and bioenergy are gaining prominence.
- Emerging technologies such as green hydrogen and battery storage are shaping future energy systems.

- Energy diversification enhances energy security and reduces import dependency.
- India aims to balance development needs with climate commitments.
- The transition is central to achieving sustainable growth and net-zero targets.

HISTORICAL EVOLUTION OF ENERGY

1 Traditional Sources

- Biomass (wood, agricultural residue)
- Animal power
- Water wheels

2 Fossil Fuel Era

- Coal → backbone of industrial revolution
- Oil → transport and petrochemicals
- Natural Gas → cleaner fossil fuel alternative

3 Nuclear Energy

- Low-carbon baseload power
- High energy density
- Requires strong safety regulation

4 Renewable Energy Revolution

- Solar Photovoltaic (PV)
- Wind Energy
- Hydropower
- Bioenergy

5 Emerging & Future Sources

- Green Hydrogen
- Energy Storage Systems
- Carbon Capture & Storage (CCS)
- Fusion research

INDIA'S ENERGY TRANSITION CONTEXT

India's strategy includes:

- Increasing non-fossil fuel electricity capacity.
- Expanding solar under the International Solar Alliance.
- Promoting green hydrogen mission.
- Enhancing energy efficiency (PAT Scheme).

Policy Frameworks

- National Action Plan on Climate Change (NAPCC)
- National Solar Mission
- National Green Hydrogen Mission
- Ujjwala & LPG expansion (clean cooking transition)

KEY CHALLENGES

- Intermittency of renewables
- Grid stability
- Energy storage costs
- Land acquisition
- Fossil fuel dependence for baseload
- Climate finance requirements

KEY HIGHLIGHTS

- **Diversification:** From coal-dominated to multi-source mix.
- **Decarbonization:** Lower carbon intensity growth.
- **Energy Security:** Reducing import dependency.
- **Technological Innovation:** Hydrogen, batteries, smart grids.
- **Just Transition:** Protecting workers in fossil fuel sectors.

- **Sustainability:** Aligning growth with environmental goals.
- **Way Forward:** Storage integration and green infrastructure investment.

PRELIMS BOOSTER BOX

- **Baseload Power:** Continuous electricity supply to meet minimum demand.
- **Green Hydrogen:** Hydrogen produced using renewable electricity.
- **Carbon Capture & Storage:** Technology to capture CO_2 emissions.
- **Net Zero (India):** Target year 2070.
- **Energy Intensity:** Energy consumption per unit of GDP.
- **Intermittency:** Variability of renewable power generation.
- **ISA:** International Solar Alliance headquartered in Gurugram.

PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. Green hydrogen is produced using renewable energy sources.
2. Baseload power refers to the maximum electricity demand during peak hours.
3. Renewable energy sources are completely free from intermittency issues.

Which of the statements given above is/are correct?

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

Answer: (a)