DAILY CURRENT AFFAIRS 16-01-2025

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Maha Kumbh

Syllabus: GS-1: Indian Heritage and Culture.

Context:

> The Maha Kumbh Mela, one of the largest religious gatherings in the world, is scheduled from **January 13, 2025** (Paush Purnima Snan) to **February 26, 2025**.

> It takes place every 12 years at four locations in India: **Haridwar, Prayagraj (Allahabad), Nashik**, and **Ujjain**.

Key Takeaways

1. Spiritual Significance

> **Opportunity for Salvation**: Devotees believe bathing during the festival absolves sins and helps attain Moksha (liberation).

> **Cosmic Alignment**: The planetary positions during the event enhance spiritual energy, making it auspicious for spiritual practices.

2. Historical Foundations

> **Mythological Origin**: Rooted in Hindu epics like the **Mahabharata** and **Puranas**, the festival traces its origins to the **Amrit Manthan** (Churning of the Ocean of Milk).

> **Legend of Nectar**: Four drops of amrita (nectar of immortality) fell at the festival's four locations, infusing them with divine energy.

3. Cultural and Social Significance

- ➢ **Sangam**: The confluence of the **Ganges, Yamuna, and Saraswati rivers** at Prayagraj is a sacred site believed to atone for sins.

- ➢ **Unity in Diversity**: The festival brings together people across castes, creeds, and backgrounds, fostering a sense of spiritual togetherness.

Key Rituals

- ➢ **Shahi Snan (Royal Bath)**:

  - o The most significant ritual, involving ceremonial bathing led by **Naga sadhus** (ascetic warriors).

  - o Symbolizes purification of sins and spiritual merit.

- ➢ **Sankirtan and Bhajans**:

  - o Devotees sing devotional songs, creating a spiritual atmosphere.

- ➢ **Yoga and Meditation**:

  - o Visitors practice yoga and meditation to achieve mental and physical harmony.

- ➢ **Spiritual Discourses**:

  - o Renowned saints and gurus deliver sermons on spirituality and philosophy.

Difference Between Maha Kumbh and Kumbh

Aspect	Maha Kumbh Mela	Kumbh Mela
Frequency	Every 12 years	Every 3 years
Scale	Largest religious gathering	Comparatively smaller
Main Location	Primarily at Prayagraj	Rotates among four locations
Spiritual Importance	Higher, with emphasis on salvation	Significant but relatively lesser
Attendance	~400 million devotees	Fewer than Maha Kumbh

Kumbh Mela takes place at four sacred sites—Haridwar (Ganges), Ujjain (Shipra), Nashik (Godavari), and Prayagraj (Ganges-Yamuna-Saraswati).

Each site has its unique significance and rituals associated with it.

Kumbh Mela in UNESCO's Intangible Cultural Heritage

- ➢ **UNESCO Recognition**:

  - o Declared India's **Intangible Cultural Heritage** in **2017**.

- o Described as "the festival of the sacred Pitcher," highlighting its diversity and cultural significance.

➢ **UNESCO Convention (2003)**:

- o Defines intangible cultural heritage as practices, expressions, and skills recognized by communities as part of their identity.

Other Intangible Cultural Heritage Inscriptions

Heritage	Year of Inscription
Kutiyattam, Sanskrit Theatre	2008
Tradition of Vedic Chanting	2008
Ramlila	2008
Chhau Dance	2010
Yoga	2016
Kumbh Mela	2017
Durga Puja in Kolkata	2021
Garba of Gujarat	2023

Relevance for UPSC

➢ **Prelims**: Questions on festivals, UNESCO heritage, and cultural diversity.

➢ **Mains**: Topics on intangible heritage, societal unity, and mythology under GS-I (Indian culture and heritage).

➢ **Essay**: Themes like "Unity in Diversity" or "Spiritual Significance of Indian Festivals."

Generation Beta

Syllabus: GS-1: Population and related concepts.

Context:

➢ The year 2025 marks a generational shift: children born between January 1, 2025, and December 31, 2039, will comprise Generation Beta.

Generational Shift in 2025: Generation Beta

Introduction to Generation Beta

➢ **Timeline**: Born between January 1, 2025, and December 31, 2039.

➢ **Successor to Generation Alpha**:

    o Gen Alpha (2010–2024) is also called the iPad Generation.

    o Term "Generation Alpha" was coined by demographer Mark McCrindle.

➢ **Named after Greek Alphabet**: Beta follows Alpha.

➢ **Parents**: Likely to be children of younger millennials and older Gen Zers.

Understanding Generations

Definition of a Generation

➢ Refers to a group of people born around the same period.

➢ Popularized by Karl Mannheim in his 1928 paper, *"The Problem of Generations"*.

    o Distinguished generations by:

        ▪ Physical location and social status.

        ▪ Participation in intellectual discussions.

        ▪ Responses to common historical events.

Generational Cohort

➢ A group born around the same time experiencing similar historical events, often influencing shared values.

➢ Sociologists debate its definition:

    o **Jane Pilcher**: Restricts the term "generation" to kinship relationships.

Importance to Marketers

➢ Generational traits help in targeted marketing strategies.

➢ **Pew Research Center (May 2023)**: Recognized the overcrowding of generational research; plans analysis only with adequate data for comparison.
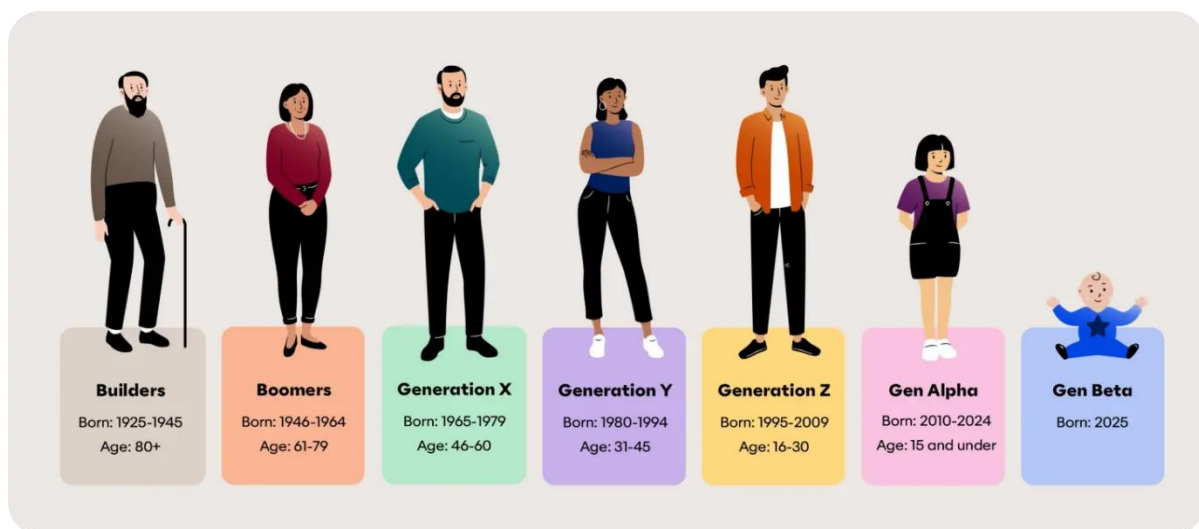
Naming Generations

➢ Initially named based on societal events, later transitioned to Greek alphabets.

➢ Examples:

    o **Baby Boomers**: Post-WWII baby boom.

    o **Generation X**: Anti-establishmentarian mindset.

    o **Millennials**: Adulthood coincided with the turn of the millennium.

Overview of Generations

Baby Boomers (1946–1964)

> **Global Characteristics**:

 - o Idealistic, competitive, mistrust of authority.

 - o Major US events: Civil Rights Movement, Vietnam War, Woodstock, assassinations of JFK and MLK Jr.

> **In India**:

 - o Grew up in newly independent India with a socialist economic model.

 - o Witnessed the Green Revolution, wars, and the Emergency.

Gen X (1965–1979)

> **Global Characteristics**:

 - o Mistrust in institutions.

 - o Known as the "sandwich generation" caring for Boomers and Gen Z children.

> **In India**:

 - o Lived through economic reforms by Rajiv Gandhi.

 - o Expansion of IT and telecom sectors.

Millennials (1980–1995)

> **Global Characteristics**:

 - o Tech-savvy and socially conscious.

 - o Influenced by acts of terrorism and school violence.

- o Prioritize work-life balance and personal goals.
- ➤ **Key Traits**:
  - o Delay traditional milestones like marriage.
  - o Value loyalty but seek flexibility.

Gen Z (1996–2010)

- ➤ **Global Characteristics**:
  - o Digital natives, growing up with constant online presence.
  - o Influenced by the 2007 recession and the loneliness epidemic.
  - o Strong focus on mental health, political advocacy, and social causes.
- ➤ **Career Outlook**:
  - o Cautious but idealistic, seek meaningful work.

Gen Alpha (2011–2024)

- ➤ **Global Characteristics**:
  - o Born entirely in the 21st century.
  - o Grew up with social media and the COVID-19 pandemic.
  - o Strong focus on sustainability and inclusion.

Speculations on Generation Beta

Predicted Characteristics

- ➤ **Technological Environment**:
  - o Seamless integration of AI and automation in education, healthcare, and entertainment.
- ➤ **Sustainability**:
  - o Sustainability as a norm rather than preference.

Challenges to Inherit

- ➤ Climate change.
- ➤ Global population shifts.
- ➤ Rapid urbanization.

National Organ and Tissue Transplant Organisation (NOTTO)

Syllabus: GS-2; International Institutions.

Context:

➢ Central government employees who donate organs are eligible for **42 days of leave** under the provisions set by the National Organ and Tissue Transplant Organisation (NOTTO).

About National Organ and Tissue Transplant Organisation (NOTTO)

What It Is

➢ A **national-level organization** under the **Directorate General of Health Services**, Ministry of Health and Family Welfare, Government of India.

Ministry

➢ **Ministry of Health and Family Welfare**

Headquarters

➢ Located at the Institute of Pathology (ICMR) Building, Safdarjung Hospital, New Delhi.

Aim of NOTTO

➢ **Coordination and Regulation**: To coordinate, regulate, and promote organ and tissue donation and transplantation in India.

➢ **Efficient Utilization**: Facilitate the safe and efficient allocation and utilization of organs and tissues.

Functions of NOTTO

1. Policy Formation

➢ Formulate guidelines and protocols for organ donation and transplantation.

2. Coordination and Networking

➢ Serve as the apex body for organ procurement, allocation, and distribution across regions.

3. Registry Maintenance

➢ Maintain a **National Organ and Tissue Donation and Transplant Registry** for data tracking.

4. Awareness Campaigns

➢ Conduct public awareness programs to promote organ donation.

5. Training and Support

➢ Organize training for healthcare professionals.

➢ Provide legal and non-legal consultancy on organ donation.

6. Monitoring

➢ Monitor transplantation activities and maintain a surveillance data bank.

Indigenous Surgical Robotic System

Syllabus: GS-3: Science and Technology – Innovations in Health sector.

Context:

➢ In a groundbreaking achievement, India's indigenous surgical robotic system, SSI Mantra, successfully conducted two robotic cardiac surgeries via telesurgery over a distance of 286 kilometers.

Overview

➢ **What it is**: An indigenously developed surgical robotic system for advanced robotic surgeries, including telesurgery.

➢ **Developer**: SS Innovations, a leading innovator in surgical technology.

Key Features

➢ **Ultra-Low Latency**:

o Operates with a latency of 35-40 milliseconds, ensuring seamless real-time remote surgical control.

➢ **High Precision**:

o Capable of performing complex surgeries such as Totally Endoscopic Coronary Artery Bypass (TECAB) with exceptional accuracy.

➢ **Regulatory Approval**:

o The first robotic system worldwide approved for telesurgery by India's Central Drugs Standard Control Organization (CDSCO).

➢ **Telesurgery & Tele-Proctoring**:

o Allows remote surgical operations and supports real-time mentoring and education through tele-proctoring.

How It Works

➢ Employs advanced robotic arms controlled remotely by surgeons over a secure and high-speed network.

➢ Minimal data transmission delay ensures precision and safety during operations.

➢ Facilitates collaborative learning and guidance in surgical practices.

Significance

➢ **Bridging Healthcare Gaps**:

   o Extends access to expert surgical care to remote and underserved areas.

   o Reduces the disparity in healthcare access, particularly in rural India.

➢ **Enhanced Patient Outcomes**:

   o Enables minimally invasive and highly accurate procedures, reducing recovery times and complications.

➢ **Transformative for India**:

   o Aligns with India's vision for Atmanirbhar Bharat (self-reliant India) in advanced healthcare technologies.

➢ **Global Potential**:

   o Showcases India's capability to develop scalable solutions for worldwide adoption in medical care and education.

Conclusion

The SSI Mantra 3 Surgical Robotic System exemplifies India's prowess in healthcare innovation, offering a transformative solution for equitable access to advanced medical care. Its success underscores India's potential to lead globally in robotic healthcare technologies.

Indian Biennial Update Report

Syllabus: GS-3: Climate Change – Policies

Context:

➢ India recently submitted its latest report detailing its greenhouse gas emission (GHG) inventory and the efforts it has taken to curb emissions.

Introduction

➢ **Visionary Leadership**: Inspired by Mahatma Gandhi's vision for sustainability, India is committed to a "Green Future" and achieving **Net Zero emissions by 2070**.

➢ **Global Climate Commitment**: India demonstrated its commitment at **COP 26 (2021)** and showcased progress with a **7.93% GHG emission reduction in 2020** (compared to 2019).

UNFCCC and India's Role

➢ **UNFCCC Overview**:

- o Established on **March 21, 1994**, to stabilize **greenhouse gas (GHG) concentrations** and promote global climate cooperation.

- o **Paris Agreement (2015)**: Signed by 195 countries, aiming to limit global warming to **below 2°C**, with efforts to cap at **1.5°C**.

➢ **India's Contributions**:

- o Submits **Biennial Update Reports (BURs)** tracking GHG emissions, mitigation measures, and received support.

- o India's **BUR-4 (2024)** revealed a **7.93% reduction in emissions**.

India's Emission Reduction Highlights

➢ **Emission Data (2020)**:

- o Without LULUCF: **2,959 million tonnes CO2e**.

- o With LULUCF: **2,437 million tonnes CO2e**, including **522 million tonnes CO2 sequestered**.

- o **Energy Sector**: Largest contributor with **75.66% emissions**.

➢ **Principle-Based Approach**: Equity and **Paris Agreement alignment** guide India's climate actions.

India's Long-Term Low Emission Strategy (LT-LEDS)

India's **seven strategic transitions**:

1. Low-carbon electricity systems.

2. Integrated and low-carbon transport systems.

3. Energy-efficient urban planning and sustainable urbanization.

4. Decoupling growth from emissions with efficient industrial systems.

5. CO2 removal and engineering solutions.

6. Enhanced forest and vegetation cover.

7. Economic and financial strategies for sustainable development.

Key Climate Action Initiatives

➢ **Forest Land Diversion & Mitigation**:

- o **Compensatory Afforestation**: Eco-restoration for diverted lands.
- o Initiatives like **"Ek Ped Maa Ke Naam"** and the **Green Credit Program**.

➢ **Urban Adaptation & Development**:

- o Integration of climate adaptation in **urban planning**.
- o Supported by programs like **Smart Cities Mission** and **AMRUT**.

➢ **Air Pollution Control**:

- o **National Clean Air Programme (NCAP)** for city-specific solutions.
- o Initiatives include ethanol blending, BS VI norms, and Nagar Van Yojna.

➢ **Coastal Ecosystem Conservation**:

- o **MISHTI Program** for mangrove restoration.
- o Integrated **Coastal Zone Management Plans (ICZMP)**.

➢ **Regulatory Measures**:

- o **CRZ Notifications** (2011 & 2019) focus on critical ecosystem protection.
- o Supported by acts like **Environment Protection Act (1986)** and **Biological Diversity Act (2002)**.

Innovative Initiatives

➢ **Miyawaki Technique**: Used for creating dense forests during **Mahakumbh 2025** in Prayagraj, merging spirituality and environmental responsibility.

Conclusion

➢ India is steadfast in achieving a **climate-resilient future** through innovative strategies and balanced growth.

➢ With initiatives like **LT-LEDS** and **carbon-neutral development efforts**, India is setting an example in global climate action.