

Today's Prelims Topics

UNESCO adds 16 new Global Geoparks

Context

UNESCO has added 16 new sites across 11 countries to its Global Geoparks Network.

What are UNESCO Global Geoparks?

- UNESCO Global Geoparks are **single, unified geographical areas** where sites and landscapes of **international geological significance** are managed with a holistic concept of protection, education and sustainable development.
- At present, there are **229 UNESCO Global Geoparks in 50 countries**.
- **Key Features:**
 - Recognizes **geological heritage** of global value.
 - Promotes **sustainable development, geo-education, geotourism, and community involvement**.
 - Encourages participation of **local and indigenous communities** in maintaining cultural and scientific traditions.
- It was established in **2015** by the **United Nations Educational, Scientific and Cultural Organization (UNESCO)**.
- Presently, **India does not have any site** included in the **UNESCO Global Geoparks list**.

UNESCO

- The United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialised agency of the United Nations (UN).
- It was founded in **1945** as the successor to the **League of Nations' International Committee on Intellectual Cooperation**.
- **Members:** UNESCO has **194 Members and 8 Associate Members**.
 - **India** has been a member of UNESCO since its inception.
- **HQ - Paris (France)**.

Source:

- [Indian Express - Global Geoparks](#)

Liquidity Coverage Ratio

Context

The Reserve Bank of India has issued new guidelines regarding LCR.

What is LCR (Liquidity Coverage Ratio)?

- LCR refers to the minimum amount of **High-Quality Liquid Assets (HQLA)** a bank must hold to meet **short-term obligations** in a **30-day stress scenario**.
- High LCR **decreases money supply** by requiring banks to hold a larger proportion of highly liquid assets.
- A **run-off factor** is used to estimate how much of the bank's liabilities (like deposits) may "run off" (i.e., be withdrawn) under stress.

Key Changes in LCR Norms

- **Reduced Run-off Factor for Digital Deposits:**
 - Banks are now required to assign an additional **2.5% run-off factor** for retail deposits accessible via Internet and Mobile Banking (IMB), including platforms like UPI. (Previously - 5%)
- **Adjusted Run-off Rates Based on Deposit Stability:**
 - **Stable IMB-enabled retail deposits:** Run-off factor increased from 5% to **7.5%**.
- **Reclassification of Non-Financial Entity Funding:**
 - Funding from entities like trusts, partnerships, and LLPs will now attract a **40% run-off rate**, down from the previous 100%.
- **Treatment of Small Business Customer Funding:**
 - Unsecured wholesale funding from non-financial small business customers will be treated similarly to retail deposits, attracting an additional **2.5% run-off factor**.

UPSC PYQ

Q. What is the importance of the term "Interest Coverage Ratio" of a firm in India? (2020)

1. It helps in understanding the present risk of a firm that a bank is going to give a loan to.
2. It helps in evaluating the emerging risk of a firm that a bank is going to give loan to.
3. The higher a borrowing firm's level of Interest Coverage Ratio, the worse is its ability to service its debt.

Select the correct answer using the code given below:

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

Answer: A

Source:

- [Indian Express - LCR](#)

News in Shorts

BharatNet

- It is an ambitious project of the Government of India aimed at providing broadband connectivity to all Gram Panchayats (GPs) in the country.
- It is one of the biggest rural telecom projects in the world.
- **Implementing agency:** Bharat Broadband Network Limited (BBNL).
- BharatNet project is funded through **Digital Bharat Nidhi**.

About Digital Bharat Nidhi (DBN)

- Digital Bharat Nidhi is a pool of funds generated by charging a **5% Universal Service Levy on the Adjusted Gross Revenue (AGR) of all telecom operators**.
- It has replaced the **Universal Service Obligation Fund (USOF) which was established under the Indian Telegraph (Amendment) Act, 2003**.
- As per '**The Telecommunications Act, 2023**' the Universal Service Obligation Fund, has become the Digital Bharat Nidhi.
- **Mandate of DBN:** To promote access and delivery of telecommunication service in underserved rural, remote and urban areas.

Source:

- [PIB - BharatNet](#)

Steel Industry

- To protect the domestic steel industry from a surge in low-cost imports, the Indian government has imposed a **12 percent provisional safeguard duty** on certain non-alloy and alloy steel flat products.
- **Top steel producing countries:** (1) China (2) India (3) Japan (4) USA (5) Russia

Steel Industry in India

- **India is the 2nd largest steel producer** in the world (after China).
- **Crude steel production (2023): ~125 million tonnes (MT)**
- **Major players:** SAIL, Tata Steel, JSW Steel, JSPL etc.
- **Employment:** Directly and indirectly employs over **2 million people**.
- **Challenges Faced by Indian Steel Industry:**
 - Surge in cheap imports, especially from: **China, South Korea, Vietnam, etc.**
 - Price volatility in global markets
 - **High input costs: Coking coal, logistics.**

What is Green Steel ?

- Green steel is a type of steel that is manufactured without using any fossil fuels.
- It uses alternative energy sources such as **hydrogen, coal gasification or electricity in production**.

Source:

- [PIB - Steel Sector](#)

Arsenic in Rice

- According to a recent study Climate Change is likely to increase Arsenic contamination in Rice.

Key Findings of the study

- When **CO₂ levels and temperature rise at the same time, arsenic levels in rice also go up.**
- This arsenic comes from the **soil and water** where rice is grown.
- **Flooded fields (paddies)**, where rice is usually grown, make it easier for the plant to **absorb arsenic.**

What is Arsenic ?

- **Arsenic** is a toxic element found naturally in soil and water, and also comes from **industrial pollution.**
- The form of arsenic that builds up in rice (called **inorganic arsenic**) is especially **harmful to humans.**
- Eating rice with high arsenic levels for a long time can lead to:
 - **Cancers:** skin, bladder, and lung
 - Heart diseases ,**Diabetes, Pregnancy problems, Weaker immunity etc.**
- **Countries more at Risk:** India, Bangladesh, China ,Vietnam, Indonesia.

Source:

- [Indian Express - Arsenic in Rice](#)

Expansion in banking facilities for Minors

- Reserve Bank of India (RBI) has recently amended rules related to banking facilities available for Minors.

Changes made by RBI

- **Minors aged 10 years or above can now:**
 - **Open and operate savings and term deposit accounts independently** (without needing a guardian).
 - Use additional banking services (if permitted by the bank).
- Some **facilities will be on Bank's Discretion:** Banks can decide:
 - The **amount limits** on transactions.
 - The **terms and conditions**, based on their **risk management policies.**
 - Whether to provide extra facilities like:
 - **Internet banking**
 - **ATM/debit cards**
 - **Cheque book**
- Minors Below **10 Years** can Still Open Accounts But **only through a natural or legal guardian.**

Restrictions on Minor Accounts (All Ages)

- **No Overdraft Allowed**

- These accounts **must always have a credit balance**.
- Cannot go into a negative balance under any circumstances.
- **Due Diligence Required**
 - Banks must:
 - Conduct **proper background verification** when opening minor accounts.
 - **Regularly monitor** the accounts for any unusual activity (ongoing due diligence).

Source:

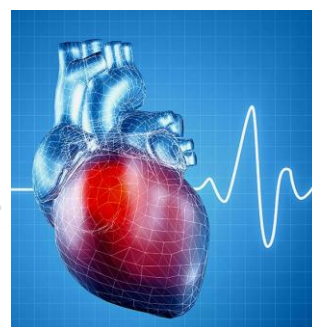
- [Indian Express - Bank account for minors](#)

Ultra-Tiny Pacemaker

- Recently scientists have engineered a pacemaker smaller than a grain of rice.

What Is a Pacemaker?

- A **pacemaker** is a small medical device that **helps the heart beat at a normal rate**.
- It sends **electrical signals** to the heart muscles when the heartbeat is too slow, irregular or has stopped.
- Pacemakers are used in people with heart conditions such as **bradycardia (slow heart rate)**, especially after surgery or in infants with **congenital (from birth) heart disease**.



About Newly discovered Pacemaker

- It is **smaller than a grain of rice**.
- It is **2.5 times smaller** than the previous smallest pacemaker created by Oklahoma University.
- It can be **injected directly into the heart** using a needle — **no surgery is needed**.
- Traditional temporary pacemakers require **open-heart or endovascular surgery** to put in and later remove the device.
- **Key Features:**
 - It is made of **Bioresorbable Materials**, it naturally dissolves in the body after a certain time. **So, there is no need to remove it after use**.
 - **No Battery or External Power Source (Self powered):**
 - The pacemaker has two electrodes at the bottom.
 - These electrodes interact with the body's fluids (like blood) to produce electricity — similar to a small chemical battery.
 - It is controlled by an external patch. The patient wears a small patch on the chest (outside the body) which monitors the heart rate.

Source:

- [The Hindu - Tiny Pacemaker](#)

Editorial Summary

New Pathways For India's Creative Economy

Context

As India strives to become a \$5 trillion economy, it must revamp its innovation strategy, fostering creativity across all levels.

Current Situation of Creative Economy in India

- **Economic Value:** As of 2024, India's creative economy is valued at **\$30 billion**. It provides employment to about **8% of the total workforce**, which includes sectors like media, design, crafts, and digital services.
- **Export Contribution:** In 2019, India exported around **\$121 billion** worth of creative goods and services — **\$100 billion** of this came from services like software design, IT, and digital media.
- **Growth Trend:** In 2024 alone, India's creative exports grew by **20%**, earning over **\$11 billion**, indicating steady global demand.
- **Dominant Segments:** The **design sector** makes up the bulk of India's creative goods exports (87.5%), while **traditional arts and crafts** contribute about 9%.
- **Creative Economy Outlook 2024:** According to the **United Nations Trade and Development (UNCTAD)** report on the creative economy, three sectors are the main contributors of the creative economy (2022): **software services (41.3%)**, **research and development (30.7%)**, **advertising, market research and architecture (15.5%)**.

Concerns Related to Creativity and Innovation in India

- **Gap Between Creativity and Innovation:** India has many creative individuals and ideas, especially in rural areas, but **most ideas don't turn into useful products or businesses**. This is due to lack of funding, mentorship, or platforms for growth.
- **Limited Investment at Local Level:** While urban tech sectors get significant investments (e.g., climate tech got \$2.85 billion in 2023), **grassroots innovations receive very little financial support**.
- **Weak Intellectual Property (IP) Support:** Many local creators don't have access to **affordable or simple IP protection**, like patents or design registrations, making it easier for their ideas to be copied.
- **No Unified Policy:** India currently does not have a **comprehensive national policy** to guide or support the creative economy. Different sectors work in silos without coordination.
- **Urban-Rural Imbalance:** Creative sectors in cities benefit from digital tools and funding. But **rural sectors, like handicrafts or traditional skills, are underfunded and declining**.

New Pathways for Strengthening India's Creative Economy

- **One District One Innovation (ODOI):** Inspired by the ODOP (One District One Product) model, every district can identify and promote a **unique innovation**, whether it is in design, technology, or cultural products.
- **Scale-Up Grassroots Innovations:** Invest in scaling grassroots creative ideas like the **Mitticool refrigerator, amphibious bicycle, or pedal washing machines**.

- **Grassroots Innovations Augmentation Network (GIAN)** have resulted in popularising hundreds of grassroots creative ideas.
- **Reform IP System for Informal Sector:** Create **simplified, low-cost IP registration processes** for small-scale inventors and traditional artists to protect their innovations and earn from them.
- **Dedicated Creative Economy Policy:** Develop an integrated national policy that brings together ministries related to **culture, MSMEs, education, and technology** under one framework for better coordination.
- **Encourage Nature-Inspired Design (Biomimicry):** Take lessons from natural structures to solve real-world problems — like Indonesia's **Antrodam Project**, which used ant nest designs to manage floods.
- **Public-Private Investment Platforms:** Launch **dedicated investment funds** that focus on creative start-ups, rural innovation, and sustainable product design. Encourage CSR funding to support local creators.

The Antrodam Project (Indonesia)

- **Initiative:** Conceived by students of *Binus School, Bekasi* to tackle flooding.
- **Inspiration: Biomimicry** — structures modeled on Indian harvester ant nests and natural elements like rose petals, coral, and bird anatomy.
- **Impact:** The system redirects water like natural tunnels, showing how **nature-inspired solutions** can address local problems.
- **Lesson for India:** School and college-level students can be incubators of real-world solutions.
 - Need for mentorship and seed funding to move from *ideas to innovation*.

Source: [The Hindu: New pathways for India's creative economy](#)

India, China at 75

Context

This year marks the 75th Year Anniversary of India- China ties.

Evolution in India-China Relations

- **From Idealism to Realism:** The early phase of the relationship was built on **Asian solidarity** and shared civilisational respect. But after the **1962 war** and the **2020 Galwan clash**, it moved towards **strategic distrust and realism**.
- **From Dialogue to Deterrence:** While diplomacy continues, both countries have **militarised the Line of Actual Control (LAC)**, especially in Eastern Ladakh, reflecting a shift from engagement to preparedness.
- **From Unstructured Trade to Strategic Competition:** Economic interdependence grew over time, with China becoming a **top trading partner**, but trade imbalance and strategic concerns have led India to pursue **selective decoupling** and supply chain diversification.
- **From Regional Cooperation to Regional Competition:** China's growing role in **South Asian infrastructure** has pushed India to counterbalance with its own development initiatives and diplomacy.

What Were The Concerns?

- **Border Militarisation and Aggression:**
 - **Galwan Valley Clash (2020):** China's troops entered contested areas along the **Line of Actual Control (LAC)**, leading to violent clashes and deaths on both sides — first fatalities in decades.
 - **Infrastructure Build-up along LAC:** China has rapidly constructed roads, bridges, airstrips, and villages near the border, especially in **Eastern Ladakh and Arunachal Pradesh**, creating a **permanent military threat**.
- **Strategic Encirclement (String of Pearls)**
 - China has invested heavily in **ports and infrastructure around India's neighbourhood**, including **Hambantota Port (Sri Lanka), Gwadar Port (Pakistan), Pokhara International Airport (Nepal)**.
 - These challenge India's strategic influence and security in the Indian Ocean Region.
 - **Close China–Pakistan defence ties**, including **joint military drills** and arms supply, amplify India's security concerns, especially in **Gilgit-Baltistan** and **Pakistan-Occupied Kashmir (PoK)**.
- **Trade Imbalance and Economic Dependence: Huge Trade Surplus Against India:** China exported goods worth over **\$100 billion** to India (2024–25), while India's exports to China are much smaller — creating **strategic economic vulnerability**.
 - **Dependency in Key Sectors:** India relies heavily on Chinese imports in:
 - Pharmaceuticals (APIs)
 - Electronics and telecom
 - Solar panels and semiconductors
- **Digital and Technological Influence:**

- **Control Over App Ecosystem and Electronics:** Before bans, Chinese apps like **TikTok**, **PUBG**, and **UC Browser** had large user bases in India. India banned **over 300 Chinese apps** citing data and national security concerns.
- **Huawei and 5G Exclusion:** India has excluded Chinese telecom giants like Huawei and ZTE from 5G trials and infrastructure over espionage fears.
- **Diplomatic Messaging and Soft Power Moves:** China uses economic aid, **Belt and Road Initiative (BRI)** projects, and political statements (e.g., from Bangladeshi leaders in Beijing) to subtly **undermine India's regional stature**.
- **Blocking India at Global Forums:** China has repeatedly blocked India's efforts to:
 - List **Pakistan-based terrorists** (e.g., Masood Azhar) under the UN sanctions list.
 - Join the **Nuclear Suppliers Group (NSG)**.
- **Environmental and Water Concerns:**
 - **Planned Dam on Yarlung Tsangpo (Brahmaputra):** China is constructing a **massive dam** near Arunachal Pradesh, which could affect India's water security and ecology.
 - **Lack of Water Sharing Treaty:** India and China don't have a treaty over transboundary rivers, and China has sometimes **withheld or delayed hydrological data**, affecting flood forecasting and disaster preparedness in Northeast India.

What Needs to be Done (at the 75th Anniversary)

- **Build "Guardrails" to Prevent Conflict:** Establish more stable communication mechanisms and **confidence-building measures** at military and diplomatic levels.
- **Pursue "Competitive Coexistence":** Accept rivalry as structural but manage it responsibly—**cooperate where possible, compete where necessary**.
- **Diversify Economy:** Invest in **domestic manufacturing**, reduce reliance on Chinese supply chains, and boost strategic sectors like semiconductors, electronics, and pharmaceuticals.
- **Strengthen Regional Diplomacy:** Deepen engagement with **South Asian neighbours** with long-term vision, not just reactive diplomacy.
- **Narrative and Influence Strategy:** Craft compelling diplomatic narratives, **own the regional story**, and resist China's framing of India's geography and strategy.
- **Focus on Ecological & Strategic Issues:** Respond strongly to threats like **China's dam on the Yarlung Tsangpo**, push for **data sharing treaties**, and raise environmental security as a strategic issue.

Source: [The Hindu: India, China at 75 — a time for strategy, not sentiment](#)