

# DAILY CURRENT AFFAIRS

By



SOURCES



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## **Important News Articles**

1. PM discusses security situation in West Asia with Egypt President - The Hindu/ Modi dials Egypt's El-Sisi over Gaza, both agree on early peace - Indian Express
2. Bangladesh is building memorial to honour Indian heroes of 1971 war - The Hindu
3. 7.5% dip in active workforce under MGNREGS, says study - The Hindu
4. India, UK trade ministers review progress of talks on proposed FTA - The Economic Times
5. Studies provide insight into the internal structure of Mars - The Hindu
6. IITM Pune demonstrates cloud seeding can produce rainfall - The Hindu
7. Developed countries to overshoot carbon emissions goal, says study - The Hindu

## **Editorials, Gists and Explainers**

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2. China model India didn't follow - Indian Express
3. India's vote on UN resolution marks a new realism in Middle East policy - Indian Express

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**Important News Articles****GS II****1. PM discusses security situation in West Asia with Egypt President - The Hindu/ Modi dials Egypt's El-Sisi over Gaza, both agree on early peace - Indian Express**

**Relevance :** Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

**News :**

- India and Egypt, recently, **discussed the deteriorating** security and humanitarian situation in West Asia.
- Both shared concern over **terrorism, violence and loss of civilian lives**.
- They **emphasised on facilitating humanitarian assistance** to those in need.
- They also deliberated on the **implications of the current situation** for West Asia and the world.
- Egypt is **making diplomatic efforts** to push the conflict towards a ceasefire.

**Prelims Takeway**

- El-Arish Airport
- Sinai Peninsula
- Middle East Region
- West Asia

**India's Efforts to De-escalate West Asian Conflict**

- India called Jordan to **express its concern** on the conflict.
- India made **call to both Israel and Palestinian Authorities**
- India **reiterated its long-standing and principled position** on the Israel-Palestine issue.
- India sent over **38 tonnes of relief material** for the people of Palestine via Egypt.
- The **Arab world has recognized India's efforts** in the conflict so far.

**India's Strategic Interests in West Asia**

- An **estimated 90 lakh Indians work** in West Asia.
- West Asia meets over **50% of India's energy needs**.
- The geopolitics of the Middle East is **fraught as well as closer home**.

**2. Bangladesh is building memorial to honour Indian heroes of 1971 war - The Hindu**

**Relevance:** India and its neighbourhood- relations.

**News:**

- **Bangladesh** has undertaken the **construction of a memorial at Ashuganj, Bangladesh** to pay tribute to the Indian heroes who played a pivotal role in the **1971 Liberation war**.
- This will be the first memorial in Bangladesh **exclusively dedicated to Indian soldiers from the 1971 war**.

**Background**

- The 1971 war marked a significant historical moment, as **Indian armed forces supported the Bangladeshi Mukti Bahini** (freedom fighters) in their **fight for independence from Pakistan**.
- This support was **instrumental in the victory** and the **eventual formation of the independent nation of Bangladesh**.

**Significance**

- The memorial **serves as a symbol of the enduring friendship** and **strong ties between India and Bangladesh**, reinforcing the historic cooperation during the 1971 war.
- The construction of this memorial **underscores the recognition of the valor and selflessness of Indian armed forces** in aiding Bangladesh's quest for independence.
- It aims to **raise awareness** of the 1971 Liberation War among the youth.

**Prelims Takeway**

- 1971 Liberation War
- India - Bangladesh relations

### 3. 7.5% dip in active workforce under MGNREGS, says study - The Hindu

**Relevance:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

**News:**

**Prelims Takeway**

- A data analysis by **LibTech India**, for April-September 2023 reveals a **7.5% reduction in the number of active workers** in the **Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)** in India.

- MGNREGA

**Workforce Contraction**

- The analysis, in conjunction with a **net reduction of 80 lakh workers** in the current financial year, paints a **concerning picture for the MGNREGS program**.
- This highlights the **need for a comprehensive analysis** to identify the factors contributing to this decrease and **formulate strategies to rejuvenate program participation**.
- Interestingly, despite the shrinking workforce, there is a **9% increase in person days under MGNREGS** compared to the previous fiscal year.
  - Person days refers to the **total work days by individuals registered** under the scheme in a financial year

**State-Level Variations**

- The report also notes **variations in employment trends at the state level**.
- **Fourteen states** reported an **increase in MGNREGS participation**, while six states experienced a decline.
- Notably, **West Bengal suspended the scheme**, alleging large-scale corruption in its implementation, resulting in a 99.5% decline.

**Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)**

- MGNREGS is one of the largest **work guarantee programmes** in the world launched in **2005** by the **Ministry of Rural development**.
- It aims to guarantee **100 days of employment** in every financial year to **adult members of any rural household** willing to do **unskilled manual work**.
- The act aims at addressing the **causes of chronic poverty** through a **rights-based framework**.
- If any rural adult fails to get work within **15 days** of demanding it, an **'unemployment allowance'** is given.
- The act mandates **Gram sabhas** to recommend the works that are to be undertaken and **at least 50%** of the works must be executed by them.
- At least **one-third** of beneficiaries need to be **women**.
- The **Centre** bears **60% of the cost of the materials used for MGNREGS work** and the **remaining 40%** is provided by the **State governments**.
- **Data:**
  - As of 2022-23, there are **15.4 crore active workers** under the MGNREGA.

### 4. India, UK trade ministers review progress of talks on proposed FTA - The Economic Times

**Relevance:** Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

**News:**

**Prelims Takeway**

- India and the UK recently reviewed the progress of negotiations of the proposed **free trade agreement (FTA)**, talks for which have reached the final stage.

- Free Trade Agreement
- Intellectual Property Rights (IPRs)

**Key Highlights**

- There are 26 chapters in the agreement, which include **goods, services, investments and intellectual property rights**.
- **An investment treaty** is also being negotiated as a **separate agreement** between India and the UK.
- These investment treaties help in **promoting and protecting investments** in each other's country.
- The main point of contention in this pact is the **mechanism for settlement of disputes**.

- The **bilateral trade between India and the UK increased** to USD 20.36 billion in 2022-23, from USD 17.5 billion in 2021-22.

#### India's Demands

- **Greater access for its skilled professionals** from sectors like IT, and healthcare in the UK market
- **Market access** for several goods at **nil customs duty**.

#### UK's Demands

- **Significant cut in import duties** on goods such as scotch whiskey, automobiles, lamb meat, chocolates and certain confectionary items.
- **More opportunities for UK services in Indian markets** in segments like telecommunications, legal and financial services.

#### Free Trade Agreement (FTA)

- An **agreement** between countries or regional blocks **to reduce or eliminate trade barriers**, through mutual negotiations with a view to **enhancing trade**.
- It includes **goods, services, investment, intellectual property**, competition, government procurement and other areas.
- This **concept** of free trade is the opposite of **trade protectionism or economic isolationism**.
- FTAs can be **categorised** as
  - Preferential Trade Agreement
  - Comprehensive Economic Cooperation Agreement (CECA)
  - Comprehensive Economic Partnership Agreement (CEPA)

### GS III

## 5. Studies provide insight into the internal structure of Mars - The Hindu

**Relevance:** Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

#### News:

- According to studies, **Mars's liquid iron core** is likely to be **surrounded by a fully molten silicate layer**.
- These results offer a **new interpretation of the interior of Mars**, suggesting its **core is smaller and denser** than previously proposed.

#### Prelims Takeway

- Interior Structure of Mars

#### Seismological Study of Mars

- In 2019, a seismological study of Mars was conducted using the **InSight Mars Lander and its Seismic Experiment for Interior Structure (SEIS) instrument**.
- Data from **three years of seismic activity on Mars**, including events caused by **meteorite impacts**, were analyzed in these studies.

#### Previous Findings

- In 2021, an analysis of the **InSight lander's SEIS project** suggested the **presence of a large but low-density core on Mars**.
- The core was **composed of liquid iron and lighter elements** like sulphur, carbon, oxygen, and hydrogen.
- This finding raised questions as **it indicated a higher proportion of lighter elements** than expected during Mars's early formation.

#### New Studies

- Researchers from the **Institute of Geochemistry and Petrology** and **Université Paris Cité** conducted new studies.
- They combined seismic data with simulations and geophysical models **to reevaluate the size and composition of Mars's core**.

#### Revised Core Composition

- The two studies propose that **Mars's liquid iron-nickel core** is surrounded by a 150 km-thick layer of **near-molten silicate rock**.
- This contradicts earlier interpretations where the **top of this layer was considered the surface of the core**.

- This revision suggests a **higher core density** than previously estimated, which **aligns better with existing knowledge** of chemical abundances on Mars.

#### Implications

- The presence of a **near-molten silicate layer** indicates that **its temperature is at least 2,000 Kelvin**.
- This suggests that Mars's interior was **likely more turbulent following its formation**, rather than a calmer process of heat transportation and dissipation into space.

## 6. IITM Pune demonstrates cloud seeding can produce rainfall - The Hindu

**Relevance:** Science and Technology- developments and their applications and effects in everyday life.

#### News:

- A **cloud seeding experiment, conducted in Solapur city**, which experiences low rainfall due to its location on the leeward side of the Western Ghats, **achieved an 18% relative enhancement in rainfall**.

#### Prelims Takeway

- CAIPEEX phase-4
- Cloud Seeding

- This experiment is known as the **Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX phase-4)**.

#### Objective of the Experiment

- To investigate the **effectiveness of hygroscopic cloud seeding in deep convective clouds** and develop a **cloud seeding protocol**.
- The experiment utilized two aircraft **to study cloud parameters and seed clouds**.

#### Important Findings

- Cloud seeding is an **effective method for increasing rainfall in specific conditions**.
- It identified certain cloud characteristics, such as **liquid water content and vertical motion**, that indicate a **cloud's potential to produce rain**.

#### Seeding Process

- Targeted clouds were **those with a depth of over one kilometer** and likely to **evolve into deep cumulus clouds**.
- The clouds were seeded using **calcium chloride flares**, which **release particles at the base of warm convective clouds** during their growing stage.
- The **base of convective clouds** is typically found at
  - Altitudes of 500-1,500 meters during the summer monsoon period
  - Around 2,000 meters or higher during monsoon breaks.

#### Impact and Cost-Benefit Analysis

- Cloud seeding can **contribute to increasing rainfall by 18%**, partially addressing water requirements.
- **Estimated cost** of producing water through cloud seeding was **18 paisa per litre**, with potential for **significant cost reduction when using indigenous seeding aircraft**.
- For regions like Solapur with limited water supply, the **additional water generated through cloud seeding can be highly beneficial**.

## 7. Developed countries to overshoot carbon emissions goal, says study - The Hindu

**Relevance:** Conservation, environmental pollution and degradation

#### News:

- An analysis by the Council for Energy Environment and Water (CEEW) reveals that **developed countries are on track to emit 38% more carbon in 2030** than their commitments.
- It highlights that the **United States, Russia, and the European Union are responsible for 83% of this overshoot**.

#### Prelims Takeway

- Nationally Determined Contributions (NDCs)
- Paris Agreement

#### Shortcomings in Nationally Determined Contributions (NDCs)

- The NDCs of developed countries **fall short of the global target** of reducing emissions to **43% below 2019 levels** necessary to limit temperature rise to 1.5°C.
- Instead, **developed countries' combined NDCs only amount to a 36% reduction.**

#### Historical Emission Reductions and Pandemic Impact

- Developed countries were obligated to reduce emissions
  - by 5% from their 1990 levels between 2008 and 2012
  - by 18% from 2013 to 2020
- While they **achieved a 20% reduction**, a substantial portion of these cuts was due to the **unplanned impact of the COVID-19 pandemic**, which led to a **global economic slowdown**.

### Missing targets

Developed countries are projected to emit **38% more carbon in 2030** than they have committed to

Party	2030 NDC target	Projected 2030 reduction
U.S.	50%	22%
Russia	70%	48%
Japan	46%	45%
U.K. and Northern Ireland	68%	56%
Canada	40%	30%
EU	55%	44%
Norway	55%	57%
Kazakhstan	15%	14%

■ Japan and Kazakhstan are set to miss their target by one percentage point



#### 2030 Targets and the Net Zero Goal

- Many developed countries have pledged to **achieve net-zero carbon emissions by 2050**.
- To reach this goal, they **need steady, measurable emissions reductions** each decade until 2050.
- The study reveals that **developed countries** are likely to **achieve only an 11% reduction by 2030**, falling far short of the necessary 43%.
  - This is based on the current emissions trajectories,

#### Impact on Developing Countries

- This shortfall in emissions reductions **places a heavier burden on developing countries** to address climate change.
- The **financial support promised by developed countries** to aid renewable energy infrastructure in developing nations **has not materialized**.
  - This is leading to **challenges in achieving emission reduction targets**.

#### Recommendations

- Developed countries should **create clear year-on-year reduction plans** to meet their targets during the critical decade leading to 2030.
- To build trust, developed nations need to **remain committed to the Paris Agreement** and **not postpone deep emission cuts** until after 2030.

## Editorials, Gists and Explainers

### 1. Why will police stations install DNA systems? - The Hindu

**Relevance :** Important aspects of governance, transparency and accountability, e-governance applications, models, successes, limitations, and potential;

**Context:**

- In April 2022, the **Criminal Procedure (Identification) Act (CrPI)** was passed by Parliament which is **yet to be implemented fully**.
- The Act enables police and central investigating agencies to **collect, store and analyse physical and biological samples of arrested persons**.
- The **National Crime Records Bureau (NCRB)**, the nodal agency, is still preparing the **guidelines and Standard Operating Procedure (SOP)** to implement the legislation.
- The Act and rules **do not distinctly mention collection of DNA samples and face-matching procedures**.

<p style="text-align: center;"><b>Why was the legislation brought in?</b></p> <ul style="list-style-type: none"> <li>• The CrPI Act repealed the British-era Identification of Prisoners Act, 1920.</li> <li>• The previous act was limited to collecting and recording finger impressions, footprint impressions and photographs of arrested persons</li> <li>• The impressions of non-convicted persons were allowed to be collected on the orders of a Magistrate.</li> <li>• The government said the new Act made provisions for the use of modern techniques to capture and record appropriate body measurements.</li> </ul> <p style="text-align: center;"><b>What is the role of the NCRB?</b></p> <ul style="list-style-type: none"> <li>• The central body has been entrusted with the task to "store, process, share, disseminate and destroy records of measurements."</li> <li>• Impressions taken at any police station will be stored in a common database maintained by the NCRB.</li> <li>• The database could be accessed by authorised police and prison officials across the country.</li> <li>• The NCRB will prescribe the specifications of the equipments or devices to be used for taking measurements.</li> <li>• Police and prison officials have been authorised to take measurements.</li> <li>• The Act expanded the scope to also allow any person skilled in taking the measurements or a registered medical practitioner or any person authorised to take such measurements.</li> <li>• The records are to be stored for 75 years.</li> </ul>	<p style="text-align: center;"><b>What is the status on the ground?</b></p> <ul style="list-style-type: none"> <li>• Police across States have been trained to record finger impressions through the National Automated Fingerprint Identification System (NAFIS).</li> <li>• NAFIS is under the NCRB.</li> <li>• It is a separate project that was launched in 2022.</li> <li>• It assigns a unique ten-digit National Fingerprint Number (NFN) to all suspects arrested by the police.</li> <li>• State police have their own fingerprint database.</li> <li>• NAFIS integrates the data on a common platform, enabling the police to run a countrywide search to match fingerprint impressions lifted from a crime scene.</li> <li>• NAFIS workstations are operational in many States.</li> </ul> <p style="text-align: center;"><b>What are the challenges?</b></p> <ul style="list-style-type: none"> <li>• The bill is being condemned on the grounds of the right to privacy.</li> <li>• The protection of biometrics is the matter of major concern.</li> <li>• The applicability of the act on prohibitory and preventive sections of law is not clear.</li> <li>• The rule states that unless a person is booked under prohibitory and preventive sections that are clubbed with other serious criminal charges, the measurements will not be stored in the system.</li> <li>• The onus of destruction and disposal of records of an individual who has been falsely implicated is upon the individual himself not the state agencies.</li> <li>• This kind of onus is the direct clash between the Right to be Forgotten and discretion of the Nodal Officer.</li> <li>• The police force requires the training to handle DNA Samples.</li> <li>• This kind of training is necessary under POCSSO but not for other offences.</li> <li>• The authorities who will access the data under the new act need to be defined.</li> <li>• The issue of secured internet leased lines can create problem</li> </ul>
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### 2. China model India didn't follow - Indian Express

**Relevance:** Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

**Context:**

- In 1954, the renowned economist **William Arthur Lewis** introduced a model that suggested **industrialization could absorb surplus labour from agriculture in underdeveloped countries**, such as India.
- He argued that the **productivity of labour in agriculture was negligible, zero, or even negative**.



- Moving labour from the farms to factories could **enhance productivity and economic growth.**

<p><b>India's Departure from the Lewis Model</b></p> <ul style="list-style-type: none"> <li>• India's labour transition has not unfolded as Lewis envisioned.</li> <li>• The share of the workforce engaged in agriculture declined from 64.6% to 48.9% between 1993-94 and 2011-12.</li> <li>• However, the shift hasn't largely been toward manufacturing.</li> <li>• The share of employment in manufacturing increased marginally from 10.4% to 12.6% during this period.</li> <li>• The subsequent years have seen a dip in manufacturing's share, falling from 12.6% in 2011-12 to 11.4% in 2022-23.</li> </ul> <p><b>Challenges in Labour Transition</b></p> <ul style="list-style-type: none"> <li>• The movement of labour has primarily occurred within "subsistence" sectors rather than from "subsistence" to "capitalist" sectors as per the Lewis model.</li> <li>• Employment growth is observed in low-paid services and construction, rather than in manufacturing and high-productivity services.</li> </ul> <p><b>State-Level Variations</b></p> <ul style="list-style-type: none"> <li>• The picture is consistent at the state level.</li> <li>• States with a high percentage of the workforce engaged in agriculture have manufacturing shares in employment below construction and services.</li> <li>• Even states with a lower dependence on agriculture still have more labour in services than in manufacturing.</li> </ul>	<p><b>New Development Model for India</b></p> <ul style="list-style-type: none"> <li>• Unlike China, which leveraged surplus rural labour for manufacturing and became "the world's factory," India's structural transformation has not followed a similar path.</li> <li>• NITI Aayog, is exploring new economic development models for India.</li> <li>• This model seeks to create remunerative job opportunities related to agriculture but outside traditional farming activities.</li> <li>• These jobs can be found in activities such as aggregation, grading, packaging, transportation, processing, warehousing, retailing of produce and the supply of inputs and services to farmers.</li> </ul> <p><b>Diversification Opportunities</b></p> <ul style="list-style-type: none"> <li>• NITI Aayog suggests that opportunities lie in bio-fuel production, utilisation of crop stubble and residues, and the development of bio-based products, including cosmetics, medicines, building materials, polymers, specialty chemicals, insecticides, and fertilisers.</li> <li>• These activities can create employment opportunities linked to agriculture, enabling a more balanced transition for India's labour force.</li> </ul>
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### 3. India's vote on UN resolution marks a new realism in Middle East policy - Indian Express

**Relevance :** Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

**News :**

- India has **absented itself** for the UN Resolution of Arab on Gaza.
- The resolution **is related to** the humanitarian truce in Gaza.
- The absence **becomes conspicuous** in the light of the fact that **India has supported the Canadian Amendment** in condemning the Hamas attack on Israel.
- UN voting is **only indicative** in character as it usually fails to stop war.

**Shift of India's Policy in the West Asia**

- This marks a **definitive shift** in India's West Asia Policy.
- India has **not abandoned** Palestinian cause in the voting.
- India **expressed** its opinion **assertively against** international terrorism.
- India has **always advocated** a two-states solution for the region.

**Geo-political Interests of India in the Region**

- Indian interests have **three dimensions.**
  - India needs **to outreach the Arab World**, especially liberal factions, to express its unremitting support to Palestinian nationhood, laws of war and humanitarian assistance in Gaza.
  - The opposition leaders **must be taken into confidence** to have a consistent stand of India in the Middle East Issues.
- India must **make all efforts** to stop the misinformation about India's stand on Palestinian cause. It must stop any act against Palestinians from its territories like Cyber Attacks against Hamas.

## Quick Look

### 1. Pichwai Painting

- It is a traditional style of painting that originated in the state of Rajasthan, India.
- The history of this art form can be traced back to the 17th century.
- Theme: It mainly features the various stages of Lord Krishna's life.
- The artists use stone pigments, especially for gold and silver tones.
  - The brighter orange, red, chrome yellow and kesari colours come from vegetable dyes
- Other schools of Pichwai: Nathdwara, Kishangarh and Bundi in Rajasthan.
- They are often used to decorate the backdrops of Hindu temples, where they serve as a visual representation of the stories associated with Lord Krishna.
- These paintings have distinct features of a heavier body and large elongated eyes, with a broad nose of Shrinathji, similar to the features of the idol at the temple.
- The paintings are often filled with details, such as flowers, animals, and geometric patterns, which are arranged in a symmetrical and balanced composition.
- Some of the famous Pishwai Paintings are
  - Shrinathji in Black & Gold
  - Ras Leela: Krishna with Radha
  - Giriraja Pichwai depicting Lord Krishna carrying Govardhana mountain on his little finger

### 2. Asia-Pacific Economic Cooperation

- APEC is an inter-governmental forum of 21 member economies in the Asia-Pacific region.
- Established in 1989 in response to the growing interdependence of the region's economies.
- Objective: To "promote trade and economic cooperation among its member economies in order to create greater prosperity for the people of the Asia-Pacific region."
- APEC accounts for approximately 60% of global GDP and 47% of global trade.
- Members: Australia, Brunei Darussalam, Canada, Chile, China, Hong Kong, Indonesia, Japan, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, the Philippines, Russia, Singapore, South Korea, Taiwan, Thailand, the United States, and Vietnam.
- APEC decisions are reached by consensus, and commitments are made on a voluntary basis.

### 3. Saras Aajeevika Mela

- It is an initiative by the Deendayal Antyodaya Yojana-National Livelihoods Mission (DAY-NRLM) of the Ministry of Rural Development.
- Objective: To bring the rural women Self Help Group members under one platform to showcase their skills, sell their products, and help them build linkages with potential market players.
- It is organised by the Ministry of Rural Development and National Institute of Rural Development and Panchayati Raj (NIRDPR)

### 4. Rashtriya Gokul Mission

- It has been implemented for the development and conservation of indigenous bovine breeds since December 2014.
- It is continued under the umbrella scheme Rashtriya Pashudhan Vikas Yojana from 2021 to 2026.
- Objectives
  - To enhance the productivity of bovines and increase milk production in a sustainable manner using advanced technologies.
  - To propagate the use of high genetic merit bulls for breeding purposes.
  - To enhance artificial insemination coverage through strengthening the breeding network and delivery of Artificial insemination services at farmers' doorstep.
  - To promote indigenous cattle & buffalo rearing and conservation in a scientific and holistic manner.

## 5. Leopard Toby Puffer Fish

- Recently, a "super rare" creature, the Leopard Toby Puffer Fish, that roams in the depths of the ocean, has been spotted off the coast of Australia.
- It is a deepwater reef species that lives in deep water caves and reef slopes at an average depth of 50 to 100 m.
- It is characterised by clusters of black dots along the flanks of its pale body.
- It is also known as blowfish.
- In general they are known for their unique morphological appearance and features, especially their defensive mechanism of inflating and deflating.
- These small sea creatures pump water into their stomachs until they turn into the shape of a ball, larger than their normal body size, to evade predators.
- Distribution: It is usually found in the waters of the Philippines, Indonesia, Guam, and Micronesia.
- IUCN: Least Concern

## 6. Antiquity

- The Antiquities and Art Treasures Act (1972), defines "antiquity" as
  - any coin, sculpture, painting, epigraph or other work of art or craftsmanship;
  - any article, object or thing detached from a building or cave;
  - any article, object or thing illustrative of science, art, crafts, literature, religion, customs, morals or politics in bygone ages;
  - any article, object or thing of historical interest.
- The minimum time for any of the above mentioned items to be considered as antique is 100 years.
- For "manuscript, record or other document which is of scientific, historical, literary or aesthetic value", this duration is "not less than 75 years."

## 7. Reykjanes Peninsula

- Recently, a seismic swarm has hit the Reykjanes peninsula in southwest Iceland with more than 5,500 small earthquakes in the last three days.
  - It is a series of many (sometimes thousands) low-intensity earthquakes without a discernible main shock that can occur over weeks in active geothermal areas.
  - When seismic energy piles up inside the Earth and is released in small amounts from certain points, a series of earthquakes can occur.
- It is a peninsula in South West Iceland, characterized by immense lava fields, volcanoes, and heightened geothermal activity.
- It runs along the Mid-Atlantic Rift, where the Eurasian and the North American tectonic plates are drifting apart.

## 8. Talagirishwara Temple

- It is located in Panamalai village of Viluppuram district in Tamil Nadu, India.
- The temple is constructed on an insignificant, small hill overlooking the Panamalai Lake.
- The temple was constructed by Pallava king Narasimharvarman II, popularly known as Rajasimha.
- Key Features
  - This Seventh Century structure incorporates a Vimana that resembles that of Kailasanatha temple in Kanchipuram.
  - The garbhagriha stocks a Dharalingam, and as in Pallava temples of that period, there is a Somaskanda section on the hindmost wall of the shrine.
  - It includes an Ardhamandapam (partial Mandapam).
  - The walls of the Ardhamandapam post panels of divinities, including Brahma with Saraswati and Vishnu with Lakshmi on either flank.
  - The temple faces east and the garbhagriha is enclosed on all three sides by sub shrines.
  - The Vimana is 3 layered and the high tier has also been rebuilt.
  - The typical Pallava mark, pillars with crouching lions, is also found.

## 9. Ejecta Halo

- The Vikram lander of the Chandrayaan-3 mission landed near the south pole of the moon.
- During the action of descent stage thrusters and the consequent landing, a significant amount of lunar surficial epi regolith material got ejected, resulting in a reflectance anomaly or ejecta halo”,
- Ejecta halo is an irregular, bright patch surrounding the lander.
- Significance
  - This discovery sheds light on the behaviour of lunar materials during such events.
  - It opens up new avenues for research and understanding lunar geology.

## 10. Jehovah's Witnesses

- They are a Christian sect, but do not believe in the Holy Trinity.
  - The Holy Trinity doctrine says that God exists in three equal persons of the Father, the Son (Jesus Christ) and the Holy Spirit.
- The origins of the sect lie in a Bible Student movement started in the 1870s by American pastor Charles Taze Russell.
- They worship Jehovah as “the one true and Almighty God, the Creator”, who is “the God of Abraham, Moses, and Jesus”.
- They base their beliefs **only on the text of the Bible**, which they see as the word of God.
- They don't celebrate Christmas or Easter, because they believe such festivals to be inspired by Pagan traditions.
- These faiths draw on the traditional religions of indigenous peoples throughout the world.
- Known for their evangelical work - believing that religious ceremony is not as important as belief in Jesus Christ and study of the Bible.
  - For this they go door to door, to spread “The Truth”.
- They believe the end of the world is near, and the Kingdom of God will replace human governments and accomplish God's purpose for the earth.

**Prelims Track Question**

**Q1. With reference to geo-political location of Egypt, consider the following statements**

1. It shares a maritime border with Jordan and Saudi Arabia.
2. The Sinai Peninsula of Egypt is located in Africa.
3. The country borders the Mediterranean Sea, the Gulf of Suez and the Red Sea.
4. The country has a land border with Libya.

**How many of the statements given above is/are correct?**

- A. Only one
- B. Only two
- C. Only three
- D. All four

**Q2. Which among the following statements is correct about Operation Searchlight ?**

- A. It was an operation related to the liberation of an Indian Territory.
- B. It was an operation to bring Indians safely from the Arab World.
- C. It was an operation to save India's nuclear experiment from US observations.
- D. None

**Q3. With reference to Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), consider the following statements**

1. It is formulated under the Ministry of Agriculture and Farmers Welfare
2. It aims to guarantee 100 days of employment in every financial year to adult members of any rural household willing to do unskilled manual work.
3. At least half of the beneficiaries need to be women.

**How many of the statements given above is/are incorrect?**

- A. Only one
- B. Only two
- C. All three
- D. None

**Q4. Consider the following**

- A. Goods and Services
- B. Intellectual Property
- C. Investments

**How many of the above components are considered while negotiating a Free Trade Agreement between two countries?**

- A. Only one
- B. Only two
- C. All three
- D. None

**Q5. Consider the following statements regarding Seismic Experiment for Interior Structure (SEIS) Project**

1. It has been made by the French space agency, CNES.
2. It is a part of the European Space Agency's Lander Mission on Mars.

**Which of the statements given above is/are correct?**

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

**Q6. The Experiment "CAIPEEX", seen in the news recently, is associated with**

- A. Cloud Seeding
- B. Cryogenic Technology
- C. Genetic Engineering
- D. A-SAT Technology

**Q7. Consider the following statements regarding Net Zero Emissions Roadmap by 2050**

1. The roadmap has been released by the UNEP.
2. The roadmap aims at no sales of new internal combustion engine passenger cars by 2045.

**Which of the statements given above is/are correct?**

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

**Q8. With reference to NAFIS, consider the following statements**

**Statement-I :** It generates a unique ten digit number.

**Statement-II :** It deals with analysis of the database related to schemes for minorities in India.

Which one of the following statements is correct?

- A. Statement I is correct but statement II is incorrect
- B. Statement I is incorrect but Statement II is correct
- C. Both Statement I and Statement II are correct and Statement II is the correct explanation for Statement I
- D. Both Statement I and Statement II are correct and Statement II is not the correct explanation for Statement I

**Q9. "The Lewis Model, introduced by economist William Arthur Lewis, seen in the news recently, primarily deals with**

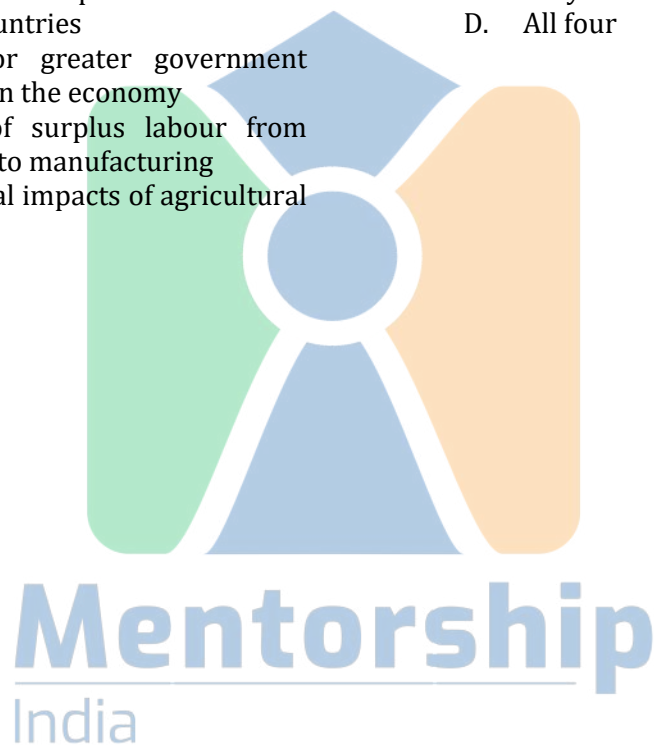
- A. Industrialization possibilities for developed countries
- B. The need for greater government intervention in the economy
- C. Absorption of surplus labour from agriculture into manufacturing
- D. Environmental impacts of agricultural practices

**Q10. With reference to India-Middle East Europe Economic Corridor , consider the following statements**

- 1. The agreement for the corridor was signed during the G-20 summit.
- 2. The corridor will consist of ship, rail and road routes.
- 3. The Indian port of Kandla is part of the corridor.
- 4. Italy, France and Germany are signatories to the corridor agreement..

**How many of the statements given above is/are correct?**

- A. Only one
- B. Only two
- C. Only three
- D. All four



**Prelims Track Answer****Ans. 1 Option C is correct****Explanation**

- Egypt shares maritime borders with Cyprus, Turkey and Greece in the Mediterranean Sea, and with Jordan and Saudi Arabia in the Red Sea. **Hence, Statement 1 is correct.**
- Egypt is a transcontinental country situated in northeastern Africa and the Sinai Peninsula in Western Asia (Middle East). **Hence, Statement 2 is incorrect.**
- The country borders the Mediterranean Sea to the north and the Gulf of Suez and the Red Sea to the east. **Hence, Statement 3 is correct.**
- It is bordered by Libya in the west, the Palestinian territory (Gaza Strip) and Israel in the northeast, and Sudan in the south. **Hence, Statement 4 is correct.**

**Ans. 2 Option D is correct****Explanation**

- Operation Searchlight was an Operation of the Pakistan Army.
- The operation began on the night of March 25, 1971.
- The goal of this military operation was to put an end to the Bengali independence movement. **Hence, Option D is the correct answer.**
- It destroyed the opposition in East Pakistan.
- It was a systematic execution of the leading Bengali intellectuals.
- The genocide by Pakistan can hardly be compared with any other genocide in the world after the Second World War.

**Ans. 3 Option B is correct****Explanation**

- MGNREGS is one of the largest work guarantee programmes in the world launched in 2005 by the Ministry of Rural development. **Hence, statement 1 is incorrect.**
- It aims to guarantee 100 days of employment in every financial year to adult members of any rural household willing to do unskilled manual work. **Hence, statement 2 is correct.**
- The act aims at addressing the causes of chronic poverty through a rights-based framework.

- If any rural adult fails to get work within 15 days of demanding it, an 'unemployment allowance' is given.
- The act mandates Gram sabhas to recommend the works that are to be undertaken and at least 50% of the works must be executed by them.
- At least one-third of beneficiaries need to be women. **Hence, statement 3 is incorrect.**
- The Centre bears 60% of the cost of the materials used for MGNREGS work and the remaining 40% is provided by the State governments.

**Ans. 4 Option C is correct****Explanation**

- FTA is an agreement between the countries or regional blocks to reduce or eliminate trade barriers, through mutual negotiations with a view to enhancing trade.
- It includes goods, services, investment, intellectual property, competition, government procurement and other areas. **Hence, option C is correct.**
- FTAs can be categorised as Preferential Trade Agreement, Comprehensive Economic Cooperation Agreement (CECA), and Comprehensive Economic Partnership Agreement (CEPA).

**Ans. 5 Option A is correct****Explanation**

- Seismic Experiment for Interior Structure (SEIS) Project, has been made by the French space agency, CNES. **Hence, Statement 1 is correct.**
- It is a part of the Mars InSight Lander Mission of NASA. **Hence, Statement 2 is correct.**
- It is a kind of quake sensing instrument.
- The tool aims to help scientists better understand the interior of Mars by studying ground motion, also known as marsquakes.

**Ans. 6 Option A is correct****Explanation**

- Recently, a cloud seeding experiment, known as the Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX phase-4) was conducted in Solapur city. **Hence, option A is correct.**
- Objective: To investigate the effectiveness of hygroscopic cloud seeding in deep

convective clouds and develop a cloud seeding protocol.

- It suggested that cloud seeding is an effective method for increasing rainfall in specific conditions.
- It identified certain cloud characteristics, such as liquid water content and vertical motion, that indicate a cloud's potential to produce rain.
- Estimated cost of producing water through cloud seeding was 18 paisa per litre, with potential for significant cost reduction when using indigenous seeding aircraft.

**Ans. 7 Option D is correct**

**Explanation**

- The Net Zero Emissions (NZE) Roadmap - named 'Net Zero by 2050' has been released by the International Energy Agency's (IEA). **Hence, Statement 1 is incorrect.**
- It is the World's first comprehensive energy roadmap.
- 'Net zero emissions' refers to achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere.
- Some of the targets of the roadmap
  - No investment in new fossil fuel supply projects
  - No further final investment decisions for new unabated coal plants.
  - No sales of new internal combustion engine passenger cars by 2035. **Hence, Statement 2 is incorrect.**
  - The global electricity sector should reach net-zero emissions by 2040.
  - Annual additions of solar power to reach 630 gigawatts by 2030, and those of wind power to reach 390 gigawatts.

**Ans. 8 Option A is correct**

**Explanation**

- NAFIS-National Automated Fingerprint Identification System (NAFIS), under the NCRB, is a separate project that was launched in 2022.
- It assigns a unique ten-digit National Fingerprint Number (NFN) to all suspects arrested by the police. **Hence, Statement 1 is correct.**
- NAFIS helps police forces to record fingerprint impressions of both convicted

and non-convicted persons. **Hence, statement 2 is incorrect.**

- NAFIS integrates the data on a common platform, enabling the police to run a countrywide search to match fingerprint impressions lifted from a crime scene.

**Ans. 9 Option C is correct**

**Explanation**

- In 1954, the renowned economist William Arthur Lewis introduced a model that suggested industrialization could absorb surplus labour from agriculture in underdeveloped countries, such as India. **Hence, option C is correct.**
- He argued that the productivity of labour in agriculture was negligible, zero, or even negative.
- Moving labour from the farms to factories could enhance productivity and economic growth.

**Ans. 10 Option D is correct**

**Explanation**

- The India-Middle East-Europe Economic Corridor (IMEC) Project was signed at the G20 Summit in New Delhi. **Hence, Statement 1 is correct.**
- The project forms part of the Partnership for Global Infrastructure and Investment (PGII).
- The proposed IMEC will consist of Railroad, Ship-to-Rail networks and Road transport routes. **Hence, Statement 2 is correct.**
- The routes will be extending across two corridors:
  - The East Corridor – connecting India to the Arabian Gulf,
  - The Northern Corridor – connecting the Gulf to Europe.
- The IMEC corridor will also include an electricity cable, a hydrogen pipeline and a high-speed data cable.
- India port of Mundra (Gujarat), Kandla (Gujarat), and Jawaharlal Nehru Port Trust (Navi Mumbai) will be part of the project. **Hence, Statement 3 is correct.**
- Railway line will connect Fujairah port (UAE) to Haifa port (Israel) via Saudi Arabia (Ghuwaifat and Haradh) and Jordan.
- India, the US, Saudi Arabia, UAE, the European Union, Italy, France, and Germany. **Hence, Statement 4 is correct.**



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