



**UPSC  
Mentorship**  
A Unit of Mentorship India

# DAILY CURRENT AFFAIRS

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SOURCES



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## GS I

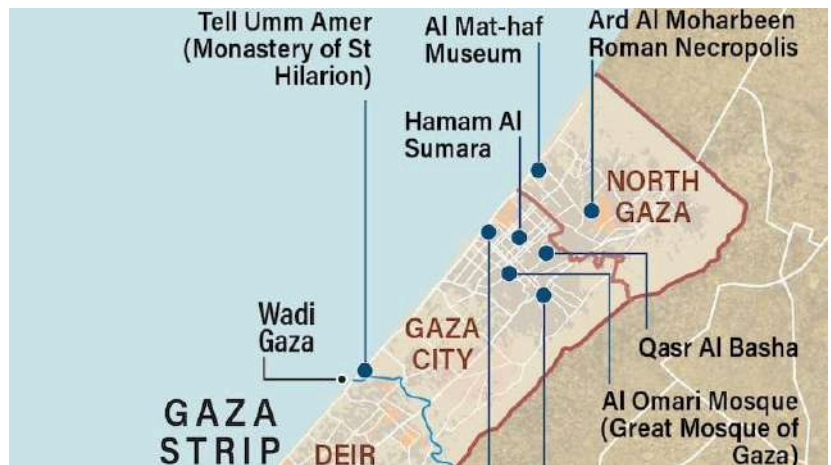
### 1. Tell Umm Amer Heritage site

Source: IE

**Context:** The World Heritage Committee (WHC) decided to include the Palestinian site of Tell Umm Amer in both the UNESCO World Heritage Site List and the Lost of World Heritage in Danger during its 46th session in New Delhi.

**Tell Umm Amer Heritage site:**

- It is situated on the **coastal dunes of the Nuseirat Municipality**, just 10 km south of Gaza city.
- It is an **ancient Christian monastery** founded in the **fourth century by Hilarion the Great** (291–371 CE).
- It is also known as the **‘Monastery of Saint Hilarion’**.
- It was the **first monastic community in the Holy Land**, laying the groundwork for the spread of monastic practices in the region.
- The monastery occupied a strategic position at the crossroads of major trade and communication routes between Asia and Africa.



**Key facts about UNESCO:**

- UNESCO stands for **United Nations Educational, Scientific and Cultural Organization**.
- It is a **specialised agency of the United Nations (UN)**.
- The constitution, which entered into force in **1946**, called for the **promotion of international collaboration in education, science, and culture**.
- The agency's permanent **headquarters are in Paris, France**.
- **Parent Organisation**- United Nations Economic and Social Council
- The primary goals of UNESCO are to **contribute to peace and security by promoting collaboration among nations through education, science, and culture**, and to promote sustainable development and intercultural dialogue.
- UNESCO believes that these areas are **crucial for building a more just, peaceful, and inclusive world**.



## GS II

### 2. Karnataka High Court Quashes POSCO Case

Source: The Hindu

**Context:** Karnataka High Court has recently quashed proceedings under the Protection of Children from Sexual Offences (POCSO) Act, 2012 against a 23-year-old man accused of raping a minor, who he subsequently married.

**What is the Protection of Children from Sexual Offences (POCSO) Act, 2012?**

- **POCSO:** The Protection of Children from Sexual Offences Act, 2012 (POCSO Act, 2012) was enacted to protect children from sexual abuse, filling a significant legislative gap in India despite the United Nations' adoption of the Convention on the Rights of the Child in 1989.
- **General principles:**
  - **Right to be Treated with Dignity:** Reflecting the importance of treating children with compassion and respect.
  - **Right to Life and Survival:** Ensuring children are protected as provided by Article 21 and raised in a secure environment.
  - **Right Against Discrimination:** Fair and just procedures without discrimination based on sex, religion, or culture.
  - **Right to Preventive Measures:** Training children to recognise and prevent abuse.
  - **Right to be Informed:** Keeping the child informed about legal proceedings.
  - **Right to Privacy:** Maintaining confidentiality of the proceedings to protect the child's privacy.
- **Shortcomings of the POCSO Act:**
  - **Consensual Sexual Activities:** The Act prosecutes a non-minor partner in consensual sex with a minor, as minors' consent is deemed irrelevant.
  - **False Complaints by Children:** Section 22 exempts children from punishment for false complaints, leading to potential misuse.
  - **Two-Finger Test:** Despite being banned in 2012, this test is still conducted, violating the victim's privacy and dignity, as noted in *Lillu @ Rajesh v. State of Haryana, 2013*.
  - **Unprepared Investigation Machinery:** The Bombay High Court in the case of the Addl. Sessions Judge, Hoingoli and *Ors. v. Bhawat and Ors., 2017* acquitted the accused due to unsealed evidence, highlighting faulty investigation procedures.

**Punishment for offences covered in the POCSO Act, 2012**

Punishment for the above offences is specified in the table:

Name of the offence	Relevant provision of the POCSO Act	Punishment
Penetrative sexual assault on a child of 16 to 18 years of age	Section 4	Minimum imprisonment of 10 years which may extend to imprisonment for life plus fine
Penetrative sexual assault on a child below 16 years of age	Section 4	Minimum imprisonment of 20 years which may extend to imprisonment for the remainder of natural life plus fine
Aggravated penetrative sexual assault	Section 6	Minimum rigorous imprisonment of 20 years which may extend to imprisonment for the remainder of natural life plus fine or death
Sexual assault	Section 8	Imprisonment of 3 to 5 years plus fine
Aggravated sexual assault	Section 10	Imprisonment of 5 to 7 years plus fine
Sexual harassment	Section 12	Imprisonment which can extend upto 3 years plus a fine.
Use of a child for pornography	Section 14(1)	First conviction- imprisonment extending up to 5 years second or further convictions- imprisonment extending up to 7 years plus fine
Use of a child for pornography while committing an offence under Section 3	Section 14(2)	Minimum imprisonment of 10 years extending up to imprisonment for life plus fine
Use of a child for pornography while committing an offence under Section 5	Section 14(3)	Rigorous imprisonment for life plus fine
Use of a child for pornographic purposes while committing an offence under Section 7	Section 14(4)	Imprisonment of 6 to 8 years plus fine
Use of a child for pornographic purposes while committing an offence under Section 9.	Section 14(5)	Imprisonment of 8 to 10 years plus fine
Offence of storing pornographic material involving a child for commercial purposes	Section 15	Imprisonment extending upto 3 years or fine or both



## 3. Quad countries call for end in violence in Ukraine, Gaza, and Myanmar

Source: The Hindu

Context: The Quad also reaffirmed commitment for a free and open Indo-Pacific region while seeking expansion of maritime operation in the Indian Ocean.

What is QUAD?

QUAD, also known as the Quadrilateral Security Dialogue or simply the Quad, is a strategic forum comprising four countries: the United States, Japan, India, and Australia.

- The Quad is aimed at promoting regional security and economic cooperation in the Indo-Pacific region.
- The four countries share a common interest in maintaining a free and open Indo-Pacific, promoting democracy, human rights, and the rule of law, and countering China's expanding influence in the region.
- The Quad has held several meetings at the ministerial and leaders' level to discuss issues such as maritime security, infrastructure development, and supply chain resilience.
- The Quad is seen as a mechanism for balancing China's influence in the region, although its members have stressed that it is not a military alliance and is open to other countries who share their values and interests.



What is the genesis and evolution of QUAD?

- **2007:** The Quad was initially formed in 2007 during an informal meeting of leaders from the Association of Southeast Asian Nations (ASEAN). It was Japanese Prime Minister Shinzo Abe who first proposed the idea of creating the Quad.
- **2012:** The Japanese Prime Minister highlighted the concept of the 'Democratic Security Diamond' in Asia, which includes the US, Japan, India, and Australia.
- **2017:** Once again confronted with the growing danger posed by China, the four nations revitalised the Quad by expanding its goals and devising a system that aimed to gradually establish an international order based on rules.
  - India, Japan, USA, and Australia held the first 'Quad' talks in Manila ahead of the ASEAN Summit 2017.



- **2020:** The trilateral **India-US-Japan Malabar naval exercises** expanded to include Australia, marking the first official grouping of the Quad since its resurgence in 2017 and the first joint military exercises among the four countries in over a decade.
- **2021:** The Quad leaders met virtually and later released a joint statement titled ‘The Spirit of the Quad’.

#### How does the QUAD function?

- The Quad is a **loose grouping** rather than a **formal alliance**. It does **not have a decision-making body or a secretariat**, or a **formal structure like NATO or the United Nations**.
- The alliance is maintained through summits, meetings, information exchanges, and military drills.
- The **Quadrilateral met five times in 2017–2019**. During the **Raisina Dialogue** in New Delhi in 2018, the navy chiefs of Japan, US, Australia, and India came together, one of the first indications of the revival of the Quad's security structure.
- Since March 2021, member states of the Quad and their leaders have hosted regular “**Leaders Summits**”, which have been both online and in-person.

#### What are the important prospects of the QUAD grouping?

The QUAD (Quadrilateral Security Dialogue) grouping, which comprises **Australia, India, Japan, and the United States**, has several important prospects, including

- **Strengthening regional security:** The QUAD aims to enhance security and stability in the Indo-Pacific region by promoting a rules-based order, freedom of navigation, and respect for international law.
- **Countering China's rise:** The QUAD is seen as a response to China's growing assertiveness in the region. The member countries seek to balance China's rise and prevent it from altering the status quo in the region.
- **Promoting economic cooperation:** The member countries are major economies in the region and seek to promote economic cooperation. In May 2022, Quad countries decided to allocate \$50 Billion for infrastructure in the Indo-Pacific region.
- **Building maritime security capacity:** The member countries have been conducting joint naval exercises and maritime patrols to enhance their maritime security capacity and interoperability.
- **Strengthening people-to-people ties:** The QUAD aims to promote people-to-people ties through academic and cultural exchanges and enhance disaster relief and humanitarian assistance capabilities.
- **Cooperation in debt management:** Resolving debt issues under the G20 Common Framework through the 'Quad Debt Management Resource Portal’.

#### What is the significance of QUAD for India?

The **significance of QUAD for India** can be analysed through

- **Strategic importance:** It is a platform to discuss and address the common challenges faced by the Indo-Pacific region, such as the rise of China and its increasing assertiveness in the region through ‘String of pearls’ theory.



- **Economic significance:** The member countries have launched several initiatives like the Asia–Africa Growth Corridor, the **Blue Dot Network**, and the **Supply Chain Resilience Initiative** to promote economic development in the region. **India is mostly at the receiving end of investments by QUAD countries.**
- **Maritime security:** QUAD is useful for Indian maritime security by conducting joint naval exercises and coordinating on issues like freedom of navigation, piracy, and illegal fishing.
- **Regional stability:** QUAD is significant for India in promoting regional stability in the Indo-Pacific region. It is based on the principles of a free, open, and inclusive **Indo-Pacific** and **aims to promote a rules-based international order.**
- **Post-COVID diplomacy:** Due to disruptions in the supply chain during the pandemic, Japan and the US want to shift their manufacturing companies out of China in order to curb their imperialistic behaviour, which could be capitalised on by India as well.

## 4.Asian Disaster Preparedness Centre

**Source:** The Hindu

**Context:** Recently, India has taken over as the Chair of Asian Disaster Preparedness Centre (ADPC) for 2024-25.

**Asian Disaster Preparedness Centre:**

- It is an **autonomous international organisation** established in **1986**.
- It is for **cooperation in and implementation of disaster risk reduction and building climate resilience in Asia and the Pacific region.**
- **Vision:** Safer communities and sustainable development through disaster risk reduction" and its geographical remit is Asia and the Pacific
- **Member countries:** **India, Bangladesh, Cambodia, China, Nepal, Pakistan, Philippines, Sri Lanka and Thailand** are the founding members.
- **Governance:** The **organs of ADPC**, defined in the ADPC Charter include the Board of Trustees, the Executive Committee, the Advisory Council and the Regional Consultative Committee (RCC), which are the governing or advisory bodies of ADPC.
- ADPC's international Charter was signed by **nine founding member countries** and it was put into effect in 2018 through the ratification by all the founding members.
- As of January 2020, **ADPC is operating as an autonomous international organisation** governed by the **Board of Trustees.**
- **Headquarter:** **Bangkok, Thailand** and sub-centers in the country of operations are the operational parts of ADPC.



## GS III

### 5. Project Tiger set to displace 5.5L forest dwellers

Source: Times of India

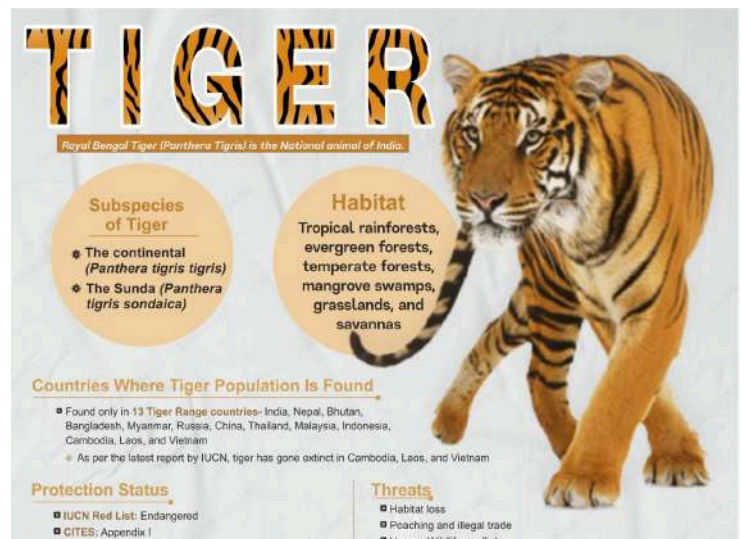
Context: India's sprawling landscapes are graced by the presence of majestic big cat species, each embodying power, grace, and an integral part of the nation's natural heritage.

#### Project Tiger:

- Project Tiger is a tiger conservation programme launched on April 1, 1973, by the Government of India.

#### Objectives:

- Reduce factors that lead to the depletion of tiger habitats and to mitigate them by suitable management.
- The damages done to the habitat shall be rectified to facilitate the recovery of the ecosystem to the maximum possible extent.
- Ensure a viable tiger population for economic, scientific, cultural, aesthetic and ecological values.



#### Benefits of Project Tiger

- Tiger Population Recovery:**
  - One of the primary objectives of Project Tiger was to **reverse the declining trend of the tiger population**.
  - Through dedicated conservation efforts, the project has **successfully increased the number of tigers in designated tiger reserves** across the country.
- Habitat Preservation:**
  - Project Tiger emphasises the protection of tiger habitats, which has a **positive ripple effect on the entire ecosystem**.
  - By safeguarding these landscapes, the project indirectly benefits a wide range of flora and fauna that depend on these habitats for survival.
- Economic Value and Tourism:**





- Tigers are **charismatic megafauna** that attract tourists from around the world. The project's success in conserving tiger populations has led to an increase in eco-tourism, generating revenue for local communities and the country.
- This economic benefit **helps incentivize local communities** to participate in conservation efforts.
- **Ecological Balance:**
  - Tigers are **apex predators** that play a **crucial role in maintaining the balance of their ecosystems**.
  - By controlling prey populations, they **prevent overgrazing** and help manage the health of herbivore species.
  - This, in turn, has **cascading effects on vegetation and other animal populations**, contributing to a healthier ecosystem.

### Challenges of Project Tiger

- **Habitat Loss and Fragmentation:**
  - Rapid urbanisation, infrastructure development, and agricultural expansion have led to habitat loss and fragmentation.
  - This poses a significant threat to tigers by reducing their living spaces.
- **Human-Wildlife Conflict:**
  - As tiger habitats shrink and human populations expand, instances of human-tiger conflicts have risen.
  - Tigers may attack livestock or even humans, leading to retaliatory killings and negative perceptions about tiger conservation. Balancing the needs of local communities and tiger conservation is a delicate challenge.
- **Poaching and Illegal Wildlife Trade:**
  - Despite conservation efforts, poaching remains a critical issue. Demand for tiger body parts, driven by traditional medicine and illegal trade, continues to threaten the species.
  - Effective enforcement against poachers and traffickers is essential to curb this illegal activity
- **Climate Change Impact:**
  - Changing climatic conditions can alter tiger habitats and prey availability, impacting their survival.
  - Project Tiger must incorporate climate resilience strategies to adapt to these changes and ensure the long-term survival of tigers and their ecosystems.

### Way Forward

- **Strengthening Habitat Protection and Restoration:**
  - Identify and protect critical tiger habitats from further encroachment, ensuring adequate space for population growth and genetic diversity.



- Invest in habitat restoration efforts, including reforestation and removal of invasive species, to create resilient and interconnected ecosystems.
- **Enhancing Anti-Poaching Measures:**
  - Strengthen law enforcement through modern technology, intelligence networks, and rapid response teams to curb poaching and wildlife trafficking.
  - Implement stringent penalties for offenders and work collaboratively with international partners to dismantle illegal wildlife trade networks.
- **Promoting Sustainable Human-Wildlife Coexistence:**
  - Develop and implement community-based conservation models that engage local communities in conservation efforts, provide alternative livelihoods, and reduce human-wildlife conflicts.
  - Employ innovative technologies such as early warning systems to minimise human-tiger conflicts and enhance safety for both humans and animals.

## 6. Mako Missile

**Source:** The Hindu

**Context:** The US Navy, Navy SEAL commandos, and the US Air Force are set to install the Mako missile in all their military aircraft.

**Mako Missile:**

- It is an **air-launched hypersonic multi-mission missile**.
- It was **developed by Lockheed Martin**, an American aerospace and defence manufacturer.
- It will be the **world's first hypersonic weapon** that could be fired from the internal weapons bay of the fifth-generation stealth fighter jets: the **F-35 and the F-22 Raptor**.
- It can be used for a **wide range of missions, including targets at sea, in the air, and on land**.

**Features:**

- Named after the **fastest shark in the seas**, Mako **blazes down on time-sensitive targets**, and it **penetrates advanced air-defence systems to engage these high-value targets at or below hypersonic speeds**, depending on mission requirements.
- It can **achieve speeds over Mach 5 with high manoeuvrability**, making it difficult to intercept.
- It represents one of **Lockheed Martin's first generation of missiles designed within an entirely "digital engineering ecosystem"**.
- It weighs close to 590 kg with a diameter of 13 inches and an approximate length of 4 metres.

**Hypersonic Missiles:**

- A hypersonic missile is a **weapon system** which flies at least at the **speed of Mach 5** (five times the speed of sound) and is **manoeuvrable**.
- These missiles are extremely fast and far harder for surface-to-air missile defence systems to target.



## Editorial, Ideas and Opinions

### 7.India’s Battle Against Plastic Waste

Source: The Hindu

Context: India generates approximately 4 million tonnes of plastic waste annually, with only a quarter being recycled or treated. To address this issue, the government implemented the Extended Producer Responsibility (EPR) rules.

#### What are the Major Issues Arising from Mismanaged Plastic Waste in India?

- **Choking the Environment:** Plastic waste in India causes severe environmental degradation.
  - It clogs waterways, leading to flooding in urban areas during monsoons.
    - For instance, Mumbai's 2005 floods were exacerbated by plastic-clogged drains.
  - **Marine pollution** is another critical issue, with an estimated 0.6 million tonnes of plastic entering India's oceans annually leading to issues like **Eutrophication and Bioaccumulation**.
- **Public Health Concerns:** Plastic waste poses significant health risks to the Indian population.
  - **Microplastics** have been found in **drinking water sources and food products**, with potential long-term health effects still being studied.
  - The accumulation of plastic waste leads to **clogging and potential breeding grounds for disease vectors like mosquitoes, contributing to the spread of dengue and malaria**.
  - The burning of plastic waste releases carcinogens and other toxic substances, leading to respiratory issues and other health problems in nearby communities.
- **Economic Challenges:** The plastic waste problem has significant economic implications for India.
  - According to a FICCI report, India could lose over USD 133 billion worth of material value used in plastic packaging by 2030.
    - Uncollected plastic packaging waste accounts for USD 68 billion of this loss.

 <b>PET</b>	 <b>HDPE</b>	 <b>PVC</b>	 <b>LDPE</b>	 <b>PP</b>	 <b>PS</b>	 <b>OTHER</b>
<b>POLYETHYLENE TEREPHTHALATE</b>	<b>HIGH-DENSITY POLYETHYLENE</b>	<b>POLYVINYL CHLORIDE</b>	<b>LOW-DENSITY POLYETHYLENE</b>	<b>POLYPROPYLENE</b>	<b>POLYSTYRENE</b>	<b>OTHER</b>
<b>WATER BOTTLES; JARS; CAPS</b>	<b>SHAMPOO BOTTLES; GROCEY BAGS</b>	<b>CLEANING PRODUCTS; SHEETINGS</b>	<b>BREAD BAGS; PLASTIC FILMS</b>	<b>YOGURT CUPS; STRAWS; HANGERS</b>	<b>TAKE-AWAY AND HARD PACKAGING; TOYS</b>	<b>BABY BOTTLES; NYLON; CDS</b>
						



- **E-commerce and Packaging Waste:** The rapid growth of e-commerce in India, accelerated by the Covid-19 pandemic, has led to a surge in packaging waste.
  - India's e-commerce market is expected to reach USD 200 billion by 2026, up from USD 38.5 billion in 2017.
  - This growth corresponds with increased use of plastic packaging materials, including bubble wrap, air pillows, and polybags.
- **Regulatory and Enforcement Challenges:** While India has implemented various regulations to address plastic waste, enforcement remains a major challenge.
  - The Plastic Waste Management Rules 2016 (amended in 2022) ban certain single-use plastics, but implementation is inconsistent across states.
  - The Extended Producer Responsibility system faces issues with fraudulent certificates and inadequate monitoring.
  - The informal nature of much of the recycling sector makes it difficult to regulate and improve practices.
    - India is among the 12 countries responsible for 60% of the planet's mismanaged plastic waste.
- **Technological and Infrastructure Gaps:** India faces significant technological and infrastructure deficits in managing plastic waste.
  - Many municipalities lack modern waste segregation and processing facilities.
    - **Only 60% of the total collected plastic waste is recycled in India.**
  - Advanced recycling technologies for handling multi-layered plastics and other difficult-to-recycle materials are not widely available.
  - The lack of a comprehensive waste tracking system makes it difficult to monitor the flow of plastic waste from generation to disposal or recycling.

#### Alternatives to Plastics:

- **Bagasse:** Made from sugarcane or beet pulp. It is compostable and eco-friendly.
- **Bioplastics:** Plant-based plastics used primarily in food packaging.
- **Natural Textiles:** Includes materials such as cotton, wool, and hemp.
- **Edible Seaweed Cups:** Seaweed grows rapidly, up to 60 times faster than land-based plants, making it a sustainable option.
- **Algae-Blended Ethylene-Vinyl Acetate:** Utilises algae to convert air and water pollutants (ammonia, phosphates, and carbon dioxide) into plant biomass rich in proteins.
- **Compostable Plastics:** Can be plant-based or fossil fuel-based and degrade through biological processes into CO<sub>2</sub>, water, inorganic compounds, and biomass, without leaving toxic residues. For example, BASF's Ecoflex.

#### What Measures can be Adopted for Better Management of Plastic Waste in India?

- **"Trash to Treasure":** Implement a comprehensive circular economy approach to plastic waste management.
  - Encourage design for recyclability in product development.



- Establish material recovery facilities in every major city to efficiently sort and process plastic waste by promoting 4R's: reduce, reuse, recycle, and recover.
- **Incentivize the use of recycled plastics** in manufacturing through tax breaks or subsidies.
- Create a robust market for recycled plastics by mandating minimum recycled content in certain products, driving demand and closing the loop in plastic consumption.
- **Nationwide Awareness and Education Campaign:** Launch a comprehensive, multi-lingual national awareness campaign on plastic waste.
  - **Integrate plastic waste management** into school curricula from primary to higher education.
  - Conduct **regular community workshops** on waste segregation and recycling practices.
  - Use social media influencers and celebrities to promote plastic-free lifestyles.
    - Establish a national plastic waste innovation challenge to engage youth in finding creative solutions to plastic pollution.
- **"Waste-to-Energy 2.0":** Invest in advanced waste-to-energy technologies for plastics that cannot be recycled.
  - **Implement pyrolysis and gasification plants** in outskirts of major cities to convert plastic waste into fuel or energy.
  - Ensure **strict emissions control and monitoring** for these plants to prevent air pollution.
  - Use the energy generated to power waste management facilities, creating a self-sustaining system. **Continuously research and adopt new technologies** for handling difficult-to-recycle plastics.
- **Plastic Footprint:** Introduce mandatory annual plastic footprint audits for large and medium-sized companies.
  - Require public disclosure of **plastic usage, waste generation, and recycling rates in annual reports.**
  - Develop a standardised methodology for calculating and reporting **plastic footprints.**
  - Use this data to inform policy decisions and track progress in plastic waste reduction. Implement a rating system for companies based on their plastic footprint management.



## In Brief

### 8. Mettur Dam

Source: **The Hindu**

**Context:** A warning has been issued to people residing in low-lying areas of the Mettur Dam, following increased inflow into the dam.

**Mettur Dam:**

- It is **one of the largest dams in India**, built in 1934.
- **Location:** It is located at Mettur, District Salem in **Tamil Nadu**.
- It is constructed in a **gorge**, where the **Kaveri River** enters the plains.

**Features:**

- It is a **masonry gravity dam**.
- The dam creates **Stanley Reservoir**.
- Set at the foot of the dam in 1937 is the **Mettur hydroelectric and thermal power plant**, with a hydropower generation of 32 MW.
- There is a park adjoining the Dam on the opposite side with lawns and fountains, and also has the **Muniappan/Aiyanar statue** in the vicinity.



**Key Facts about Kaveri River:**

- **Kaveri River**, also known as **Cauvery River**, is **one of the major rivers of southern India**, which is considered sacrosanct by the Hindus.

**Course:**

- It rises on **Brahmagiri Hill** of the **Western Ghats** in southwestern **Karnataka**.
- It **flows in the south and east through Karnataka and Tamil Nadu** and then across the southeastern lowlands, and finally surrenders in the **Bay of Bengal** through two principal mouths.
- It is **bounded by the Western Ghats on the west, by the Eastern Ghats on the east and south and by the ridges separating it from the Krishna basin and Pennar basin on the north**.
- The **Cauvery basin** extends over the states of **Tamil Nadu, Karnataka, Kerala, and the Union Territory of Puducherry**.
- **Tributaries:** Its important tributaries joining from left are the **Harangi, the Hemavati, the Shimsha, and the Arkavati**, whereas the **Lakshmantirtha, the Kabbani, the Suvarnavati, the Bhavani, the Noyil, and the Amaravati** joins from right.
- **Dams:** Dams constructed across the river are **Krishna Raja Sagara Dam, and Mettur Dam**, and the **Banasura Sagar Dam** on the **Kabini River**, which is a tributary of the **Kaveri River**.



## 9.MQ-9B Predator

**Source:** The Hindu

**Context:** The MQ-9B Predator drones India will be buying from the United States will be placed in two states: Tamil Nadu and Uttar Pradesh.

**MQ-9B Predator:**

- It is a **high-altitude, long-endurance armed Unmanned Aerial Vehicle (UAV)**, capable of remotely controlled or autonomous flight operations.
- It is a variant of the MQ-9 "Reaper" developed by **General Atomics Aeronautical Systems (GA-ASI)**, with its primary purpose being for the United States Air Force (USAF).
- The United States uses these drones for surveillance, intelligence gathering and airstrikes. It has two variants: **SkyGuardian** and **SeaGuardian**.

**Features:**

- It can carry up to **5,670 kg** and has a **fuel capacity of 2,721 kg**. It can operate at **altitudes exceeding 40,000 feet**. It has a top speed of 275 mph, or 442 km/h.
- It can **fly as close as 250 metres from the ground without the target** even having an inkling it is there unless spotted.
- With a maximum endurance of 40 hours, they provide a reliable platform for prolonged surveillance.
- It is **armed with strike missiles**, allowing it to engage and eliminate enemy targets with high precision. It can carry **four Hellfire missiles** and around 450 kg of bombs.
- This feature enhances its effectiveness in various roles, including **land and maritime surveillance, anti-submarine warfare, anti-surface warfare, electronic warfare, and expeditionary missions**.
- It is capable of **automatic take-offs and landings**, providing operational flexibility.
- It can safely integrate into **civil airspace**, enabling joint forces and civil authorities to obtain real-time situational awareness in the maritime domain, day or night.

## 10.MERCOSUR

**Source:** The Hindu

**Context:** Recently, Bolivia became a full time member of MERCOSUR groupings in order to increase trades with member countries.

**Mercosur:**

- Mercosur (MERCOSUR for its Spanish initials) or the **Southern Common Market** is an economic and political bloc of Latin America.



**Members:**

- It originally comprised **Argentina, Brazil, Paraguay, and Uruguay** as its members. **Bolivia and Venezuela** joined it later. (Venezuela has been suspended since December 1, 2016).
- It was **created in 1991 by signing the Treaty of Asuncion**, an accord calling for the “free movement of goods, services, and factors of production between countries.”
- It aims to promote **economic integration, free trade, and the movement of goods, services, and people** among member countries.

**Headquarter:** Montevideo, Uruguay.

**Governance:**

- The bloc’s **highest decision-making body, the Common Market Council**, provides a **high-level forum for coordinating foreign and economic policy**.
- Its **official working languages are Spanish and Portuguese**.
- India and MERCOSUR signed the **Preferential Trade Agreement (PTA) in 2004**, which allowed India to forge closer economic ties with one of the world’s largest trade blocs.





## Daily Quiz

**Q1. Consider the following statements regarding the POCSO Act:**

1. The POCSO Act mandates the establishment of Special Courts for the trial of offences under the Act.
2. The POCSO Act provides for the death penalty for certain aggravated sexual assault offenses.

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

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

**Q2. Consider the following statements regarding Mettur Dam:**

1. The Mettur Dam is located on the Kaveri River in Tamil Nadu.
2. The primary purpose of the Mettur Dam is hydroelectric power generation.

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

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

**Q3. Consider the following statements regarding tigers in India:**

1. India is home to more than 70% of the world's tiger population.
2. The Project Tiger initiative was launched in 1985 to protect the Bengal tiger.
3. The Sundarbans in West Bengal is the only mangrove forest in the world where tigers are found.

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

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2, and 3

**Q4. The MQ-9B Predator, recently seen in the news, is:**

- A. A new variant of the COVID-19 virus
- B. An advanced military drone
- C. A high-speed bullet train developed by Japan
- D. A type of renewable energy technology

**Q5. Consider the following statements regarding Mercosur:**

1. Mercosur is a South American trade bloc established by the Treaty of Asunción.
2. The member countries of Mercosur include Brazil, Argentina, Paraguay, Uruguay, and Venezuela.

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

- A. 1 only



- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

**Q6. Consider the following statements regarding the Mako missile:**

1. The Mako missile is an air-to-air missile developed by the United States.
2. The Mako missile is primarily designed for anti-ship warfare.
3. The Mako missile incorporates stealth technology to evade radar detection.

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

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

**Q7. Consider the following statements regarding plastic waste:**

1. Plastic waste contributes significantly to ocean pollution, harming marine life.
2. Most types of plastic are biodegradable and decompose quickly in natural environments.
3. Many countries have implemented bans or restrictions on single-use plastics to combat plastic pollution.

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

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2, and 3

**Q8. Consider the following:**

**Assertion (A):** The Asian Disaster Preparedness Index is an important tool for evaluating the disaster resilience of Asian countries.

**Reason (R):** The index assesses countries based on factors such as infrastructure robustness, emergency response capabilities, and community preparedness.

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

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. A is false, but R is true.

**Q9. Which of the following countries are members of the QUAD (Quadrilateral Security Dialogue)?**

- A. India, China, Japan, and Australia
- B. India, Japan, Australia, and the United States
- C. India, Japan, South Korea, and Australia
- D. India, Japan, Australia, and the United Kingdom



Q10. Consider the following information given in the table:

Tiger Reserve	State
Namdapha Tiger Reserve	Arunachal Pradesh
Nagarjunsagar-Srisaigham Tiger Reserve	Andhra Pradesh
Valmiki Tiger Reserve	Bihar

Which of the above statements is/are correct?

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



## Solutions

### 1. Correct Answer is C

#### Explanation:

- Statement 1: Correct. The POCSO Act mandates the establishment of Special Courts for the speedy trial of offenses under the Act, ensuring that cases involving the sexual abuse of children are handled with sensitivity and efficiency.
- Statement 2: Correct. The POCSO Act provides for the death penalty for certain aggravated sexual assault offenses, particularly in cases of repeated offenders or extreme cases of sexual abuse against children.

### 2. Correct Answer is A

#### Explanation:

- Statement 1: Correct. The Mettur Dam is located on the Kaveri River in the state of Tamil Nadu, India.
- Statement 2: Incorrect. The primary purpose of the Mettur Dam is irrigation, providing water for agriculture in the Cauvery Delta region. While it does contribute to hydroelectric power generation, that is not its primary purpose.

### 3. Correct Answer is B

#### Explanation:

- Statement 1: Correct. India is indeed home to more than 70% of the world's tiger population, making it a critical region for tiger conservation.
- Statement 2: Incorrect. The Project Tiger initiative was launched in 1973, not 1985, to protect the Bengal tiger and its habitats.
- Statement 3: Correct. The Sundarbans in West Bengal is the only mangrove forest in the world where tigers are found, known for its unique population of swimming tigers.

### 4. Correct Answer is B

#### Explanation:

The MQ-9B Predator is an advanced military drone. It is a remotely piloted aircraft designed for long-endurance, high-altitude surveillance, and precision strike missions. The MQ-9B is a part of the Predator series and is known for its advanced capabilities in intelligence, surveillance, and reconnaissance (ISR) operations.

### 5. Correct Answer is C

#### Explanation:

- Statement 1: Correct. Mercosur, also known as the Southern Common Market, was established by the Treaty of Asunción in 1991.
- Statement 2: Correct. The member countries of Mercosur include Brazil, Argentina, Paraguay, Uruguay, and Venezuela (although Venezuela's membership has been suspended since 2016).



### 6. Correct Answer is A

#### Explanation:

Statement 1: Incorrect. The Mako missile is not an air-to-air missile developed by the United States.

Statement 2: Correct. The Mako missile is designed for anti-ship warfare.

Statement 3: Incorrect. The Mako missile does not incorporate stealth technology to evade radar detection.

### 7. Correct Answer is B

#### Explanation:

- Statement 1: Correct. Plastic waste contributes significantly to ocean pollution, where it poses a threat to marine life through ingestion, entanglement, and habitat disruption.
- Statement 2: Incorrect. Most types of plastic are not biodegradable and can persist in the environment for hundreds of years.
- Statement 3: Correct. Many countries have implemented bans or restrictions on single-use plastics to reduce plastic pollution and encourage the use of more sustainable alternatives.

### 8. Correct Answer is A

#### Explanation:

- Assertion (A): Correct. The Asian Disaster Preparedness Index is indeed an important tool for evaluating the disaster resilience of Asian countries. It provides a comprehensive assessment of how prepared different nations are to handle disasters.
- Reason (R): Correct. The index assesses countries based on various factors, including infrastructure robustness, emergency response capabilities, and community preparedness. These factors are critical for determining the overall disaster resilience of a country.

Since the reason correctly explains why the assertion is true, both statements are correct, and the reason is the correct explanation for the assertion.

### 9. Correct Answer is B

#### Explanation:

The QUAD (Quadrilateral Security Dialogue) consists of four member countries: India, Japan, Australia, and the United States. This strategic dialogue aims to ensure a free, open, and inclusive Indo-Pacific region and addresses shared security challenges.

### 10. Correct Answer is C

#### Explanation:

- Namdapha National Park is located in Changlang district of the Northeast Indian state of Arunachal Pradesh, near the international border with Myanmar.
- Nagarjunsagar-Srisailem Tiger Reserve is the largest tiger reserve in India. The reserve spreads over five districts, Nandyal District, Prakasam District, Palnadu District, Nalgonda District and Mahabub Nagar district of Andhra Pradesh.
- Valmiki National Park is a national park and tiger reserve in the West Champaran District of Bihar, India covering 898.45 km<sup>2</sup> (346.89 sq mi). It is the only national park in Bihar.



**MAINS PRACTISE QUESTION**

Q. Analyze the role of the Protection of Children from Sexual Offences (POCSO) Act, 2012 in safeguarding minors from sexual abuse. What are the key provisions of the Act and their significance?

Q. Discuss the challenges and prospects of conserving India's big cat species with a special focus on the role and effectiveness of Project Tiger.





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