
Prelims Exam Topics

AIM-260 JOINT ADVANCED TACTICAL MISSILE

Context

Australia is reportedly set to become the **first international buyer** of the **AIM-260 Joint Advanced Tactical Missile (JATM)**, a next-generation long-range air-to-air missile being developed by the United States.

About AIM-260 Joint Advanced Tactical Missile

- **Nature:** The AIM-260 JATM is a **next-generation Beyond-Visual-Range Air-to-Air Missile (BVRAAM)** designed primarily for long-range interception of **advanced fighter aircraft and high-value airborne targets**.
- **Developer:** It is being developed by **Lockheed Martin** for the **U.S. Air Force** under a highly classified **Special Access Program**.
- **Purpose:** The missile is intended to provide the U.S. with enhanced **long-range air-combat capability** against sophisticated and highly manoeuvrable aerial targets.
- **Propulsion & Speed:** Likely to use **dual-pulse or advanced solid-rocket propulsion**, with an expected speed of **over Mach 4**.
- **Range:** Its effective range is estimated to be **at least 200 km**, significantly extending the engagement envelope of fighter aircraft.

EVEREST ENGINE

Context

Astrobase Space Technologies recently unveiled Everest, an **800 kN Full-Flow Staged Combustion (FFSC) rocket engine**, aimed at supporting India's private space sector in developing reusable, high-frequency launch vehicles.

About Everest Engine

- **Nature:** Everest is an **800 kN Full-Flow Staged Combustion (FFSC) rocket engine** designed for **reusable medium-lift launch vehicles**.
- **Developer:** Developed by **Astrobase Space Technologies**, a Bengaluru-based Indian space-tech startup, it is described as **India's first privately developed high-thrust FFSC engine**.

- **Propellant:** Uses **liquid oxygen (LOX)** and **liquid methane (LCH₄)**, commonly known as **methalox**, as its propellant combination.
- **Thrust & Application:** Produces about **800 kN of vacuum thrust** and is designed to enable **precision control, faster turnaround, and improved launch economics** for reusable launch vehicles.
- **Full-Flow Combustion:** Both fuel and oxidiser are **partially burned in separate pre-burners** to drive their respective turbopumps; the resulting flows are then directed into the **main combustion chamber**, enabling efficient operation at very high pressures.
- **Propulsion Advantage:** The FFSC architecture can improve **engine efficiency and component durability** by reducing thermal and mechanical stress on certain components.

WORLD TRIBAL DAY 2026

Context

Ahead of the **International Day of the World's Indigenous Peoples**, also known as **World Tribal Day**, a two-day cultural festival highlighting indigenous heritage was organised at **Vellalar College for Women, Erode, Tamil Nadu**.

About World Tribal Day

- **Observance:** **World Tribal Day**, officially known as the **International Day of the World's Indigenous Peoples**, is observed annually on **9 August** to promote awareness of and protect the **rights, cultures, and well-being of indigenous peoples**.
- **Historical Significance:** The date commemorates the **first meeting of the UN Working Group on Indigenous Populations**, held in **Geneva in 1982** under the Subcommission on the Promotion and Protection of Human Rights.
- **Theme 2026:** “**Honouring Indigenous Midwives: Safeguarding Life and Well-being**”, highlighting the role of indigenous midwives in preserving traditional knowledge and promoting community health.

Key Facts

- **Population & Poverty:** Indigenous peoples constitute **less than 6% of the global population** but account for at least **15% of the world's extremely poor**.
- **Land & Biodiversity:** They safeguard around **28% of the Earth's surface**, including **11% of global forests**, with indigenous territories containing much of the world's remaining biodiversity.

- **Food Systems:** Indigenous communities maintain highly self-sufficient food systems, producing around **50–80% of their own food and resources**.

SLENDER-BILLED VULTURE

Context

Recently, **five captive-bred slender-billed vultures** from the **Bombay Natural History Society (BNHS)** conservation facility in **Assam** were released into the wild.

About Slender-billed Vulture

- **Habitat:** Found in **wetlands, wooded areas, and open countryside**, generally away from densely populated human settlements.
- **Distribution:** Occurs across **India's Gangetic plains, Assam and adjoining regions**, and in parts of **Bangladesh, Nepal, Myanmar, and Cambodia**.
- **Identification:** Characterised by a **long, slender neck, pale underparts, and dark, narrow bill**; it is a strong **glider** that undertakes extensive search flights for food.
- **Feeding:** A **scavenger** that feeds primarily on **carrion**, often congregating around animal carcasses.
- **Population Decline:** Major declines have been linked to exposure to **diclofenac and other NSAIDs** through the carcasses of livestock treated with these drugs before death.
- **Conservation Status:**
 - **IUCN Red List: Critically Endangered**
 - **Wildlife Protection Act, 1972: Schedule I**

DHANSIRI RIVER

Context

The **Assam State Disaster Management Authority (ASDMA)** recently issued a public advisory for residents near the **Dhansiri River in Golaghat district** amid the state's ongoing flood situation.

About Dhansiri River

- **Nature:** The **Dhansiri** is a **transboundary river** flowing through **Nagaland and Assam** and is an important **tributary of the Brahmaputra River**.
- **Origin:** It rises from **Laisang Peak in Nagaland**.

- **Course:** From its source, it initially flows **northwest**, then **northeast towards Dimapur**, before turning generally **northward towards Golaghat** and finally **northwestward** to join the Brahmaputra at **Dhansirimukh, Assam**.
- **Tributaries:** Major tributaries include the **Intaki, Bara Monglu, Langlong Nadi, and Amaluma Jan** rivers.
- **Ecological Setting:** The river traverses the **Nagaland–Assam border**, with the **Dhansiri Reserved Forest** on one side and **Intanki National Park** on the other, supporting rich biodiversity.

DELFT ISLAND

Context

The **Sri Lanka Navy** recently rescued **11 Indian fishermen** after their trawler ran aground near **Delft Island**.

About Delft Island

- **Location:** Also known as **Neduntheevu**, Delft Island lies in the **Palk Strait**, off the **northern coast of Sri Lanka**, southwest of the **Jaffna Peninsula**.
- **Geography:** Covering about **50 sq. km**, it is the **largest of the seven inhabited islands** in the region.
- **Hydrology:** The island has **no streams**; freshwater is mainly obtained from **surface water collected in natural depressions and artificial ponds**.
- **Landscape & Vegetation:** The island is **flat, oval-shaped and wind-swept**, surrounded by shallow waters and beaches composed largely of **coral fragments and sand**; vegetation includes **dry shrubs, semi-arid tropical plants and tall palms**.
- **History & Heritage:** Inhabited predominantly by people of **Tamil origin**, the island bears historical influences of the **Chola dynasty, Portuguese, Dutch and British**; notable remains include **ancient temple ruins and a Dutch colonial fort**.

QUIT INDIA MOVEMENT

Context

The **84th anniversary of the Quit India Movement** was recently commemorated in Parliament, recalling the mass nationalist struggle launched in **1942** against British colonial rule.

About the Quit India Movement

- **Nature:** The **Quit India Movement**, also known as **Bharat Chhod Andolan** or **August Kranti**, was a mass civil disobedience movement launched by the **Indian National Congress (INC)** demanding the **immediate withdrawal of British rule from India**.
- **Launch:** The movement was formally launched on **8 August 1942** at **Gowalia Tank Maidan, Bombay (now August Kranti Maidan, Mumbai)**, with **Mahatma Gandhi's "Do or Die" (Karo ya Maro)** call.
- **Congress Resolution:** The **Congress Working Committee at Wardha in July 1942** prepared the Quit India resolution, which was formally approved by the **AICC in Bombay on 8 August 1942**.
- **Leadership Arrests:** British authorities arrested **Gandhi, Nehru, Patel, Azad and other Congress leaders** in the early hours of **9 August 1942**, creating a leadership vacuum and triggering a largely spontaneous mass uprising.
- **Parallel Governments:** Nationalists established **Prati Sarkars/parallel administrations** in several areas—**Tamluk Jatiya Sarkar in Midnapore (Bengal)**, **Satara Prati Sarkar under Nana Patil**, and the **parallel government at Ballia under Chittu Pandey**.
- **Underground Resistance:** **Aruna Asaf Ali** hoisted the national flag at Gowalia Tank Maidan, while **Usha Mehta operated the clandestine Congress Radio**, sustaining communication despite the suppression of open political activity.

Outcomes

- **Disruption of Colonial Rule:** Strikes, sabotage of **railways and telegraph lines**, and local boycotts disrupted the functioning of British administration in several regions.
- **Political Impact:** The movement demonstrated the depth of popular opposition to colonial rule and weakened the long-term legitimacy of British authority.
- **Road to Independence:** Despite severe repression, the movement became a decisive phase of the freedom struggle and contributed to the **post-war transition towards Indian independence in 1947**.

NATIONAL URBAN CO-OPERATIVE FINANCE AND DEVELOPMENT CORPORATION LIMITED (NUCFDC)

Context

The Union Minister of Home Affairs and Cooperation recently inaugurated the new office of the National Urban Co-operative Finance and Development Corporation Limited (NUCFDC) in Mumbai, along with a dedicated cybersecurity Security Operations Centre (SOC).

About National Urban Co-operative Finance and Development Corporation Limited (NUCFDC)

- **Nature:** NUCFDC is an RBI-registered Non-Banking Financial Company (NBFC) functioning as the apex Umbrella Organisation (UO) for India's Urban Cooperative Banking (UCB) sector, bringing together over 1,400 UCBs and thousands of branches.
- **Evolution:** Its establishment was recommended by several RBI expert committees, including the Viswanathan, V.S. Das, Malegam, and R. Gandhi Committees, drawing on international cooperative banking models such as Rabobank and Crédit Agricole.
- **Launch:** It was formally launched on 2 March 2024 in New Delhi; its new Mumbai office and cybersecurity SOC were inaugurated in August 2026.
- **Sector Modernisation:** To strengthen and modernise UCBs by promoting digital adoption, liquidity support, capacity building, cybersecurity, and economies of scale, particularly for smaller cooperative banks.
- **Digital Infrastructure:** Provides shared Core Banking Software (CBS), digital banking solutions, ATM connectivity, and cybersecurity services at lower costs for UCBs.
- **Liquidity Support:** Acts as a central liquidity manager, providing short-term liquidity assistance and facilitating Priority Sector Lending (PSL) certificate transactions among member UCBs.
- **Governance & Capacity Building:** Provides regulatory compliance tools, board training, and professional capacity-building programmes to improve governance.
- **Economies of Scale:** Enables collective procurement of software, hardware, and financial services, reducing operational costs for smaller UCBs.
- **SRO Potential:** It is envisaged to become a Self-Regulatory Organisation (SRO) for UCBs after achieving the prescribed ₹300 crore paid-up capital threshold.

MECCA JOINT DETERRENCE AGREEMENT

Context

Türkiye, Saudi Arabia, and Pakistan recently signed the Mecca Joint Deterrence Agreement in Mecca to establish a collective defence and deterrence framework aimed at strengthening regional security.

About Mecca Joint Deterrence Agreement

- **Nature:** It is a **trilateral defence framework** seeking to combine the military, technological, financial, and strategic capabilities of **Türkiye, Saudi Arabia, and Pakistan** to safeguard national sovereignty and regional stability.
- **Members:** **Türkiye** contributes defence technology and manufacturing capabilities; **Saudi Arabia** brings financial strength, diplomatic influence and energy resources; while **Pakistan** contributes military manpower, combat experience and nuclear deterrence capabilities.
- **Background:** The agreement emerges amid heightened **West Asian instability following the Gaza conflict**, builds on the **2025 Saudi-Pakistan mutual defence agreement** and existing Türkiye–Pakistan strategic ties, and reflects the members' pursuit of greater **strategic autonomy**.
- **Mutual Defence:** An **armed attack against one member is to be treated as aggression against all three**, creating a collective deterrence mechanism.
- **Defence-Industrial Cooperation:** Promotes **joint military production, technology transfer and localised manufacturing**, combining Türkiye's defence technology with Saudi financial resources to reduce dependence on external arms suppliers.

ARUNACHAL PRADESH

Context

The **Ministry of Home Affairs (MHA)** and **Survey of India** recently updated India's official map to standardise the names of **27 strategic locations in Arunachal Pradesh**, countering China's attempts to assign unilateral names to places in the state.

About Arunachal Pradesh

- **Geographical Identity:** Known as the “**Land of the Dawn-Lit Mountains**”, Arunachal Pradesh is the **largest state in Northeast India by area**, located in the **Eastern Himalayas** and sharing international borders with **Bhutan, Myanmar, and China/Tibet Autonomous Region**.
- **Neighbouring states:** **Assam and Nagaland**
- **Constitutional Evolution:** Formerly the **North-East Frontier Agency (NEFA)**, it was administered under the Ministry of External Affairs until **1972**, became a **Union Territory** in 1972, and attained **full statehood on 20 February 1987** as India's **24th state**.
- **Terrain:** Characterised by rugged Himalayan ranges, deep valleys and high-altitude lakes such as **Sambho Sarovar**; **Kangto (7,090 m)** is identified as its highest peak.

- **River Systems:** Major rivers include the **Siang** (headstream of the Brahmaputra), **Kameng**, **Subansiri**, **Dibang**, and **Lohit**.
- **Tribal Diversity:** Major tribes include **Nyishi**, **Adi**, **Apatani**, **Monpa**, **Mishmi**, **Tagin**, **Tangsa**, **Wancho**, and **Singpho**; important festivals include **Losar**, **Solung**, **Nyokum**, and **Dree**.
- **State Symbols:** **Great Pied Hornbill** – State Bird; **Mithun/Gayal** – State Animal; **Hollong** – State Tree; **Foxtail Orchid** – State Flower.
- **McMahon Line:** The boundary between British India and Tibet was delineated during the **1914 Simla Convention** and is known as the McMahon Line.



Mains Exam Topics

INDIA–BANGLADESH RELATIONS

Context:

Former Bangladesh Prime Minister Sheikh Hasina, in her first media interaction from India since her ouster, reiterated her intention to return to Bangladesh despite ongoing legal proceedings against her. Her remarks have introduced a fresh political strain into India–Bangladesh relations, with Dhaka objecting to the platform provided to the former leader.

How does Bangladesh function simultaneously as India's strategic challenge and logistical gateway to the Northeast?

- **Geographic Leverage and Strategic Dependence:** Bangladesh's location between India's mainland and the Bay of Bengal creates a major logistical advantage for the Northeast while making stable bilateral ties strategically important.
 - E.g., The **Agartala–Chattogram route through Bangladesh is just over 200 km**, compared with roughly 1,600–1,700 km by the conventional route through the Siliguri Corridor to Kolkata, demonstrating the significant distance advantage of Bangladesh-based connectivity.
- **Multimodal Gateway to the Northeast:** Bangladesh provides the infrastructure through which the Northeast can access regional and maritime markets through shorter road, rail, inland-waterway and port routes.
 - E.g., The **Akhaura–Agartala Cross-Border Rail Link**, inaugurated in 2023, connects Tripura with Bangladesh's railway network, while the **Chattogram and Mongla Ports Agreement** facilitates transit cargo between the Northeast and the rest of India.
- **Act East Enabler:** Bangladesh-based connectivity can transform the Northeast from a peripheral border region into a gateway linking India with the Bay of Bengal and Southeast Asian markets.
 - E.g., The **BBIN Motor Vehicles Agreement** provides an institutional framework for facilitating the movement of passenger and cargo vehicles across Bangladesh, Bhutan, India and Nepal, supporting sub-regional connectivity.
- **Strategic Vulnerability:** The Southeast Asian market access enabled by Bangladesh-based connectivity also creates vulnerability because political or security frictions can disrupt border infrastructure and transit arrangements.

- E.g., In 2024–25, objections by Bangladesh's Border Guard Bangladesh (BGB) to **fencing works contributed** to delays in completing feasible stretches of the India–Bangladesh border fence, illustrating how border-management disagreements can affect India's security infrastructure.
- **Security Interdependence:** The densely interconnected India–Bangladesh border creates shared security externalities, making cooperation essential for containing transnational threats affecting the Northeast.
 - E.g., Bilateral mechanisms such as **BSF–BGB Director General-level talks and the Coordinated Border Management Plan** address cross-border crime, smuggling, border violations and information-sharing.

Why has geographical proximity not translated into the full economic potential of India–Bangladesh trade?

- **Border Transaction Costs:** Geographical proximity loses its economic advantage when congestion and inefficient border procedures make short-distance trade costly and unpredictable.
 - E.g., **Petrapole–Benapole**, the principal land port for India–Bangladesh trade, has historically experienced lengthy cargo-clearance and border-crossing times, increasing logistics costs.
- **Policy-Induced Barriers:** Tariffs, para-tariffs and sensitive-list restrictions limit market access even where physical distance is minimal.
 - E.g., Products such as **oranges, pineapples, ginger and turmeric** have faced restrictions under Bangladesh's SAFTA sensitive-list framework, affecting the ability of India's Northeast to exploit its geographical proximity to the Bangladeshi market.
- **Narrow Trade Basket:** Bilateral commerce remains concentrated in a relatively limited range of commodities, restricting the diversification normally expected from two neighbouring economies.
 - E.g., In the **August 2024–January 2025 period**, India's major exports included mineral fuels, cotton, vegetable textile fibres, vegetables and vehicles, while Bangladesh's exports to India remained substantially concentrated in apparel and textile products.
- **Weak Production Linkages:** Because bilateral trade remains concentrated in finished and intermediate commodities, sufficiently deep cross-border production networks have not yet emerged.

- E.g., Bangladesh's garment industry could be more closely linked with Indian **cotton, yarn, chemicals and machinery**, generating repeated intermediate-goods trade rather than predominantly product-based commerce.
- **Institutional Lag Behind Infrastructure:** Physical connectivity has expanded, but customs systems, information flows and regulatory coordination have not advanced at the same pace.
 - E.g., The World Bank has identified **limited information on non-tariff measures and inadequate modern trade-facilitation systems** as constraints on deeper India–Bangladesh and wider South Asian trade.
- **Northeast Value-Chain Exclusion:** Despite proximity to Bangladesh, the Northeast has not been sufficiently integrated into cross-border agricultural and manufacturing value chains.
 - E.g., **Fruits, spices and other agricultural products from the Northeast** have identifiable market opportunities in Bangladesh, but border restrictions and weak logistics prevent these sectors from fully exploiting that proximity advantage.

Way Forward

- **Build an Eastern Multimodal Corridor:** Integrate existing road, rail, waterway and port infrastructure into a seamless corridor connecting the Northeast with Bangladesh and the Bay of Bengal.
 - E.g., Build on the **Akhaura–Agartala rail link, Khulna–Mongla rail line and inland-waterway network** to create predictable multimodal cargo routes.
- **Reduce the Border Penalty:** Make customs efficiency and trade facilitation as important as physical infrastructure in bilateral economic integration.
 - E.g., Introduce **single-window clearance, electronic documentation, risk-based inspection and coordinated border procedures** at Petrapole–Benapole and other major land ports.
- **Build Regional Value Chains:** Move beyond commodity trade towards complementary production networks that generate sustained two-way commerce.
 - E.g., Link Indian **cotton, yarn, chemicals and machinery** with Bangladesh's garment industry, while integrating Northeastern agro-processing with Bangladeshi distribution networks.

- **Integrate the Northeast into Trade Networks:** Ensure that Bangladesh-based connectivity generates production and employment within the Northeast rather than merely making it a transit region.
 - **E.g.,** Develop **agro-processing, cold-chain and logistics clusters** around Tripura, Assam, Meghalaya and Mizoram, using Bangladesh's transport network to access larger regional markets.
- **Deepen Economic Interdependence:** Expand sectors where cooperation creates durable mutual economic stakes beyond merchandise trade.
 - **E.g.,** Build on **cross-border electricity trade and the 1,320 MW Maitree Super Thermal Power Project** to expand cooperation in energy, logistics and other complementary sectors.
- **Maintain Strategic Redundancy:** Use Bangladesh as a major eastern gateway while preserving alternative connectivity routes for the Northeast.
 - **E.g.,** Strengthen **specific alternative infrastructure such as the Siliguri Corridor and Northeast rail network**, alongside Bay of Bengal maritime connectivity, so that Bangladesh-based transit remains an advantage rather than a single-point dependency.
- **Institutionalise Political Trust:** Protect long-term connectivity and economic cooperation from bilateral frictions through sustained institutional engagement.
 - **E.g.,** Use existing mechanisms on **transboundary rivers, border management, trade and security**, while expanding **border haats** to strengthen local economic interdependence and people-to-people contact.