DAILY CURRENT AFFAIRS 18-10-2025

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Exercise Samudra Shakti

Syllabus: GS-2; International Relations – Prelims Bits.

Context:

The Indian Navy is hosting the fifth edition of the Indo–Indonesian bilateral maritime exercise "Samudra Shakti–2025" at Visakhapatnam.

Background

- Initiated in 2018
- Partners: India and Indonesia
- Framework: Part of India's **Act East Policy** and **Indo-Pacific vision**
- Objective: Strengthen naval cooperation, interoperability, and maritime security in the Indo-Pacific

Key Features

- Type: Bilateral maritime exercise
- Venue (2025): Visakhapatnam
- Participants: Indian Navy and Indonesian Navy
- Focus Areas:
    - Military Interdiction Operations (MIO)
    - Cross Deck Landings
    - Air Defence Drills
    - Practice Weapon Firings
    - Replenishment Approaches
    - Tactical Manoeuvres

Objectives

- Enhance operational coordination in maritime operations
- Strengthen defence cooperation and strategic trust
- Reaffirm commitment to peace, security, and stability in the Indo-Pacific region
- Promote interoperability between the two navies

Significance

- Strengthens maritime partnership between two key Indian Ocean nations
- Supports freedom of navigation and a rules-based maritime order

- Reinforces India's strategic outreach under the Act East Policy
- Boosts preparedness for joint humanitarian and disaster relief (HADR) and anti-piracy operations

Other India–Indonesia Military Engagements

Exercise	Forces Involved	Focus Area
Garuda Shakti	Army	Counter-terrorism and jungle warfare training
IND-INDO CORPAT	Navy	Coordinated patrol in Andaman Sea and Malacca Strait for maritime security and surveillance
Samudra Shakti	Navy	Maritime interoperability and operational coordination

Broader Strategic Context

- Both nations are archipelagic democracies and Indo-Pacific partners
- Located near the strategic Malacca Strait, crucial for global trade and energy routes
- Cooperation contributes to ASEAN–India maritime partnership and regional stability

Euthanasia

Syllabus: GS-2: Article -21 & Laws and Policies. & GS-4: Applied Ethics

Context:

The renewed discussion in the **United Kingdom** on the *Terminally Ill Adults (End of Life) Bill, 2025* has once again drawn international attention to the **ethics of dying**.

In the Indian context, the issue is **not about permitting active euthanasia**, but about **reforming the existing legal framework** to make it **compassionate, transparent, and practically implementable**.

What is Passive Euthanasia?

- **Definition:** Passive euthanasia refers to the **discontinuation or non-initiation of life-sustaining treatment** for patients suffering from terminal illness where recovery is medically impossible, allowing **death to occur naturally**.
- **Purpose:** It seeks to uphold the **right to die with dignity** and to avoid **unnecessary and prolonged suffering** in irreversible medical conditions.

Legal Evolution in India

Before 2011

- Euthanasia lacked legal recognition, and **attempted suicide** was a punishable offence under **Section 309 of the Indian Penal Code (IPC)**.

Aruna Shanbaug v. Union of India (2011)

- The Supreme Court acknowledged **passive euthanasia** under **judicial oversight**.
- Permitted withdrawal of life support in **exceptional circumstances** subject to **High Court approval**.
- Differentiated between:
    - **Active euthanasia:** Directly causing death (illegal).
    - **Passive euthanasia:** Allowing death by withholding treatment (conditionally permissible).
- Declared that **a life devoid of dignity** is not safeguarded under Article 21.

Common Cause v. Union of India (2018)

- Recognised **the right to die with dignity** as an **integral component of Article 21**.
- Validated the use of **Advance Medical Directives (Living Wills)**.
- Prescribed a **structured procedural framework** for implementing passive euthanasia.

Existing Procedure (as per 2018 Guidelines; simplified in 2023)

Advance Directive (Living Will)

- Any **competent adult** may record a *living will* expressing when life support should be discontinued.
- It must be:
    - Signed in the presence of **two witnesses**, and
    - **Attested by a Judicial Magistrate of the First Class (JMFC).**

Medical Review Mechanism

- **Primary Board:** Comprises three senior doctors from the treating hospital who certify that the condition is irreversible.
- **Secondary Board:** Formed by the **Chief Medical Officer (CMO)** of the district to review the decision.

Magisterial Role

- The **JMFC** verifies the authenticity of both the living will and the medical opinions before authorising withdrawal of life support.

In Absence of a Living Will

- Family members, close relatives, or treating doctors may approach the court to seek permission under the same two-tier medical review.

Revisions in 2023 (SC Order)

- **Eliminated** the requirement for **district collector approval**.
- **Empowered hospital ethics committees** to approve decisions more efficiently.
- Retained the **double medical-board evaluation** to prevent misuse.

Challenges in the Current System

- **Administrative delays:** Lengthy approval processes hinder timely relief.
- **Low public and professional awareness:** Many citizens and healthcare practitioners are unaware of the legal mechanisms.
- **Moral and emotional conflict:** Families often face internal dilemmas between guilt, faith, and financial strain.
- **Institutional gaps:** Several hospitals lack the necessary ethics committees.
- **Fear of prosecution:** Doctors remain cautious due to possible charges under **IPC Section 309** or **medical negligence laws**.

Ethical and Constitutional Dimensions

- **Constitutional perspective (Article 21):** The right to life encompasses the **freedom from inhumane or undignified suffering**.
- **Ethical principles involved:**
  - **Autonomy:** Respecting an individual's right to make personal health decisions.
  - **Non-maleficence:** Avoiding unnecessary harm and suffering.
- **Judicial prudence:** Courts maintain a careful distinction between *allowing death* and *causing death*.
- **Cultural aspect:** Indian traditions view death as a **natural and inevitable phase**, encouraging conscious acceptance.
- **State responsibility (Article 47):** The government is constitutionally obligated to ensure **palliative and end-of-life care** as part of public health.

Comparative Insights

- **Global experience:** Countries such as the **Netherlands** and **the U.K.** have legalised euthanasia, supported by robust healthcare and regulatory systems.
- **Indian context:** Rather than replicating foreign models, India must focus on **simplifying procedures**, ensuring **ethical integrity**, and **strengthening institutional mechanisms**.
- The goal should be a **measured approach**—blending **compassion with caution**.

Proposed Reforms

Digital Advance Directives

- Develop a **National Euthanasia Portal** integrated with **Aadhaar** for online registration and authentication of living wills.
- Allow citizens to **create, modify, or revoke directives** digitally, certified by a medical practitioner to confirm mental soundness.
- This would reduce paperwork and minimise judicial dependence.

Institutional Ethics Committees

- Mandate **ethics committees** in all hospitals, including senior doctors, palliative care experts, and an independent representative.
- Empower them to approve or reject life-support withdrawal requests within **48 hours**, ensuring both efficiency and accountability.

Transparent Oversight

- Replace the single-ombudsman system with **state-level health commissioners** or **digital monitoring dashboards**.
- Conduct **random audits** and publish annual reports to strengthen public confidence.

Safeguards and Checks

- Introduce a **7-day reflection period** with **mandatory counselling** for patients and families.
- Require review by **palliative-care professionals** to ensure informed and voluntary consent, safeguarding against coercion.

Training and Awareness

- Incorporate **end-of-life ethics** into medical and nursing education.
- Organise **nationwide awareness campaigns** on living wills and palliative options.
- Encourage **community-level dialogues** through local health institutions and NGOs.

Conclusion

India's journey on euthanasia should aim not at **legalising death**, but at **humanising the process of dying**.

By leveraging **digital systems**, **ethical institutional mechanisms**, and **public awareness**, the nation can transform passive euthanasia from a **legal abstraction** into a **humane, accessible, and constitutionally sound reality**.

Astra Mark 2 Missile

Syllabus:GS-3: Science and Technology – Defence Technology.

Context:

- The **Defence Research and Development Organisation (DRDO)** has announced plans to **extend the range of the Astra Mark 2 air-to-air missile beyond 200 km**, significantly enhancing India's air combat capability.

About Astra Mark 2 Missile

- **Type:** Beyond Visual Range (BVR) **Air-to-Air Missile (AAM)**
- **Developed by:DRDO** in collaboration with over **50 public and private industries**, including **Hindustan Aeronautics Limited (HAL)**.
- **Purpose:** Designed to **engage and destroy highly manoeuvrable aerial targets** beyond the pilot's visual range.

Development Background

- The **Astra missile series** is India's first indigenously developed BVR air-to-air missile program.
- The **Astra Mark 1**, with a strike range of 90–110 km, is already **inducted into the Indian Air Force (IAF)** and **integrated with Su-30MKI** and **LCA Tejas** fighter aircraft.
- The **Astra Mark 2** represents a **technological leap**, offering greater range, accuracy, and kill probability.

Key Features of Astra Mark 2

Feature	**Details**
Range	150–180 km (planned extension to **200+ km**)
Speed	Up to **Mach 4.5**
Motor Type	**Dual-pulse solid rocket motor** (unlike Mk-1's single pulse) – provides extended range and sustained propulsion
Seeker	**Indigenous Radio Frequency (RF) Seeker** for target acquisition and tracking
Guidance System	Combination of **inertial navigation system (INS)** with **mid-course updates** and **active radar terminal guidance**
Dimensions	Length – ~3.8 m; Diameter – 190 mm; Weight – ~175 kg
Launch Platforms	Designed for integration with **Su-30MKI**, **Tejas Mk-1A**, **MiG-29**, and **Rafale** (in future)

Feature	Details
Propulsion	**Smokeless solid fuel** to reduce visibility during launch

Significance

- Enhances **IAF's long-range air dominance** and **BVR engagement capability**.
- Strengthens India's **Atmanirbhar Bharat** and **Make in India** initiatives in defence manufacturing.
- Offers **export potential** to friendly nations, boosting India's status as a **defence exporter**.
- Counters modern air threats from **China's PL-15** and **Pakistan's AMRAAM**-equipped aircraft.

Comparative Insight

Missile	Country	Range (km)
AIM-120D AMRAAM	USA	160–180
PL-15	China	200–300
Astra Mark 2	India	150–200+

Way Forward

- Development of **Astra Mark 3** (Solid Fuel Ducted Ramjet – SFDR variant) underway, targeting **350+ km range**.
- Continued focus on **indigenous seeker technologies** and **modular integration** across multiple aircraft platforms.

Conclusion

The **Astra Mark 2** marks a **strategic milestone in India's missile self-reliance**, bridging the technological gap with global BVR missile systems. Its enhanced range, indigenous design, and export potential position it as a key enabler of India's **air superiority and defence industrial base**.

Lagocheilus hayaomiyazakii

Syllabus: GS-3: Wildlife – Species in News.

Context:

A new species of land snail, *Lagocheilushayaomiyazakii*, has been recently discovered in **Mizoram, India** by scientists from the Zoological Survey of India (ZSI). This discovery highlights the rich **malacofaunal (mollusk) diversity** of the Indo-Burma biodiversity hotspot.

About Lagocheilushayaomiyazakii

- **Scientific name:***Lagocheilushayaomiyazakii*
- **Genus:***Lagocheilus*
- **Family:**Cyclophoridae
- **Type:** Terrestrial operculate land snail
- **Discovered in:** Mizoram, India
- **Discovered by:** Scientists from the Zoological Survey of India (ZSI)

Key Characteristics

- **Habitat:**
  - Found in **moist, forested regions** of Mizoram, typically under leaf litter and decaying logs.
  - Prefers **humid subtropical conditions**.
- **Physical Features:**
  - Possesses a **spiral shell** with distinctive **fine sculpture and coiling pattern**.
  - The **shell aperture** is guarded by an **operculum**, a hard plate that closes the shell opening — a key trait of Cyclophoridae family.
- **Ecological Role:**
  - Acts as a **decomposer**, aiding in nutrient cycling in forest ecosystems.
  - Serves as an **indicator of ecosystem health** due to its sensitivity to microclimatic changes.

Naming Significance

- The species has been named *Lagocheilushayaomiyazakii* in **honour of Japanese malacologist H. Miyazaki**, for his contributions to snail taxonomy and systematics in Southeast Asia.

Distribution and Importance

- The discovery extends the known distribution range of the **genus *Lagocheilus*** to **India**, as earlier it was largely reported from **Southeast Asian countries** such as Thailand, Myanmar, and Malaysia.
- It strengthens India's position within the **Indo-Burma biodiversity hotspot**, one of the **world's 36 biodiversity hotspots**.

Conservation Significance

- Highlights the **need for detailed faunal surveys** in the Northeastern states, many of which are underexplored.
- Discovery underscores the **ecological importance of conserving forest microhabitats** in the region.

Zoological Survey of India (ZSI)

- **Established:** 1916
- **Headquarters:** Kolkata
- **Mandate:** Exploration, research, and documentation of India's faunal diversity.
- Plays a crucial role in discovering and cataloguing new species from India's rich ecosystems.

Impatiens Rajibiana

Syllabus: GS-3: Wildlife – Species in News.

Context:

A team from the *Botanical Survey of India (BSI)* has discovered a new species of balsam flower, **Impatiens rajibiana**, in Arunachal Pradesh.

About Impatiens rajibiana

- **What it is:**A newly identified species of *balsam flower* belonging to the genus *Impatiens* (family **Balsaminaceae**).
- **Discovery site:**Found in the **natural forests of Shergaon**, *West Kameng district*, **Arunachal Pradesh**.
- **Habitat:**
  - Grows in **moist, shaded forest areas** at elevations above **2,000 metres**.
  - Prefers cool, humid, and high-altitude environments typical of Eastern Himalayan forests.
- **Taxonomic details:**
  - **Family:**Balsaminaceae
  - **Genus:***Impatiens*
  - **Common name:** Balsam / Touch-me-not
- **Endemism and ecological importance:**
  - Many balsam species are **endemic** to the Eastern Himalayas, existing in **small, isolated populations**.
  - They play an important role in **forest ecology** as nectar sources for insects and birds.

Balsam Diversity in India

- India hosts around **230 known species** of *Impatiens*.
- Arunachal Pradesh is a hotspot of balsam diversity.
- Between **2013–2017**, at least **16 new species** were discovered from the state, including:
    - *Impatiens godfreyi*
    - *Impatiens sashinborthakurii*

Significance of the Discovery

- Highlights the **rich floral biodiversity** of Arunachal Pradesh.
- Reinforces the need for **continued botanical surveys** in unexplored Himalayan regions.
- Adds to the documentation of **endemic Himalayan flora**, important for conservation planning.