

WEEKLY DIGEST

SEPTEMBER 2025

WEEK - 1

STAY INFORMED,
STAY CONNECTED.

www.newsupsc.com

TABLE OF CONTENTS

1. **SCO SUMMIT 2025**
2. **VRINDAVANI VASTRA**
3. **EDUCATE GIRLS WINS 2025 RAMAN MAGSAYSAY AWARD**
4. **VIKRAM 32-BIT PROCESSOR**
5. **THE GLOBAL PEACE INDEX 2025**
6. **SELF-RESPECT MOVEMENT**
7. **2D MATERIALS**
8. **THE RAJASTHAN COACHING CENTRES (CONTROL & REGULATION) BILL 2025**
9. **DR. SARVEPALLI RADHAKRISHNAN**
10. **STRAIT OF MALACCA**



educate girls

ORIGINALS

UNVEILS FIRST INDI
PROCESSOR 'VIKRA

VIKRAM 3201
200LVCMGA2
2124S01
SCL VSSC

P-1

SCO SUMMIT 2025

CONTEXT

The 25th Shanghai Cooperation Organization (SCO) Summit, hosted in Tianjin, China, unfolded from August 31 to September 1, 2025. Chaired by President Xi Jinping, it marked the largest gathering in the SCO's history—with more than 20 heads of state and leaders of 10 international organizations in attendance.



ABOUT SHANGHAI COOPERATION ORGANIZATION (SCO)

- The Shanghai Cooperation Organization (SCO) was officially established in 2001 by China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan.
- Its origins trace back to 1996, when China, Russia, Kazakhstan, Kyrgyzstan, and Tajikistan formed the "Shanghai Five"—a regional framework aimed at building mutual trust and promoting security cooperation.
- With the inclusion of Uzbekistan in 2001, the group was renamed the SCO, marking the beginning of broader collaboration across security, trade, and regional stability.
- The organization expanded significantly in 2017, when India and Pakistan became full members, bringing new strategic dimensions and diversity to the bloc.
- Iran followed as a full member in July 2023, and Belarus joined in July 2024. In addition to these ten full members, the SCO engages with 16 other countries as observers or dialogue partners.
- Today, the SCO is recognized as the world's largest regional organization by geographical coverage and population.
- The Shanghai Spirit is the core value of the SCO.

- The SCO aims to promote cooperation and mutual support in areas such as trade, investment, energy, transportation, and security.
- It is about mutual trust, mutual benefit, equality, consultation, respect for cultural diversity, and the pursuit of common development among the SCO members.
- The official working language of the SCO Secretariat is Russian and Chinese.
- The main objectives of SCO are:
 - Strengthen relations among member states.
 - Promote cooperation in political affairs, economics, and trade, scientific-technical, cultural, and educational spheres as well as in energy, transportation, tourism, and environmental protection.
 - Safeguard regional peace, security, and stability.
 - Create a democratic, equitable international political and economic order.
- SCO spans approximately 24% of the Earth's land area (covering around 65% of Eurasia) and represents close to 42% of the global population.

HIGHLIGHTS OF SCO SUMMIT 2025

- Host Country: China, marking its fifth time hosting the SCO Summit.
- Summit Theme: “Upholding the Shanghai Spirit: SCO on the Move.”
- Major Focus Areas:
 - Adoption of a comprehensive 10-year development strategy (2025–2035).
 - Reflection on 25 years of SCO accomplishments and progress.
 - Regional security and intensified counter-terrorism cooperation.
 - Strengthening of trade, energy partnerships, and connectivity initiatives.
 - Renewed emphasis on sustainable development and climate action.
- Participation: Over 20 heads of state and 10 leaders of international organizations attended the summit.
- The SCO Summit 2025 witnessed participation from member states including India, China, Russia, Pakistan, and Central Asian countries. Discussions focused on counter-terrorism, trade, climate change, energy security, and the role of technology in shaping the global economy.
- Strengthening regional security
- Boosting trade and connectivity
- Enhancing cooperation in energy and digital technology
- Addressing climate and sustainable development

VRINDAVANI VASTRA

CONTEXT

In a landmark cultural development, the British Museum has agreed to return the Vrindavani Vastra, a 16th-century silk textile masterpiece, to Assam on an 18-month loan for a high-profile exhibition in 2027.



ABOUT VRINDAVANI VASTRA

- The Vrindavani Vastra is a sacred silk textile woven in Assam during the 16th century.
- It depicts childhood stories and divine pastimes of Lord Krishna in Vrindavan, intricately woven into the fabric using threads.
- The work was created under the guidance of Srimanta Sankardeva, a key figure in the Vaishnavite movement of Assam.
- Originally woven as 15 individual panels, it was later assembled into a single textile measuring 937 cm by 231 cm.
- The tapestry vividly portrays scenes from Lord Krishna's life in Vrindavan, along with various mythological motifs.
- The textile was commissioned by Koch king Nara Narayan, who ruled parts of present-day Assam and West Bengal.
- King Nara Narayan had offered refuge to Sankardeva after the saint faced persecution by the Ahom kingdom, allegedly at the behest of Brahmin priests.
- The Vastra reflects the rich tradition of Assamese weaving and incorporates artistic elements from diverse traditions.
- The textile journeyed from Assam to Tibet, before eventually being acquired by the British Museum in 1904.
- The piece currently held by the British Museum is 9.5 metres long, assembled from multiple silk drapes, and originally featured 15 separate panels.
- Celebrated as a masterpiece of sacred art, the Vrindavani Vastra holds immense religious, cultural, and historical significance, especially within Assamese Vaishnavism.

EDUCATE GIRLS WINS 2025 RAMAN MAGSAYSAY AWARD

CONTEXT

Educate Girls, an Indian NGO working to bring out-of-school girls into classrooms, has won the 2025 Ramon Magsaysay Award.

It is the first Indian organisation (not individual) to be honoured with this award, often called the “Asia’s Nobel Prize”.



ABOUT RAMAN MAGSAYSAY AWARD

- It is often called "Nobel Prize of Asia".
- It is the continent’s most prestigious award, given annually for outstanding courage, integrity, and selfless service to the people.
- It was established in 1957 by the Rockefeller Brothers Fund, in memory of Philippine President Ramon Magsaysay, who died in a plane crash that same year.
- Eligibility: It is open to individuals and organisations across Asia who demonstrate “greatness of spirit” through dedicated and impactful public service.
- The award recognizes and honors individuals and organizations in Asia regardless of race, creed, sex, or nationality, who have achieved distinction in their respective fields and have helped others generously without anticipating public recognition.
- Award Components: Recipients receive a medallion bearing Magsaysay’s image, a certificate, and a cash prize.

ABOUT EDUCATE GIRLS NGO:

- Full Name: Foundation to Educate Girls Globally, commonly known as Educate Girls.
- Founded: In 2007 by Safeena Husain, an alumna of the London School of Economics.
- Mission: To end the cycle of illiteracy and poverty by engaging communities and working with governments to promote girls’ education in rural and underserved areas.
- Motto: “One girl at a time.”

- **Key Initiatives & Activities**

- **Community Engagement:**

- Identifies out-of-school girls, ensures their enrolment, and supports their retention in schools.

- **Government Collaboration:**

- Works closely with state governments to expand and scale its education initiatives.

- **Innovative Financing:**

- In 2015, pioneered the world's first Development Impact Bond (DIB) in education to fund measurable outcomes.

- **Pragati Programme:**

- Aimed at young women (ages 15–29), helping them complete their secondary education through open schooling pathways.

- **Impact**

- Active in over 30,000 villages
- Has supported the education of more than 2 million girls
- Achieved a >90% school retention rate



VIKRAM 32-BIT PROCESSOR

CONTEXT

At Semicon India 2025, the Prime Minister of India unveiled the country's first indigenously developed semiconductor — the 'Vikram' 32-bit processor, marking a significant milestone in India's pursuit of self-reliance in semiconductor technology.



ABOUT VIKRAM 32-BIT PROCESSOR (VIKRAM3201)

- The VIKRAM3201 is a 32-bit processor, proudly recognized as India's first indigenously designed semiconductor chip.
- It is engineered for high-performance applications across space, defence, and other advanced technology sectors.
- Developed By: Created by ISRO's Semiconductor Laboratory (SCL) in Mohali, Punjab, under the framework of the India Semiconductor Mission, launched in 2021.
- Purpose & Objectives
 - Reduce reliance on imported semiconductor components.
 - Strengthen India's strategic and technological self-reliance.
 - Enable indigenous solutions for aerospace, defence, automotive, and high-reliability energy systems

Key Features

- 32-bit architecture suitable for complex, mission-critical applications.
- Built to withstand extreme conditions, such as those experienced in space missions and launch vehicles.
- Designed for use in defence, aerospace, automotive, and industrial electronics.
- Supports next-generation technologies including:
 - mRNA-based medical innovations
 - Immersive technologies
 - Digital security infrastructure
 - (in alignment with broader ISRO and Semiconductor Mission goals)

THE GLOBAL PEACE INDEX 2025

CONTEXT

In the Global Peace Index (GPI) 2025, Iceland retained its position as the most peaceful country, while India ranked 115th out of 163 countries, showing a slight improvement in its overall peace score.



ABOUT GLOBAL PEACE INDEX (GPI)

- An annual ranking that evaluates the peacefulness of nations worldwide.
- It covers 163 countries and territories, accounting for 99.7% of the global population.
- Published By:
 - The Institute for Economics and Peace (IEP) — a global think tank based in Sydney, Australia.
- Assessment Criteria
 - The GPI is based on 23 indicators, grouped into three key domains:
 - Societal Safety and Security
 - Includes factors like crime rates, political stability, and the impact of refugees and displaced persons.
 - Ongoing Domestic and International Conflict
 - Assesses levels of war, terrorism, civil unrest, and other forms of conflict.
 - Militarisation
 - Measures aspects such as military spending, arms trade, and the number of armed forces personnel.

Global Peace Index 2025 – Trends and Rankings

- Most Peaceful Countries:
 - Iceland retained the top spot, followed by Ireland, New Zealand, Finland, Austria, Switzerland, Singapore, Portugal, Denmark, and Slovenia.
- Least Peaceful Nations:
 - Countries at the bottom of the index include Russia, Ukraine, Sudan, the Democratic Republic of the Congo, and Yemen.



Regional Insights

- Europe continues to dominate the upper rankings, with multiple countries in the top 10.
- South America showed notable improvements, particularly in Argentina and Peru.
- Sub-Saharan Africa and the Middle East remain the least peaceful regions globally

India in the Global Peace Index 2025

- Rank & Score:
 - India is ranked 115th out of 163 countries, with a peace score of 2.229.
 - This marks a 0.58% improvement compared to the previous year.
- Positive Developments:
 - Reduction in domestic violence and local disputes
 - Improved societal stability contributed to the overall rise in peacefulness.
- Ongoing Challenges:
 - High levels of militarisation
 - Persistent cross-border tensions
 - Occasional internal unrest and disturbances

SELF-RESPECT MOVEMENT

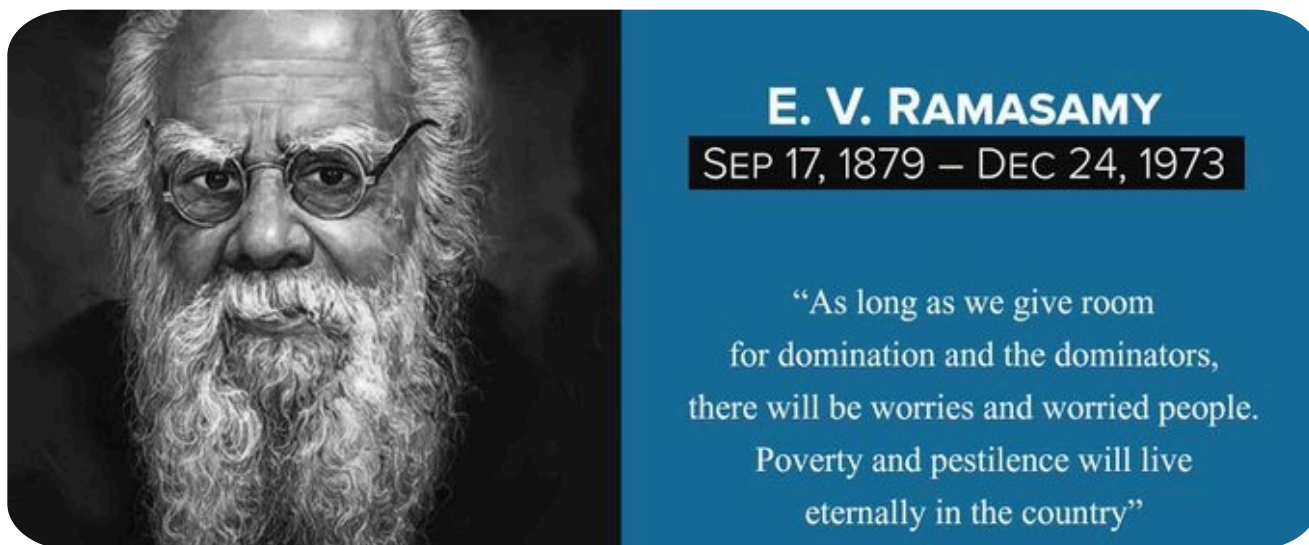
CONTEXT

The year 2025 marks the centenary of the Self-Respect Movement, which was launched in 1925 in Tamil Nadu by Periyar E.V. Ramasamy.



ABOUT THE SELF-RESPECT MOVEMENT

- A radical social reform movement that challenged caste-based oppression, patriarchy, and religious orthodoxy.
- It promoted rationalism, individual dignity, and equality, rejecting ritualism and social hierarchy.
- Launched: In 1925 in Tamil Nadu, through the Tamil weekly Kudi Arasu (The Republic).
- Key Leader:
 - E.V. Ramasamy (Periyar) – Founder and primary ideologue.
 - He was influenced by earlier reformers like Iyothee Thass, Jyotirao Phule, and B.R. Ambedkar.
- Political Support & Evolution:
 - Initially supported by the Justice Party, the movement later evolved into the Dravidar Kazhagam, forming the ideological base of the Dravidian movement.
- Objectives
 - Eliminate caste discrimination and Brahmanical dominance
 - Promote self-respect, social equality, and gender justice
 - Shift reform efforts from elite non-Brahmins to the common masses



Key Features

- Advocated self-respect marriages — conducted without priests or caste-based rituals
- Championed women's rights:
 - Widow remarriage
 - Right to divorce
 - Property and abortion rights
- Encouraged inter-caste marriages and gender equality
- Strongly opposed religion, superstition, and patriarchal norms
- Rejected the Congress Party's religion-infused nationalism and Gandhian conservatism
- Emphasised Dravidian identity and rationalist ideology

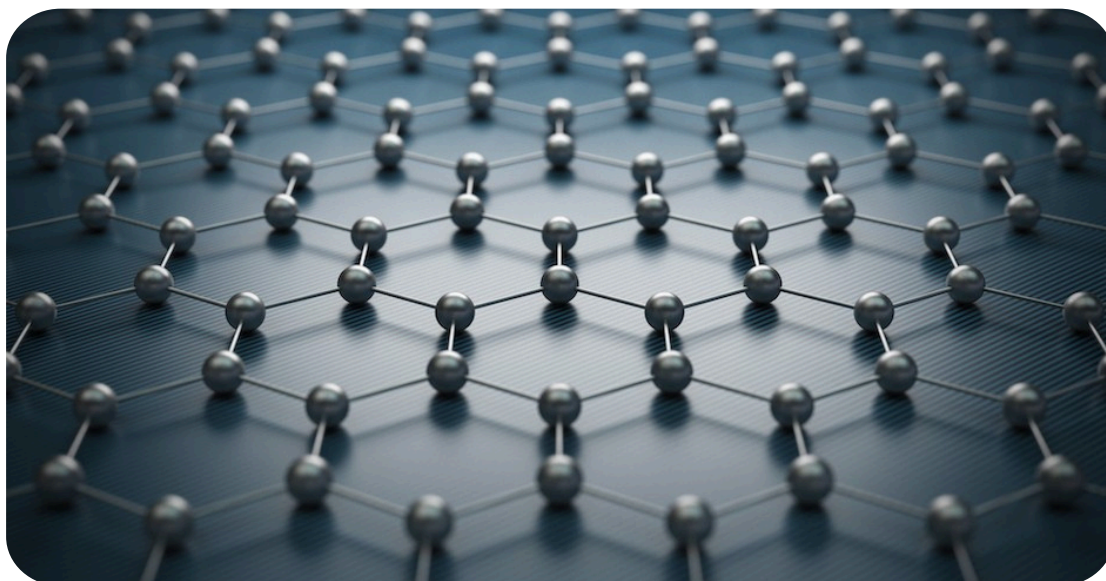
Significance

- Empowered the non-Brahmin masses with dignity, awareness, and political consciousness
- Laid the groundwork for Dravidian politics and welfare-centric governance in Tamil Nadu

2D MATERIALS

CONTEXT

The Frontier Tech Hub of NITI Aayog, in partnership with IISc Bengaluru, has released the 4th edition of its Future Front Quarterly Insights, titled “Introduction to 2D Materials”. The report highlights the importance of 2D materials and emphasizes why India should prioritise their development and research.



ABOUT 2D MATERIALS

- 2D materials are ultra-thin substances that are just one atom thick—thinner than anything we typically encounter.
- Examples include graphene, molybdenum disulfide (MoS_2), and tungsten disulfide (WS_2).
- Structure: These materials are flat like a sheet of paper, but at the atomic scale, giving them unique properties not found in conventional 3D materials.
- Discovery: First isolated in 2004, when researchers used adhesive tape to peel graphene from graphite.
- This breakthrough earned the 2010 Nobel Prize in Physics.
- Types:
 - Graphene – Pure carbon in a hexagonal lattice
 - TMDCs – Transition Metal Dichalcogenides like MoS_2 and WS_2
 - Hexagonal Boron Nitride (h-BN)
 - Xenes – New 2D forms of elements like silicene, germanene, etc.

How Do They Work?

- Their extreme thinness allows electrons to move with minimal resistance, making devices faster and cooler.
- Sheets are strongly bonded internally, but layers are loosely stacked, making them easy to isolate.
- Their electronic properties (like the band gap) can be tuned, which is essential for making advanced chips.
- Highly sensitive to surroundings, making them ideal for sensors.
- Exhibit quantum phenomena (e.g., spin–valley coupling) — key to future quantum computing.

Key Properties

- Exceptional Conductivity:
 - Graphene conducts electricity better than copper and dissipates heat efficiently.
- Extraordinary Strength:
 - Around 200 times stronger than steel yet flexible and can stretch up to 20%.
- Semiconductor Potential:
 - Can be engineered for next-gen chips beyond traditional silicon.
- Quantum Compatibility:
 - Can host qubits for quantum technologies.
- Flexible & Transparent:
 - Perfect for foldable devices, wearables, and transparent electronics.

Applications:

- Semiconductors:
 - Atom-thin transistors (like MoS₂, WS₂) can outperform silicon, extending Moore's Law into the angstrom scale.
- Neuromorphic Computing:
 - Ultra-thin memristors that replicate brain-like synapses, enabling efficient AI hardware.
- Optoelectronics:
 - Tunable materials for photodetectors, LEDs, and solar cells that are ultra-light and efficient.
- Advanced Materials:
 - Graphene composites used in aerospace, water purification, protective coatings, batteries, and EV supercapacitors.

THE RAJASTHAN COACHING CENTRES (CONTROL & REGULATION) BILL 2025

CONTEXT

The Rajasthan Assembly has passed the Rajasthan Coaching Centres (Control and Regulation) Bill, 2025, aimed at bringing oversight to the state's coaching industry. The move comes in response to increasing student suicides and the intensifying commercialization of coaching centres.



ABOUT THE RAJASTHAN COACHING CENTRES (CONTROL AND REGULATION) BILL 2025

- A state-level law introduced to regulate coaching centres in Rajasthan through mandatory registration, regular monitoring, and compliance measures.
- The primary aim is to protect student welfare, reduce academic stress, and ensure greater accountability in the coaching sector.

Key Provisions of the Bill

- **Regulatory Authority:** A dedicated oversight body will be established, comprising government officials, doctors, parents, and police representatives, to monitor coaching institutes.
- **Mandatory Registration:**
 - Coaching centres with over 100 students must register and comply with minimum operational standards.
- **Improved Infrastructure & Teaching:**
 - Adequate space per student is required
 - Only qualified teachers may be employed
 - Misleading claims about exam ranks or guaranteed marks are strictly prohibited
- **Student Well-being Focus:**
 - Classes limited to a maximum of 5 hours per day
 - Weekly holidays mandatory for both students and teachers
 - Access to counselling and mental health support must be provided
- **Penalties for Non-Compliance:**
 - Fines ranging from ₹50,000 to ₹2 lakh for violations
 - Repeat offenders risk cancellation of registration/license
- **Broader Perspective:** While prioritising student safety and mental health, the law also acknowledges the economic and employment significance of the coaching sector in the state.

DR. SARVEPALLI RADHAKRISHNAN

CONTEXT

On September 5, 2025, President Droupadi Murmu honored Dr. Sarvepalli Radhakrishnan by laying floral tributes at Rashtrapati Bhavan, commemorating his birth anniversary, which is also observed as Teacher's Day in India.

ABOUT DR. SARVEPALLI RADHAKRISHNAN

- Born on September 5, 1888, in Tirutani, Andhra Pradesh, Radhakrishnan was a celebrated philosopher, scholar, educator, and statesman.
- He served as India's second President (1962–1967) and the first Vice President (1952–1962).

Academic and Professional Journey

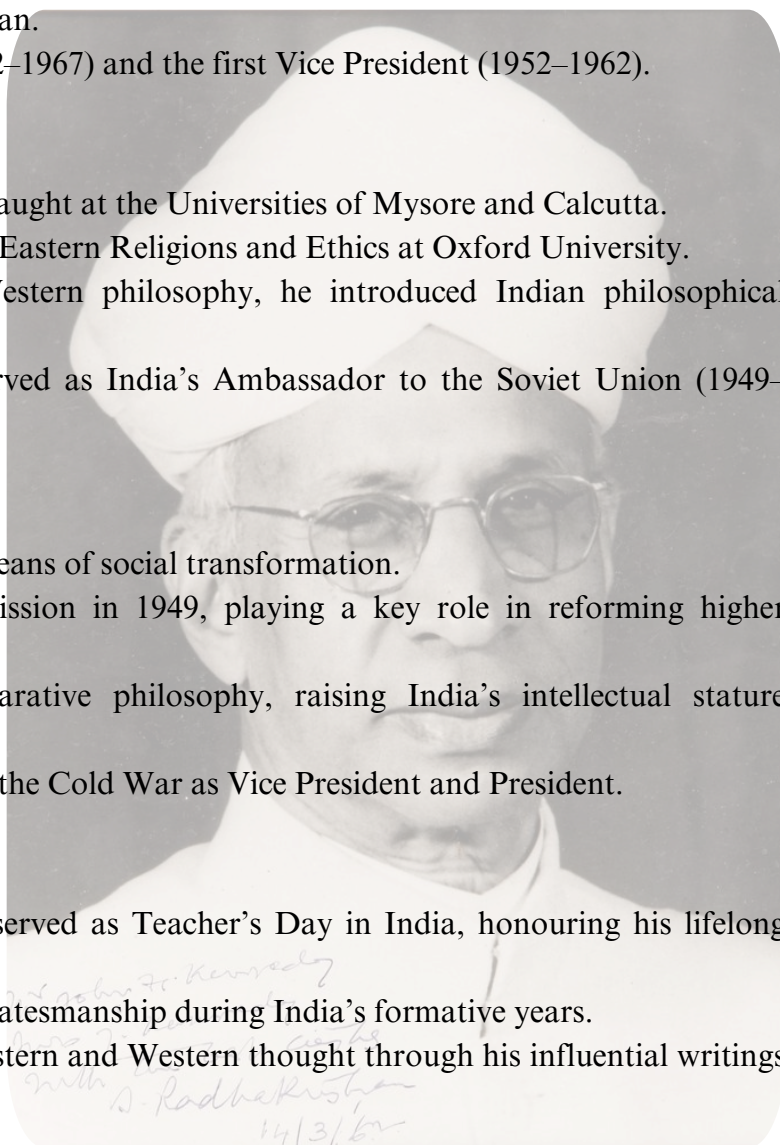
- Educated at Madras Christian College, he taught at the Universities of Mysore and Calcutta.
- Later, he became the Spalding Professor of Eastern Religions and Ethics at Oxford University.
- Renowned for connecting Indian and Western philosophy, he introduced Indian philosophical thought to the global community.
- Before holding top political offices, he served as India's Ambassador to the Soviet Union (1949–1952).

Contributions to India

- A passionate advocate for education as a means of social transformation.
- Chaired the University Education Commission in 1949, playing a key role in reforming higher education in independent India.
- Promoted religious pluralism and comparative philosophy, raising India's intellectual stature internationally.
- Provided leadership during critical years of the Cold War as Vice President and President.

Legacy and Significance

- His birth anniversary (September 5) is observed as Teacher's Day in India, honouring his lifelong commitment to education.
- Revered for his wisdom, scholarship, and statesmanship during India's formative years.
- Recognized as a bridge-builder between Eastern and Western thought through his influential writings on Vedanta and comparative religion.



STRAIT OF MALACCA

CONTEXT

Recently, India gained Singapore's backing for its interests in conducting patrols in the Malacca Strait.



ABOUT THE STRAIT OF MALACCA

- The Strait of Malacca connects the Andaman Sea (part of the Indian Ocean) to the South China Sea (part of the Pacific Ocean).
- It lies between the Indonesian island of Sumatra to the west and peninsular Malaysia and southern Thailand to the east.
- The strait's name comes from the Malacca Sultanate, which ruled the region from 1400 to 1511.
- It serves as a crucial link between the Indian and Pacific Oceans and is among the world's busiest and most vital shipping routes.
- Singapore, Malaysia, and Indonesia jointly oversee the security and patrolling of the strait.

Significance of the Strait of Malacca

- Approximately 60% of India's seaborne trade and nearly all of its LNG imports pass through this strait.
- It is a critical chokepoint for Chinese maritime traffic, making it a region of strategic importance.

What Are the Malacca Straits Patrols (MSP)?

- Established in 2004 by Indonesia, Malaysia, and Singapore, the MSP aims to combat piracy, terrorism, and trafficking in this heavily trafficked sea lane.
- Thailand joined the patrols later, expanding the cooperation.
- The MSP operates through three coordinated components:
 - a. Malacca Straits Sea Patrol – Joint naval patrols conducted regularly.
 - b. Eyes-in-the-Sky – Combined aerial surveillance patrols.
 - c. Intelligence Exchange Group – Real-time sharing of intelligence among the four participating countries.