22nd January 2026: DSC

1. The Importance of Pax Silica for India

Global Economic Context: Persistence and Transformation

Structural Continuities in the World Economy

Despite decades of globalisation, the global economic order continues to be shaped by a **deep North–South divide** in income levels, technological sophistication, and patterns of resource consumption. Advanced economies still dominate **high-value manufacturing, frontier technologies, and intellectual property regimes**, while most developing countries remain positioned as **raw-material suppliers or low-end manufacturers** within global value chains.

Shifting Engines of Power and Growth

In the 21st century, **semiconductors and artificial intelligence (AI)** have emerged as decisive drivers of economic productivity, military capability, and national security. Simultaneously, control over **critical minerals**, particularly **Rare Earth Elements (REEs)**, has become central to technological competitiveness and geopolitical leverage.

Relevance

- **GS II:** India's foreign policy, technology diplomacy, strategic partnerships, minilateral arrangements
- **GS III:** Semiconductors, AI, critical minerals, supply-chain resilience, industrial policy, economic security

---

Pax Silica Summit 2025: Genesis and Purpose

Background and Timing

On **12 December 2025**, the United States convened the first **Pax Silica Summit** with the objective of securing supply chains for **semiconductors, artificial intelligence, and critical minerals**. The term *Pax Silica* symbolically links global stability with silicon-based technologies, signalling that **trusted technology supply chains are now viewed as pillars of international order**.

Stated Objectives

The **Pax Silica Declaration** outlined three primary goals:

- Reducing coercive economic and technological dependencies
- Securing semiconductor and AI supply chains
- Building trusted digital and advanced manufacturing infrastructure

---

Membership Composition and Strategic Logic

Core Members and Their Comparative Strengths

- **United States & Japan:** Leaders in advanced R&D, chip design ecosystems, and frontier technologies
- **Australia:** Major supplier of lithium and holder of significant REE reserves critical for batteries and electronics
- **Netherlands:** Home to ASML, the sole global producer of EUV lithography machines
- **South Korea:** Dominant manufacturer of memory chips such as DRAM and NAND
- **Singapore:** Long-established semiconductor manufacturing hub integrated with US firms
- **Israel:** Strength in AI software, defence technologies, and cybersecurity
- **United Kingdom:** Hosts the world's third-largest AI market with a strong research and start-up ecosystem
- **Qatar and UAE:** Possess large sovereign wealth funds and are rapidly investing in AI and advanced technology platforms

Observers and Prospective Expansion

Canada, the European Union, OECD members, and Taiwan participated as observers, signalling scope for **future expansion and institutional consolidation**.

Strategic Rationale: Countering China's Dominance

China and Rare Earth Control

China controls a dominant share of **global REE processing**, providing it leverage over advanced technology supply chains. In response to US tariff actions, China temporarily suspended REE exports, effectively **weaponising resource dominance**.

Consequences for India

India experienced disruptions in **rare-earth magnet imports**, affecting automobile and electronics manufacturing. Supplies resumed only after Indian firms complied with stringent Chinese licensing conditions, including assurances against defence or dual-use applications.

Pandemic-Induced Lessons

The COVID-19 crisis exposed the vulnerabilities of **single-country-dependent supply chains**, accelerating diversification strategies such as **friend-shoring and trusted-partner frameworks**.

India and Supply-Chain Resilience Efforts

Existing Initiatives

- **Supply Chain Resilience Initiative (SCRI)** with Japan and Australia (2021)
- **Quad Critical Minerals Initiative** (2025) to strengthen access to emerging technologies

TAKSHASHILA
SCHOOL OF CIVIL SERVICES

India's Initial Exclusion and Likely Entry

India was not invited to the inaugural Pax Silica Summit despite involvement in similar efforts. However, in **January 2026**, the US Ambassador to India indicated that New Delhi would soon receive an invitation to join.

What India Contributes to Pax Silica

Technological and Institutional Strengths

- Robust **digital public infrastructure** and expanding AI adoption
- Launch of **IndiaAI Mission** and **Semiconductor Mission** with large public investments
- Growing semiconductor investments by Indian firms and foreign players
- Expanding AI start-up ecosystem and strong STEM talent pipeline

Human Capital Advantage

A large number of Indian engineers and PhDs trained in the US provide a global talent reservoir. Restrictive visa regimes may even trigger **reverse brain gain**, strengthening domestic ecosystems.

Strategic Opportunities for India

Scaling the Technology Ecosystem

Participation could deepen collaboration with technologically advanced partners and integrate India into **trusted semiconductor and AI value chains**, beyond low-end manufacturing roles.

Long-Term Strategic Alignment

Given decades of India–West collaboration in IT services and digital sectors, India may naturally align with Pax Silica's framework—while negotiating policy space.

Challenges and Risks

Developmental Asymmetry

Most Pax Silica members are high-income US allies. India would be the first major developing country and non-ally entrant, potentially creating expectations of policy convergence.

Strategic Autonomy

India's nuanced foreign policy positions may diverge from alliance-based frameworks, requiring careful balancing.

Industrial Policy Frictions

India's use of subsidies, procurement preferences, and calibrated import controls to protect nascent industries may clash with free-market preferences of some members.

The Road Ahead: Competing Supply-Chain Blocs

Emerging Dual-Chain World

China is likely to strengthen REE export controls, while Pax Silica develops parallel frameworks. Over time, **China-led and Pax-Silica-led supply chains** may dominate the global economy.

India's Strategic Choice

Given strained ties with China and deep engagement with Western firms, India may lean toward Pax Silica while negotiating safeguards for autonomy and development.

Strategic Assessment

Pax Silica reflects the **geopoliticisation of technology**, where security and trust increasingly override pure efficiency. For India, participation offers resilience and access—but demands careful negotiation.

---

2. Reusable Rockets and the Commercial Space Revolution

Structural Shift in the Global Space Economy

After decades of state dominance, space activity has shifted toward **private-sector-driven innovation and financing**. The global space economy is projected to exceed **USD 1 trillion by 2030**, driven by satellites, launch services, human spaceflight, and deep-space missions.

Cost and Cadence Transformation

Partial reusability has reduced launch costs by **5–20 times** and transformed launch frequency from episodic missions to routine operations.

Relevance

- **GS III:** Space technology, innovation ecosystems, private sector participation, strategic industries

---

Economics of Space Missions

Human vs Satellite Missions

Human missions cost **3–5 times more** due to life-support systems, redundancy, and safety protocols. Satellite missions are simpler, one-way, and lower-cost.

Payload Efficiency Constraints

More than **90% of rocket mass** consists of fuel and tankage. The **Tsiolkovsky equation** illustrates why payload fractions remain below 4%.

Why Rockets Use Multiple Stages

Staging as an Engineering Solution

Discarding spent stages mid-flight reduces dead weight, improving efficiency.

Traditional Expendable Design

Rockets like PSLV and LVM-3 discard stages after use—reliable but expensive and low-cadence.

Reusability: The Disruptive Shift

SpaceX's Breakthrough

Innovations such as vertical integration, modular design, and reusable first stages enabled cost reduction. Falcon 9 stages return via retro-propulsion and aerodynamic braking.

Proven Reliability

Over **520 successful recoveries**, with some boosters reused more than **30 times**, demonstrate economic viability.

Towards Full Reusability

Starship aims for **fully reusable heavy-lift capability**, potentially reducing launch costs to near terrestrial transport levels.

Global Trends

Blue Origin, Chinese firms, and others are advancing reusable systems, with multiple players pursuing full reusability.

Limits to Reusability

Engineering Constraints

Thermal stress, pressure cycles, and cryogenic fuels cause material fatigue, increasing inspection complexity.

Economic Trade-offs

Beyond a point, refurbishment costs outweigh savings; practical reuse limits are set by economics, not physics alone.

India's Position

ISRO's Efforts

India is developing a **Reusable Launch Vehicle (RLV)** with winged landing and exploring first-stage recovery.

Competitive Imperative

As reusability becomes standard, future Indian launch systems must embed recovery and reuse as core design principles.

Strategic Assessment and Conclusion

Reusability has transformed spaceflight into a transport paradigm. For India to remain competitive in the trillion-dollar space economy, rapid adoption of reusable architectures is essential.

3. Reusable Rockets and the Commercial Space Revolution

Global Space Economy: A Structural Transition

From State Monopoly to Market Leadership

After nearly four decades of state-led dominance in space exploration, the 21st century has witnessed a decisive transition toward **private-sector-driven innovation, financing, and operations**. Commercial entities are now central to launch services, satellite constellations, human spaceflight, and deep-space missions. The global space economy is projected to **cross USD 1 trillion by 2030**, reflecting this paradigm shift.

Cost and Frequency Transformation

The partial reusability of launch vehicles has dramatically altered the economics of space access. Compared to traditional expendable rockets, reusable systems have reduced **cost per kilogram to orbit by 5–20 times**. This has also enabled a sharp increase in **launch cadence**, transforming spaceflight from occasional missions into routine operations.

Relevance

- **GS III:** Space technology, innovation ecosystems, role of private sector, strategic industries

---

Economics of Space Missions

Human Spaceflight vs Satellite Launches

Human missions are inherently **3–5 times more expensive** than satellite launches due to life-support systems, redundant safety mechanisms, abort protocols, and extremely high reliability thresholds. In contrast, satellite missions are largely one-way, with simpler hardware and lower safety margins.

Structural Payload Constraints

Rockets face gravity losses and aerodynamic drag during ascent, requiring enormous energy to achieve orbital velocity. The **Tsiolkovsky rocket equation** illustrates this limitation: fuel mass increases exponentially with velocity requirements. As a result, **over 90 percent of a rocket's mass is propellant and tankage**, leaving less than 4 percent for payload.

Why Rockets Use Multiple Stages

Engineering Logic of Staging

Staging allows rockets to discard spent propulsion units mid-flight, shedding dead weight and improving the efficiency of the remaining vehicle. This partially offsets the mass penalty imposed by rocket physics.

Traditional Expendable Architecture

Conventional launch vehicles such as **PSLV and LVM-3** use expendable stages that fall into the ocean after use. While these systems are reliable, they suffer from **high per-launch costs and low operational frequency**.

Reusability: The Disruptive Breakthrough

SpaceX's Innovation Model

SpaceX transformed launch economics through vertical integration, modular design, extensive use of 3D printing, and stage recovery. The **Falcon 9 first stage** returns to Earth using retro-propulsion and aerodynamic drag to dissipate kinetic energy.

Operational Proof

SpaceX has successfully recovered Falcon 9 first stages **more than 520 times**, with some boosters reused **over 30 missions**, establishing reusability as economically viable and operationally reliable.

Towards Fully Reusable Systems

Next-Generation Platforms

SpaceX's **Starship** is designed as a fully reusable heavy-lift vehicle capable of transporting crew and cargo to Earth orbit, the Moon, and Mars. Full reusability aims to reduce launch costs to levels comparable with terrestrial transport systems.

Global Developments

- **Blue Origin (USA):** Vertical landing recovery for New Glenn
- **China:** Commercial firms like LandSpace developing reusable rockets (Zhuque-3)
- Over a dozen private companies globally are pursuing reusable launch systems, with several targeting full reusability

---

Limits to Reusability

Engineering Constraints

Thermal cycling, pressure loads, cryogenic propellants, and combustion heat cause material fatigue and microfractures in engines and tanks, increasing inspection complexity over time.

Economic Trade-offs

Beyond a certain reuse threshold, **refurbishment costs and downtime exceed savings**, making reusability an economic—not purely engineering—decision.

India's Position in the Reusable Launch Ecosystem

ISRO's Initiatives

ISRO is developing a **Reusable Launch Vehicle (RLV)** with winged, runway-style landing. Parallel efforts focus on first-stage recovery using aerodynamic braking and retro-propulsion. Technology demonstration missions are currently underway.

Competitive Imperative

As reusability becomes an industry standard, **cost reduction is no longer optional**. Future Indian launch vehicles must embed recovery and reuse as core design principles.

Strategic Assessment

Reusable rockets have transformed spaceflight from a disposable launch model into a **transportation paradigm**. Countries that fail to adopt reusable architectures risk technological obsolescence and market exclusion.

---

4. Hate Speech as a Constitutional Tort: Constitutional Accountability and Democratic Integrity

Context

In January 2026, civil society actors urged the Supreme Court of India to recognise **hate speech as a constitutional tort**, arguing that it reflects systemic constitutional failure rather than a mere law-and-order concern. The petition cited a sharp rise in hate speech incidents, particularly at religious gatherings.

Relevance

- **GS I:** Social harmony, communal relations, fraternity
- **GS II:** Fundamental Rights, constitutional torts, Supreme Court jurisprudence
- **GS III:** Internal security and communal violence

Understanding Constitutional Tort

Conceptual Basis

A constitutional tort is a **public law remedy** where the State is held vicariously liable for actions or omissions by its agents that violate fundamental rights. It moves beyond criminal prosecution to include **compensation and systemic accountability**, rooted in Articles 14, 19, and 21.

Judicial Evolution

This doctrine evolved through landmark rulings such as:

- *Rudul Sah v. State of Bihar (1983)*
- *Nilabati Behera v. State of Odisha (1993)*
- *D.K. Basu v. State of West Bengal (1997)*

Why Hate Speech is Argued as a Constitutional Tort

Inherent Discrimination

Hate speech targets individuals or groups based on religion, caste, ethnicity, or identity, directly violating:

- **Article 14:** Equality before law
- **Article 15:** Non-discrimination
- **Article 21:** Right to dignity and life

Beyond Policing Logic

Treating hate speech as a routine policing issue reduces it to crowd control, ignoring its **systemic erosion of constitutional morality**.

Failure of Existing Enforcement

Supreme Court Directions (2022)

States were directed to:

- Register **suo motu FIRs** against hate speech
- Act irrespective of religion or political affiliation

Ground-Level Non-Compliance

Persistent failures include refusal to register FIRs, invocation of weak penal provisions, and delayed investigations.

Hate Speech and Hate Crimes

Petitioners highlighted a strong empirical link between incendiary speech and:

- Communal riots
- Mob violence
- Targeted attacks

Foreseeable harm combined with State inaction triggers **vicarious constitutional liability**.

Ethical and Democratic Dimensions

- Hate speech corrodes **fraternity, secularism, and dignity** in the Preamble
- Article 19(1)(a) protects speech, but **Article 19(2)** allows restrictions to prevent public disorder and incitement

---

Way Forward

- Clear judicial standards for constitutional tort liability
- Accountability of supervisory police officers
- Preventive monitoring of high-risk assemblies
- Training law enforcement in constitutional values

5. Chagos Islands Dispute: Sovereignty, Security, and the Changing Global Order

Context and Recent Trigger

The Chagos Islands dispute has re-entered global attention following criticism by former U.S. President Donald Trump of the United Kingdom's decision to **transfer sovereignty of the Chagos Archipelago to Mauritius**. The UK government, however, has defended the move, indicating that a formal agreement is being finalised to complete the transfer by **May 2026**, while simultaneously retaining the **Diego Garcia military base** under a long-term lease arrangement of nearly **99 years**.

Geographic and Strategic Significance

The Chagos Archipelago occupies a **strategic location in the central Indian Ocean**, astride critical sea lanes connecting **Africa, West Asia, and the Indo-Pacific**.
Diego Garcia, the largest island, hosts a **U.S.–UK military base** that plays a pivotal role in:

- Indo-Pacific security architecture
- Middle East military operations
- Counter-terrorism logistics and force projection

This makes Chagos a cornerstone of contemporary maritime and military strategy.

Colonial Legacy and Human Rights Dimension

In 1965, the UK separated the Chagos Islands from Mauritius, three years before Mauritius gained independence in 1968, creating the **British Indian Ocean Territory (BIOT)**.
Between **1967 and 1973**, approximately **1,500–2,000 Chagossians** were forcibly displaced to facilitate the establishment of the military base—an act widely criticised as a grave human rights violation.

International Legal Developments

- **ICJ Advisory Opinion (2019):**
  The International Court of Justice ruled that the decolonisation of Mauritius was **not lawfully completed** and that the UK was obligated to end its administration of Chagos as rapidly as possible.

- **UN General Assembly Resolution:**
  Following the ICJ opinion, the UNGA overwhelmingly voted in favour of Mauritius, demanding UK withdrawal—strengthening Mauritius' diplomatic and legal position.

Proposed UK–Mauritius Settlement

Key elements of the proposed arrangement include:

- Transfer of sovereignty over Chagos to Mauritius
- Long-term lease of Diego Garcia to the UK–US
- Security guarantees ensuring uninterrupted military access

The UK argues this approach reconciles **international legal compliance** with **strategic security interests**.

Implications for India and the Indian Ocean Region

- Reinforces India's long-standing support for **decolonisation and territorial integrity**
- Aligns with India's interest in a **stable, rules-based Indian Ocean Region**
- Demonstrates that strategic security need not negate international law

Broader Global Order Significance

The Chagos case highlights the tension between:

- **Rules-based international law**, and
- **Great-power strategic imperatives**

Compliance with ICJ opinions strengthens global legal institutions, while defiance risks accelerating erosion of the international order.

Way Forward

- Sovereignty transfer combined with binding security guarantees
- Addressing Chagossian resettlement, compensation, and dignity
- Transparent engagement with multilateral institutions to ensure legitimacy

---

6. Darwin's Bark Spiders: Why Only Females Weave the Toughest Webs

Species Profile and Habitat

Darwin's bark spider (*Caerostris darwini*), endemic to **Madagascar**, is renowned for constructing the **largest orb webs ever documented**, often spanning **up to 25 metres** across rivers and lakes.

Record-Breaking Silk Properties

The spider's dragline silk exhibits a **tensile strength of approximately 1.6 GPa**, making it the **toughest biological material ever tested**. In terms of toughness, it significantly outperforms materials such as steel and iron.

Key Scientific Discovery

Research reveals that **only large adult females** produce this ultra-tough silk.
Silk spun by males and juveniles is markedly weaker and shows **no meaningful mechanical variation** across age or sex.

Evolutionary Explanation

- Adult females are **three to five times larger** than males
- Supporting massive webs across open water imposes strong structural demands
- The evolution of tough silk is linked to **web stability**, not prey capture

Energy–Efficiency Trade-off

Producing high-performance silk requires metabolically expensive proteins, particularly **proline**. As a result, female spiders:

- Spin less silk overall
- Rebuild webs more slowly
- Prioritise **quality over quantity**

Web Architecture Strategy

Female webs are:

- Sparse, with wider gaps
- Composed of fewer threads
- Each thread capable of absorbing extremely high mechanical stress

Males and juveniles, by contrast, construct denser webs using cheaper, weaker silk.

Genetic versus Adaptive Traits

- Elasticity of silk is genetically conserved across all individuals
- Extreme toughness is selectively activated in large females based on **body size and ecological need**

Evolutionary Significance

This phenomenon exemplifies **sex-specific adaptive evolution**, where costly biological traits evolve only when they offer clear survival advantages under ecological constraints.

---

7. Faster Warming, Faster Breeding: Climate Change and Antarctic Penguins

Context and Core Finding

Recent scientific studies indicate that **three Antarctic penguin species** are now breeding **approximately two weeks earlier** than they did a decade ago.
This shift coincides with a **~3°C rise in Antarctic temperatures between 2012 and 2022**, underscoring the pace of climate change in polar ecosystems. The findings are based on **remote photographic monitoring** of penguin colonies from 2010 to 2021.

Penguin Species Affected

- **Adélie penguin (*Pygoscelis adeliae*)**
- **Gentoo penguin (*Pygoscelis papua*)**
- **Chinstrap penguin (*Pygoscelis antarcticus*)**

A 14-day advancement in breeding represents one of the **fastest phenological shifts recorded among vertebrates**.

Why Breeding Timing Is Critical

Penguin reproductive success depends on tight synchronisation between:

- Breeding cycles
- Food availability (krill, fish, plankton)
- Sea-ice extent and marine productivity

Even small mismatches can drastically reduce chick survival.

Comparison with Other Species

While many vertebrates exhibit similar shifts over **several decades**, Antarctic penguins have displayed comparable changes within **just ten years**, highlighting extreme ecosystem stress.

Role of Antarctic Warming

The **Antarctic Peninsula** is among the fastest-warming regions globally. Rising temperatures have altered:

- Sea-ice duration
- Snow melt timing
- Marine food-web dynamics

Differential Species Responses

- **Gentoo penguins:** Generalists; benefit from reduced ice and diverse diets
- **Adélie and Chinstrap penguins:** Ice-dependent specialists; more vulnerable to change

Food Web Changes and Competition

Climate-driven changes in plankton and krill availability have:

- Favoured adaptable species like Gentoo
- Increased competition for nesting sites
- Displaced Adélie penguins from traditional habitats

Observed Population Trends

- Chinstrap populations declining globally

- Adélie populations showing mixed responses
- Gentoo populations expanding in range and number

Risks of Phenological Mismatch

Earlier breeding does not guarantee success. If food peaks shift faster than breeding adaptation, chick growth and survival may decline.

Broader Climate Change Implications

Penguins function as **sentinel species**, reflecting wider disruptions in Antarctic marine ecosystems. Rapid changes in breeding behaviour signal **system-level ecological instability**, not isolated adaptation.

22nd January 2026: Daily MCQS

Q1. With reference to the term "Pax Silica", consider the following statements:

1. It refers to a strategic framework linking peace and stability with trusted silicon-based technology supply chains.
2. It focuses primarily on nuclear energy cooperation among advanced economies.
3. Semiconductors, artificial intelligence, and critical minerals form its core concerns.

Which of the statements given above is/are correct?

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

Answer: B

Q2. Which of the following countries derives strategic importance in Pax Silica primarily due to hosting the only producer of EUV lithography machines?

A. Japan
B. South Korea
C. Netherlands
D. United States

Answer: C

Q3. India's interest in joining Pax Silica is best explained by which of the following reasons?

A. Immediate replacement of Chinese supply chains
B. Ideological de-dollarisation of global trade
C. Integration into trusted semiconductor and AI value chains
D. Creation of a military technology alliance

Answer: C

Q4. With reference to reusable rockets, consider the following statements:

1. Rocket reusability significantly reduces the cost per kilogram of payload to orbit.
2. The Tsiolkovsky rocket equation explains why rockets require a high fuel-to-payload ratio.
3. Reusability completely eliminates the need for multi-stage rockets.

Which of the statements given above is/are correct?

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

Answer: A

Q5. Why are human spaceflight missions substantially more expensive than satellite missions?

A. They require nuclear propulsion
B. They involve life-support systems and multiple safety redundancies
C. Satellites are launched using reusable rockets only
D. Human missions do not use staging

Answer: B

Q6. The concept of "constitutional tort" in Indian jurisprudence is best associated with which of the following?

A. Criminal liability of private individuals
B. Vicarious liability of the State for violation of fundamental rights
C. Judicial review of constitutional amendments
D. Parliamentary privilege cases

Answer: B

Q7. Recognition of hate speech as a constitutional tort is argued primarily because it:

A. Always violates the right to freedom of speech
B. Represents systematic State failure to protect equality and dignity
C. Falls outside the scope of criminal law
D. Is exclusively a central subject under the Constitution

Answer: B

Q8. With reference to the Chagos Islands dispute, consider the following statements:

1. The International Court of Justice held that the decolonisation of Mauritius was incomplete.
2. Diego Garcia hosts a strategically important US–UK military base.
3. The ICJ judgment is legally binding and enforceable through sanctions.

Which of the statements given above is/are correct?

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

Answer: A

Q9. The Chagos Islands issue is significant for India primarily because it relates to:

A. Nuclear non-proliferation
B. Indian Ocean security and decolonisation principles
C. Arctic sea routes
D. ASEAN maritime disputes

Answer: B

Q10. Darwin's bark spider is scientifically significant because:

A. It produces venom stronger than any other spider
B. It builds the smallest orb webs known
C. Its dragline silk is the toughest biological material tested
D. Both males and females produce identical silk

Answer: C

Q11. Only female Darwin's bark spiders produce ultra-tough silk mainly due to:

A. Genetic mutation exclusive to females
B. Their larger body size and need to support massive webs
C. Higher prey capture efficiency
D. Absence of predators

Answer: B

Q12. With reference to Antarctic penguins, consider the following statements:

1. Some penguin species are breeding earlier due to rising temperatures.
2. Gentoo penguins are more adaptable to warming than Adélie penguins.
3. Earlier breeding always leads to higher chick survival.

Which of the statements given above is/are correct?

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

Answer: A

Q13. Antarctic penguins are often described as “sentinel species” because they:

A. Regulate marine food chains
B. Signal broader ecosystem changes caused by climate stress
C. Control krill population growth
D. Adapt faster than all other polar species

Answer: B

Mains: The normalisation of hate speech poses a threat not only to public order but to constitutional morality itself. Critically examine this statement. (150 words)