

The Hindu Important News Articles & Editorial For UPSC CSE

Thursday, 12 Feb, 2026

Edition : International Table of Contents

Page 01 Syllabus : GS II : Governanace	Govt. plans guidelines on books by veterans
Page 07 Syllabus : GS III : Science & Technology / Prelims Exam	Budget gives science missions big figures but core funding gaps persist
Page 07 Syllabus : GS III : Environment / Prelims Exam	As the Arctic warms, threat of invasive plants looms
Page 10 Syllabus : GS III : Indian Economy / Prelims Exam	Have States gained from the 16th FC?
Page 12 Syllabus : GS III : Indian Economy / Prelims Exam	SMEs unfamiliar with capital markets, lack intermediaries: SEBI
Page 09 : Editorial Analysis Syllabus : GS II : Polity & Constitution	The Constitution enters the sanctum

The recent controversy surrounding the unpublished memoir *Four Stars of Destiny* by former Army Chief M. M. Naravane has triggered a policy response from the Ministry of Defence (MoD). The Centre is now preparing comprehensive guidelines to regulate publication of books by serving and retired armed forces personnel. This development raises critical issues concerning national security, civil-military relations, freedom of expression (Article 19(1)(a)), and the continuing applicability of the Official Secrets Act (OSA).

Govt. plans guidelines on books by veterans

Ministry held a meeting to frame regulations for both serving and retired personnel, says official

The Centre will lay down a framework that must be followed before any manuscript is sanctioned

The OSA continues to apply for life, making it an offence to disclose classified, or sensitive data

Saurabh Trivedi
NEW DELHI

Amid the controversy surrounding the unpublished memoir, *Four Stars of Destiny*, of former Army chief General M.M. Naravane (retd.), the Defence Ministry is working on detailed guidelines for serving and retired armed forces personnel who wish to publish books in future.

The proposed guidelines will spell out the process to be followed before any manuscript is cleared for publication.

A senior defence official confirmed that a meeting was held recently to frame a new set of rules, during which a detailed presentation was made. The upcoming framework is expected to incorporate provisions of existing service rules as well as the Official Secrets Act.

At present, there is no single consolidated law specifically governing book-writing by retired Army officers. Instead, different legal and service frameworks apply to serving personnel and retirees. In both cases, national security and protection of classified information remain the primary red lines.

There are no specific service rules barring servicemen or retired Army officers from authoring or publishing books. However, the freedom operates within a legal grey area. The Official Secrets Act (OSA) continues to apply for life, even after retirement, making it a criminal offence to disclose classified information, sensitive operational details, or any material prejudicial to national security.

While retired personnel are no longer governed by the Army Act or Army

Fresh framework

The upcoming guidelines are expected to incorporate provisions of existing service rules as well as the Official Secrets Act (OSA)



Tricky words: LoP in the Lok Sabha Rahul Gandhi with a copy of the unpublished memoir of former Army chief M.M. Naravane. PTI

- At present, there is no single consolidated law specifically governing book-writing by retired Army officers
- The OSA makes disclosure of classified information, sensitive operational details, or any material prejudicial to national security a criminal offence
- The Act continues to apply to an officer for life, even after retirement

rules in matters of publication, statutory laws remain applicable. If a manuscript contains operational or sensitive details, authors are expected to submit it to the Ministry for clearance. The relevant department then verifies and cross-checks the content before granting approval.

For serving Army per-

sonnel, the rules are explicit and mandatory. Service rules and defence service regulations require prior written permission before undertaking any literary, political or remunerative activity outside official duties. Requests are routed through a chain of command and may require clearance up to Army

Headquarters or the MoD, depending on the nature of the content.

Material relating to classified information, operational details, internal procedures, equipment capabilities, intelligence inputs, or issues affecting national security or foreign relations is strictly prohibited. Even fictional works may face restrictions if they closely resemble real operations or disclose identifiable details.

Individual's judgment

Lt. Gen. (retd.) D.P. Pandey said, "When an Army person retires, he or she is as much a civilian as anyone else but the facet of Official Secrets Act remains. After retirement, it largely comes down to individual's maturity and judgment regarding what to write and how to present it. One should avoid writing on matters that are classified

and not in open domain. However, retired personnel are free to express their personal opinions about politics and matters of national security. If any content falls under the Official Secrets Act, prior permission from the MoD is required."

He further mentioned that in his view, material that is already in the public domain can be written about. There is a laid-down process within the respective Services to grant permission for publication if a book mentions issues related to national interest. If any information published in a book is found to be incorrect or unlawful, there are legal provisions to deal with such infringements.

On Tuesday, Gen. Naravane endorsed Penguin Random House India's (PRHI) statement that his memoir has not been published. PRHI clarified it

holds sole publishing rights and that no print or digital copies have been released or distributed. This followed a First Information Report by the Delhi Police over alleged illegal circulation of the unpublished manuscript. The row intensified after Congress leader Rahul Gandhi questioned conflicting claims, prompting the PRHI to state that pre-order announcements do not amount to publication.

In the case of civil servants, the Centre had amended the Pension Rules for Civil Servants in 2021, prohibiting retired officials in intelligence or security related organisations to publish any information related to their organisation without clearance from the competent authority.

FIR OVER 'MEMOIR'
» PAGE 4

Background and Context

Currently, there is no single consolidated statute governing publication by retired military officers. The regulatory framework operates through:

Service Rules and Defence Service Regulations (mandatory for serving personnel)

Official Secrets Act, 1923 (applies for life, even after retirement)

Administrative clearance mechanisms within MoD

The OSA criminalizes disclosure of classified information, operational details, intelligence inputs, or material prejudicial to national security. However, retired personnel are no longer bound by the Army Act regarding literary activity, creating a regulatory grey area.

Key Issues Involved

1. National Security vs Freedom of Expression

Daily News Analysis

Article 19(1)(a) guarantees freedom of speech and expression.

Article 19(2) permits reasonable restrictions in the interest of sovereignty, integrity, and security of the State.

The proposed guidelines aim to operationalize these constitutional limits.

This reflects the classical dilemma between state secrecy and democratic transparency.

2. Civil–Military Relations

India maintains strong civilian control over the military.

Serving officers require prior written approval for literary or remunerative activities.

Retired officers are civilians but remain bound by OSA.

The guidelines seek to prevent:

Disclosure of sensitive operational doctrines

Exposure of defence preparedness gaps

Politicization of military narratives

3. Legal and Institutional Dimensions

The OSA is often criticized as a colonial-era legislation with vague definitions.

Lack of clear pre-publication review mechanisms can lead to controversies and FIRs, as seen in this case.

Similar restrictions already exist for civil servants under amended pension rules (2021), especially for intelligence officials.

This indicates a trend toward tightening post-retirement information control in sensitive sectors.

4. Ethical and Professional Responsibility

Lt. Gen. (retd.) D.P. Pandey's remarks highlight an important principle: Retired officers are free to express personal opinions, but must avoid classified content.

This emphasizes:

Professional ethics

Institutional loyalty

Individual judgment

Broader Implications

(A) Governance Perspective

Ensures structured manuscript clearance process.

Reduces ambiguity and legal uncertainty.

(B) Democratic Perspective

Over-regulation may create a chilling effect on memoir writing.

Excessive secrecy can weaken accountability and historical transparency.

(C) Security Perspective

Prevents inadvertent leaks about operational capabilities.

Protects India's strategic posture and foreign relations.

Way Forward

Frame clear, narrowly tailored guidelines specifying:

- What constitutes classified information

- Timeline for clearance

- Appeal mechanisms

Harmonize OSA with modern transparency laws like RTI.

Ensure the process is not used for political censorship.

Consider reform of the OSA to align with democratic standards.

Conclusion

The proposed framework on publications by military veterans reflects the delicate balance between safeguarding national security and upholding constitutional freedoms. While protecting sensitive information is a legitimate state objective, regulatory measures must remain proportionate, transparent, and non-arbitrary. In a mature democracy like India, civil-military equilibrium must combine institutional secrecy with accountable governance—ensuring that security concerns do not unduly constrain intellectual and historical discourse.

UPSC Mains Exam Practice Question

Ques: Examine the relevance and limitations of the Official Secrets Act in contemporary India. Should it be reformed to balance transparency with national security? **(250 Words)**

The Union Budget 2026–27 projects science and technology as a central driver of India's growth and strategic autonomy, announcing large mission-mode allocations in biopharma, semiconductors, carbon capture, and research-linked finance. However, leading scientists have highlighted a persistent structural issue: while headline allocations for new missions appear ambitious, core funding for basic research institutions, State universities, and foundational science remains uncertain and volatile. This tension reflects a deeper policy challenge in India's research ecosystem.

Budget gives science missions big figures but core funding gaps persist

The 2026-27 Union Budget touted science as an engine of growth but leading researchers in India see familiar gaps: they say that while new funds and big-ticket missions look impressive, basic research, state universities, and core institutes still face stagnant support and uncertain disbursement

T.V. Padma
Vasudevan Mukunth
NEW DELHI/CHENNAI

The Union Budget 2026-27 presented science as an instrument of growth, with large numbers on biopharma, semiconductors, carbon capture, and research-linked industrial finance on paper. However, expert reactions to this budget point to a more fragile reality. As the state attempts to move from adopting technologies to creating them, by building mission-linked platforms in biopharma, semiconductors, critical materials, and climate, it seems that the limiting factor isn't the ambition of schemes but what the government actually delivers – including reliable and timely funds, autonomy for research institutions, and the transparency and performance of large finance vehicles for innovation.

In 2023-24, allocation for the Department of Biotechnology was revised down from ₹2,683.86 crore (BE) to ₹1,607.32 crore (RE), and actual spending fell further to ₹1,467.34 crore. Likewise for the Department of Science and Technology, from ₹7,593.05 crore (BE) to ₹4,891.75 crore (RE) and actuals of ₹4,002.67 crore. Even in 2024-25, when the Department of Science and Technology experienced a sizeable cut from ₹8,029.01 crore (BE) to ₹5,661.45 crore (RE).

Biopharma SHAKTI
Against this backdrop, L.S. Shashidhara, director of the National Centre for Biological Sciences, Bengaluru, framed the biopharma outlay as welcome but incomplete. He pointed to "significant funding shortfalls following major changes introduced in 2024-25 to the fund-flow system" and to delays in the transition from the Science and Engineering Research Board to the Anusandhan National Research Foundation.

According to him, some of the under-spending in recent years may have been less about lack of intent and more about administrative disruption. The budget, he said, has at least avoided "punishing" science departments for that disruption by cutting overall allocations.

The biggest allocation this year was for a new programme called "Biopharma SHAKTI", of ₹10,000 crore over five years. Department of Biotechnology secretary Rajesh Gokhale said it will address non-communicable diseases and scale indigenous development and manufacturing of biologics and biosimilars. He linked it explicitly to the earlier DBT-National Biopharma Mission.

Dr. Gokhale also said the next set of ambitions would include cell and gene therapy missions, biomanufacturing hubs and biofoundries, and "Moonlark" hubs that integrate AI with biology.

Big-ticket infra

The technical case for such a push is obvious. India has real competencies in vaccines, diagnostics, and bioengineering. The issue is whether the outlay will broaden the base or only thicken the top layer of applied



Students, science and technology enthusiasts, and others visit the Indian Institute of Science campus in Bengaluru. FILE PHOTO

programmes. Dr. Shashidhara expressed caution related to this if Biopharma SHAKTI is administered primarily through the Department of Pharmaceuticals, as planned, it could privilege downstream manufacturing goals while neglecting the upstream life-science ecosystem that produces the tools and ideas.

So he asked that the Department of Pharmaceuticals "actively engage the broader life sciences community" in design and implementation. He also said longstanding prevention programmes and the routine issuance of small- and medium-sized grants could deliver high social returns – but only if agencies and the Finance Ministry's Expenditure Division fix the problem of "smooth and timely fund flow".

A similar tension appears in the budget's embrace of big-ticket infrastructure linked to "missions". N. Kalaiselvi, Council for Scientific and Industrial Research (CSIR) director-general N. Kalaiselvi read the budget as "a strong and reassuring affirmation" of science as an engine of growth and self-reliance.

She highlighted sustained support to the Department of Scientific and Industrial Research and the CSIR and welcomed mission-mode initiatives such as Biopharma SHAKTI, India Semiconductor Mission 2.0, the new carbon capture utilisation and storage (CCUS) mission, and expanded support for electronic components manufacturing, and critical minerals.

Gap in astronomy

IT Madras Institute Professor T. Pradeep also welcomed the way the budget embedded research "across multiple mission-mode initiatives" and said platforms and infrastructure that span multiple sectors, such as clinical trial networks and industry-linked training centres, could improve India's

As the state attempts to move from adopting technologies to creating them, by building mission-linked platforms in biopharma, semiconductors, critical materials, and climate sectors, it seems that the limiting factor isn't the ambition of schemes but what the government actually delivers

translational capacity and "full-stack" capabilities. His proviso, however, was that the budget "largely presents policy perspectives". He also said he expected "various missions/ministries to allocate sector-specific funding" in the coming years.

This has in fact been a recurring problem in India's research ecosystem: the government often proclaims science as a foundation for missions but often defers the stable, long-term financing required for that foundation to future plans.

Raman Research Institute director Tarun Souradeep remarked favourably on the budget's support for major national observational facilities and recalled the various spin-off technologies these facilities have produced, including CCD imaging and instruments for high-frequency communications.

'Globally fashionable script'

However, National Institute of Advanced Studies adjunct professor C.P. Rajendran articulated a counterpoint: that while the Finance Ministry's proposal to upgrade four astronomy facilities, including the National Large Solar Telescope and the National Large Optical Infrared Telescope, at ₹3,500 crore could strengthen the field, the support for the Indian Institute of Astrophysics has stagnated while a set of autonomous institutes including the Institute has

received only ₹1,623 crore.

More broadly, Dr. Rajendran said the budget followed a "globally fashionable script" that privileges applied sectors such as space applications and semiconductors while continuing to underfund basic research.

He added that India's gross expenditure on R&D has hovered around 0.64-0.7% of GDP for years, which when adjusted for inflation amounts to cuts in real terms. He also said the state's hope that private capital will carry domestic R&D hasn't materialised at the required scale.

While Dr. Shashidhara welcomed the ₹20,000 crore for the Research, Development and Innovation Fund, Dr. Rajendran recalled that a promise in the 2024-25 budget to deploy ₹1 lakh crore over seven years has been followed by only ₹3,000 crore disbursed so far.

Likewise, Punjab University vice-chancellor Reem Vig lauded the budget's emphasis on "university townships" as a move towards integrated industry in education but she also argued that the Centre shouldn't bypass legacy State universities in favour of new enclaves. Instead, she suggested a "thematic cluster" where "a legacy State university leads in the basic sciences, humanities, and regional innovation, while technical institutes provide the necessary toolsets."

"This kind of multi-disciplinarity is the core of the National Education Policy 2020 and it is already in the DNA of legacy institutions. These universities educate more than 80% of our students and have built the nation's intellectual foundation over decades; they are a national asset that must be nurtured to ensure the success of India's new educational map," Dr. Vig added. (T.V. Padma is a science journalist based in New Delhi. t.padma.10@yaho.co.in; Vasudevan Mukunth is science editor, The Hindu. mukunth.v@thehindu.co.in)

1. Budget's Science Vision: Mission-Oriented Growth

The Budget emphasizes:

Biopharma SHAKTI – ₹10,000 crore over five years

Semiconductor ecosystem (India Semiconductor Mission 2.0)

Carbon Capture, Utilisation and Storage (CCUS) mission

Research, Development and Innovation (RDI) Fund – ₹20,000 crore

This approach aligns with:

Atmanirbhar Bharat

Industrial policy-linked innovation

Strategic technology sovereignty

The model prioritizes “translational research” and manufacturing-linked innovation rather than purely curiosity-driven research.

2. The Persistent Core Funding Gap

Despite ambitious announcements, past budget trends reveal a pattern of:

Budget Estimates (BE) being significantly revised downward to Revised Estimates (RE)

Actual expenditure falling below even revised allocations

For instance:

Department of Biotechnology and Department of Science & Technology saw substantial downward revisions in 2023–24 and 2024–25.

Gross Expenditure on R&D (GERD) remains ~0.64–0.7% of GDP — far below advanced economies (2–3%+).

Structural Problems Identified:

Irregular and delayed fund disbursement

Administrative transitions (e.g., from SERB to Anusandhan NRF)

Over-centralisation of large finance vehicles

Weak private-sector participation in R&D

Thus, the issue is less about announcements and more about implementation credibility and fiscal stability.

3. Applied Missions vs Basic Research

Several experts warned of imbalance:

Biopharma SHAKTI may privilege downstream pharmaceutical manufacturing over upstream life-sciences research.

Daily News Analysis

Astronomy infrastructure upgrades are welcome, but institutional grants to autonomous research bodies remain stagnant.
Focus on “globally fashionable” applied sectors (semiconductors, space applications) may marginalize foundational science.

Why Basic Research Matters

- It produces breakthrough innovations (long-term spillovers).
- Builds human capital and scientific culture.
- Supports interdisciplinary ecosystems envisioned under NEP 2020.

Without strong basic science, applied missions risk becoming technology adoption exercises rather than original innovation platforms.

4. Universities and the Federal Dimension

A major concern is bypassing legacy State universities in favour of:

- New “university townships”
- Mission-specific enclaves

However:

- State universities educate over 80% of India’s students.
- They are critical for democratizing research capacity.

Neglecting them may widen regional and institutional disparities, undermining inclusive scientific development.

5. Governance and Policy Design Issues

A. Over-reliance on Big Funds

The ₹1 lakh crore innovation fund promised earlier has seen limited disbursement so far. This raises questions about:

- Fund governance
- Transparency
- Performance metrics

B. Need for Stable Institutional Autonomy

- Scientific institutions require predictable multi-year funding cycles.
- Administrative disruptions weaken research continuity.

C. Public-Private R&D Gap

India expects private capital to boost R&D, but industry contribution remains limited relative to global peers.

6. Broader Implications for India

Positive Signals:

Strategic intent to move from “technology adopter” to “technology creator”

Recognition of science as a growth multiplier

Mission-mode infrastructure creation

Concerns:

Underfunding of core research ecosystem

Inflation-adjusted stagnation in real R&D spending

Potential erosion of academic autonomy

Risk of top-heavy, elite-driven innovation model

Way Forward

Raise GERD to at least 1–1.5% of GDP in the medium term.

Ensure timely and predictable fund flow to research institutions.

Strengthen Anusandhan NRF with autonomy and accountability.

Balance mission-driven applied research with stable basic science funding.

Integrate State universities into thematic innovation clusters.

Improve monitoring and transparency of large innovation funds.

Conclusion

The Union Budget 2026–27 articulates a bold technological ambition, positioning science as an engine of economic transformation. Yet, sustained innovation depends not merely on marquee missions but on the invisible architecture of stable funding, institutional autonomy, and vibrant basic research. For India to transition from a technology follower to a global innovation leader, it must complement mission-mode initiatives with reliable, long-term investment in its foundational scientific ecosystem. Only then can policy ambition translate into durable scientific capability.

UPSC Prelims Exam Practice Question

Ques: Which of the following best describes the term "Translational Research"?

- (a) Research focused exclusively on theoretical advancements
- (b) Research converting scientific discoveries into practical applications
- (c) Research limited to defence technologies
- (d) Research conducted only in private laboratories

Ans: (b)

UPSC Mains Exam Practice Question

Ques: Discuss the structural challenges in India's R&D financing ecosystem. Suggest reforms to enhance innovation capacity. **(250 words)**



Page 07 : GS III : Environment / Prelims Exam

The Arctic is no longer just a landscape of retreating ice and stranded polar bears; it is becoming a new frontier for biological invasion. Often referred to as "Arctic Amplification," the region is warming nearly three to four times faster than the global average. This shift is breaking down the natural barriers—harsh cold and short growing seasons—that historically protected the tundra. A recent study in NeoBiota warns that over 2,500 non-native vascular plants could soon find a suitable climatic niche in the Arctic, threatening to permanently alter its unique biodiversity.

The Science of a Warming Arctic

1. Arctic Amplification

The rapid warming is driven by several feedback loops:

Albedo Effect: As white ice (which reflects sunlight) melts, it exposes dark ocean water or soil (which absorbs heat), further accelerating melting.

Convection & Moisture: Warmer air holds more water vapor, which acts as a greenhouse gas and traps even more heat over the poles.

2. Ecological Shift: Tundra to Shrubland

The traditional Arctic flora—mosses, lichens, and low-lying shrubs—is being replaced. Scientists have already documented the Common Meadow Rue (*Thalictrum flavum*), a temperate Russian/European shrub, blooming in Svalbard. This "greening" of the Arctic creates a hospitable environment for generalist species that outcompete specialized native plants.

Invasive Species: Pathways and Hotspots

The study identifies six primary "invasion hotspots" where climatic conditions are most favorable for alien species:

Western Alaska (Highest risk with ~1,200 potential species)

Southwestern and Southeastern Greenland

Northern Iceland

Fennoscandia (Northern Norway, Sweden, Finland)

Kanin-Pechora (Russia)

Pathways of Introduction

The "natural isolation" of the Arctic is being breached by increased human footprint:



Cold ground: The Arctic is home to diverse flora and fauna from tundra shrubs to beluga whales. AFP

As the Arctic warms, threat of invasive plants looms

Divya Gandhi

The frozen Arctic presents one of the most iconic stories of climate change: we have all seen pictures of icebergs collapsing into the ocean and polar bears left stranded on a shrinking patch of sea ice. The Arctic has in fact become a site of "last-chance tourism", according to a paper published earlier this month in *Nature Climate Change*. Millions of visitors behold the vanishing glaciers and collectively express their "ecological grief" over the imminent change in its landscape.

In its warmest parts, the Arctic is habitat to shrubs such as bearberry, and in the coldest parts the ground is bare but for thick layers of non-vascular plants,

Climate change and human activity are affecting Arctic ecosystems, which have largely been shielded from devastating effects of alien species so far

such as mosses and lichens, that form the tundra ecosystem. The snowy owl, the Arctic fox, the grizzly bear, seals, walrus, and beluga live here.

Now, another study published in *NeoBiota* has reported that thousands of alien floral species could "invade" and transform the Arctic ecology forever. "These plants have a chance of surviving the warming Arctic if they manage to find a way to get there and proliferate."

The authors, at the Norwegian University of Science and Technology, have already found a number of non-native species in Svalbard, including the common meadow rue, a shrub native to Russia and parts of Europe, in full bloom. In fact, they reported 2,554 vascular plants could find a suitable climatic niche in the new Arctic.

"Our results show that alien species from virtually all over the world can find a niche in the Arctic. And with all the human activity in the Arctic now, there are lots of opportunities to get there," study coauthor and university associate professor Kristine Bakke Westergaard, was quoted as saying in a release.

The Intergovernmental Panel on Climate Change considers alien species that displace native ones as one of the greatest threats to species diversity on the earth. Scientists at the Norwegian University and from the University of Liverpool used data from the Global Biodiversity Information Facility to reveal six major potential hotspots for introductions: western Alaska, southwestern and southeastern Greenland, northern Iceland, Fennoscandia, and Kanin-Pechora.

Unlike most areas of the world, Arctic terrestrial ecosystems have largely been shielded from the devastating effects of alien species "due to natural barriers, including short growing seasons, harsh climatic conditions, and limited human activity and disturbance," the paper said. But climate change and increasing human activity are changing this, it added. An older inventory in the Arctic documented 341 taxa, of which 188 had become naturalised in at least one floristic province, per the paper.

The most common routes for naturalised species is "escape from confinement", which accounts for 48% of invasive plant introductions, while "transport-stowaway" accounts for 37%.

Seed contaminants and "transport via vehicles" have been important routes, each contributing 14% of introductions, the paper said. "However, a significant proportion (43%) of introductions remains classified as 'unknown'."

Last October, mosquitoes were found in Iceland for the first time, as global warming has made it a suitable habitat for the insect. Antarctica is currently the last remaining mosquito-free area.

Daily News Analysis

Escape from Confinement (48%): Decorative or garden plants from settlements spreading into the wild.

Transport-Stowaway (37%): Seeds attached to ship hulls, vehicle tires, or the clothing and boots of tourists/researchers.

New Shipping Routes: As sea ice thins, the Northern Sea Route and Northwest Passage open, bringing more ballast water and hitchhiking species.

Analysis

1. Biodiversity & Ecosystem Services: Invasive species are one of the top five drivers of global biodiversity loss. In the Arctic, they threaten the Sámi and Inuit indigenous communities by:

Altering the habitat of reindeer (affecting food security).

Disrupting the "phenological match" (e.g., flowers blooming before pollinators emerge).

2. Global Frameworks: The threat aligns with the goals of the Kunming-Montreal Global Biodiversity Framework (GBF), which aims to reduce the rate of invasive species introduction by 50% by 2030. The Arctic Council has also adopted the ARIAS (Arctic Invasive Species) Strategy to coordinate early detection.

3. Geopolitical Dimensions: The Arctic is a site of "Last-Chance Tourism" and resource extraction. The same melting that allows for scientific discovery also facilitates the "accidental" introduction of pests, such as the first mosquitoes recently recorded in Iceland.

Conclusion

The "invasion" of the Arctic is a biological byproduct of the climate crisis. While the focus has historically been on melting ice, the "biological greening" and influx of alien species represent a more subtle but equally irreversible transformation. For India, which maintains a significant scientific presence through its Himadri station in Svalbard, monitoring these shifts is crucial. Protecting the Arctic now requires a shift from purely climate-mitigation strategies to robust biosecurity protocols for all human activity in the region.

Daily News Analysis

UPSC Prelims Exam Practice Question

Ques: The term "Arctic amplification" refers to:

- A) Increased human activity in polar regions
- B) Amplification of ocean currents in Arctic seas
- C) Faster rate of warming in the Arctic compared to the global average
- D) Increase in biodiversity due to warming

Ans: c)

PSC Mains Exam Practice Question

Ques: Climate change is emerging as a threat multiplier for biodiversity in polar regions. Discuss with reference to invasive alien species in the Arctic. **(150 Words)**



Page 10 : GS III : Indian Economy / Prelims Exam

The Finance Commission is a constitutional body (Article 280) that determines how the Centre's tax revenues should be shared with States. The 16th FC has submitted its report for the award period starting April 1, 2026. While it maintained the "vertical" share for States at 41%, it introduced a groundbreaking change in the "horizontal" distribution formula by including a State's Contribution to GDP as a key criterion.

Have States gained from the 16th FC?

What have been the recommendations of the 16th Finance Commission? What taxes are shared between the Centre and the States? Why did the last Commission revise vertical devolution to 41%? What had industrialised States such as Maharashtra, Gujarat, Tamil Nadu, Karnataka and Telangana demanded?

EXPLAINER

Rangarajan, R

The story so far:

The 16th Finance Commission under the chairmanship of Dr. Arvind Panagariya has submitted its report for the period of 2026-31. The Central government has accepted its recommendations with respect to devolution of funds from Centre to States.

What were past recommendations?

The Constitution in Article 270 provides for the scheme of distribution of net tax proceeds collected by the Central government between the Centre and the States. The taxes that are shared between the Centre and the States include corporation tax, personal income tax, Central Goods and Services Tax (GST), Centre's share of the Integrated Goods and Services Tax (IGST) etc. This division is based on the recommendation of the Finance Commission that is constituted every five years as per the terms of Article 280. This divisible pool, however, does not include cess and surcharge that are levied by the Centre. For the year, 2025-26, it is estimated that the divisible pool constitutes only around 81% of the gross tax revenue of the Centre after excluding cess and surcharge.

Till the 13th FC (2010-2015), the devolution involved specific transfers for Centrally Sponsored Schemes (CSS) with extensive conditionalities. The share of States in Central taxes (vertical devolution) was fixed at 32%. However, since the 14th FC (2015-2020), the specific transfers for CSS were discontinued and the vertical devolution was increased to 42%. It was revised down to 41% in the 15th FC (2020-2026) due to the reorganisation of Jammu and Kashmir into two Union Territories.

The criteria for distribution amongst the States (horizontal devolution) since the 13th FC is provided in Table 1. As can



FILE PHOTO

The share for States

Till the 13th FC (2010-2015), the devolution involved specific transfers for Centrally Sponsored Schemes (CSS) with extensive conditionalities

Table 1: Criteria for horizontal devolution amongst States

Criteria	13th FC 2010-15	14th FC 2015-20	15th FC 2020-26	16th FC 2026-31
Income distance	47.5	50	45	42.5
Population (1971)	25	17.5	-	-
Population (2011)	-	10	15	17.5
Area	10	15	15	10
Forests	-	7.5	10	10
Fiscal discipline	17.5	-	-	-
Demographic performance	-	-	12.5	10
Tax effort	-	-	2.5	-
State's contribution to GDP	-	-	-	10
Total	100	100	100	100



be observed, higher weightage has been given for equity (income gap) and needs (population and area) when compared to efficiency (forests, demographic performance and tax effort).

What were States' demands?

Firstly, as regards vertical devolution, 18 States had demanded that the States' share be increased from the current 41% to 50%. Few other States had demanded an increase of 45% to 48%. Many States had demanded the inclusion of cess and surcharge in the divisible pool as well as fixing a cap on cess and surcharge that could be levied by the Centre.

Secondly, as regards horizontal

devolution, many States had pitched for the continued dominance of equity parameters in the criteria. Equally, many States had recommended reducing the weight assigned to 'income distance' as a criterion. Industrialised States such as Maharashtra, Gujarat, Tamil Nadu, Karnataka and Telangana had recommended the inclusion of States' contribution to GDP among the horizontal devolution criteria.

What did the 16th FC recommend?

With respect to the demands regarding vertical devolution, the FC opined that under the present constitutional scheme, it is neither permissible nor desirable to

fix a cap on cess and surcharge or for their inclusion in the divisible pool. These instruments may also be needed to raise resources for the Union to meet any exigencies. Similarly, the FC recommended retaining the States' share in vertical devolution at its current level of 41% considering three main reasons – the States' share in total tax revenues of the country; that much of the spending of the Union in CSS is anyway ultimately routed to the States; and that the Union government needs increased funds for defence and infrastructure.

In its approach for horizontal devolution, the FC was guided by two principles. First, changes to each State's share in the portion of divisible pool should be gradual. Second, due recognition should be given to efficiency and especially the States' contributions to growth. Accordingly, a new criterion of State's contribution to GDP has been added. The weightage to this new criterion as well as other criteria has been assigned in such a way that it spells a directional change without causing a drastic shift in States' shares.

Considering all the above factors, the share of southern and western States has marginally increased while the share of big north and central States has marginally decreased. Hence, one may conclude that it is status quo as far as vertical and horizontal devolution is concerned with a directional change towards providing due recognition for efficiency. Additionally, the following observations of the FC should be borne in mind. The Centre should progressively reduce raising revenues through cess and surcharge. The States should make their subsidies efficient and targeted, actively pursue reforms in the power sector, and rein in the levels of their fiscal deficit and debt. The Centre and States should undertake various public sector enterprise reforms.

Rangarajan, R is a former IAS officer and author of 'Courseware on Polity Simplified.' He trains at Officers IAS academy. Views expressed are personal.

THE GIST

The Constitution in Article 270 provides for the scheme of distribution of net tax proceeds collected by the Central government between the Centre and the States.

With respect to the demands regarding vertical devolution, the FC opined that under the present constitutional scheme, it is neither permissible nor desirable to fix a cap on cess and surcharge or for their inclusion in the divisible pool.

In its approach for horizontal devolution, the FC was guided by two principles. First, changes to each State's share in the portion of divisible pool should be gradual. Second, due recognition should be given to efficiency and especially the States' contributions to growth.

Vertical Devolution: The 41% Logic

Vertical Devolution refers to the percentage of the "divisible pool" of Central taxes that goes to the States.

What Taxes are Shared?

Under Article 270, the divisible pool includes:

Corporation Tax and Personal Income Tax.

Daily News Analysis

Central GST (CGST) and the Centre's share of Integrated GST (IGST).

Customs and Union Excise Duties.

Exclusions: Cesses and surcharges (which now comprise nearly 20% of the Centre's gross tax revenue) are not shared with States.

Why was it revised to 41%?

The 14th FC had hiked the share from 32% to 42%. The 15th FC (and now the 16th FC) revised this to 41%. The 1% reduction was specifically to provide for the newly created Union Territories of Jammu & Kashmir and Ladakh, as their funding is now the direct responsibility of the Centre.

Horizontal Devolution: Rewarding Efficiency

Horizontal Devolution is the formula used to divide the 41% among individual States. The 16th FC has rebalanced the weights to include economic performance.

Criterion	15th FC Weight	16th FC Weight (New)
Income Distance (Equity)	45%	42.5%
Population (2011 Census)	15%	17.5%
Area	15%	10%
Demographic Performance	12.5%	10%
Forest & Ecology	10%	10%
Contribution to GDP	—	10% (New)
Tax & Fiscal Effort	2.5%	— (Removed)

Demands of Industrialised States

For years, States like Maharashtra, Gujarat, Tamil Nadu, Karnataka, and Telangana argued they were being "penalised for their success." Their primary demands included:

Reward for Growth: They wanted the formula to recognize their high contribution to the national GDP and tax revenue.

Demographic Reward: They sought credit for successfully implementing population control policies (Family Planning).

Cess and Surcharge: They demanded that these be included in the divisible pool, as the Centre's increasing reliance on cesses effectively reduces the "real" share of States below 41%.

Analysis**1. Shift to "Performance-Linked Federalism"**

By giving 10% weight to GDP Contribution, the 16th FC has addressed a long-standing grievance of southern and western States. This encourages Competitive Federalism, where States compete to improve their GSDP to gain a larger share of the tax pie.

2. The "Equity vs. Efficiency" Debate

While the formula rewards efficient States, Income Distance (the gap between a State's per capita income and the richest State) still holds the highest weight (42.5%). This ensures that poorer States like Bihar and UP continue to receive support to bridge developmental gaps, maintaining the "Equalisation Principle."

3. Fiscal Roadmap & Discipline**The 16th FC set strict fiscal targets:**

Centre's Fiscal Deficit: To be reduced to 3.5% of GDP by 2030-31.

States' Fiscal Deficit: Capped at 3% of GSDP.

Off-Budget Borrowings: Explicitly asked States to discontinue this practice and bring all debt into the formal budget.

Conclusion

The 16th Finance Commission has maintained a "status quo" on the headline 41% figure but has fundamentally altered the internal dynamics of how that money is shared. By introducing the GDP contribution metric, it has signaled that the era of purely "need-based" funding is evolving into a hybrid model that values productivity. However, the non-inclusion of cesses and surcharges remains a point of friction that might dominate future Centre-State fiscal dialogues.

UPSC Prelims Exam Practice Question

Ques: The term 'Income Distance' used in horizontal devolution refers to:

- (a) Gap between per capita income of a State and the highest per capita income State
- (b) Difference between tax collection and tax capacity
- (c) Difference between urban and rural income
- (d) Gap between State GDP and National GDP

Ans: a)

Daily News Analysis

UPSC Mains Exam Practice Question

Ques: Critically analyse the evolution of vertical and horizontal devolution in India since the 14th Finance Commission. **(150 Words)**



Page 12 : GS III : Indian Economy / Prelims Exam

At the India SME Finance & Investment Summit held in Mumbai on February 11, 2026, SEBI Chairman Tuhin Kanta Pandey stated that India's SME capital market remains "under-scaled" despite significant activity. While the SME platform has become a vital source of funding, a lack of familiarity with market mechanics, limited access to professional intermediaries, and "immature" internal governance continue to make the Initial Public Offering (IPO) process cumbersome for small businesses.

SMEs unfamiliar with capital markets, lack intermediaries: SEBI

Practical guidance not clear, internal governance systems to handle SME IPOs not yet mature, making IPO process cumbersome, says Pandey

Ashokamithran T.
MUMBAI

Small and Medium Enterprises (SME) face limited access to intermediary facilities such as merchant bankers and are unfamiliar with capital markets, which make it challenging for them to go public, said SEBI Chairman Tuhin Kanta Pandey.

"Greater SME participation in markets also diversifies financing channels, reduces risk concentration in banking sector and frees bank capacity for genuine



Shift focus: Greater SME participation in markets diversifies financing channels, cuts banking sector risk, says SEBI chief.

working capital and priority lending. Yet, SME capital market is under-scaled relative to India's potential." Practical guidance is un-

clear and internal governance systems to handle SME IPOs have not matured making the process cumbersome, he added.

Key Challenges Identified by SEBI

1. Limited Access to Intermediaries

SMEs often struggle to find quality merchant bankers and legal advisors. Most top-tier intermediaries focus on "Mainboard" IPOs, leaving a smaller pool of bankers for the SME segment. This leads to:

Inadequate due diligence.

Poorly drafted offer documents (DRHPs).

Higher costs of capital raising relative to the issue size.

2. Governance and Compliance "Burdens"

Many SMEs view disclosure requirements not as a tool for transparency, but as a regulatory burden.

Internal Systems: Most SMEs lack the sophisticated accounting and internal audit systems required to manage a public company.

Documentation: SEBI noted that practical guidance for filing is often unclear, leading to repeated regulatory queries and delays.

3. Misuse of Regulatory Relaxations

The SME framework offers certain "carve-outs" (relaxations) in compliance compared to the Mainboard. However, Chairman Pandey flagged "egregious instances" where these relaxations were misused for:

Fund Diversion: Moving IPO proceeds to shell companies or related parties.

Market Manipulation: Creating artificial sentiment to induce retail investors.

SME IPO Market Stats (2025–2026)

Despite these challenges, the volume of activity is historically high.

Period	Number of IPOs	Funds Raised
FY 2024-25	241	₹9,800 Crore
FY 2025-26 (Till Jan)	232	₹10,500 Crore

Market Cap: The collective market capitalization of the 1,400+ listed SMEs stands at ₹4.1 lakh crore.

Migration: Over 350 companies have successfully migrated from SME bourses to the Mainboard.

Analysis for UPSC

1. Strategic Importance: De-risking the Banking Sector

The SEBI chief highlighted a critical macroeconomic point: when SMEs raise equity from the market, it reduces their dependence on bank loans.

This diversifies financing channels for the industry.

It frees up "bank capacity" for working capital and priority sector lending, thereby reducing the systemic risk of Non-Performing Assets (NPAs) in the banking sector.

2. Regulatory Response: The "SME Portal"

To solve the "unfamiliarity" problem, SEBI and stock exchanges are working on a dedicated SME portal. This one-stop digital gateway will provide:

Clear compliance guidance.

Mapping of eligible intermediaries.

AI-driven processing of offer documents to speed up approvals.

3. The "Quality vs. Quantity" Dilemma

While the number of listings is increasing, the high failure rate (nearly 37% of 2025 SME IPOs listed below issue price) remains a concern. The regulator is now moving toward sharper disclosures—specifically requiring independent verification of site visits (with geotagged photos) and stricter scrutiny of Related Party Transactions (RPTs).

Conclusion

The SME capital market is at a crossroads. While it has democratized access to capital, it currently suffers from "governance deficit" and a lack of professional guidance. The SEBI Chairman's call for mature internal systems signals that the regulator will no longer tolerate the misuse of "SME relaxations." For SMEs, the message is clear: the market rewards credibility over hype, and the transition from a private firm to a public entity requires a fundamental shift in institutional maturity.

UPSC Prelims Exam Practice Question

Ques: The term “Related Party Transactions (RPTs)” is most closely associated with:

- A. Monetary policy
- B. Corporate governance
- C. Foreign exchange management
- D. Public debt management

Ans: (b)

UPSC Mains Exam Practice Question

Ques: Explain how deepening equity markets for SMEs can strengthen financial stability in India. Also highlight associated regulatory risks. **(250 words)**



The Constitution enters the sanctum

Two recent judgments of the Madras High Court – one concerning the Thiruparankundram Deepathoon and the other relating to the rights of the Thenkalai sect to recite hymns at the Kanchipuram Varadaraja Perumal temple – have brought to the fore the role of the judiciary in adjudicating religious disputes. That these matters have reached the High Court is revealing on multiple levels. First, it tells us that courts have a constitutional role in deciding religious disputes. Second, it demolishes the argument that temples are private spaces where the court or the state cannot intervene. Given the growing number of such cases, the law around religion has taken centre stage like never before.

Shift from civil rights disputes

Over a hundred years ago, it was civil courts that dealt with temple disputes. In a case pertaining to entry into the Kamudhi temple in Ramanathapuram, pitched battles around civil rights to enter temple premises were fought all the way up to the Privy Council in London. In *Sankaralinga Nadan and Ors vs Raja Rajeswara Dorai and Ors* (1908), the Privy Council was called upon to decide whether the Nadar community had a right to enter the Kamudhi temple. In the pre-constitutional era, such cases around temple entry and right to co-worship were primarily regarded as disputes concerning civil rights.

In 1927, the Madras Presidency government enacted the Madras Hindu Religious Endowments Act to govern temples and their endowments. A slew of legislative activity followed in the next two decades, which enabled setting up of local temple committees and the auditing of temple funds which enshrined the supervisory role of the Presidency government.

All this changed when the Constitution was adopted in 1950, which introduced fundamental rights to practise religion. The



Manuraj Shunmugasundaram

DMK spokesperson and advocate practising before the Madras High Court



Swetha Sethubaskaran

Advocate practising before the Madras High Court

The growing number of religious disputes before constitutional courts reflects the role of the judiciary in ensuring that religious practices do not undermine constitutional principles

freedom of worship rights in Articles 25 and 26 to worship were made applicable to individuals as well as religious denominations. However, this freedom was tempered with the requirement that rights to practise or profess religion would be subject to public order, health, and morality. This allowed the state to further regulate worship when it offended public conscience or morality.

This period ushered in a critical shift in judicial thinking. From the earlier view that these matters were civil rights disputes, the courts began looking at them from the vantage of constitutional directives. By doing so, the judiciary asserted the rights of the individual to equality and religious freedom subject to public interest restrictions. This led to the blossoming of jurisprudence around temple entry, religious freedoms, and equality in the appointment of priests. It is now a matter of debate in constitutional courts as to if and how these rights should be limited.

Nevertheless, the southern States, which belonged to the erstwhile Madras Presidency, must be credited for bringing in this jurisprudence. It started with these States enacting legislation under the Hindu Religious and Charitable Endowments Act for better temple governance. These legislation and regulations, consequently, invited judicial oversight, as writ courts were called to adjudicate upon whether State intervention respected the rights of the religious denominations while safeguarding the constitutional rights of others. This led to the development of temple-related jurisprudence over the last 70 years.

The test used by courts

In developing this jurisprudence, courts have undertaken an inquiry into whether religious practices conflict with constitutional principles. For example, where there is a restriction of the entry of certain people or where a customary practice is in conflict

with fundamental rights, such matters can be brought before constitutional courts. The constitutional court then undertakes the task of finding out whether such custom or practice is protected by the essential religious practice test. A creation of the Supreme Court, this test is to determine whether a particular custom or practice is essentially integral to the religion. Those not essentially religious were, interestingly, deemed to be “secular” and open to judicial guidance. Therefore, if a practice fails this test, then the court typically proceeds to issue directions in consonance with settled constitutional principles.

Despite criticism regarding its inconsistent interpretation in subsequent judgments, the courts have continued to use this test to bring a measure of objectivity to decisions by focusing on the core tenets of the religion itself. In *Indian Young Lawyers Association and Ors vs State of Kerala* (2018) (Sabarimala temple case), this approach underwent a significant consolidation when the Supreme Court held that even those practices considered essential to the religion cannot be shielded from judicial scrutiny if they are inconsistent with constitutional morality. Therefore, the law of the land is that religious freedoms are subject to constitutional morality, which in turn is founded on the principles of justice, liberty, equality and fraternity.

The growing number of religious disputes before constitutional courts reflects not only ideological polarisation within and across faiths, but also the enduring role of the judiciary in ensuring that religious practices do not undermine constitutional principles. Judicial review of religious disputes, therefore, cannot be seen as an aberration but a continuation of a long-standing constitutional engagement – one that seeks to harmonise faith with the foundational principles of the Constitution.

GS Paper II : Polity & Constitution

UPSC Mains Practice Question: Religious freedom under Articles 25 and 26 of the Indian Constitution is not absolute but subject to constitutional morality. In the light of recent judicial interventions in temple-related disputes, critically examine the role of the judiciary in adjudicating religious matters. **(250 Words)**

Context :

Recent judgments of the Madras High Court concerning the Thiruparankundram Deepathoon dispute and the rights of the Thenkalai sect in the Kanchipuram Varadaraja Perumal Temple have reignited debate on the judiciary's role in religious affairs. These cases are significant because they reaffirm that temples are not insulated private domains but institutions subject to constitutional scrutiny. The issue lies at the intersection of religious freedom (Articles 25–26), equality (Articles 14–15), and constitutional morality.

Background: From Civil Rights to Constitutional Adjudication

Before 1950, temple disputes were treated largely as civil rights issues. For instance, in *Sankaralinga Nadan vs Raja Rajeswara Dorai* (1908), the Privy Council adjudicated whether the Nadar community had the right to enter the Kamudhi temple.

The enactment of the Madras Hindu Religious Endowments Act, 1927 marked the beginning of state supervision over temple administration.

However, a paradigm shift occurred after the adoption of the Constitution in 1950. Religious freedom became a **fundamental right** under:

Article 25 – Freedom of conscience and free profession, practice and propagation of religion

Article 26 – Rights of religious denominations to manage their own affairs

These rights were made subject to public order, morality, and health, allowing the State and courts to intervene when practices conflicted with constitutional values.

Evolution of Temple Jurisprudence

Post-Constitution, courts moved from a narrow civil law approach to a constitutional rights framework. This led to jurisprudence on:

Temple entry (abolition of caste-based exclusion)

Appointment of priests

Rights of denominations vs. State regulation

Gender equality in places of worship

Southern States, particularly under the Hindu Religious and Charitable Endowments (HRCE) framework, played a pioneering role in shaping this jurisprudence.

The Essential Religious Practices (ERP) Test

Daily News Analysis

A crucial judicial tool has been the Essential Religious Practices (ERP) Test, evolved by the Supreme Court.

It determines whether a practice is essential and integral to a religion.

Practices not deemed "essential" are treated as secular and open to State regulation.

The test gained renewed prominence in the Indian Young Lawyers Association v. State of Kerala (Sabarimala case), where the Supreme Court held that even essential practices cannot override constitutional morality, especially equality and dignity.

Thus, religious autonomy is not absolute; it is subordinate to constitutional values such as justice, liberty, equality, and fraternity.

Key Issues

Balance between Religious Freedom and Equality

Can denominational rights override individual fundamental rights?

Where should courts draw the line?

Judicial Activism vs Judicial Overreach

Critics argue courts lack theological competence.

Supporters see intervention as necessary to uphold constitutional morality.

Constitutional Morality vs Social Morality

Courts increasingly prioritize constitutional morality over majoritarian or traditional norms.

Federal and Administrative Dimensions

State regulation of temples under HRCE Acts raises questions about secularism and equal treatment of religions.

Critical Evaluation

Positive Aspects:

Protects marginalized groups (women, Dalits, sect minorities).

Reinforces supremacy of the Constitution.

Ensures transparency in temple administration.

Concerns:

Inconsistent application of ERP test.

Risk of excessive judicial involvement in doctrinal matters.

Perceived selective regulation of Hindu religious institutions.

Conclusion

The recent Madras High Court judgments illustrate that constitutional courts remain central to mediating conflicts between faith and fundamental rights. Judicial review in religious matters is not an intrusion but a constitutional obligation aimed at harmonising religious practices with equality, dignity, and justice.