



NAMAN SHARMA
IAS ACADEMY

Daily

CURRENT AFFAIRS

 December 30th, 2025



 **Offline Centre Location:**
SCO 173-174, Sector 17C, Chandigarh

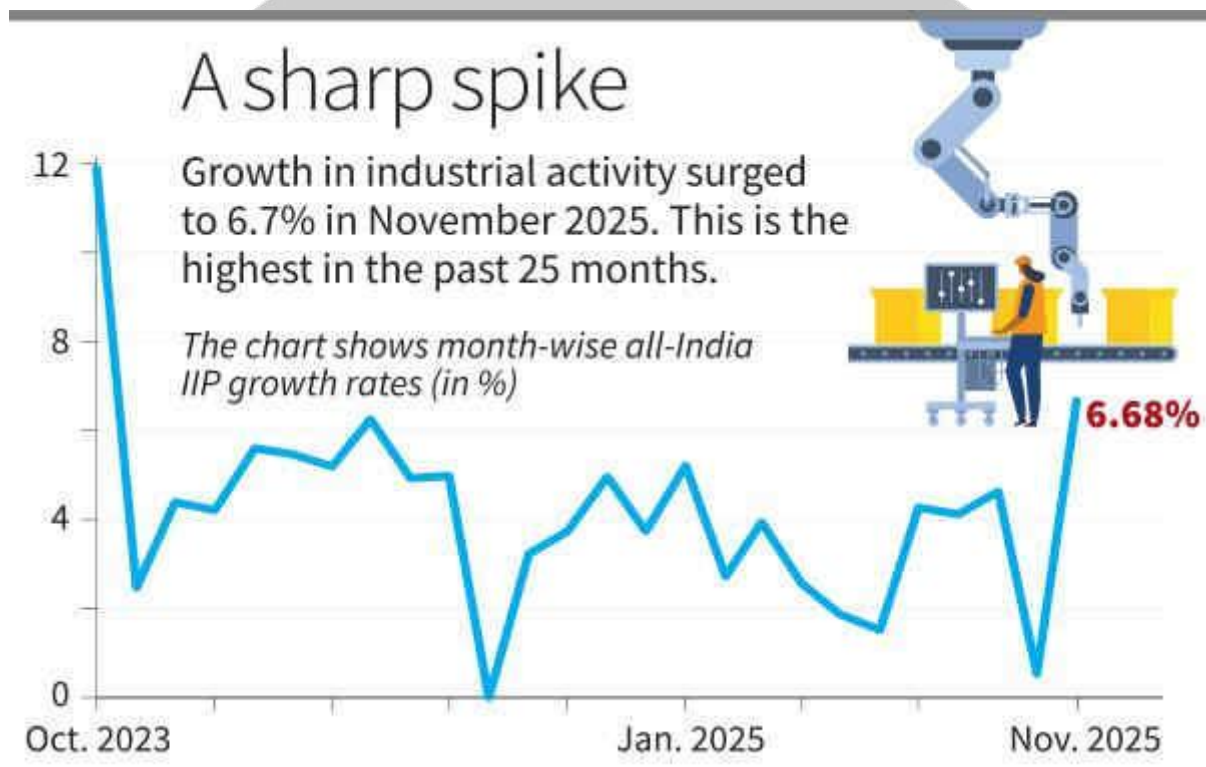
Index

- 1. Manufacturing, capital goods lead IIP growth to a 25-month high of 6.7% in Nov.**
- 2. SC pauses Aravalli ruling, moots new panel**
- 3. DAC gives its nod for defence purchases worth ₹79,000 crore**
- 4. Union govt. Gearing up to host mega AI summit in February**
- 5. Indian Navy's stitched sailing vessel INSV Kaundinya sets off for Oman**
- 6. A twist in the tale: are scientists wrong about dark energy?**

1. Manufacturing, capital goods lead IIP growth to a 25-month high of 6.7% in Nov.

Why in the News

India's Index of Industrial Production (IIP) recorded a 25-month high growth of 6.7% in November, according to data released by the Ministry of Statistics and Programme Implementation. The growth was broad-based, led particularly by the manufacturing and capital goods sectors, while mining also showed notable improvement. However, the electricity sector posted a contraction, marking the only drag on industrial performance.



Background

- The Index of Industrial Production (IIP) is a key macroeconomic indicator that measures the volume of production in industrial sectors, namely manufacturing, mining, and electricity.
- It is released monthly with a base year of 2011–12.
- Industrial output is a key driver of GDP growth, employment, and investment cycles.
- Historically, the manufacturing sector contributes over 75% of the IIP basket.

In November:

- Manufacturing output increased by 8%, the highest growth rate in 25 months.
- Growth partly reflects:
 - festive-season restocking,
 - base-effect contribution,
 - recovery from disruptions caused by unseasonal rains in October.

However, despite GST-driven demand in September, average IIP growth during October–November stood at 3.6%, lower than the July–September average of 4.3%.

Features

Manufacturing sector leads recovery

- Growth: 8% (25-month high)

Driven by:

- consumer durables (+10.3%)
- consumer non-durables (+7.3%)
- restocking after festive sales
- strong construction demand

Capital goods surge

- Growth: 10.4% - an 11-month high

Signals:

- rising investment demand
- infrastructure push
- improved business confidence

Infrastructure and construction goods boom

- Growth: 12.1% - highest since October 2023

Supported by:

- large-scale public capital expenditure
- urban infrastructure projects
- real estate rebound

Mining output strengthens

- Growth: 5.4%

Reflects:

- improved coal production
- normalisation post-weather disruptions

Electricity sector contracts

- Decline: 1.5%

Possible reasons:

- mild weather impact on consumption
- supply disruptions

Consumption shows signs of recovery.

- Consumer durables: +10.3%
- Consumer non-durables: +7.3%

This indicates:

- Rural revival signals
- festive demand bounce-back

Challenges

Uneven sectoral performance

- Electricity contraction signals demand volatility.

Base-effect distortions

- High growth may not fully reflect structural improvement.

Slower average growth trend

- Oct–Nov average (3.6%) still trails Q2 growth (4.3%).

Export demand uncertainty

- Ongoing global slowdown pressures manufacturing exports.

Private investment is still uneven

- Public capex remains the main driver.

Weather & seasonal dependencies

- Unseasonal rains continue to impact industrial momentum.

Way Forward

Strengthen domestic manufacturing ecosystems.

- Boost MSME competitiveness
- Promote value-chain integration
- Support technology adoption

Deepen private sector investment.

- Policy certainty
- Reduced compliance burden
- Faster clearances

Expand the infrastructure pipeline.

- Maintain high public capital expenditure.
- Improve project execution efficiency.

Stimulate rural and consumer demand.

- Support income-generating schemes
- Strengthen agri-logistics and market access.

Diversify export markets

- Trade agreements
- Global supply-chain linkages

Enhance power sector resilience

- Grid upgrades
- Renewable integration
- Demand-side management

Conclusion

The sharp 6.7% IIP expansion in November, backed by strong manufacturing, capital goods, and infrastructure activity, signals a revival in industrial momentum. While festive restocking and base effects partly explain the surge, improving investment demand and construction growth point toward broader resilience. However, uneven performance across sectors and moderating average growth underline the need for sustained policy support, private investment revival, and consumer demand strengthening to convert short-term gains into durable industrial expansion.

2. SC pauses Aravalli ruling, moots new panel

Why in the News?

The Supreme Court of India has stayed (kept in abeyance) its November 20 judgment that had upheld a government panel's restrictive definition of the Aravalli Range, limiting its recognition to hills 100 metres or higher and clusters within 500 metres of each other.

The Court has now:

- paused the ruling until final disposal of the case, and
- barred the grant or renewal of any mining lease in the Aravalli region without prior Supreme Court permission.

The Court also proposed forming a high-powered expert committee to assess whether the restrictive definition could harm the ecology of one of the world's oldest mountain systems.



Background

- The Aravalli Range, spread across Rajasthan, Haryana, Delhi and Uttar Pradesh, is a critical ecological barrier preventing eastward expansion of the Thar Desert.
- The November 20 ruling upheld a Ministry of Environment expert committee's definition:
 - Only hills ≥ 100 m elevation count, and
 - Only those within 500 m of each other form part of the system.
- This definition meant that only 1,048 hills (out of 12,081 in Rajasthan alone) would qualify, potentially lifting protections from thousands of smaller hills and hillocks.

Environmentalists warned this would:

- permit unregulated mining
- degrade forests and wildlife corridors

- worsen air pollution in NCR
- accelerate land degradation and desertification

Amid significant public concern, the SC took suo motu cognisance of the issue.

Features

Stay on the earlier judgment

- The court has suspended the November 20 ruling
- Until the matter reaches logical finality
- To prevent irreversible environmental and administrative actions

Freeze on Mining Permissions

- No fresh or renewed mining leases allowed
- Without prior SC approval

Possible High-Powered Committee

- **To examine:**
 - ecological impact of restricted definition
 - whether so-called “sustainable mining” harms the Aravalli ecology
 - long-term vs short-term impacts
 - whether excluded areas risk degradation

Court Flags Risks of Narrow Definition

- It may create a “structural paradox”
 - Protected area shrinks
 - Previously protected zones may open for mining
 - Contiguous but technically excluded terrain becomes vulnerable

Call for Scientific Mapping

- **Court stresses:**
 - exhaustive geological estimation
 - precise mapping of hills & hillocks
 - protection based on the ecological integrity of the whole range

Challenges & Concerns

Ecological degradation risk

- Loss of natural desert barrier
- Habitat fragmentation
- Impact on water recharge and forests

Regulatory ambiguity

- Narrow definitions create legal loopholes.

Mining pressure

- Strong commercial incentives in the region

Urban pollution

- The Aravallis act as green lungs for NCR.

Climate resilience

- The Aravallis help moderate heat and dust-storm flow.

Public trust deficit

- Perception that policy favours mining over ecology

Way Forward

Adopt Ecologically-Based Definitions

- Recognise hills, ridges, slopes, hillocks, corridors
- Consider geology, biodiversity & ecosystem services

Independent Scientific Mapping

- Satellite + field-based surveys
- Multi-disciplinary panel input

Strengthen Mining Governance

- Strict cumulative impact assessments
- Transparent clearance processes
- Zero-tolerance on illegal mining

Landscape-Level Conservation Plan

- Protect ecological connectivity
- Restore degraded stretches

Balance livelihoods with ecology

- Promote sustainable alternatives
- Green jobs and eco-tourism

Conclusion

The Supreme Court's decision to pause its earlier ruling and seek deeper scientific scrutiny underscores the critical ecological role of the Aravalli Range. A purely technical or elevation-based definition risks weakening protections for a fragile ecosystem already under pressure from mining, urbanisation and climate stress. A more holistic, ecology-centric approach will be key to safeguarding the environmental integrity of the Aravallis, vital not only for Rajasthan and NCR but for India's broader environmental security.

3. DAC gives its nod for defence purchases worth ₹79,000 crore

Why in the News?

The Defence Acquisition Council (DAC), chaired by Defence Minister Rajnath Singh, has accorded Acceptance of Necessity (AoN) for capital acquisition proposals worth about ₹79,000 crore for the Army, Navy, and Air Force. The proposals focus on enhancing operational preparedness with advanced platforms, including loiter munitions, guided rockets, drone detection systems, naval HALE drones, and Astra Mk-II missiles.



Background

- The Defence Acquisition Council is India's apex decision-making body for capital procurement in defence.
- AoN is the first step in the procurement process under the Defence Acquisition Procedure (DAP).

This approval follows India's push towards:

- Modernising the armed forces
- Indigenisation under Atmanirbhar Bharat
- strengthening joint operational capabilities

India's defence budget prioritises:

- capability enhancement
- indigenous manufacturing
- technology infusion

Features

For the Indian Army

Loiter Muniton Systems

- Enable precision strikes on tactical targets

Low-Level Light-Weight Radars

- Detect small, low-flying UAVs

Long-Range Guided Rocket Ammunition for Pinaka MRLS

- Enhances range and accuracy for high-value targets

Integrated Drone Detection & Interdiction System (IDD&IS) Mk-II

- Protects vital assets with enhanced anti-drone range

For the Indian Navy

Bollard Pull (BP) Tugs

- Assist submarines & ships in harbour manoeuvres

HF Software-Defined Radio Manpack Systems

- Secure long-range communications

Leasing of HALE Remotely Piloted Aircraft Systems

- Persistent maritime surveillance in the Indian Ocean Region

For the Indian Air Force

Automatic Take-off & Landing Recording System

- Enhances aerospace safety via all-weather data capture

Astra Mk-II BVRAAM

- Extended-range air-to-air combat capability

Full Mission Simulator for LCA Tejas

- Realistic & cost-effective pilot training

SPICE-1000 guidance kits

- Long-range precision strike capability

Challenges

- Procurement delays and bureaucratic processes
- Technology dependency in some high-end systems
- Budgetary pressures amid competing social sector needs
- Integration challenges across platforms and services
- Skill & ecosystem gaps in domestic R&D and manufacturing

Way Forward

- Streamline procurement under DAP to avoid delays
- Deepen Make in India partnerships with global OEMs
- Invest in R&D, AI, EW & drone warfare technologies
- Promote joint doctrine development & training
- Strengthen public-private defence industry collaboration
- Focus on lifecycle support & indigenous maintenance

Conclusion

The DAC's approval of ₹79,000-crore defence purchases marks a significant step towards modernising India's armed forces, enhancing strategic preparedness, and advancing indigenisation goals. As security threats evolve, sustained investment in technology, training, and domestic capability will be crucial to achieving long-term defence self-reliance and operational superiority.

4. Union govt. Gearing up to host mega AI summit in February

Why in the News?

The Union Government of India is preparing to host the AI Impact Summit in February, expected to be on a scale comparable to the 2023 G-20 Summit. The event is likely to see participation from 15–20 heads of state and nearly 1,00,000 participants, as stated by IT Secretary S. Krishnan.



सर्वजन हिताय | सर्वजन सुखाय
WELFARE FOR ALL | HAPPINESS OF ALL

Background

- The AI Impact Summit is part of a multilateral annual summit series focused on governance, ethics, safety, and societal impact of AI.
- Previous summits:
 - 2023 – Bletchley Park, UK (27 countries participated; 28 signed declaration)
 - 2024 – Seoul
 - 2025 – Paris, where India was announced as host for 2026
- Participation has been steadily increasing, with over 100 countries involved, including France.

- India is seeking to strengthen its global leadership in digital public infrastructure and AI governance.

Features

High-level participation

- 15–20 heads of state
- Leading AI firms & researchers (e.g., Anthropic, Google DeepMind)
- Strong representation from the Global South

Large-scale engagement

- Around 1 lakh participants expected
- Multiple pre-summit events in India and abroad

Major Discussion Themes

- AI's impact on work & labour markets
- Trust and safety protocols for AI models
- Sector-specific AI applications (industry, governance, economy)

Strategic Diplomacy Goal

- Position India as a thought leader in AI ethics, innovation & inclusion

Challenges

- Balancing innovation with regulation
- Data privacy & cybersecurity concerns
- Risk of AI misuse (deepfakes, manipulation, security threats)
- Ensuring equitable access for developing countries
- Building domestic AI capacity & skilled workforce
- Avoiding over-dependence on global tech giants

Way Forward

- Create robust AI governance frameworks
- Promote open innovation & ethical AI standards
- Strengthen R&D, skilling & academic-industry linkages
- Support AI startups and SMEs
- Ensure inclusive AI for public service delivery
- Build a trusted data infrastructure
- Lead Global South coordination on AI development concerns

Conclusion

The upcoming AI Impact Summit highlights India's ambition to shape the global conversation on AI governance and innovation. With rising global participation and strategic engagement, the summit is expected to reinforce India's role as a leader in ethical, inclusive, and responsible AI development, while catalysing domestic technological growth and international cooperation.

5. Indian Navy's stitched sailing vessel INSV Kaundinya sets off for Oman

Why in the News?

- INSV Kaundinya, the Indian Navy's indigenously built, traditional stitched sailing vessel, has embarked on its maiden overseas voyage from Porbandar, Gujarat, to Muscat, Oman.
- The voyage aims to revive India's ancient maritime heritage and retrace historic sea routes linking India and Oman.

Background

- India has a rich maritime tradition dating back thousands of years, with extensive trade networks across the Indian Ocean region.
- Traditional boats along India's western coast were often built using stitched shipbuilding techniques, where wooden planks were stitched together using coir rope, instead of metal nails.
- These vessels facilitated trade, cultural exchanges and navigation between India, Arabia, East Africa and Southeast Asia.
- The current expedition forms part of the Indian Navy's effort to preserve maritime heritage and indigenous craftsmanship.



Significance

Traditional Construction

- Built using stitched shipbuilding techniques employing natural materials such as wood and coir.
- Reflects indigenous knowledge systems and maritime craftsmanship.

Historical Inspiration

- Modelled on traditional Indian sailing vessels.
- Retraces ancient maritime trade routes between Gujarat and Oman.

Crew & Leadership

- Commanded by Commander Vikas Sheoran.
- Officer-in-Charge: Commander Y. Hemant Kumar.
- The crew includes 4 officers and 13 naval sailors.

Diplomatic & Cultural Significance

- Voyage enhances India–Oman relations.
- Highlights shared oceanic heritage and civilisational ties.

National Significance

- Supports India's maritime narrative of being a historic seafaring civilisation.
- Endorsed by Prime Minister Narendra Modi, who extended best wishes to the crew.

Features

Revival of Maritime Heritage

- Preserves ancient technologies and navigation traditions.

Soft Power & Diplomacy

- Strengthens ties with Oman and showcases India's heritage globally.

Cultural Linkages

- Reinforces Gujarat–Oman historical trade connections.

Naval Tradition & Training

- Enhances seamanship and traditional navigation skills within the Navy.

Promotion of Indigenisation

- Demonstrates India's capability in heritage-based shipbuilding.

Challenges

Navigational Risks

- Traditional vessels are more vulnerable to weather and sea conditions.

Preservation of Traditional Skills

- Knowledge transmission to future generations is limited.

Resource & Maintenance Constraints

- Natural-material vessels require continuous upkeep.

Balancing Heritage & Modernity

- Integrating traditional methods with safety standards can be complex.

Way Forward

Institutional Support for Maritime Heritage Projects

- Promote documentation, training programs and museums for traditional boatbuilding.

Strengthen Cultural Diplomacy

- Use heritage voyages to deepen maritime partnerships in the Indian Ocean Region.

Skill Preservation

- Support coastal artisan communities and shipwrights.

Awareness & Education

- Incorporate maritime heritage into academic and naval training curricula.

Leverage for Blue Economy Vision

- Align heritage initiatives with India's broader maritime and ocean policy goals.

Conclusion

The maiden voyage of INSV Kaundinya is more than a naval expedition-it is a symbolic reconnection with India's ancient maritime identity. By reviving traditional shipbuilding and retracing historic trade routes, the mission strengthens strategic ties with Oman, celebrates indigenous craftsmanship, and highlights India's enduring role as a seafaring civilisation in the Indian Ocean world.

6. A twist in the tale: are scientists wrong about dark energy?

Why in the News?

A new study from Yonsei University, South Korea, published in the Notices of the Royal Astronomical Society (Nov 6), suggests that the universe's expansion may be slowing down - contradicting the long-accepted view that dark energy is causing the expansion to accelerate. This challenges the Lambda-Cold Dark Matter (Λ CDM) model and raises questions about the true nature of dark energy.



Background

- The universe originated ~13.8 billion years ago in the Big Bang.
- Edwin Hubble demonstrated in the 1920s that the universe is expanding.
- In 1998, two independent teams discovered - using Type Ia supernovae as “standard candles” - that expansion is accelerating, not slowing.
- This acceleration was attributed to dark energy, making up ~70% of the cosmos.
- For this discovery, Saul Perlmutter, Brian Schmidt, and Adam Riess received the 2011 Nobel Prize in Physics.
- The Λ CDM model explains the universe with:
 - Matter (including dark matter): ~30%
 - Dark energy (as a constant Λ): ~70%

Features

The Yonsei University research indicates:

- Dark energy may not be constant
- Its effect may be weakening over time
- The universe may already be in a phase of decelerated expansion

The study challenges the assumption that Type Ia supernovae are perfect standard candles.

Supporting threads:

- Data from the Dark Energy Spectroscopic Instrument (DESI) also suggests supernova brightness may depend on the age of their progenitor stars.

Implication:

- If dark energy evolves with time, the universe may slow, and in a far-off future could even collapse in a “Big Crunch.”

Challenges

Theoretical uncertainty

- There is still no solid model explaining dark energy.

Insufficient statistical confidence

- Critics say the findings are not strong enough to claim a discovery.

Data handling concerns

- **Nobel laureate Adam Riess argues:**
 - Existing supernova analyses already adjust for host galaxy properties.
 - The claimed effect is not visible in real-world datasets.

Scepticism from leading cosmologists

- Brian Schmidt notes that the standard model would be modified - not overturned - if proven true.

Possibility of methodological bias

- Critics say the study relies on specific data-slicing choices not aligned with standard practice.

Way Forward

More precise observational data is needed from next-generation instruments such as:

- Vera Rubin Observatory (Chile)
- NASA's Nancy Grace Roman Space Telescope

Continued refinement in:

- Supernova modelling
- Astrophysical corrections (mass, age, evolution)

Cross-verification via:

- Galaxy surveys
- Gravitational lensing
- Cosmic microwave background studies

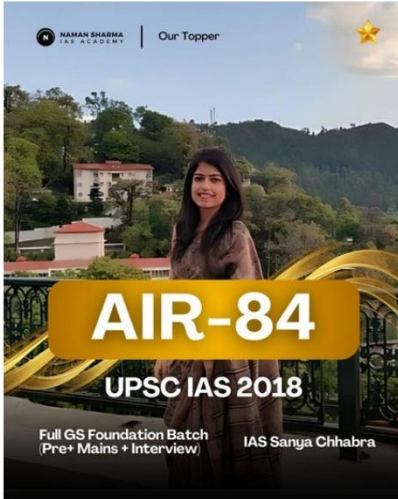
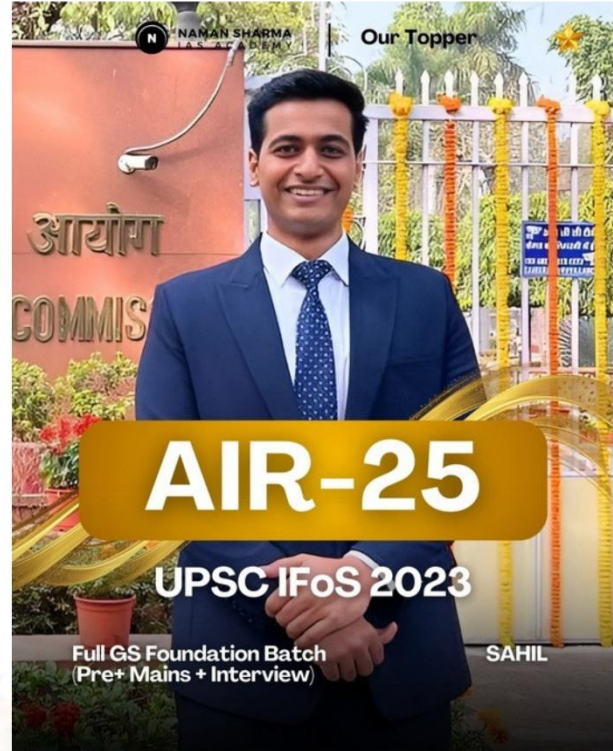
Theoretical development on:

- Time-varying dark energy (quintessence-like models)
- Possible deviations from Λ CDM

Conclusion

The Yonsei University study has reopened debate on one of cosmology's greatest mysteries - what drives the universe's expansion. While the standard Λ CDM model still holds strong support, the new findings hint that dark energy may not be constant and that the universe's expansion could be slowing. The scientific jury is still out - and future high-precision observations will be critical in deciding whether this represents a paradigm shift or a temporary anomaly. Regardless of the outcome, the episode highlights how even well-established cosmic truths remain open to challenge as science advances.

Our Recent Toppers



Vipin Kumar
AIR-4, HPAS 2022



Anshul Shandil
AIR-7, HPPCS 2019



Arshiya Sharma
AIR-3, HPPCS 2019



Kirti Sharma
AIR-35, PCS 2021



IPS Vineet Ahlawat
AIR-231, CSE 2020



SDM Himani Sharma
AIR-2, HPAS 2024



WhatsApp Now +91-843-768-6541



Offline Centre Location: SCO 173-174, Sector 17C, Chandigarh



NAMAN SHARMA
IAS ACADEMY

Admissions Now Open!

Saarthi for UPSC 2027/28

- ✓ 1/2/3 Years Course with Lifetime access
- ✓ Inclusive of Crash Course + Test Series
- ✓ Full Prelims + Mains
- ✓ Offline + Online + Hybrid Mode

Enroll Now

+91-8437686541
www.namaniasacademy.com



Enroll
in just **₹2000**

- Mode: Offline/Hybrid/Online
- Medium: Hinglish (Notes in English)
- Timings:

Morning: 9 AM - 1 PM

Evening: 4 PM - 8 PM

Enrollment Process:

- Visit Our Website: **Naman IAS Academy**
- Call us at **+91-843-768-6541**
for Free Seminar

Free UPSC seminar

Saturday, 4PM



Offline Centre Location: SCO 173-174, Sector 17C, Chandigarh