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FORTUNE WEEKLY DIGEST

› EUTHANASIA IN INDIA ›PROTON ACCELERATOR IN INDIA › ENERGY SECURITY IN INDIA

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FORTUNE WEEKLY DIGEST

EDITOR'S NOTE

As UPSC aspirants, it is essential to stay updated on current affairs to excel in the examination. This **Fortune Weekly Digest (ForWarD)** brings you the latest news and developments from around the world, carefully curated and analyzed to help you prepare for the Civil Services (Main) Examination.

We understand that time is precious, and we have made sure to present the information in a concise and easy-to-understand manner.

The magazine is divided into different sections. Mains relevant topics have been covered in detail with a UPSC previous year question perspective. The jot downs are examples and interesting facts to enrich your answer writing. Cherrypicks has some key words from the week, helpful again in answer writing and essay. We have also included essay topics and sample questions to help you guage your preparation.

We have designed this magazine to best supplement the daily current affairs notes we have launched by the name of **FIND (Fortune IAS News Daily)** and **FINDER (Fortune IAS News Daily Explainer)** and the **Fortune Prelims Precise** monthly compilation. This magazine will be explained in detail and your queries addressed in a live class we conduct.

At a time when there is no dearth of current affairs materials, our hope is help you get a one-stop solution for all your current affairs needs.

This magazine is a work in progress and your feedback will be appreciated.

We hope that this magazine will serve as a valuable resource for your exam preparation and contribute to your success in the UPSC examination.

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ENERGY SECURITY IN INDIA

Syllabus: GS III - Infrastructure — Energy

PYQ MAPPING

Q) *"Access to affordable, reliable, sustainable and modern energy is the sine qua non to achieve Sustainable Development Goals (SDGs)".Comment on the progress made in India in this regard.* ***(2018)***

WHY IN NEWS

Global crude oil prices crossing **$100 per barrel amid the West Asia conflict** have triggered LPG supply tightness in India, leading the government to prioritise domestic LPG for households, increase booking intervals to **25 days**, and regulate supplies for commercial and industrial users.

INTRODUCTION

Energy security refers to the reliable availability of energy at affordable prices, essential for economic growth and national development. For India, rising demand and high import dependence make it crucial for achieving strategic autonomy, with **its share in global energy consumption projected to double by 2035.**

SHORT TAKES

➢ **International Solar Alliance**
- o A treaty-based intergovernmental organization launched by India and France in 2015 at COP21 to promote solar energy deployment and cooperation among countries.
- o It aims to mobilise **$1 trillion in solar investments by 2030**, reduce technology and financing costs, and support clean energy access and climate goals globally.

CURRENT ENERGY SCENARIO IN INDIA

Rapidly Growing Energy Demand:

- o India is the **3rd largest energy consumer globally**, driven by industrialisation, urbanisation, and rising incomes.

Expansion of Power Sector :

- o Electricity generation has increased significantly from **1,168 Billion Units (2015–16) to 1,824 Billion Units (2024–25)**, reflecting strong growth in supply.
- o India achieved **100% village electrification by 2018** and connected over **2.8 crore households**, ensuring near-universal access.
- o Energy shortages have declined sharply from **4.2% (2013–14) to 0.1% (2024–25)**, reflecting improved supply-demand balance.

Fossil Fuel Dominated Energy Mix:

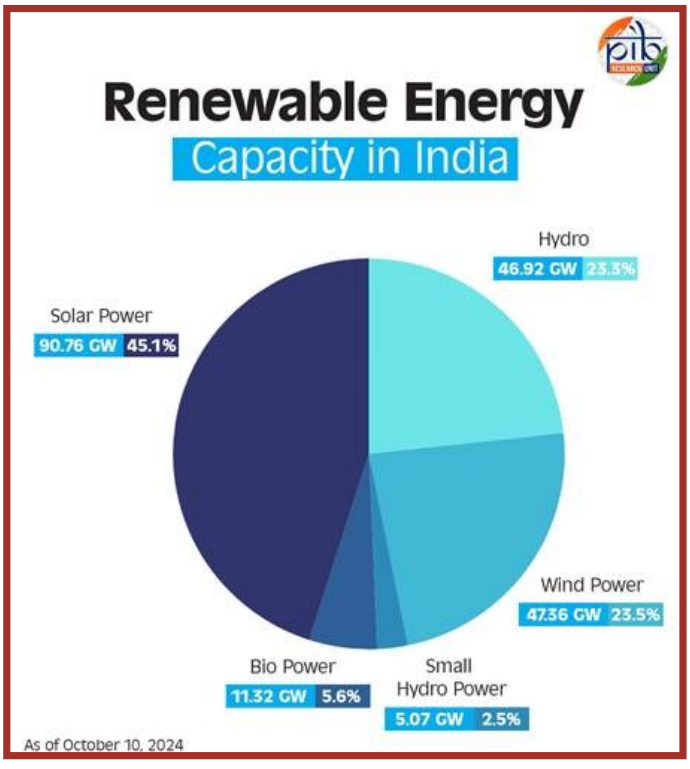
- o Thermal power contributes **~240 GW**, with coal alone accounting for over **90% of thermal capacity**.
- o Oil accounts for ~25–27%, while natural gas contributes only ~6%, indicating an imbalanced energy basket.

Global Leadership:

- o India ranks **4th in Renewable Energy capacity, 3rd in solar, 4th in wind globally**.
- o Leads initiatives like **International Solar Alliance (122 signatories)**.

High Import Dependence:

- o India imports
  - **~85–89% of crude oil**
  - **~46–50% of natural gas**



- **~25% of coal**

o Makes India the **3rd largest crude oil importer globally**, exposing it to global shocks.

Per Capita Energy Consumption:

o Per capita electricity consumption rose from **957 kWh (2013–14) to 1,395 kWh (2023–24)**, a **45.8% increase** which is below global average (~3000 kWh).

Improving Energy Efficiency:

o Transmission & Distribution losses reduced from **23% → 17%**, improving efficiency.

o Energy intensity of GDP declining, showing **decoupling of growth and energy use**.

ENERGY CRISIS IN INDIA DUE TO WEST ASIA CONFLICT

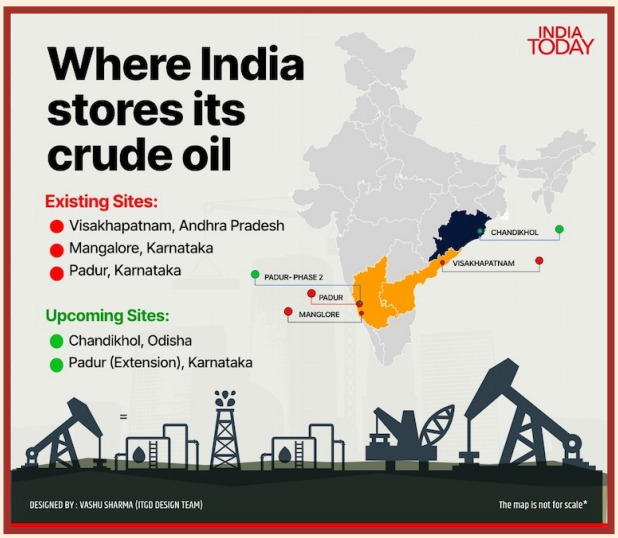
- **Strait of Hormuz Disruption:** Conflict has disrupted the **Strait of Hormuz**, through which **~40% of India's crude oil and 90% of LPG imports** pass, leading to severe supply shocks.
- **Collapse of LPG Supply:** As much as **54% of India's LPG supply was disrupted**, causing one of the worst cooking gas crises in recent years.
- **Decline in Fuel Availability:** LPG consumption fell sharply by **17.3% year-on-year and 26.3% month-on-month** due to stalled shipments and tanker delays.
- **Spike in Global Prices:** Crude oil prices crossing **$100 per barrel** increased import bills, inflation, and macroeconomic stress.
- **Impact on Economy & Society:** Shortages have affected **restaurants, industries, and even crematorium services**, highlighting deep dependence on imported fuels.

GOVERNMENT MEASURES

- **Prioritisation of Domestic Supply:** Government directed oil companies to **prioritise LPG supply for households, hospitals, and essential services**, restricting industrial usage.
- **Boosting Domestic Production:** Domestic LPG production has been **increased by ~30–36% within weeks** to address shortages.
- **Diversification of Imports:** India secured LPG supplies from **USA, Norway, Canada, Algeria, and Russia**, reducing Gulf dependence from ~99% to ~70%.
- **Shift to Alternatives:** Government advised households to **shift to piped natural gas (PNG)** and alternative fuels like electric cooking to ease pressure on LPG demand.
- **Anti-Hoarding & Demand Control:** Measures like **discouraging panic booking, KYC norms, and controlled booking intervals** were introduced to prevent hoarding and ensure equitable distribution.
- **Logistics & Supply Management:** Ports prioritised **LPG tanker berthing**, and stranded vessels (22 ships) are being cleared to restore supply chains.
- **Institutional Monitoring:** Government set up **control rooms across states and continuous monitoring mechanisms** to manage supply disruptions.

INDIA'S STRATEGIC PETROLEUM RESERVES (SPR)

- **Core Purpose & Global Standard**
  - o Strategic Petroleum Reserves (SPR) are emergency crude oil stockpiles to protect against supply shocks and price volatility.
  - o The **International Energy Agency (IEA)** mandates member countries maintain reserves equivalent to **90 days of net oil imports**.
  - o **As India is an associate member of IEA, it is not bound to maintain the same.**
- **India's Current SPR Infrastructure**
  - o Managed by the **Indian Strategic Petroleum Reserve Limited (ISPRL)** under the **Ministry of Petroleum & Natural Gas**, Phase I includes **5.33 Million Metric Tonnes (MMT)** stored in underground caverns at:



- **Visakhapatnam:** 1.33 MMT
- **Mangaluru:** 1.5 MMT
- **Padur:** 2.5 MMT

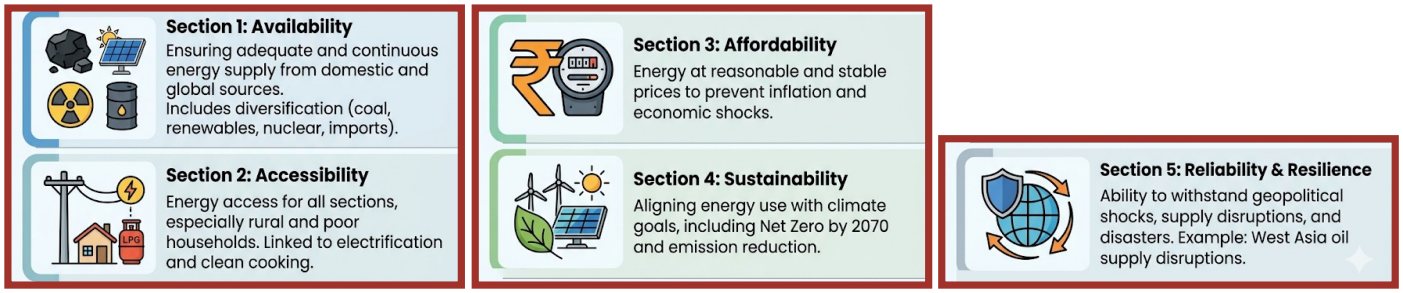
❧ **Energy Security Gap**

- India imports over **80% of its crude oil**.
- Phase I SPR covers **~9.5 days**, and with commercial and in-transit stocks, total coverage is **~74 days**, below the **IEA 90-day standard**.

❧ **Phase II Expansion & Private Participation**

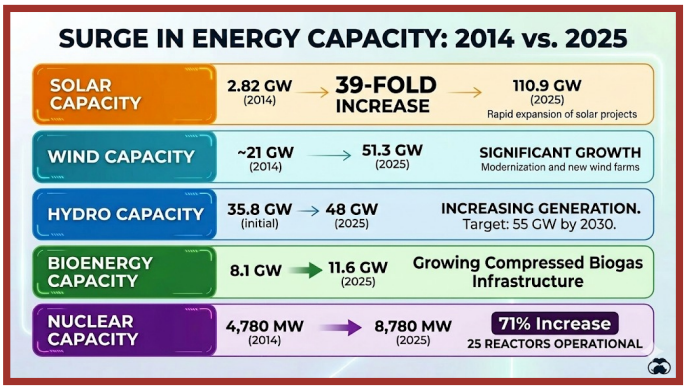
Phase II adds **6.5 Million Metric Tonnes** at **Chandikhol** and expands **Padur**, with **Megha Engineering & Infrastructures Ltd (MEIL)** awarded the first private SPR contract under a Public-Private Partnership.

DIMENSIONS OF ENERGY SECURITY



ROLE OF RENEWABLE ENERGY IN ENERGY SECURITY

- **Reducing Import Dependence:** Renewable sources like solar and wind, being domestically available, reduce reliance on imported fossil fuels and strengthen India's energy independence and strategic security.
- **Supporting Climate Commitments:** Renewables are crucial for achieving India's targets of **500 GW non-fossil capacity by 2030** and **net-zero emissions by 2070**, thereby reducing greenhouse gas emissions.
- **Energy Diversification:** Increasing the share of renewables reduces dependence on coal and oil, creating a more balanced energy mix and enhancing overall system stability.
- **Decentralised Energy Access:** Technologies such as rooftop solar and mini-grids enable electricity access in remote areas, improving last-mile connectivity and reducing transmission losses.
- **Economic and Employment Benefits:** The renewable sector generates jobs in manufacturing, installation, and maintenance while promoting green industries and innovation.



- **Technological Advancement:** Renewable energy investments drive advancements in battery storage, smart grids, and green hydrogen, strengthening India's energy technology capabilities.
- **Long-Term Cost Efficiency:** With falling costs, renewable energy is becoming increasingly competitive with fossil fuels, reducing the long-term economic burden.

CHALLENGES

- **High Import Dependence:** Reliance on imported oil and gas exposes India to price volatility and geopolitical tensions, affecting fiscal stability and affordability.
- **Coal Dependence:** Dominance of coal due to low cost delays clean energy transition and contributes significantly to pollution.
- **Intermittency of Renewables:** Solar and wind depend on weather, causing inconsistent generation and grid stability challenges.
- **Energy Storage Constraints:** Limited affordable storage technologies hinder renewable integration, with batteries still costly.
- **Grid Infrastructure Limitations:** Weak transmission networks cause energy losses and underutilisation of renewable capacity.
- **Financial Constraints:** Energy transition needs huge investments, stressing governments and DISCOMs, while policy uncertainty affects private participation.
- **Critical Minerals Dependency:** Dependence on imported lithium and cobalt creates a new form of import vulnerability.
- **Energy Poverty:** Many households still face affordability and reliable access issues, reflecting energy inequality.

- **Environmental Concerns:** Fossil fuel use drives pollution and climate change, complicating sustainable growth.
- **Policy and Regulatory Issues:** Delays and inconsistent policies create uncertainty and hinder investments and implementation.

GOVERNMENT INITIATIVES

- **Renewable Energy Targets:** India targets **500 GW non-fossil capacity by 2030** (with ~252 GW already achieved, over 50% of installed capacity), driving massive clean energy investments.
- **PM Surya Ghar Scheme:** Targets **1 crore households and 30 GW rooftop solar capacity**, with subsidies up to 40% and potential reduction of **720 MMT CO_2 emissions**.
- **PM-KUSUM Scheme:** Aims to add **34.8 GW solar capacity** through decentralised plants, solar pumps, and feeder solarisation, providing up to **60% subsidy to farmers**.
- **Green Hydrogen Mission:** The National Green Hydrogen Mission aims to produce **5 million metric tonnes annually by 2030**, positioning India as a global hub for clean fuel.
- **Ethanol Blending Programme:** Ethanol blending has increased from **~1.5% (2013) to ~15% (2024)** with a **20% target by 2025–26**, saving over **₹1 lakh crore in forex** and reducing emissions.
- **Ujjwala Yojana:** The scheme has provided **9+ crore LPG connections**, improving health outcomes and reducing indoor air pollution among poor households.
- **Energy Efficiency Programs:** Initiatives like UJALA LED distribution have delivered **36+ crore LEDs**, significantly reducing electricity consumption and costs.
- **Electricity Sector Reforms:** The **Revamped Distribution Sector Scheme (RDSS)** focuses on reducing **Aggregate Technical and Commercial (AT&C) losses** and improving the efficiency of power distribution companies (DISCOMs).
- **Make in India in Energy:** Production Linked Incentive (PLI) schemes have created **48 GW solar module manufacturing capacity**, boosting domestic production and reducing import dependence.
- **Diversification of Imports:** India is diversifying oil and gas sourcing across regions like the US, Russia, and Africa to reduce geopolitical risks and supply vulnerabilities.

WAY FORWARD

- **Diversification of Energy Basket:** India must reduce fossil fuel dependence by expanding renewables, nuclear, and gas to ensure a more stable and secure energy mix.
- **Accelerating Renewable Transition:** Rapid scaling of solar, wind, and hybrid projects is essential to meet rising demand and achieve climate targets.
- **Investment in Energy Storage:** Promoting battery storage and pumped hydro is crucial to manage renewable intermittency and ensure reliable power supply.
- **Strengthening Grid Infrastructure:** Developing smart grids and modern transmission systems can improve efficiency and enable seamless renewable integration.
- **Boost Domestic Production:** Expanding domestic exploration of oil, gas, and critical minerals reduces import dependence and enhances resilience.
- **Green Hydrogen Ecosystem:** Building hydrogen-based energy systems can decarbonize hard-to-abate sectors and provide a sustainable long-term solution.
- **Energy Efficiency and Conservation:** Promoting efficient technologies and conservation reduces overall energy demand and is the most cost-effective energy strategy.
- **Strengthening Energy Diplomacy:** Strategic global partnerships ensure stable energy supplies while facilitating access to technology and investment.
- **Just Energy Transition:** Policies must protect workers and regions dependent on fossil fuels to ensure social equity and political acceptability.
- **Innovation and R&D:** Increased investment in research and development strengthens indigenous capabilities and reduces dependence on foreign technology.

CONCLUSION

India's energy security challenge lies in balancing **growth needs, environmental sustainability, and geopolitical risks**. A diversified energy mix supported by renewables, efficiency, and strong policy measures is key to achieving a **secure, resilient, and sustainable energy future**.

SAMPLE QUESTION

Q) How do global geopolitical developments impact India's energy security? Suggest measures to mitigate risks.
(10 marks) (150 words)

TRANSGENDER PERSONS AMENDMENT BILL, 2026

Syllabus: GS II - Government policies and interventions for development in various sectors

PYQ MAPPING

Q) *Women empowerment in India needs gender budgeting. What are the requirements and status of gender budgeting in the Indian context?* ***(2016)***

WHY IN NEWS

The **Transgender Persons (Protection of Rights) Amendment Bill, 2026** was introduced in Parliament on March 13 by Union Minister **Virendra Kumar**, Ministry of Social Justice and Empowerment, proposing significant reforms to the 2019 Act.

INTRODUCTION

Transgender persons in India have historically faced systemic marginalisation despite constitutional guarantees of equality, dignity, and freedom. The Transgender Persons (Protection of Rights) Act, 2019 and the proposed Transgender Persons (Protection of Rights) Amendment Bill, 2026 represent evolving legislative attempts to address these challenges, albeit with significant debates.

SHORT TAKES

- **Guru-chela network**
  - A traditional kinship system in the hijra/transgender community where a senior member (guru) adopts and mentors younger members (chelas), providing shelter, protection, and social identity.
  - In return, chelas often share a portion of their earnings and follow a hierarchical structure, making it both a support system and a form of socio-economic organization.

HISTORICAL EVOLUTION

Pre-colonial Social Legitimacy:

- Transgender identities in India have historically included communities such as **hijra, kinner, aravani, and jogta,** reflecting a long-standing socio-cultural presence.
- They occupied **recognized socio-cultural and religious roles**, including court positions and ritual functions.

Colonial Criminalisation and Stigma:

- The Criminal Tribes Act, 1871 classified transgender persons as "eunuchs" and subjected them to surveillance and restrictions.
- This institutionalised stigma and created **long-term socio-economic exclusion that persists today**.

Post-Independence Policy Neglect:

- Despite constitutional guarantees of equality, transgender persons remained **absent from welfare policies and legal frameworks** for decades which resulted in continued marginalisation in education, employment, and housing.

Gradual Recognition Phase (2010s):

- The 2011 Census formally recognised transgender persons, marking a **shift toward official acknowledgment**.
- Increased activism and judicial engagement further brought transgender rights into mainstream discourse.

Legislative Evolution:

- The journey from the 2014 Private Member Bill to the 2019 Act reflects **growing but contested state intervention** in transgender rights.

LANDMARK JUDGEMENTS

National Legal Services Authority (NALSA) v. Union of India (2014):

- The Supreme Court recognised transgender persons as a **"third gender"** and **affirmed that fundamental rights apply equally to them**
- The judgment established that individuals have the right to **self-identify as male, female, or third gender without medical intervention**
- It also directed the state to provide **reservation and welfare measures**, establishing a rights-based framework.

Navtej Singh Johar Case (2018):

- The decriminalisation of Section 377 reinforced the principles of **dignity, equality, and personal choice**.

- It expanded constitutional protection for LGBTQ+ identities, including transgender persons.

Supriyo v. Union of India (2023):

- The Supreme Court **declined to legalise same-sex marriage** under existing laws like the Special Marriage Act.
- It held that **recognising marriage equality is the role of Parliament, not the judiciary**.
- However, the Court **affirmed rights of LGBTQ+ persons**, including dignity, equality, and protection from discrimination.

NEED FOR A LEGISLATIVE FRAMEWORK

Persistent Structural Discrimination: Transgender persons face systemic exclusion in **education, employment, healthcare, and housing**. Legal protection is necessary to ensure equal access and prevent discrimination.

Economic Marginalisation: Due to lack of opportunities, many transgender persons are forced into **informal sectors such as begging or sex work**.

Gap Between Judicial Recognition and Implementation: While NALSA provided a rights-based framework, there was **no statutory mechanism to enforce these rights effectively**.

Human Rights Imperative: Gender identity is intrinsically linked to **fundamental rights such as equality, freedom, and dignity**.

Need for Welfare State Intervention: Targeted schemes and institutional support are required to address **historical disadvantage and social exclusion**.

ABOUT THE TRANSGENDER ACT 2019

Broad and Inclusive Definition of Transgender:

- The Act defined transgender persons as those whose gender does not match the sex assigned at birth, including **trans men, trans women, intersex persons, genderqueer individuals, and socio-cultural identities**.
- This aligned with the United Nations understanding of transgender as an umbrella category.

Distinction Between Sex and Gender:

- The Act clearly distinguished **sex (biological characteristics such as chromosomes, hormones, and anatomy)** from **gender (a social construct involving roles and behaviours)**.

Prohibition of Discrimination:

- It prohibits discrimination in education, employment, healthcare, housing, and access to public services.

Right to Identity Certificate:

- Transgender persons could apply to the District Magistrate for a certificate of identity without medical examination.
- This ensured a relatively accessible and non-invasive process for legal recognition thereby enabling change of name/gender in documents.
- As per official data, **32,424 identity cards have been issued through the national portal**.

Welfare Measures:

- The government is mandated to create welfare schemes, including vocational training, self-employment, and social inclusion programs.

Right to Residence and Family:

- The Act provides the right to reside with family, and separation is allowed only through a court order, ensuring protection from arbitrary exclusion.

Institutional Mechanism & Penalties:

- It establishes the **National Council for Transgender Persons** and **Transgender Welfare Board.**
- Prescribes punishment (6 months to 2 years imprisonment + fine) for offences against transgender persons.

KEY FEATURES OF THE AMENDMENT BILL, 2026

Removal of Self-Identification Principle:

- The Bill removes the right to self-identify gender, arguing that the earlier provision was too broad and vague.
- It claims this made it difficult to identify "genuine beneficiaries" and enforce laws effectively.

Introduction of Medical Screening Committees:

- The amendment redefines transgender identity based on **biological and congenital factors**, reverting to a pre-2014 understanding.
- The Bill mandates the formation of a **medical board headed by a Chief Medical Officer or Deputy CMO**, which will recommend certification to the District Magistrate (DM).

- The DM must consider these recommendations along with expert advice before issuing identity certificates.

Narrowing of Definition:

- The Bill **excludes categories such as genderqueer and non-binary individuals,** retaining only certain socio-cultural identities and medically identifiable conditions

Creation of a New Category (Forced Identity Cases):

- It introduces a category for persons who are forced into transgender identity through coercion, inducement, mutilation, castration, amputation, or hormonal/surgical procedures.

Strengthened Penal Provisions:

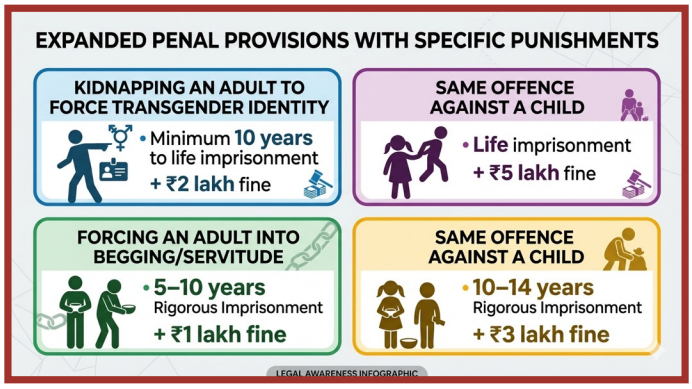
- The Bill significantly enhances punishments and prescribes strict penalties for forcing transgender persons into begging, bonded labour, or servitude, especially in cases involving children.

Stricter Institutional Criteria:

- The Bill requires that representatives of states/UTs in the National Council must hold at least the **rank of Director in relevant ministries or departments**.

Government Rationale:

- The government argues that stricter provisions are needed to **prevent misuse of benefits and ensure targeted welfare delivery**.



CRITICISMS

Violation of Judicial Mandate: The removal of self-identification violates the **fundamental right to dignity and autonomy recognised by the Supreme Court**, seen as a direct rollback of NALSA protections.

Burden of Proof on Individuals: The amendment requires individuals to "prove" their identity through medical certification which places an unfair burden on transgender persons.

Medicalisation and Bureaucratisation: The introduction of medical boards is seen as **intrusive and difficult**, especially in a society with widespread transphobia. It may lead to delays, harassment, and exclusion.

Exclusionary Definition: The Bill recognises only certain socio-cultural identities, excluding individuals outside traditional systems like the **guru-chela structure** which creates ambiguity and exclusion.

Lack of Stakeholder Consultation: The Bill has been criticised for being drafted without adequate **consultation with the transgender community**.

Fear of Rights Rollback: Activists argue that the Bill may reverse progress made since 2014, leading to **greater marginalisation and bureaucratic control**.

Concerns Over Terminology and Respect:

- Activists pointed out that the use of terms like "hijra" and "aravani" without acknowledging evolving respectful terminology is problematic.
- It ignores progress made in regions like Tamil Nadu with terms such as **"thirunagai" and "thirunambi".**

Continuing Issues from 2019 Act: The absence of reservation and weak penal provisions remain unresolved.

GOVERNMENT INITIATIVES

SMILE Scheme: The scheme focuses on **rehabilitation, livelihood support, and healthcare services** for transgender persons and aims to integrate them into mainstream society.

Garima Greh (Shelter Homes): These provide **safe housing, food, medical care, and skill training**. They address immediate needs of vulnerable individuals.

National Portal for Transgender Persons: The portal enables online application for **identity certificates and ID cards**, improving accessibility thereby reduces physical barriers in accessing services.

Transgender Persons Rules, 2020: These rules provide detailed procedures for implementing the Act. They operationalise the legal provisions at the ground level.

KERALA MODEL FOR TRANSGENGER INCLUSION

- **First State Policy:** Kerala became the **first state to adopt a Transgender Policy (2015)** ensuring self-identification, non-discrimination, and equal access to opportunities.
- **Kochi Metro Employment Initiative:** Kochi Metro was among the **first public sector projects to employ transgender persons (around 23 initially)**, promoting mainstream inclusion.
- **Institutional Mechanisms:** Kerala set up bodies like **Transgender Justice Board and welfare systems**, along with inclusion in official records and infrastructure (e.g., separate toilets)
- **Examples of Welfare Schemes:**
  - **Saphalam** Provides financial assistance (up to ₹1,00,000 per year) for transgender students pursuing degree or diploma-level professional courses.
  - **Karuthal** A crisis intervention fund that provides immediate financial support for emergency medical needs, complications after Sex Reassignment Surgery (SRS), ambulance services, food, shelter, and legal aid.

WAY FORWARD

- **Restore Self-Identification:** The law must align with NALSA by recognising **self-identification as a fundamental right**.
- **Adopt Rights-Based Approach:** Policy must shift from welfare to **empowerment and equal opportunity** to ensure long-term inclusion rather than dependency.
- **Reservation and Affirmative Action:** Implementing quotas in education and employment can address **historical disadvantage and systemic exclusion**.
- **Simplify Certification Process:** Reducing bureaucratic hurdles will ensure **accessibility and dignity in identity recognition**.
- **Sensitisation:** Awareness programs are needed to address transphobia in society and institutions, especially healthcare and administration
- **Community Participation:** Involving transgender persons in policymaking ensures **inclusive and effective governance**.
- **Holistic Inclusion:** Focus must extend to **healthcare, mental health, housing, and livelihood opportunities** to ensure comprehensive empowerment.

CONCLUSION

While India has made notable progress through judicial recognition and legislative measures, tensions remain between **rights-based autonomy and state regulation**. The way forward lies in aligning laws with constitutional morality to ensure **dignity, inclusion, and substantive equality** for transgender persons.

SAMPLE QUESTION

Q) Analyse the issues faced by transgender persons in India and evaluate the measures taken to address them. **(10 marks) (150 words)**

EUTHANASIA IN INDIA

Syllabus: GS IV - International relations

PYQ MAPPING

Q) *Appropriate local community-level healthcare intervention is a prerequisite to achieve 'Health for All ' in India. Explain.* ***(2018)***

In order to enhance the prospects of social development, sound and adequate health care policies are needed particularly in the fields of geriatric and maternal health care. Discuss. ***(2020)***

WHY IN NEWS

The **Supreme Court of India (March 2026)** permitted withdrawal of life support for Harish Rana, a patient in a permanent vegetative state. This marks the **first practical implementation** of passive euthanasia principles after their legal recognition, bridging the gap between law and practice.

INTRODUCTION

Euthanasia refers to the intentional ending of life to relieve suffering in cases of incurable illness. While it remains ethically contested, modern constitutional jurisprudence in India has evolved to recognise that the **right to life includes the right to die with dignity**. India permits **passive euthanasia under strict safeguards**, while **active euthanasia remains illegal**.

DIFFERENCE BETWEEN ACTIVE AND PASSIVE EUTHANASIA

Aspect	Active Euthanasia	Passive Euthanasia
Meaning	Intentional act to end life using medical intervention	Allowing death by withdrawing or withholding treatment
Nature of Action	**Direct action** to cause death	**Indirect action** (letting nature take its course)
Method Used	Lethal injection or prescribed drug	Stopping life support (ventilator, dialysis, CPR, etc.)
Objective	Immediate relief from suffering by causing death	Relief from suffering by avoiding prolonged artificial survival
Role of Doctor	Doctor actively administers or prescribes lethal substance	Doctor withdraws/withholds treatment with consent
Legal Status in India	Illegal	Legal (with safeguards)
Legal Status Globally	Legal in some countries (e.g., US (select states), Canada, etc.)	Widely accepted in many countries

LEGAL FRAMEWORK IN INDIA

The evolution of passive euthanasia in India has been gradual and judicially driven.

- Under **Article 21 of Indian Constitution**, the Supreme Court has expanded the meaning of life to include dignity even in death.
- **Key judicial milestones include**
  - In ***Gian Kaur v. State of Punjab***, the Court held that the right to die is not a fundamental right, but it opened the door for passive euthanasia in certain situations.
  - The ***Aruna Shanbaug Case*** laid down procedural safeguards, requiring approval from High Courts and medical boards.
  - A major shift came in ***Common Cause v. Union of***

India, where passive euthanasia and **Living Wills** were formally recognised.

- **Supreme Court's Observations in Harish Rana Case (2026)**
- **Legislative Vacuum & Core Issue:** The Supreme Court of India highlighted the absence of a comprehensive euthanasia law and addressed the key question of whether artificial feeding (PEG tube) qualifies as *medical treatment*, and if its withdrawal is legally permissible.
- **Broad Interpretation of Life Support:** The Court rejected the Delhi High Court's narrow view, clarifying that life support is not limited to ventilators and that dependence on medical care can exist even if the patient can breathe independently.
- **CANH as Medical Treatment (Turning Point):** It classified **Clinically Assisted Nutrition and Hydration (CANH)** as a medically supervised intervention, thereby bringing it under the ambit of Common Cause v. Union of India and allowing its withdrawal when futile.
- **Best Interests & Dignity Principle:** The Court applied the **"best interests of the patient" test**, holding that treatment should not merely prolong biological survival without dignity, awareness, or hope of recovery, and recognised the family's decision as an act of compassion.
- **Shift to Clinical Judgment & Procedural Clarity:** Decision-making was placed within doctors' professional assessment, and the Court directed better coordination in forming medical boards to ensure smooth and timely implementation of end-of-life decisions.

PROCEDURE FOR PASSIVE EUTHANASIA IN INDIA

The process for passive euthanasia in India, based on the **Supreme Court's directives and 2024 draft guidelines,** involves a structured, multi-step medical and ethical evaluation

- **Initial Medical Assessment:** The treating doctor first evaluates whether the patient has any realistic chance of recovery or meaningful quality of life with continued treatment.
- **Primary Medical Board Review:** A **primary board**, consisting of the treating physician and two experienced specialists (minimum 5 years' experience), examines the case and arrives at a consensus regarding prognosis.
- **Consultation with Family:** The medical team discusses the patient's condition, prognosis, and treatment options with the family. A **shared decision** is taken regarding continuation or withdrawal of life support.
- **Secondary Medical Board Approval:** If withdrawal is agreed upon, the case is referred to a **secondary board** (including a CMO-nominated doctor and two experts), which must review and decide within **48 hours**.
- **Intimation to Authorities & Implementation:** The hospital informs the concerned magistrate (approval not required), and upon completion of formalities, life-sustaining treatment may be **legally withdrawn**.

ON GOING DEBATE

Arguments in Favour of Passive Euthanasia	Arguments Against Passive Euthanasia
» **Dignified Death under Article 21:** The Supreme Court of India, in ***Common Cause v. Union of India***, recognised that the right to life includes the **right to die with dignity**, particularly in terminal or irreversible conditions. » **Respect for Individual Autonomy:** It empowers patients to make informed choices about their own bodies, including the right to **refuse life-prolonging treatment**. » **Preservation of Human Dignity:** It prevents situations where a person is kept alive in a purely biological state, without awareness, autonomy, or meaningful interaction. » **Role of Advance Directives (Living Will):** The recognition of **Living Wills** ensures that an individual's medical preferences are honoured even when they are no longer capable of expressing consent.	» **Possibility of Misuse:** Vulnerable groups such as the elderly, disabled, or financially dependent, may face **subtle coercion** from families or institutions. » **Inadequate Healthcare Infrastructure:** Limited access to **palliative and end-of-life care** raises concerns that euthanasia may be used as a substitute for proper medical support. » **Uncertainty in Medical Prognosis:** Diagnoses are not always definitive; there have been cases of **unexpected recovery**, making irreversible decisions risky. » **Cultural and Ethical Resistance:** Many religious and societal beliefs in India emphasise the **sanctity of life**, leading to moral opposition to withdrawal of life support.

HURDLES IN IMPLEMENTATION OF PASSIVE EUTHANASIA IN INDIA

- **Shortage of Qualified Medical Experts:** Many hospitals lack doctors with the required experience to serve on medical boards, making it difficult to follow the prescribed procedure.
- **Delay in Formation of Secondary Medical Boards:** The process depends on the Chief Medical Officer (CMO) to provide a list of nominated doctors, but only a few states (like Maharashtra, Goa, Karnataka) have operationalised this.
- **Institutional Gaps Across States:** Uneven implementation across states leads to inconsistency and delays in decision-making.
- **Fear of Legal Consequences in Private Hospitals:** Private hospitals are often reluctant to withdraw life support due to concerns over litigation, unlike government hospitals where the process is relatively smoother.
- **Emotional and Psychological Burden on Families:** Families often experience guilt and hesitation while making end-of-life decisions, requiring sensitive counselling and clear communication from doctors.
- **Lack of Effective Communication:** Inadequate counselling can lead to confusion and delay, even when the medical prognosis is clear and treatment is futile.

WAY FORWARD

- **Enact a Comprehensive Legislation:**
  - India should move beyond judicial guidelines and enact a clear law on end-of-life care, defining procedures, safeguards, and accountability. This will reduce ambiguity noted by the Supreme Court of India and ensure uniform implementation across states.
- **Strengthen Living Will & Patient Autonomy Mechanisms:**
  - The framework evolved in Common Cause v. Union of India should be simplified further and integrated with digital health records.
  - **Global example**: Countries like the **USA** and **Netherlands** have well-established advance directive systems that ensure patient wishes are respected.
- **Expand Palliative Care Infrastructure**
  - Passive euthanasia should not become a substitute for lack of care.
    - India must invest in **palliative and hospice care**, especially in rural areas.
    - **Global example**: The **UK** has a strong hospice movement ensuring dignity in end-of-life care without over-reliance on euthanasia.
- **Institutionalise Medical Ethics & Safeguards:**
  - Clear hospital protocols, trained ethics committees, and time-bound medical boards should be ensured.
  - The ***Harish Rana judgment*** emphasised **clinical judgment and "best interest" test**, which must be standardised across institutions.
- **Awareness, Oversight & Protection Against Misuse**
  - Public awareness campaigns and strict monitoring mechanisms are needed to prevent coercion. Independent oversight bodies can ensure decisions are voluntary and informed.

CONCLUSION

Passive euthanasia in India reflects a shift towards balancing **sanctity of life with dignity in death**. Through cases like Common Cause v. Union of India and the Harish Rana judgment, the Supreme Court of India has operationalised the **right to die with dignity under Article 21**. However, gaps in law and implementation remain, requiring a **clear, ethical, and well-regulated framework** to prevent misuse while ensuring dignity.

SAMPLE QUESTION

Q) *"Passive euthanasia in India represents a shift from preservation of life to preservation of dignity."* Discuss in the light of recent Supreme Court judgments. Also examine the ethical challenges and suggest a way forward. **(15 marks) (250 words)**

PROTON ACCELERATOR IN INDIA

Syllabus: GS III - Indigenization of technology and developing new technology.

PYQ MAPPING

Q) *The fusion energy programme in India has steadily evolved over the past few decades. Mention India's contributions to the international fusion energy project International Thermonuclear Experimental Reactor (ITER). What will be the implications of the success of this project for the future of global energy?* ***(2025)***

Q) *With growing energy needs should India keep on expanding its nuclear energy programme? Discuss the facts and fears associated with nuclear energy?* ***(2018)***

Q) *Give an account of the growth and development of nuclear science and technology in India. What is the advantage of fast breeder reactor programme in India?* ***(2017)***

WHY IN NEWS

Andhra Pradesh is set to host a **high-energy proton accelerator facility in Visakhapatnam**, as part of India's long-term plan to develop accelerator-driven systems for utilising its vast thorium reserves.

INTRODUCTION

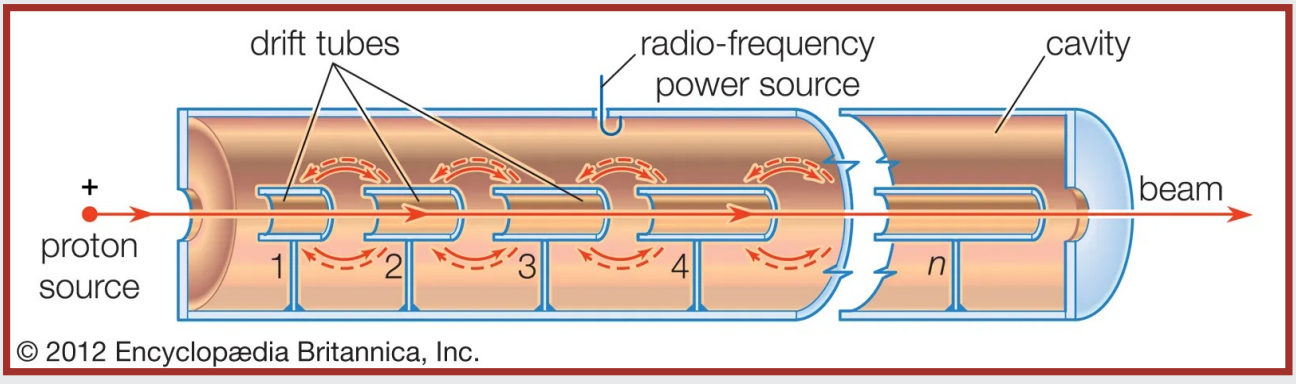
Proton accelerators represent the cutting edge of modern science, **enabling precise control over high-energy particles** for applications ranging from cancer therapy to nuclear research. In the Indian context, their emergence reflects a strategic shift toward high-technology capabilities in healthcare, energy, and fundamental research.

SHORT TAKES

- **Particle Accelerator:**
  - A broad class of machines that accelerate charged particles (electrons, protons, ions, etc.) to high speeds.
- **Cyclotron:**
  - A type of particle accelerator that uses a magnetic field and an alternating electric field to accelerate charged particles in a spiral path to high energies.
  - As particles repeatedly cross a gap between electrodes, they gain energy and move outward in larger circular paths until they are extracted for use in nuclear research, medicine, or industry
- **Spallation**
  - A nuclear reaction in which a heavy atomic nucleus, when struck by a high-energy particle (like a proton), ejects several smaller particles such as neutrons.

WHAT IS A PROTON ACCELERATOR?

- **Definition:** A proton accelerator is a type of **particle accelerator** that accelerates positively charged particles (protons) to very high speeds using electromagnetic fields, enabling their use in medicine, research, and industry.
- **Working Principle:** Protons are extracted from hydrogen atoms, accelerated through electric fields, and controlled using magnetic fields to hit a specific target with high precision.



EVOLUTION OF ACCELERATOR TECHNOLOGY IN INDIA

Early Development:

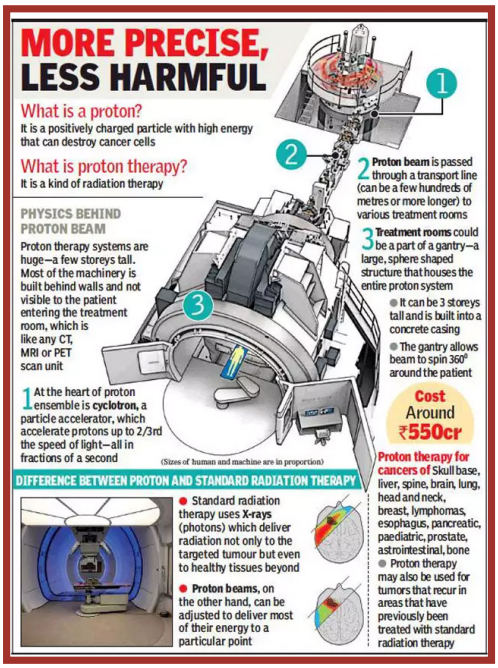
- India's accelerator programme began under the Department of Atomic Energy (DAE), focusing on nuclear research, isotope production, and basic particle physics.
- Institutions like Bhabha Atomic Research Centre (BARC) and Variable Energy Cyclotron Centre (VECC) played a pioneering role in India's accelerator development by establishing cyclotrons.

Expansion Phase:

- Over time, the focus expanded to applied areas like radiation technology, material science, and **Accelerator Driven Systems (ADS)** for nuclear energy.

Modern Developments:

- India entered advanced medical applications with proton therapy centres
  - Apollo Proton Cancer Centre (2019) – first in South Asia
  - Tata Memorial Centre (2023) – first public sector facility



PROTON ACCELERATOR AT VISAKHAPATNAM

Project Overview

- The Government of India is planning to establish a **high-energy proton accelerator facility in Visakhapatnam (Andhra Pradesh)** as part of its long-term nuclear research programme.
- The project is linked to India's **advanced atomic energy roadmap**, focusing on next-generation reactor technologies.

Institutional Leadership

- The project is being developed under the guidance of the **Raja Ramanna Centre for Advanced Technology (RRCAT),** a premier institution under the Department of Atomic Energy.
- RRCAT has expertise in **particle accelerators, laser technologies, and advanced research infrastructure**, making it the nodal technical body.

Purpose and Scientific Function

- The proton accelerator will generate **high-energy neutrons through spallation reactions** by bombarding heavy metal targets with high-speed protons.
- These neutrons will be used to **convert thorium into fissile uranium (U-233)**, enabling its use as nuclear fuel.

Role in India's Nuclear Programme

- The project supports India's **three-stage nuclear power programme**, particularly the **third stage based on thorium utilisation**.
- It contributes to the development of **Accelerator Driven Systems (ADS)**, which are safer and more efficient nuclear technologies.

Strategic Importance

- India possesses **one of the world's largest thorium reserves**, but lacks sufficient natural uranium.
- The proton accelerator helps **unlock thorium-based energy**, enhancing **long-term energy security and strategic autonomy**.
- It also has implications for **defence, advanced research, and high-end technological capability building**.

Location Advantage: Visakhapatnam

- **Visakhapatnam** has been selected due to:
  - Strong **industrial and technological ecosystem**
  - Presence of **defence and research institutions**
  - **Proximity to the sea**, ensuring availability of large quantities of cooling water required for

high-energy systems

- **Timeframe and Complexity**
  - The project is **highly complex and capital-intensive**, involving cutting-edge accelerator physics and is expected to take **several decades to become fully operational.**
- **Economic and Innovation Potential**
  - The ecosystem around RRCAT and the proposed facility is expected to:
    - Promote **startup innovation and industry collaboration**
    - Generate **high-value technology markets (₹1000 crore+ potential)**
    - Contribute to India's emergence as a **global hub in advanced accelerator technologies**

APPLICATIONS AND IMPORTANCE

Cancer Treatment:

- Proton accelerators are used in proton therapy to treat cancers like brain and spinal tumours with high precision and fewer side effects.
- Proton therapy shows **80–95% tumour control rates** and significantly improves patient recovery and quality of life.
- Proton therapy reduces the need for Indians to travel abroad and can benefit nearly **1.2 lakh patients annually** requiring advanced radiation treatment.

Scientific Research:

- They are used to study atomic structure, nuclear reactions, and fundamental forces, contributing to advancements in physics and materials science.

Industrial Applications:

- Proton beams are used for semiconductor testing, material strengthening, and radiation testing of space equipment.

Energy Applications:

- Proton accelerators enable **Accelerator Driven Systems (ADS)**.
- An **ADS** is a nuclear technology in which a **high-energy proton accelerator produces neutrons through spallation to sustain fission in a subcritical reactor core**.
- A **subcritical reactor** means the nuclear chain reaction **cannot sustain itself independently** and requires an external neutron source, making the system inherently safe as the reaction stops when the accelerator is switched off.
- ADS is used for **efficient thorium utilisation, generation of safer nuclear energy, and transmutation of long-lived radioactive waste into less harmful forms**.

Technological Self-Reliance:

- Developing proton accelerators supports indigenous high-end technology and aligns with Atmanirbhar Bharat goals.

CHALLENGES

- **High Capital Cost:** Setting up a proton accelerator facility can cost around ₹500 crore, with high maintenance expenses, making it capital-intensive.
- **Expensive Treatment**: Proton therapy costs ₹10–50 lakh per patient, limiting accessibility despite its benefits.
- **Limited Availability:** India currently has only a few operational centres, leading to unequal regional access to this advanced treatment.
- **Technical Complexity:** The technology requires highly skilled professionals and complex infrastructure, increasing operational challenges.
- **Low Awareness:** Many patients and doctors still rely on conventional radiotherapy due to lack of awareness about proton therapy benefits.

GLOBAL DEVELOPMENTS

- **Fundamental Particle Physics (Europe):** CERN operates the Large Hadron Collider, a **27 km-long machine** colliding protons at near light speed, enabling discoveries like the Higgs boson and research on dark matter.
- **Medical Applications (USA & Japan):** The USA hosts **40+ proton therapy centres**, while Japan leads in **carbon-ion therapy and compact synchrotron systems** for highly precise cancer treatment.

- **Nuclear Energy & Waste (India & China):** India, through Bhabha Atomic Research Centre, is developing **Low Energy High Intensity Proton Accelerator (LEHIPA)** while China is advancing similar facilities for nuclear waste transmutation.
- **Materials Science (USA, EU, Japan):** Facilities like the **Spallation Neutron Source (USA)** and **Japan Proton Accelerator Research Complex (J-PARC)** generate neutrons via spallation, enabling **atomic-level analysis of materials, proteins, and electronics**.

WAY FORWARD

- **Infrastructure Expansion:** More proton accelerator centres must be established across India to improve accessibility and reduce regional imbalance.
- **Indigenous Technology Development**: Investment in domestic R&D can reduce dependence on imports and lower overall costs.
- **Public Sector Strengthening:** Government-supported centres like Tata Memorial can provide subsidized or free treatment to improve inclusivity.
- **Skill Development:** Training programmes are needed to build expertise in accelerator physics, oncology, and engineering.
- **Global Collaboration:** Partnerships with international research projects can accelerate technology transfer and innovation.

CONCLUSION

As a **dual-use technology spanning healthcare and strategic sectors**, proton accelerators can significantly enhance India's scientific and developmental trajectory. Strengthening indigenous capacity, expanding access, and fostering innovation will be key to leveraging their full transformative potential.

SAMPLE QUESTION

Q) "Proton accelerator technology is emerging as a critical component of India's scientific and healthcare ecosystem." Discuss its applications, challenges, and future prospects in India. **(10 marks) (150 words)**

WEEKLY DOSSIERS

NAVIC IN DISTRESS: CHALLENGES TO INDIA'S INDIGENOUS NAVIGATION SYSTEM

NavIC (Navigation with Indian Constellation), developed by Indian Space Research Organisation, is India's regional navigation system aimed at ensuring strategic autonomy after the denial of GPS access during the Kargil War. However, recent satellite failures and system inefficiencies have pushed the constellation into operational distress.

Issues

- **Satellite Degradation**
  - Only 3 satellites currently operational for PNT (Position Navigation and Timing) (minimum 4 required)
  - Rapid decline faster than replacement rate
- **Atomic Clock Failures**
  - Failure of rubidium atomic clocks affecting navigation accuracy
  - Reliability issues even in earlier imported systems
- **Launch & Technical Setbacks**
  - Failed/incorrect satellite placement (e.g., NVS-02)
  - Low launch frequency and dependence on limited launch vehicles
- **Institutional & Resource Constraints**
  - ISRO overburdened with multiple roles
  - Lack of dedicated navigation authority and limited budget

Implications

- **Strategic Vulnerability**
  - Weakens defence navigation independence
- **Reduced Reliability**
  - Impacts civilian and military navigation services
- **Economic Loss**
  - Limits growth of geospatial and digital economy
- **Technological Setback**
  - Erodes confidence in indigenous space capabilities

Way Forward

- **Technological Upgradation**
  - Improve indigenous atomic clocks and satellite redundancy
- **Institutional Reform**
  - Create a dedicated NavIC authority and enact space law
- **Enhance Launch Capacity**
  - Increase launch frequency and involve private sector
- **Promote Adoption**
  - Ensure NavIC integration in devices and expand civilian use

Conclusion

NavIC is crucial for India's strategic autonomy and technological self-reliance. Addressing current operational and institutional challenges is essential to transform it into a reliable and globally competitive navigation system.

ENVIRONMENTAL COSTS OF CONFLICT: WEST ASIA WAR AND CLIMATE IMPACT

Modern warfare has emerged as a significant but often overlooked contributor to environmental degradation. Recent conflicts in West Asia, including the ongoing crisis involving Gaza, have generated massive greenhouse gas emissions, with a study in *One Earth* estimating **33 million tonnes of CO_2 equivalent**, highlighting the ecological cost of war.

Issues

- **High Carbon Emissions from Military Operations**
  - Extensive use of fighter jets, bombers, and naval fleets consuming fossil fuels
  - Continuous operations significantly increase greenhouse gas emissions
- **Destruction of Energy Infrastructure**
  - Attacks on oil refineries, depots, and tankers release toxic pollutants

- Fires lead to large-scale air pollution and carbon release

- **Lifecycle Emissions of War**
  - Emissions from weapons production, logistics, and troop deployment
  - Post-war reconstruction further adds to carbon footprint
- **Ecological Damage and Pollution**
  - Air, water, and soil contamination from explosives and fuel leaks
  - Spread of toxic chemicals affecting ecosystems and human health

Implications

- **Climate Change Acceleration**
  - War-related emissions undermine global climate targets
- **Public Health Crisis**
  - Toxic smoke and pollutants lead to respiratory and water-borne diseases
- **Energy Security Disruptions**
  - Conflicts in critical regions like the Strait of Hormuz affect global energy supply
- **Policy Trade-offs**
  - Governments prioritise energy prices and security over climate commitments

Way Forward

- **Integrate War Emissions into Climate Frameworks**
  - Include military emissions in global climate agreements
- **Protect Critical Environmental Infrastructure**
  - Strengthen international norms against targeting oil and energy facilities
- **Promote Clean Energy Transition**
  - Reduce dependence on fossil fuels to limit war-related environmental risks
- **Post-Conflict Environmental Accountability**
  - Ensure restoration, compensation, and ecological rehabilitation mechanisms

Conclusion

The environmental impact of war extends far beyond immediate destruction, posing long-term threats to climate stability and human health. Recognising and addressing these hidden costs is essential for achieving sustainable peace and global climate goals.

ELECTRIFYING INDUSTRIAL HEAT: TOWARDS INDIA'S THERMAL INDEPENDENCE

The ongoing geopolitical tensions around the **Strait of Hormuz** have exposed India's vulnerability due to heavy dependence on imported natural gas. Since industrial heat accounts for nearly **25% of India's energy use**, transitioning to electrified and renewable heat sources is crucial for achieving thermal independence.

Issues

- **High Dependence on Fossil Fuels**
  - Industrial processes rely heavily on gas and coal
  - Vulnerable to global supply disruptions and price shocks
- **Technological & Infrastructure Constraints**
  - Electrification of high-temperature processes is complex
  - Limited adoption of technologies like induction, plasma, and CST
- **Grid Limitations**
  - Power grids in industrial clusters are ageing and overloaded
  - Lack of storage capacity for round-the-clock renewable supply
- **Policy and Financial Gaps**
  - Lack of incentives for direct heat technologies (CST)
  - High upfront costs and weak carbon market mechanisms

Implications

- **Industrial Disruptions**
  - Gas shortages lead to shutdowns in clusters like Morbi and Ludhiana
- **Energy Insecurity**
  - Dependence on imports threatens economic

stability

- **Climate Concerns**
  - Continued fossil fuel use increases emissions
- **Competitiveness Loss**
  - Higher energy costs reduce global competitiveness of Indian industries

Way Forward

- **Promote Electrification Technologies**
  - Scale up induction heating, plasma torches, and electric boilers
- **Boost Renewable Thermal Solutions**
  - Expand **Concentrated Solar Thermal (CST)** with incentives
- **Strengthen Grid & Storage**
  - Invest in battery storage and pumped hydro
  - Upgrade industrial power infrastructure
- **Policy & Market Reforms**
  - Introduce a **National Thermal Policy**
  - Strengthen carbon markets and provide financial incentives

Conclusion

Electrifying industrial heat is essential not just for decarbonisation but for achieving **true energy sovereignty**. A coordinated push in technology, infrastructure, and policy can enable India to transition from fuel dependence to sustainable thermal independence.

BEYOND VERDICTS: KEY JUDICIAL INTERVENTIONS

SC Judgment on Maternity Benefits for Adoptive Mothers

- The Supreme Court has declared **Section 60(4) of the Social Security Code, 2020** unconstitutional, which restricted maternity benefits to adoptive mothers only if the child was below three months of age.
- The Court held that adoptive mothers are entitled to 12 weeks of maternity leave regardless of the child's age, affirming that reproductive autonomy under **Article 21** extends beyond biological childbirth to include adoption.
- The Social Security Code, 2020, which consolidates nine laws including the Maternity Benefit Act, 1961, was thus read in a more inclusive manner. The Court also urged the Union Government to introduce provisions recognising paternity leave as a social security benefit.

Closure of M.C. Mehta PIL and Landmark Environmental Jurisprudence

- The Supreme Court has formally disposed of the landmark 1985 PIL filed by environmentalist M.C. Mehta, which played a pivotal role in shaping India's environmental law framework.
- The case established the principle of **Absolute Liability** and reinforced the **Doctrine of Public Trust** over natural resources, while also leading to key policy actions such as the introduction of lead-free petrol, coastal management plans, and relocation of polluting industries like stone crushers from Delhi.
- Other significant rulings include the **T.N. Godavarman case (1995)**, which broadened the definition of forest land; the **Vellore Citizens Welfare Forum case (1996)**, which recognised the Precautionary and Polluter Pays principles; and the **S.P. Muthuraman case (2025)**, where the Court held post-facto environmental clearances to be illegal.

Consumer Justice Report 2026: Key Findings

- The **Consumer Justice Report 2026**, released by the India Justice Report, evaluates the performance of consumer dispute redressal commissions in India and highlights persistent structural challenges.
- Despite an improved disposal rate of 88.5% of 7.64 lakh cases post-pandemic, overall pendency increased by 21% between 2020 and 2024, far exceeding the timelines mandated under the Consumer Protection Act, 2019.

- The report also notes severe underutilisation of mediation, with only 134 cases referred across 23 states, a decline in women's representation in State Commissions from 35% in 2021 to 29% in 2025, and significant vacancies, with nearly half of the State Consumer Disputes Redressal Commissions lacking a sitting president.

Crop Diversification and Policy Concerns

- In ***Kisan Mahapanchayat v. Union of India***, the policy allowing duty-free import of yellow dal was challenged on the grounds that it depressed domestic prices and discouraged farmers from cultivating pulses.
- To address such concerns and promote crop diversification, the government has introduced initiatives such as the Crop Diversification Programme under Pradhan Mantri- Rashtriya Krishi Vikas Yojana (PM-RKVY), promotion of pulses through the Mission for Aatmanirbharata on Pulses, oilseeds under the National Mission on Edible Oil–Oilseeds (NMEO), and horticulture development under the Mission for Integrated Development of Horticulture (MIDH).

'Digital Arrest' and Need for Social Media Regulation

- During the hearing of ***Hemendra Patel v. Union of India***, the Supreme Court, led by CJI Surya Kant, highlighted the growing issue of online harassment and termed certain actions of digital platforms as akin to "**digital arrest.**"
- The Court agreed with the Solicitor General's view that some virtual platforms engage in blackmail-like practices, contributing to irresponsible content and social media trials. It also raised concerns over the practice of police sharing images of accused persons on social media, noting that it can lead to public bias and humiliation.
- Emphasising the need for regulation, the Court referred to its earlier directions to States to frame guidelines on police media briefings and called attention to the broader challenge posed by unregulated digital media.

ETHICS - CASE STUDY

Q) Meera is the Chief Executive Officer of a Zila Parishad in a semi-urban district. The administration recently digitized all welfare services, including applications for scholarships, pensions, and maternal health benefits, through an online portal to improve transparency and efficiency. However, Meera notices that a large number of women, especially from economically weaker sections, are unable to access these benefits due to lack of digital literacy, limited access to smartphones, and social restrictions imposed by family members. Many applications are being filed through middlemen who charge high fees, leading to exploitation. Further, data shows that despite higher eligibility, women's participation in welfare schemes has actually declined after digitization. Civil society groups have raised concerns that the move, though well-intentioned, has unintentionally deepened gender inequality. Meanwhile, higher authorities are praising the district for achieving "100% digital governance targets" and expect Meera to replicate this model across all blocks. Reversing or modifying the system may be seen as administrative inefficiency or resistance to reform. Meera is now faced with the challenge of balancing efficiency, technological progress, and inclusive access to welfare.

Questions

a. What are the ethical issues involved in this case?
b. Examine the conflict between efficiency and equity in this situation.
c. What options are available to Meera? Evaluate their pros and cons.
d. What course of action should Meera adopt to ensure gender justice and inclusivity?
e. Suggest long-term measures to bridge the digital divide while maintaining transparency in governance.

ETHICS - EXAMPLES

1. **Human Rights:** The Telangana High Court allowed a 32-year-old woman with Complete Androgen Insensitivity Syndrome (CAIS), a condition where a person has XY chromosomes but lacks a uterus and ovaries, to pursue surrogacy after the State rejected her requests as denial based on her chromosomal condition was unjustified.
2. **Social Justice**: Aajibaichi Shala was launched on March 8, 2016, in Phangane village, Thane district, Maharashtra, with 28 women aged 60 and above as its first batch. They learn Marathi reading and writing, basic arithmetic, rhymes, drawing, and practical skills like banking, allowing many to sign documents instead of using thumbprints and help their grandchildren with homework.
3. **Innovation**: Prabhat Day Boarding School in Akola, Maharashtra, cooks for 1,500 students daily using a biomass-powered flameless kitchen. This LPG-free system uses thermic fluid and crop-residue pellets, ensuring safe, efficient, and low-emission cooking.
4. **Professional Ethics**: Dr Sadanand and Dr Pallavi Raut of Narayangaon, Pune, have treated over 6,000 snakebite victims since 1992, handling around 200 cases annually with antivenom and intensive care. They have trained 10,000 students, 2,000 teachers, and 1,500 ASHA workers across Pune, Kolhapur, and Satara districts, while providing free treatment at Manchar's sub-divisional hospital.
5. **Social Responsibility**: Rohit Kumar in Bihar started his rooftop school with four children paying Rs 125 monthly and now teaches nearly 1,000 students for free or minimal fees. He has also expanded his teaching online, reaching lakhs through Instagram while making education accessible to underprivileged families.
6. **Inclusivity:** Umang Vatika, opened at Safdarjung Hospital, Delhi, is a 2,500 sq ft sensory park for children with cerebral palsy, autism, visual impairments, and other developmental disabilities. Developed by ASTHA and R Squared Foundation, it features wheelchair-accessible swings, sandpits, and sensory pathways to promote safe, inclusive play and development.
7. **Responsibility**: Faldaar initiative, launched by the Revamp India Foundation, involves students in Uttar Pradesh schools planting guava, mango, jamun, and amla trees, many named after teachers or family members. The program has achieved a 75% tree survival rate.
8. **Public Service Ethics:** IAS officer Supriya Sahu launched Chennai's Cool Roof initiative under Tamil Nadu's Urban Heat Mitigation Project, coating rooftops with solar-reflective white paint to reduce indoor temperatures by 5–8°C. The project helped vulnerable communities stay cool, created local employment, and earned her the 2025 Champions of the Earth Award from the UNEP

MODEL ESSAY

"Gratitude is not only the greatest of virtues, but the parent of all the others"

Introduction

- Quote by Roman thinker Cicero
- Highlights gratitude as a foundational moral emotion that nurtures all other virtues such as kindness, humility, and compassion.

Importance

- **Improves mental well-being**: Gratitude enhances happiness, optimism, and reduces stress, anxiety, and depression.
- **Encourages prosocial behaviour**: Grateful individuals are more likely to help others and engage in altruistic actions.
- **Develops moral character**: It nurtures virtues like humility, compassion, and forgiveness by recognising others' contributions.
- **Improves physical health**: Linked to better sleep, lower stress, and overall healthier lifestyles.

Examples

- At Campbell Soup Company in New Jersey, CEO Doug Conant personally wrote over 30,000 thank-you notes, raising employee engagement from among the lowest in the Fortune 500 companies to one of the highest.
- The langar at Golden Temple serves 50,000–100,000 free meals daily through donations and volunteer service, reflecting the Sikh principle that gratitude (*Shukrana*) must be expressed through selfless action (*Seva*).
- In 1847, the Choctaw Nation donated $170 during the Irish Potato Famine, and in 2020 during the COVID-19 pandemic, the Irish people repaid this historic gratitude by raising over $3 million for Native American communities like the Navajo Nation and Hopi Reservation.

Challenges of Gratitude

- **Superficial expression**: Often limited to formal politeness without genuine feeling or reflection.
- **Moral compromise**: Individuals may overlook wrongdoing or act unethically to repay favors.
- **Reinforces inequality**: Can discourage marginalized groups from questioning injustice or demanding rights.
- **Cultural and social barriers**: In some contexts, expressing gratitude openly is discouraged or undervalued.
- **Creates a sense of obligation** – May lead to feelings of indebtedness, pressure, or emotional discomfort.

Way Forward

- **Promote regular practice**: Encourage habits like journaling and daily reflection to build genuine gratitude.
- **Integrate in education**: Include value-based learning and activities that teach appreciation from an early age.
- **Ensure ethical balance**: Practice gratitude without compromising justice or tolerating wrongdoing.
- **Encouragement in institutions**: Foster a culture of appreciation in workplaces and governance for better outcomes.
- **Strengthen social values**: Use media, community efforts, and traditions to cultivate a gratitude-oriented mindset.

Conclusion

- In a fast-paced, materialistic world, gratitude serves as an ethical anchor that fosters emotional well-being, social harmony, and moral development.
- True gratitude must remain thoughtful and ethical, without leading to blind acceptance or compromise.

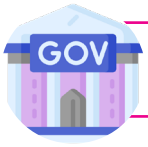
Sample Quotes

- *Fortune favors the prepared mind- Louis Pasteur*
- *The wise man doesn't give the right answers, he poses the right questions- Claude Levi-Strauss*
- *Action is the foundational key to all success- Pablo Picasso*

MAINS JOT DOWN

GS I: *INDIAN SOCIETY*

- The **Central Adoption Resource Authority (CARA)** has issued memorandums under the Juvenile Justice (Care and Protection of Children) Act, 2015 (amended in 2021) and Adoption Regulations, 2022 to strengthen adoption procedures.
- The guidelines mandate strict due process, including proper inquiry, efforts to trace biological parents, and a two-month reconsideration period for surrendered children before declaring them legally free for adoption.
- They also emphasise secure preservation and lawful transfer of adoption records, even if institutions close, and strictly prohibit disclosure of a child's identity, with directions to states for sensitisation and penal action in case of violations.



GS II: *GOVERNMENT POLICIES AND INTERVENTIONS*

- The **Samriddh Gram Phygital Services Initiative**, launched by the Ministry of Communications under the Department of Telecommunications (DoT), aims to transform rural connectivity into a comprehensive service delivery platform.
- Currently in a pilot phase across three villages, it leverages high-speed broadband under BharatNet to integrate digital and physical services. At its core is the **Samriddhi Kendra**, a single-window rural hub providing access to healthcare, education, and e-governance services in one location.

GS II: *HEALTH*

- The **Levels and Trends in Child Mortality Report 2025**, released by the UN Inter-agency Group for Child Mortality Estimation (UNIGME), highlights significant progress made by India in reducing child mortality.
- The under-five mortality rate declined sharply by about 79%, from 127 in 1990 to 26.6 in 2024. Similarly, the neonatal mortality rate dropped to 17, while the infant mortality rate fell to 23.3, reflecting sustained improvements in child health outcomes.

GS III: *AGRICULTURE*

- The Ministry of Agriculture & Farmers Welfare has released the final horticulture estimates for 2024–25, showing steady growth in both area and production.
- The total area under horticulture crops increased from 290.86 to 301.36 lakh hectares, while overall production rose from 3547.44 to 3707.38 lakh tonnes.
- Fruit production grew by 4.13% to 1176.49 lakh tonnes, driven by higher output of crops such as banana, mango, and guava. Similarly, vegetable production increased by 5.11% to 2177.97 lakh tonnes, with notable gains in onion, potato, and cabbage.

GS III: *INTERNAL SECURITY*

- The **Assam government** has signed Memorandums of Settlement with **Kuki** and **Hmar** militant groups, including organisations such as the United Kukigam Defence Army and the Kuki Revolutionary Army, as part of efforts to promote peace and stability in the region.

GS III: *RESOURCES*

- **National Mineral Development Corporation (NMDC) Ltd.**, a Navratna Central Public Sector Enterprise established in 1958 under the Ministry of Steel, is India's largest iron ore producer and the first mining company in the country to achieve 50 million tonnes of output in a single financial year.
- Headquartered in Hyderabad, it is also involved in the exploration of minerals such as copper and limestone, and is notably the only organised producer of diamonds in India through its Majhgawan mine in Panna, Madhya Pradesh.

- The **Council of Scientific and Industrial Research–National Chemical Laboratory (CSIR-NCL)** has developed an indigenous technology for the production of **Dimethyl Ether (DME)**.
- Considered a second-generation biofuel, DME serves as a cleaner and sustainable alternative to LPG, offering potential for reducing emissions and enhancing energy security.

GS III: *SCIENCE & TECHNOLOGY*

- The government has approved 23 institutions to establish **quantum labs** under the **National Quantum Mission (NQM)**. Launched by the Department of Science and Technology (DST) for the period 2023–2031, the mission aims to position India as a global leader in quantum technologies.
- It seeks to promote, nurture, and scale up scientific and industrial research and development while building a vibrant and innovative ecosystem in quantum technology.

GS III: *ENVIRONMENT*

- The report **"Reducing Methane Emissions from Landfills The Potential of Biocover Systems"**, released by the Climate and Clean Air Coalition (CCAC), highlights cost-effective and locally adaptable solutions to curb methane emissions from landfills.
- It emphasises **biocovers**, a microbial system that uses naturally occurring bacteria to convert methane into less harmful carbon dioxide and water, thereby improving air quality and public health. Such systems can mitigate up to **50% of methane emissions** over a long-term period.

GS III: *INFRASTRUCTURE*

- The government has approved the **Small Hydro Power (SHP) Development Scheme** for the period FY 2026–27 to FY 2030–31, with an outlay of ₹2,584.60 crore to develop around 1500 MW capacity.
- The scheme is expected to attract ₹15,000 crore in investment and generate about 51 lakh person-days of employment, particularly benefiting North Eastern and hilly states with high SHP potential.
- It provides financial assistance of up to ₹3.6 crore/MW (or 30% of project cost) for NE and border areas, and ₹2.4 crore/MW (or 20%) for other states, along with support for preparing detailed project reports through a ₹30 crore allocation.

CHERRYPICKS OF THE WEEK

CAPTIVE GENERATING PLANT (CGP)

- It refers to a power plant set up by a company primarily for its own electricity consumption.
- As per the **Electricity Act, 2003** and the **National Electricity Policy, 2005**, a plant qualifies as captive when at least **51% of the generated power is used internally** and the owners hold a minimum of **26% ownership stake**.
- CGPs play a crucial role in supporting industrial growth by ensuring reliable power supply and reducing exposure to fluctuations in electricity costs.

NOR'WESTERS

- They are intense pre-monsoon thunderstorms that develop over eastern and northeastern India during March–May. They bring heavy rain, lightning, thunder, hail, squalls, and sometimes even tornadoes. Known as **Kalbaisakhi** in Bengal and **Bordoisila** in Assam, these storms, despite their destructive nature, are beneficial for crops like tea, jute, and rice.

ANTI-DUMPING DUTY

- It is a trade remedy imposed by an importing country after investigation establishes that imports from another country are being sold at unfairly low prices, causing material injury to domestic industries.
- A product is considered "dumped" when it is exported at a price lower than its normal value in the home market. The imposition of such duties is governed by the Anti-Dumping Agreement of the World Trade Organization (WTO).

FORCE MAJEURE

- It is a term derived from French meaning "superior force," refers to a contractual clause that relieves a party from fulfilling its obligations when unforeseen events beyond its control, such as natural disasters, make performance impossible or impracticable.

VEHICLE-TO-EVERYTHING (V2X) TECHNOLOGY

- It enables vehicles to communicate with each other (V2V), with pedestrians and cyclists (V2P), and with roadside infrastructure (V2I).
- This connectivity enhances road safety by helping detect vulnerable users and prevents collisions, while also improving traffic efficiency through better coordination and real-time information sharing.