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**JANUARY 2024** 

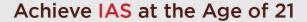
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# MAKAR SANKRANTI, PONGAL, LOHRI: A CELEBRATION OF THE SUN'S RETURN AND THE HARVES

Across India, on January 14th (or 15th in leap years), a vibrant tapestry of cultural celebrations unfolds. This day, known by various names like Makar Sankranti, Pongal, and Lohri, marks a significant shift in the seasons and holds deep astronomical and spiritual significance.

Kannam Pongal celebrates new beginnings.

Karnataka: The saying "Ellu bella thindu olle mathaadi" encourages sharing and good words. Women and children exchange sugarcane pieces, sesame-jaggery mixtures, and caramelized sugar candy. Cattle are adorned and



#### Why We Celebrate:

- Change of Seasons: Makar Sankranti heralds the end of winter and the coming of warmer months. It signifies the northward movement of the Sun (Uttarayan) and the beginning of longer days.
- Astronomical Significance: This day coincides with the Earth's elliptical orbit around the Sun, leading to a change in seasons for the Northern Hemisphere. India, being in this hemisphere, experiences increased daylight hours after Makar Sankranti.
- Religious Importance: The festival is associated with the worship of the Sun god, Lord Surya, and celebrates the victory of the goddess Sankranti over the demon Sankarasur.

#### **Unique Celebrations:**

Despite the common thread of celebrating the Sun's return and the harvest, each region adds its own distinctive flair to the festivities:

 Tamil Nadu: The four-day Pongal festival begins with Bhogi, where houses are cleaned and decorated. The main day features the Pongal dish, a mixture of rice, milk, and sugar. Mattu Pongal honors the bulls crucial for farming, while showcased in a fiery ritual called "Kicchu Haisodu."

North India: Sesame and jaggery ladoos or chikkis are distributed. In Bihar, the festival is called "Khichdi" and features a dish of the same name. Bonfires are lit in Punjab, with people offering groundnuts and popcorn to the flames. Kite-flying is popular in Rajasthan and Gujarat, accompanied by the International Kite Festival in Ahmedabad. Sky lanterns illuminate the evening sky.

#### **Shared Traditions:**

While regional variations exist, some common threads bind these celebrations:

- Bathing in sacred rivers: Ganga, Yamuna, Godavari, Krishna, and Cauvery are popular choices for a purifying dip at sunrise.
- Offering prayers and food: Naivedhya (food offerings) are made to Lord Surya, and charity or Dakshina is given to mark the occasion.
- Family gatherings and feasting: Festive dishes like Pongal, khichdi, vadas, and payasam are prepared and shared.

Makar Sankranti, Pongal, Lohri - a vibrant tapestry of traditions woven across India, celebrating the Sun's return, the harvest bounty, and the joy of new beginnings.



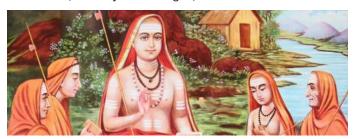
"Education is the ability to listen to almost anything without losing your temper or your self-confidence." - Robert Frost



#### ADI SHANKARA: LIFE, PHILOSOPHY, AND LEGACY

#### **Early Life and Journey:**

- Born in Kalady, Kerala, near the River Periyar.
- Popular legend recounts how a crocodile encounter led him to embrace the ascetic life.
- Renowned as a scholar-monk, constantly visiting spiritual centers, debating philosophies, and establishing monasteries (mathas).
- Traveled extensively across India, from Tamil Nadu to Assam, Himalayas to Ganges, and Puri.



#### **Contributions and Philosophy:**

- Credited with authoring 116 works, including commentaries on Upanishads, Brahmasutra, and Bhagavad Gita (authenticity of some works disputed).
- Most notably associated with Advaita Vedanta, a school of Hindu philosophy emphasizing radical nondualism.
- Advaita Vedanta posits that reality (Brahman) transcends perceived divisions and illusions (maya), with true liberation lying in recognizing the unity of individual (atman) and ultimate reality.

#### Legacy and Significance:

- Shankara's travels are often interpreted as a unifying force for Hindu religion and philosophy across India.
- His four cardinal mathas, established in different regions, are seen as pillars of Hindu faith and tradition.
- His enduring legacy transcends philosophical contributions, influencing India's cultural and spiritual landscape.

#### THIRUVALLUVAR: REVERED POET, PHILOSOPHER, AND CULTURAL ICON

#### Who was he?

- Thiruvalluvar, also known as Valluvar, is a revered Tamil figure.
- His exact timeline is uncertain, possibly 5th century BC or earlier.
- Author of the celebrated "Tirukkural," a collection of 1,330 couplets on ethics, politics, and love.

#### Significance:

- Considered a saint, poet, and philosopher by Tamils across religions.
- "Tirukkural" is a cultural cornerstone, comparable to Ramayana or Bhagavad Gita in North India.
- Teaches ethical living and forms a cultural anchor for Tamils.
- Quoted by Finance Minister Nirmala Sitharaman in 2020 Budget speech.

#### Thiruvalluvar's enduring significance:

Transcends historical debates to remain a central figure in Tamil culture.

- "Tirukkural" continues to offer valuable moral and philosophical guidance.
- His legacy underlines the richness and depth of Tamil heritage.

#### THE NAGARA STYLE: A LANGUAGE OF INDIAN TEMPLE ARCHITECTURE

#### **Key Features of Nagara Temples:**

- Shikhara: The towering, mountain-like spire, the most recognizable element. Represents the natural and cosmological order.
- Garbha Griha: The sanctum sanctorum, the most sacred part, housing the deity.
- Circumambulatory Passage: A walkway around the garbha griha for devotees to perform rituals.
- Mandapas: Halls for various purposes, often adorned with murals and reliefs.

#### **Five Modes of Nagara Architecture:**

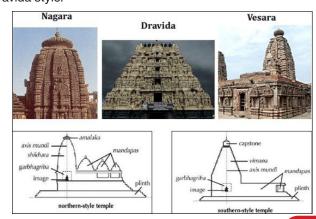
- Valabhi: Barrel-roofed structure, resembling early chaitya halls.
- Phamsana: Multi-eave towers, a formalization of Valabhi.
- Latina: Single, curved tower with four equal sides, dominant for centuries.
- Shekhari: Composite Latina with attached sub-spires echoing the main shape.
- · Bhumija: Pyramidal shikhara with miniature spires in a

#### grid-like pattern.

#### Comparison with Dravida Style:

Dravida temples have vimanas (smaller towers) overshadowed by gopurams (grand gateways).

Nagara temples rarely have elaborate boundary walls, unlike Dravida style.





# SUBHAS CHANDRA BOSE AND THE INDIAN NATIONAL ARMY: A FIGHT BEYOND THE BATTLEFIELD

#### **Bose Takes Command and Reinvigorates the INA:**

- The INA, initially lacked direction until Bose's arrival in 1943.
- Bose's charisma and leadership revitalized the army, garnering support from the Indian diaspora.
- The INA's strength grew significantly, fueled by Bose's vision and the dedication of Indian volunteers.



#### **Military Misfortune and Retreat:**

- Bose hoped for a coordinated uprising within India alongside the INA's attack, but the war's tide turned against them.
- The Imphal offensive in 1944 proved disastrous, forcing the INA to retreat and suffer heavy losses.
- By 1945, the INA faced defeat again in Burma and ultimately retreated to Singapore.

#### **Legacy Beyond the Battlefield:**

- Despite military setbacks, INA's fight inspired future generations.
- The public trials of INA officers sparked widespread sympathy and national sentiment in India.
- The British Indian Army, witnessing the public support for the INA, became unreliable for the British Raj.
- The INA's impact, along with other factors, contributed to the British decision to grant India independence.

In conclusion, Subhas Chandra Bose and the INA's legacy extends beyond their military campaign. Their fight for freedom ignited a spirit of nationalism that ultimately contributed to India's independence.

#### THE ART OF THE INDIAN CONSTITUTION: A VISUAL NARRATIVE ACROSS HISTORY

#### **Handwritten and Illustrated:**

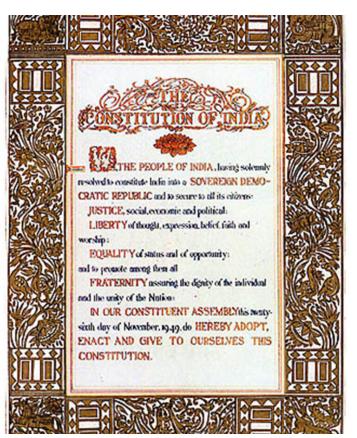
- The Indian Constitution is unique, adorned with hand-painted images and elaborate borders in all 22 parts.
- While Prem Behari Narain Raizada penned the text, artist Nandalal Bose and his team conceived and implemented the paintings.

#### **A Journey Through Time:**

The narrative scheme showcases significant periods in

- Indian history, from the Indus Valley to the freedom struggle.
- Scenes from epics like Ramayana and Mahabharata are also intertwined, alongside representations of diverse geography.
- Nandalal's vision wasn't a direct illustration of the text, but a personal interpretation of India's story.





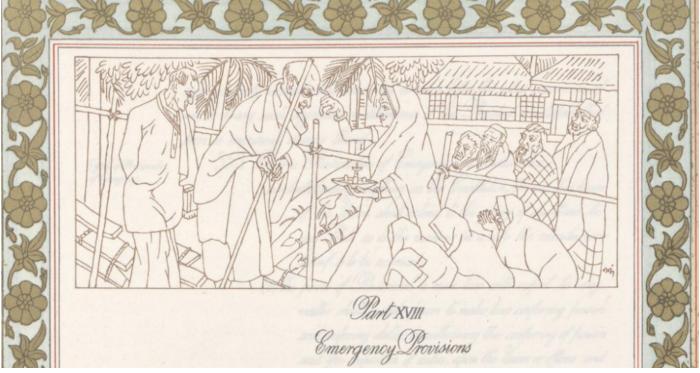


#### **Collaboration and Creation:**

- Nandalal worked with family members, students, and other artists to bring the visuals to life.
- Beohar Rammanohar Sinha created intricate patterns on the Preamble page, while Dinanath Bhargava sketched the National Emblem.
- Artists received Rs 25 per page for their contributions.
- Religious figures like Buddha and Mahavira find their place alongside scenes from Hindu epics.
- Sculptures from Mahabalipuram and the descent of Ganga add to the cultural tapestry.

#### **Portraying India's Monarchs and Heroes:**

 Emperor Ashoka and King Vikramaditya are depicted as patrons of faith and art respectively.



#### **Jawaharlal Nehru's Vision and Raizada's Dedication:**

- Nehru reportedly desired a handwritten Constitution, leading to Raizada's involvement.
- Raizada, a skilled calligrapher, worked for six months without charge, requesting only his name on each page.

#### **From Preliminary Plans to Final Touches:**

- Initial plans for the artwork went through changes, with some figures like Akbar replacing others.
- Ashish Anand highlights the diverse influences and styles showcased in the visuals.

#### **Borrowing from History and Religion:**

 The Bull Seal from the Indus Valley marks the first pictorial representation.

- Rani Lakshmibai of Jhansi stands as the sole prominent female figure, accompanied by Tipu Sultan.
- Chhatrapati Shivaji, Guru Gobind Singh, and Subhas Chandra Bose receive their due recognition.

#### **Landscapes and a Touch of Tagore:**

 Three landscapes pay homage to Rabindranath Tagore and the National Anthem's celebration of India's diverse terrain.

#### In Conclusion:

The artwork of the Indian Constitution is a unique and fascinating journey through the nation's history, culture, and geography. It transcends mere decoration, offering a visual narrative that complements and enriches the written text.

#### REPUBLIC DAY: THE CONTEXT OF THE 1920S

# The End of Non-Cooperation Movement and Rise of New Leaders (1920s):

- After the Chauri Chaura incident in 1922, Gandhi deemed the country "not yet ready" for non-violent protests, leading to a lull in mass mobilization.
- However, the 1920s saw the rise of revolutionary figures like Bhagat Singh and Chandrashekhar Azad.
- New INC leaders like Jawaharlal Nehru, Subhash Chandra Bose, Vallabhai Patel, and C Rajagopalachari emerged during this period.

# The Simon Commission and Demand for Dominion Status (1927):

 In 1927, the British appointed the Simon Commission to consider political reforms in India, sparking nationwide outrage and protests.

- The INC countered with its own commission under Motilal Nehru, demanding dominion status for India within the Empire.
- Dominion status, as defined in the Balfour Declaration, meant autonomy within the British Empire but with some Crown and Parliament influence.

#### **Internal Disagreement within the Congress:**

- Younger leaders like Bose and Nehru favoured complete independence, arguing against dominion status due to its limitations and colonial ties.
- Gandhi initially supported dominion status as a step towards independence but later changed his stance.

Viceroy Irwin's Backtracking and Growing Support for Independence:

· Viceroy Irwin's vague promise of future dominion status



- in 1929 faced backlash in Britain due to India's economic importance to the Empire.
- Irwin's eventual retraction on his promise led to a unified Congress front demanding complete independence.

#### **Declaration of Poorna Swaraj and the Shift to Radical Goals:**

- In December 1929, the Lahore Session of the INC passed the historic "Poorna Swaraj" resolution, declaring India's right to complete independence.
- This marked a shift from the language of charity to the language of justice in India's freedom struggle.

January 26, 1930, was proclaimed "Poorna Swaraj Day" and celebrated as a day of reaffirming commitment to sovereignty.

#### Republic Day in Post-Independence India:

- After independence in 1947, January 26 was chosen to promulgate India's new constitution, drawing upon the significance of Poorna Swaraj Day.
- While the celebrations have evolved, January 26 remains a reminder of India's journey towards self-rule.





"If you invest more in your education, then you are likely to get more interest in it." -Benjamin Franklin

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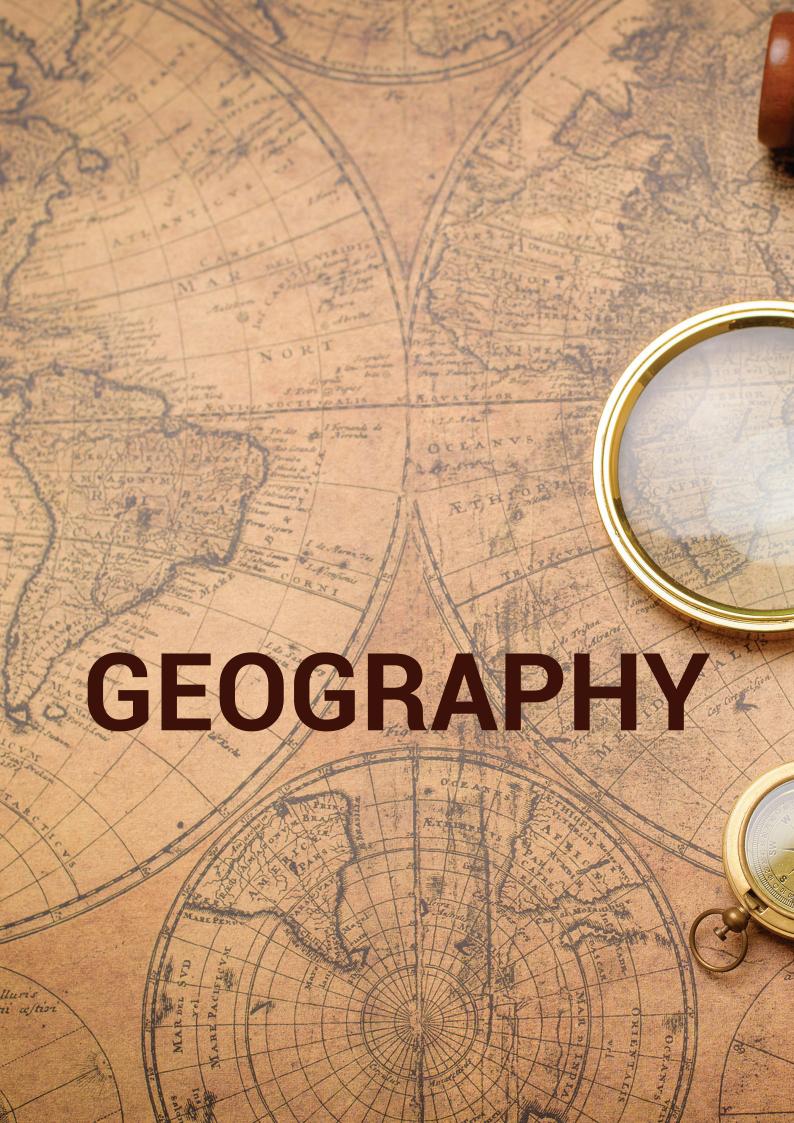


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BAB EL MANDEB STRAIT

IRON ORE AND STEEL SECTOR IN
INDIA

REJUPAVE TECHNOLOGY AT INDO-CHINA BORDER

INLAND WATERWAYS
DEVELOPMENT COUNCIL

ANEEL

KRISHNA-GODAVARI BASIN
PEREGRINE LUNAR LANDER
AMATERASU

MUMBAI TRANS HARBOUR LINK (MTHL)

HUMBOLDT'S ENIGMA

ARTIFICIAL REEFS IN KERALA

MPEMBA EFFECT



#### **BAB EL MANDEB STRAIT**

**CONTEXT:** Explosions were reported near a cargo ship in the Bab el-Mandeb Strait on January 2, according to the UK Maritime Trade Operations (UKMTO). The ship was travelling between the coasts of Eritrea and Yemen.

#### What is a Strait?

A strait is a narrow, naturally formed waterway that connects

two larger bodies of water, typically seas or oceans. They can be formed by a variety of geological processes, such as tectonic activity, erosion, or the submersion of land.

The Strait of Bab el-Mandeb is a crucial maritime chokepoint, connecting the Red Sea with the Gulf of Aden and the Indian Ocean.

#### **IRON ORE AND STEEL SECTOR IN INDIA**

The Competition Commission of India (CCI) conducted a study on iron ore pricing and exports, highlighting concerns about varied pricing and recommending discouraging iron ore exports in the country.

#### What is Iron Ore?

Iron ore refers to rocks and minerals from which metallic iron can be extracted economically. It typically contains iron oxides, and the primary types include hematite, magnetite, and taconite.

#### Status:

India is self-sufficient in iron ore production. It contributes 7% to global production. India ranks as the 4th largest producer globally. India is the 2nd largest producer of steel in the world after China

#### **Distribution of Iron Ore:**

- India is endowed with abundant resources of iron ore, with the largest reserve of iron ore in Asia.
- The iron ore mines occur in close proximity to the coal fields in the northeastern plateau region which adds to their advantage.

#### States:

About 95% of total the reserves of iron ore are located in

the States of Odisha, Jharkhand, Chhattisgarh, Karnataka, Goa, Telangana, Andhra Pradesh and Tamil Nadu.

#### Mines:

- In Odisha, iron ore occurs in a series of hill ranges in Sundergarh, Mayurbhanj and Jhar. The important mines here include Badampahar (Mayurbhaj), Kiruburu (Kendujhar) and Bonai (Sundergarh).
- oJharkhand has some of the oldest iron ore mines and most of the iron and steel plants are located around them.
- Important mines include Noamundi and Gua in Poorbi and Pashchimi Singhbhum districts, further extending to Durg, Dantewara and Bailadila.

#### Other regions:

- Karnataka Sandur-Hospet area of Ballari district, Baba Budan hills and Kudremukh in Chikkamagaluru district and parts of Shivamogga, Chitradurg and Tumakuru districts.
- Chandrapur, Bhandara and Ratnagiri districts of Maharashtra; Karimnagar and Warangal districts of Telangana; Kurnool, Cuddapah and Anantapur districts of Andhra Pradesh; Salem and Nilgiris districts of Tamil Nadu
- Goa has also emerged as an important producer of iron ore.

#### REJUPAVE TECHNOLOGY AT INDO-CHINA BORDER

**CONTEXT:** The Border Roads Organisation (BRO) plans to enhance the operational capacity of the defence forces along the Indo-China border in Arunachal Pradesh by using an indigenous technology called "Rejupave."

#### What is Rejupave?

Developed by CSIR-Central Road Research Institute (CSIR-CRRI), Rejupave is a bio-oil-based asphalt modifier that reduces the heating requirement of bituminous mixes and preserves their temperature during transit. This technology

addresses the challenges of constructing and maintaining bituminous roads in high-altitude areas during low and sub-zero temperatures.

The BRO has successfully applied Rejupave at the world's highest Sela road tunnel and LDY Road section near the China border in Arunachal Pradesh. The technology is developed using a Bio-based eco-friendly product with 100% biooil.

#### INLAND WATERWAYS DEVELOPMENT COUNCIL

**CONTEXT:** The first Inland Waterways Development Council (IWDC) in Kolkata, was recently launched for the development of river cruise tourism in India.

- The IWDC also launched the 'Harit Nauka' guidelines and the 'River Cruise Tourism Roadmap, 2047.'
- The roadmap aims to enable capacity in 26 additional waterways, increase the number of cruise circuits, and enhance infrastructure, with the goal of significantly
- boosting cruise tourism traffic and local cruise tourism on National Waterways.
- The IWDC was organized by the Inland Waterways Authority of India (IWAI).
- The government has undertaken various measures, including the Jal Marg Vikas Project, to enhance the role of inland waterways and increase the modal share of Inland Water Transportation (IWT) from 2% to 5%.



"If you invest more in your education, then you are likely to get more interest in it."

—Benjamin Franklin



#### **ANEEL**

**CONTEXT:** Clean Core Thorium Energy, a Chicago-based company, has developed ANEEL (Advanced Nuclear Energy for Enriched Life), (named after India's scientist, Dr Anil Kakodkar) – a fuel that combines Thorium and High Assay Low Enriched Uranium (HALEU).

 ANEEL can be used in India's existing Pressurized Heavy-Water Reactors (PHWRs), offering a potential game-changer for the country's nuclear energy sector.

India has the world's largest reserves of Thorium, estimated at 1.07 million tonnes, and ANEEL could facilitate the efficient utilization of Thorium in nuclear reactors.

The fuel's benefits include reduced nuclear waste volume, lower operating costs, and longer-lasting efficiency.

#### KRISHNA-GODAVARI BASIN

**CONTEXT:** The Oil and Natural Gas Corporation (ONGC) has successfully initiated crude oil production from its KG-DWN-98/2 deep-sea project in the Krishna-Godavari basin off the east coast of India.

This significant development, marked by delays and extensions, aims to bolster ONGC's overall oil production, combating the decline in mature fields.

#### **About Krishna-Godavari Basin:**

It is situated in Andhra Pradesh and the Bay of

Bengal is a vast deltaic plain formed by the Krishna and Godavari rivers. Covering 15,000 sq. km on land and 25,000 sq. km offshore, it has 5 km thick sediments deposited from Late Carboniferous to Pleistocene. The basin features upland and coastal plains, flood, and delta plains. Notably, the D-6 block in this basin holds India's largest natural gas reserves, discovered by ONGC in 1983. Besides its geological significance, the basin is home to the Vulnerable Olive Ridley Sea Turtle.

#### PEREGRINE LUNAR LANDER

**CONTEXT:** A private US spacecraft, part of NASA's Commercial Lunar Payload Services (CLPS) initiative, took off with the Peregrine lander module and Vulcan rocket built by private space companies.

This mission aims to be the first US spacecraft to land

on the Moon in over 50 years and would have marked the first landing of a private spacecraft on the Moon.

The Peregrine Mission-1, a private lunar lander, encountered an "anomaly" and will be unable to make its planned soft landing on the moon due to a propellant leak.

#### **AMATERASU**

**CONTEXT:** Japanese scientists discovered a high-energy cosmic-ray event named 'Amaterasu,' making it the second-highest-energy cosmic ray ever detected.

- The energy level of Amaterasu is about 40 million times higher than that produced by the Large Hadron Collider.
- The discovery of such ultra-high-energy cosmic rays (UHECRs) could contribute to understanding cosmic phenomena and subatomic particles better, as well as potentially challenging existing theories in high-energy

particle physics.

Amaterasu's unique characteristic is that it appears to have originated from an empty region of the universe, presenting intriguing possibilities for unknown astronomical phenomena.

The study of these cosmic rays may offer insights into the sources of cosmic rays and enhance our understanding of high-energy physics beyond the Standard Model.

#### MUMBAI TRANS HARBOUR LINK (MTHL)

**CONTEXT:** Mumbai Trans Harbour Link (MTHL), also named Atal Bihari Vajpayee Sewri-Nhava Sheva Atal Setu, India's longest sea bridge covering 21.8 km (16.5 km over the sea), has been inaugurated and is open for public commute. Features:

- The bridge is expected to witness over 70,000 vehicles daily, improving connectivity between Mumbai and Navi Mumbai.
- 2. It is the longest sea bridge in India (World's 10th longest

- sea bridge)
- It is expected to alleviate traffic congestion, promote economic development, and reduce travel time between Sewri and Chirle to just 15 to 20 minutes.
- 4. Fuel, transportation costs & 1 hour travel time will be saved
- 5. 1st project in Indiawith an open road tolling system.
- 6. For the first time in India, Orthotropic steel deck technology

#### **HUMBOLDT'S ENIGMA**

**CONTEXT:** The article discusses Humboldt's enigma, a concept proposed by Alexander von Humboldt in the 19th century that suggests a relationship between temperature, altitude, humidity, and biodiversity.

 Humboldt's enigma is the idea that the Earth's tropical areas are not the only biodiverse regions. According to this idea, many areas outside the tropics, such as mountains, are also highly biodiverse.

The eastern Himalayas are cited as an example where climate dissimilarity and diverse geological composition contribute to high biodiversity.



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#### **ARTIFICIAL REEFS IN KERALA**

**CONTEXT:** The deployment of artificial reefs off the coast of 42 fishing villages in Thiruvananthapuram district, Kerala, commenced as part of a project aimed at enhancing fish resources and promoting sustainable fisheries management. A total of 6,300 artificial reef units, with 150 designated for each village, will be deployed. It intends to boost sustainable fishing practices, improve the marine landscape, and enhance the livelihoods of the fishing community. The initiative is implemented under the Central Government's Pradhan Mantri Matsya Sampada Yojana, with technical support from the Central Marine Fisheries Research Institute.

#### What are Artificial reefs?

effect of frost in cold water.

They are man-made structures intentionally placed on the ocean floor to mimic the characteristics of natural reefs. These structures, often made of materials like concrete, rocks, or sunken ships, serve as habitats for marine life. The primary purpose of artificial reefs is to enhance local marine ecosystems, promote biodiversity, and provide breeding and feeding grounds for fish, ultimately supporting sustainable fisheries and conservation efforts.

#### **MPEMBA EFFECT**

**CONTEXT:** The Mpemba effect, named after Tanzanian student Erasto Mpemba, describes the counterintuitive phenomenon where hot water can freeze faster than cold water in similar conditions.

 Although noticed by historical figures like Aristotle, Francis Bacon, and René Descartes, the effect gained attention after Mpemba highlighted it in 1969.

Despite various experiments, scientists have not reached a

consensus on the exact causes of the Mpemba effect. Several factors are considered, such as microbubbles promoting convection and heat transfer in heated water, increased evaporation in warmer water, and the insulating

Compounds like calcium carbonate in water may also play a role.



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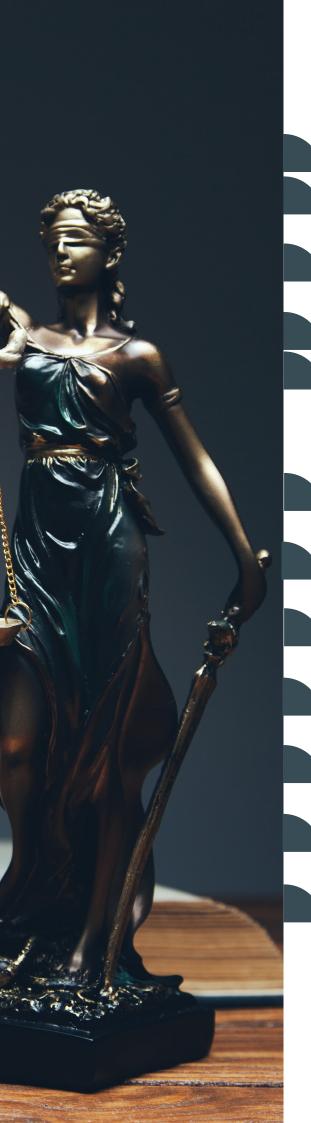
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**A BACKSLIDING** 

THE GOVERNMENT'S OTT OVERSIGHT

POST OFFICE ACT, ITS UNBRIDLED POWERS OF INTERCEPTION

THE CHIEF ELECTION

COMMISSIONER AN OTHER ELECTION COMMISSIONERS (APPOINTMENT, CONDITIONS OF SERVICE AND TERM OF OFFICE) BILL, 2023,

CONSECRATION DONE, PM CALLS IT A HISTORIC DAY

THE IDEA OF ONE NATION, ONE ELECTION IS AGAINST FEDERALISM

ON EQUAL ACCESS TO BENEFITS FOR ALL SCS

CONSECRATION DONE, PM CALLS IT A HISTORIC DAY

THE IDEA OF ONE NATION, ONE ELECTION IS AGAINST FEDERALISM

WHY WAS FCRA REGISTRATION FOR SEVERAL NGOS CANCELLED?

**MOTIVATED LITIGATION** 



#### **A BACKSLIDING**

**CONTEXT:** The Indian government's recent cancellation of Foreign Contribution (Regulation) Act licenses for organizations like the Centre for Policy Research and World Vision India raises concerns about a perceived crackdown on civil society. Critics argue that such actions undermine democratic values, potentially impacting India's global image and standing in indices of freedom and democracy.

**BACKGROUND:** The Indian government cancelled the FCRA license of the Centre for Policy Research (CPR), a prominent think tank, citing its publications as "current affairs programming" prohibited for FCRA-funded entities. This decision has sparked concerns about shrinking space for free expression and knowledge flow in India.

#### **SIGNIFICANCE:**

# IMPLICATIONS OF FCRA CANCELLATION FOR INDIAN CIVIL SOCIETY AND GOVERNMENT:

#### **CIVIL SOCIETY:**

Shrinking space for dissent and critical voices: The cancellation of FCRA licenses for organizations like CPR and World Vision India, coupled with increasing restrictions on foreign funding, sends a chilling message to civil society organizations working on sensitive issues like environment, human rights, and accountability. This could lead to self-censorship, reduced activism, and ultimately, a weakened civil society landscape.

Financial constraints and closure of crucial initiatives: Many NGOs rely heavily on foreign funding for their work. Losing FCRA licenses can cripple their operations, forcing them to scale back or even shut down crucial programs addressing critical social issues. This impacts vulnerable communities who depend on these services.

**Erosion of democracy and public trust:** A vibrant civil society is vital for a healthy democracy. The government's actions raise concerns about a shrinking space for informed debate and dissent, potentially leading to decreased public trust in democratic institutions.

#### **INDIAN GOVERNMENT:**

International criticism and reputational damage: The Indian government's actions regarding the FCRA have come under heavy criticism from international human rights organizations and legal experts. This criticism tarnishes India's image on the global stage and undermines its claims of being a "Vishwaguru" and "Mother of Democracy."

**Potential economic repercussions:** A weakened civil society can hinder economic development by limiting its role in holding the government accountable for transparency and good governance. This can discourage foreign investment and economic growth.

**Internal discontent and instability:** Silencing dissent and critical voices can lead to growing frustration and dissatisfaction within the population, potentially fuelling social unrest and instability.

#### **ADDITIONAL INFORMATION**

 The International Commission of Jurists (ICJ) stated that the latest FCRA amendments "impose extraordinary

- obstacles on the capacity of... civil society actors to carry out their important work."
- Freedom House downgraded India to an "electoral autocracy" in its Democracy Index, citing erosion of civil liberties.
- A 2020 report by Human Rights Watch highlighted the Indian government's increasing crackdown on civil society organizations.

## WHY GOVT. IS TIGHTENING THE CONTROL OVER FOREIGN FUNDING?

The cancellation of FCRA licenses for NGOs such as CPR and World Vision India, officially attributed to alleged violations of regulations on foreign funds, has prompted speculation among critics and analysts regarding several underlying reasons:

#### **Managing Public Discourse:**

Some argue that the government may seek to manage public discourse by restricting criticism and activism on issues such as the environment, human rights, and accountability. NGOs often advocate for reforms and highlight government shortcomings, which may be perceived as challenging by the ruling party.

#### Influence over Civil Society:

By regulating access to foreign funding, the government could potentially exercise greater influence over civil society organizations, making them more aligned with government perspectives and less independent. This may facilitate the implementation of the government's agenda with reduced opposition.

#### **National Security Considerations:**

Government claims about foreign contributions to NGOs posing national security threats might be a rationale for these actions. However, critics often question the strength of evidence supporting such assertions, suggesting that these claims may serve as a pretext to quell dissent.

#### **Addressing Ideological Variances:**

Cancellation of FCRA licenses may be a response to ideological differences between certain NGOs and the government. This could be an attempt to suppress divergent viewpoints and promote a more unified narrative.

#### **Political Objectives:**

The timing of these cancellations, coinciding with specific political objectives, is noted by some observers. Targeting NGOs involved in human rights work, for instance, might be seen as a strategy to resonate with particular voter segments or deflect international criticism.

#### **CONCLUSION:**

The Indian government's tightening control over foreign funding through the cancellation of FCRA licenses has raised serious concerns about the state of civil society and democratic values. The repercussions for dissent, public trust, and global standing are significant. As the government asserts its authority, the need for a robust and independent civil society becomes ever more crucial for fostering open debate, ensuring transparency, and sustaining a vibrant democracy in India.



#### THE GOVERNMENT'S OTT OVERSIGHT

**CONTEXT:** The 2023 Broadcasting Services (Regulation) Bill, set to replace the Cable Television Networks (Regulation) Act, introduces measures such as mandatory registration, the establishment of content evaluation committees for self-regulation, and a three-tier regulatory system.

This legislation extends regulatory authority to cover Over-the-Top (OTT) platforms and digital content.

While the government asserts that these changes aim to modernize regulations and improve business efficiency, there are apprehensions about potential censorship and concerns regarding the impact on freedom of speech.

The increased scrutiny of digital media, particularly about content deemed "obscene and vulgar," raises worries about the potential curtailment

#### WHY a NEW BILL IS INTRODUCED?

The new Broadcasting Services (Regulation) Bill aims to:

- Modernize regulations: Update outdated cable TV rules for the internet age by covering OTT platforms and digital content.
- **Enhance business ease:** Simplify registration and approval processes for broadcasters.
- Control content: Address concerns about "obscene and vulgar" content through mandatory self-regulation and government oversight.

#### However, the bill raises concerns about:

- Censorship: Increased scrutiny and potential government control over digital media could stifle freedom of speech.
- Over-compliance: Broad powers for government intervention may lead platforms to self-censor to avoid penalties.
- Different models: Applying traditional TV regulations to the dynamic, diverse OTT space might not be effective.

#### **SALIENT FEATURES:**

- All cable and satellite broadcasting network operators must register to operate, while broadcasters should get approval from the registering authority for transmitting programmes, except a few authorised bodies like Prasar Bharati or Parliament channels. Similar provisions apply to terrestrial and radio broadcasting networks. They are also required to maintain subscriber data.
- 2. Expands the purview of broadcasting rules to networks that use the internet to broadcast services and programmes, such as Internet Protocol Television (IPTV) and OTT broadcasting services (classified as broadcasting network operators in the draft) if they have the required number of subscribers or viewers. The Bill leaves it to the Union government to prescribe limits later.
- OTT broadcasting services will, however, not include a social media intermediary or a user of such intermediary, as defined under the Information Technology Act, of 2000.

#### **CONTENT QUALITY and ACCESSIBILITY**

Any programme or advertisement broadcasted through TV, radio, or other broadcasting services must adhere to the Programme Code and Advertisement Code, which are yet to be defined. These Codes will also apply to individuals and organisations broadcasting news and current affairs programmes online through e-newspapers, news

portals, websites and other similar social media platforms that operate as a "systematic business" or "professional" entity. Digital copies of newspapers and publishers of commercial newspapers, however, will be exempted.

Broadcasters will have to classify their programmes into different categories based on context, theme, tone, impact and target audience. The classification must be prominently displayed at the beginning of the show so that viewers can make "informed decisions." The Bill requires network operators to implement access control measures for shows that are classified for restricted viewing, such as those with adult content.

Additionally, the Bill provides accessibility guidelines to address the needs of persons with disabilities, calling for broadcasting network operators and broadcasters to make their platform, equipment and programmes more accessible. Suggested measures include audio descriptions for the blind, sign language translations, adding subtitles in different fonts, sizes and colours, and using accessible applications.

It further asks broadcasters to make a certain percentage of content accessible within a specified period under the accessibility guidelines. A disability grievance redressal officer will be appointed by the Centre to address complaints on the accessibility guidelines, and a broadcaster or broadcasting network operator could be penalised in case of a violation.

#### **SELF-REGULATION**

One of the highlights of the draft is a proposed selfregulation regime to ensure compliance with the programme and advertisement codes and to address other complaints.

Every broadcaster or broadcasting network operator must establish a Content Evaluation Committee (CEC) with members from various social groups, including women, child welfare, Scheduled Castes, Scheduled Tribes, and minorities. Broadcasters will be allowed to air only those programmes certified by the CEC, except for specific shows exempted by the government.

The Centre, meanwhile, will have the authority to define the size, quorum, and other operational details of the committee. The details of the committee members, including their names and credentials, should be published by the broadcaster or network operator on their website.

# THE THREE-TIER BROAD REGULATORY STRUCTURE: Self-regulation by operators

Broadcasters and broadcasting network operators will have to establish and maintain mechanisms for the filing and redressal of complaints. A grievance redressal officer will be appointed to handle complaints related to content and contravention of the programme and advertisement codes. In case the official is unable to decide in the prescribed period or the complainant is not satisfied with their decision, it can approach the self-regulatory organisation.

#### Self-regulatory organisations

It is a proposed body of broadcasters, broadcasting network operators or their associations, which will guide their members to ensure compliance with the broadcasting rules and deal with grievances related to content violations not resolved within a specific time frame. They can also take up



appeals against the decisions of broadcasters or network operators.

If a broadcaster is found guilty of any wrongdoing, the self-regulatory organisation to which it belongs has the authority to expel, suspend, or impose penalties in the form of advisories, censures, warnings, or monetary fines, not exceeding ₹5 lakh for each violation.

#### **Broadcast Advisory Council**

The Centre will establish an advisory council, consisting of independent experts and government representatives, to oversee the implementation of the regulations. It will hear content violations complaints and accordingly make recommendations to the government.

The government will then, after due consideration, issue appropriate orders and directions. The Council can also form review panels to assist with its functions. These panels are assigned specific cases or appeals and provide their recommendations, considered as recommendations of the Broadcast Advisory Council as per the text of the Bill.

#### Provision for inspection, seizure of equipment

The Broadcasting Services (Regulation) Bill allows inspections by the government without prior notice. Operators must facilitate monitoring at their own cost and can face equipment seizure if violations are suspected. Companies are liable unless they prove a lack of knowledge or due diligence. The equipment seized shall be liable to confiscation unless the operator of broadcasting network or broadcasting services demonstrates compliance with the provisions of the rules or guidelines, within 30 days from the date of seizure of the said equipment. There is, however, a provision of a written notice to the operator informing it of the grounds for such confiscation to provide the opportunity of making a representation. In case no such notice is given within 10 days from the date of the seizure of the equipment, it has to be returned to the operator.

#### What are the penalties for non-compliance?

The Bill includes provisions for penalties such as removal of objectionable shows, orders, apologies, off-air periods, or even cancellation of registration in case of non-compliance with the programme and advertisement codes.

The Centre may prohibit the transmission of a programme, or operation of broadcaster or broadcasting network by citing public interest or national security reasons. If

the programme or channel is "likely to promote disharmony or feelings of enmity, hatred, or ill-will between different religious, racial, linguistic, or regional groups or castes or communities or if it is likely to disturb public tranquillity on grounds of religion, race, language, caste, or community," then it can be prohibited by order, the draft reads.

#### What are the main concerns?

The broad scope of the Bill for traditional broadcasters, such as cable TV, and the evolving OTT space, which essentially has a different business model and content delivery mechanism, has drawn a mixed response from legal experts and advocates for digital freedom.

Digital rights organisation Internet Freedom Foundation (IFF) has called for a cautious examination of the Bill due to the proposed codes' similarity to the Code applicable to cable TV and the increased censorship of TV programmes as a consequence. "This may affect the publisher's online free speech, freedom of journalistic expression and artistic creativity, & the citizen's right to access differing points of view because publishers will be compelled to only produce content which is palatable to the Union Government," it says.

The group claims that exerting executive control over OTT content will lead to "over-compliance and self-censorship" because platforms would aim to avoid the government's broad discretion when it comes to punishments.

**CONCLUSION:** The 2023 Broadcasting Services (Regulation) Bill introduces comprehensive measures aimed at modernizing regulations, enhancing business ease, and controlling content in the evolving media landscape, covering both traditional and digital platforms. However, the expansion of regulatory oversight to OTT platforms raises concerns about potential censorship and its implications for freedom of speech. The intricate three-tier regulatory structure, comprising selfregulation, self-regulatory organizations, and a Broadcast Advisory Council, seeks to address content-related issues but may face challenges in balancing government control and media autonomy. As the bill navigates the legislative process, the potential impact on digital freedom and diverse content delivery models warrants careful consideration and scrutiny to strike a balance between regulation and the preservation of democratic values.

#### POST OFFICE ACT, ITS UNBRIDLED POWERS OF INTERCEPTION

**CONTEXT:** On December 24, 2023, the President of India approved the Post Office Bill, 2023, set to replace the old Indian Post Office Act, 1898, once the central government issues a notification. During the Parliament debate, the Opposition raised concerns about the provision granting extensive powers to post office authorities to intercept items without clear conditions for such actions, especially in undefined 'emergency' situations. Additionally, they highlighted the absence of procedural safeguards, raising worries about potential misuse without accountability.

#### **BACKGROUND TO POST OFFICE ACT:**

The Indian Post Office Act of 1898 was the primary legislation governing postal services in India for over 125 years. It was enacted during the British Raj and reflected the colonial approach to controlling communication and information flow.

#### **SOME KEY ASPECTS OF THE 1898 ACT:**

- Granted the central government monopoly over conveying letters: This created a single entity responsible for postal services throughout the country.
- Empowered the government to intercept postal items under certain circumstances: These included public emergency, public safety, investigation of certain crimes, and prevention of incitement to offense. However, the Act lacked clear guidelines and safeguards for such interception, raising concerns about potential misuse.
- Limited regulations on private courier services: With the absence of specific legislation for private couriers, their operations were governed by broader legal frameworks.

Over time, the 1898 Act became outdated and needed revisions to adapt to changes in technology, communication



practices, and privacy concerns. Calls for reform gained • momentum due to:

- Technological advancements: The rise of electronic communication challenged the Post Office's traditional role and necessitated updates to regulations.
- Growing demand for privacy and transparency: Increasing concerns about government surveillance and potential misuse of interception powers led to demands for stronger safeguards.
- Evolving competition: The emergence of private courier services highlighted the need for a level playing field and clearer regulations for all postal service providers.

In response to these factors, the government drafted the Post Office Bill, 2023, aiming to replace the 1898 Act.

#### **INTERCEPTION UNDER CENTRAL ACTS**

- On December 24, 2023, the President approved the Telecommunications Bill, 2023.
- The new bill replaces the Indian Telegraph Act, 1885, and the Indian Wireless Telegraphy Act, 1933.
- The Telecommunication Act incorporates the interception provision of the Telegraph Act.
- Rules on precautions against improper interception are consolidated into section 20(2) of the Telecommunication Act.
- Activation of section 20(2) depends on the prescription of procedures and safeguards.
- The Information Technology (IT) Act, 2000, provides a broader scope for interception without necessitating a 'public emergency.'
- In PUCL vs Union of India (1996), the Supreme Court set procedural safeguards for phone tapping due to privacy concerns.
- These safeguards remained in effect until the government amended the Telegraph Rules in 2007 and introduced Rule 419A
- Rule 419A replaced the Court's directives and allowed interception in emergent cases for up to seven days without prior directions.
- This amendment delegated power to law enforcement agencies.
- The Court stressed the necessity of a 'public emergency' or 'public safety' for interception.

Similar procedures were prescribed under the Information Technology Rules in 2009.

#### APPREHENSIONS ABOUT INTERRUPTION

- Post Office Act Lacks Procedural Safeguards: The recently enacted Post Office Act does not include provisions for procedural safeguards, raising concerns about potential misuse of its interception powers.
- Confidential Nature of Post Items: The Supreme Court recognizes the confidentiality of items transported by the post office, such as letters and postcards, emphasizing the right to privacy even when personal items are entrusted for correspondence.
- Right to Privacy in Legal Precedents: Legal judgments, including Distt. Registrar & Collector, Hyderabad & Anr vs Canara Bank (2005) and Justice K.S. Puttaswamy (Retd.) & Anr. vs Union of India & Ors. (2017), affirm the right to privacy, requiring written recording of reasons for search and seizure.

- International Covenant and Directive Principle: India's commitment to international standards, such as Article 17 of the International Covenant on Civil and Political Rights, and Directive Principle 51(c) of the Constitution, emphasizes the protection of privacy.
- Historical Considerations: Draft proposals on fundamental rights included the right to the secrecy of correspondence, but it was dropped due to practical concerns. Relevant laws permit interception only in specified circumstances, as observed by the Supreme Court.
- Liberalized Interception Provision: The Post Office Act removes major conditions from the previous legislation, such as 'the occurrence of public emergency' and 'in the interest of public safety,' making interception provisions more liberal.
- Absence of Procedural Safeguards: Despite the liberalization, the Act lacks provisions for procedural safeguards, necessitating a just, fair, and reasonable procedure for any interception by the post office.
- Vague Term 'Emergency': The term 'emergency' is deemed vague, requiring inference from Rule 419A of the Telegraph Rules or the IT Rules to clarify what constitutes 'emergent' cases.
- Government Responsibility: The central government must address fears of misuse to prevent potential intervention by constitutional courts, ensuring adherence to privacy rights and establishing procedural safeguards.

#### **CONSEQUENCES OF UNAUTHORISED INTERCEPTION**

- Lack of accountability for misuse of interception powers: Both Telegraph and Telecommunication Acts lack clear mechanisms to hold authorities accountable for exceeding or misusing these powers.
- Inadequate safeguards for privacy: Interception documents are destroyed after a certain period, making it difficult to track and hold authorities accountable.
- Limited power of review committees: Review committees can only set aside interception orders and destroy records, not recommend disciplinary action for misuse.
- Need for stronger accountability measures: The "good faith" clause shouldn't shield authorities from willful misuse of interception powers.
- Potential for infringement on privacy: Without robust safeguards, these statutes risk violating citizens' right to privacy.
- Limited avenues for redressal: Relief for privacy infractions under these statutes might only be possible through constitutional courts.

# SIMILAR LAWS ON POSTAL INTERCEPTION IN OTHER COUNTRIES:

#### **DEMOCRACIES:**

- United States: The United States Postal Service (USPS)
  can only intercept mail under exceptional circumstances
  and with warrants specifically authorized by a federal
  judge. These warrants can be issued for reasons like
  national security, foreign intelligence, or preventing
  serious crimes.
- Canada: Canada Post, the national postal service,



requires a warrant issued by a judge for intercepting mail. Like the US, permissible reasons include national security, criminal investigations, and preventing harm to individuals.

- Germany: German postal law only allows interception in exceptional cases, such as investigating serious crimes or preventing imminent danger. Interceptions require a warrant from a judge and involve strict oversight mechanisms.
- France: French postal law permits interception for national security and criminal investigations, but only with authorization from a judge. There are limitations on the duration of such interceptions and procedures for independent oversight.

#### **NON-DEMOCRACIES:**

- China: The Chinese postal service operates under broad government control, and interception of mail can occur without judicial warrants for reasons deemed relevant to national security or state interests.
- Russia: Similar to China, Russian postal authorities have extensive powers to intercept mail without warrants, often in the context of national security or political control.
- Iran: Iranian postal laws allow interception based on national security concerns or suspicion of illegal activity. Transparency and oversight mechanisms are limited.

#### **KEY OBSERVATIONS:**

- Democracies generally have stricter legal frameworks and stronger oversight mechanisms for postal interception compared to non-democracies.
- Warrants issued by judges or independent oversight bodies are often required for interception in democracies.
- The grounds for permissible interception, such as national security or criminal investigations, can be similar across both democracies and non-democracies, but the level of legal safeguards and transparency differs significantly.

# SPECIFIC COMPARISON TO THE INDIAN POST OFFICE ACT:

The Indian Act seems to grant broader interception powers than some democracies, without requiring specific conditions like "public emergency" or "public safety" as mentioned in older legislation.

The lack of clear procedural safeguards and accountability mechanisms in the Indian Act raises concerns similar to those observed in non-democracies.

#### **COMPARISON TO SIMILAR INDIAN LAWS**

In India itself, there are several existing laws with provisions for intercepting communication, both similar and different to the Post Office Act:

#### **SIMILARITIES:**

**Telecommunications Act, 2023:** This newly enacted law replaces the Telegraph Act and Wireless Telegraphy Act and grants interception powers to authorities under specific circumstances like national security, public safety, investigation

of certain crimes, etc. There are also procedural safeguards and oversight mechanisms outlined in the Act.

**Information Technology (IT) Act, 2000:** This Act allows interception of electronic communication under conditions similar to the Telecommunications Act and the Post Office Act, focusing on national security, public safety, etc. It also outlines procedures and regulations for such interception.

**Telegraph Act, 1885:** While still technically in force until the Telecommunications Act is notified, this outdated law included similar provisions for postal interception under conditions like public emergency, public safety, etc.

#### **DIFFERENCES:**

**Scope of coverage:** The Post Office Act specifically focuses on postal items like letters and postcards, whereas the Telecommunications Act and IT Act cover broader electronic and digital communication channels.

**Conditions for interception:** The Post Office Act removes the restrictions of "public emergency" and "public safety" from the previous act, giving wider discretion for interception. The Telecommunications Act and IT Act retain these conditions.

**Procedural safeguards:** The Post Office Act currently lacks any specific procedural safeguards for interception, unlike the Telecommunications Act and IT Act which outline procedures and oversight mechanisms.

#### **OTHER RELEVANT LAWS:**

**The Constitution of India:** Articles 19 (freedom of speech and expression) and 21 (right to life and personal liberty) are crucial, as they can be invoked to challenge any interception deemed unconstitutional or violating privacy rights.

**Supreme Court judgments:** Various judgments like PUCL vs Union of India (1996) and Justice K.S. Puttaswamy (Retd.) & Anr. vs Union of India & Ors. (2017) have established principles of privacy and procedural fairness that apply to interception practices.

Overall, while the Post Office Act's interception provisions share similarities with other Indian laws, its lack of safeguards and broader scope raise concerns about potential misuse and infringement on privacy rights. This highlights the need for robust regulations and oversight mechanisms to ensure transparency and accountability in any communication interception practices.

**CONCLUSION:** The new Post Office Act grants broad interception powers without clear safeguards, sparking concerns about privacy and potential misuse. While existing laws provide frameworks for interception, the Act's vagueness and lack of oversight mechanisms raise the spectre of abuse similar to non-democracies. To uphold citizens' right to privacy and prevent misuse, the government must address these concerns by implementing robust procedural safeguards and ensuring strong accountability measures. Only then can the Post Office Act fulfill its mandate without sacrificing fundamental rights.



# INDIA'S LARGEST ONLINE IAS COACHING ACADEMY



# THE CHIEF ELECTION COMMISSIONER AND OTHER ELECTION COMMISSIONERS (APPOINTMENT, CONDITIONS OF SERVICE AND TERM OF OFFICE) BILL, 2023,

**CONTEXT:** The Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service, and Term of Office) Bill, 2023, was recently endorsed by the Parliament in December 2023. This bill delineates the procedures for the appointment of the Chief Election Commissioner (CEC) and Election Commissioners (EC).

The legislative initiative is driven by the objective of introducing transparency into the appointment process, in compliance with the Supreme Court of India's directive in the 2023 Anoop Baranwal v Union of India case.

**BACKGROUND:** In March 2023, the Supreme Court emphasised the critical role of an independent Election Commission of India (ECI) in ensuring free and fair elections. It was addressing a longstanding legislative gap since the Constitution's adoption regarding the appointment of the CEC and ECs.

- The SC drew attention to other institutions supporting constitutional democracy that have independent mechanisms for appointing their heads/members.
- Supreme Court cited examples such as the National and State Human Rights Commission, Central Bureau of Investigation (CBI), Information Commission, and Lokpal.
- The SC noted recommendations from the Dinesh Goswami Committee on Electoral Reforms (1990) and the Law Commission's 255th report on Electoral Reforms (2015).
- Both committees suggested a committee comprising the Prime Minister, Chief Justice of India (CJI), and the Leader of the Opposition for appointing the CEC and ECs.

#### **USE OF ARTICLE 142 BY THE SUPREME COURT**

The SC, using its powers under Article 142 (to issue directions for doing 'complete justice' in any matter), laid down that the CEC and ECs shall be appointed by a committee consisting of the Prime Minister, the CJI and the Leader of the Opposition or the largest opposition party in the Lok Sabha.

SC ruled that this mechanism shall be in place till Parliament enacts a law on this matter.

Article 142 grants the Indian Supreme Court unique "complete justice" powers. This makes it special because:

**Flexibility:** It allows the Court to go beyond existing laws and craft solutions to unusual cases where legal remedies fall short.

**Social Progress:** This flexibility enables the Court to address important social issues, like environmental protection or human rights, even before specific laws exist.

**Equity:** It grants the Court the power to bridge gaps in existing laws and ensure fair outcomes for all, especially marginalized groups.

### WHAT ARE THE MAJOR PROVISIONS OF THE DECEMBER 2023 BILL

- The Bill supersedes the Election Commission (Conditions of Service of Election Commissioners and Transaction of Business) Act, 1991.
- It addresses matters related to the appointment, remuneration, and removal procedures for the Chief Election Commissioner (CEC) and Election Commissioners (ECs).

#### **APPOINTMENT PROCESS:**

- The President will appoint the Chief Election Commissioner (CEC) and Election Commissioners (ECs).
- A dedicated Selection Committee will recommend candidates for these positions.
- The Selection Committee comprises
  - The Prime Minister,
  - A Union Cabinet Minister, and
  - The Leader of the Opposition in Lok Sabha (or the leader of the largest opposition party in the absence of a designated Leader of the Opposition).
- Vacancies within the Selection Committee won't impede the acceptance of its proposed candidates.
- A Search Committee, led by the Cabinet Secretary, will propose a list of eligible candidates to the Selection Committee.
- Only individuals with experience at the Secretary level (current or past) are eligible for these positions.

#### **CHANGES IN SALARY AND CONDITIONS:**

- Compensation and benefits for the CEC and ECs will match those of the Cabinet Secretary.
- Under the 1991 Act: Compared to the current bill, the 1991 Act set their salary equal to that of a Supreme Court Judge.

#### **REMOVAL PROCESS:**

The bill preserves the constitutionally defined removal process for the CEC (Article 324(5)) - mirroring that of Supreme Court Judges - while keeping the current system for ECs, mandating a recommendation from the CEC.

#### **PROTECTION FOR CEC AND ECS:**

The bill shields the CEC and ECs from lawsuits stemming from decisions made during their term, as long as such actions were within their official capacity.

#### WHAT IS THE PRESENT MECHANISM?

#### **Constitutional Provisions:**

- Part XV (Elections) of the Constitution encompasses only five Articles (324-329).
- The Constitution lacks a specified legislative process for appointing the Chief Election Commissioner (CEC) and Election Commissioners (ECs).
- Article 324 of the Constitution entrusts the "superintendence, direction, and control of elections" to an Election Commission, comprising the Chief Election Commissioner and any additional Election Commissioners as determined by the President.
- The appointment is made by the President based on the advice of the Union Council of Ministers, led by the Prime Minister.
- The Law Minister proposes a pool of eligible candidates to the Prime Minister for deliberation, and the appointment is finalized on the advice of the Prime Minister.

#### MAJOR CONCERNS REGARDING THE BILL?

#### **Threat to Diversity and Independence:**

A major concern is the possibility of undue government influence through the Selection Committee. If a vacancy arises, the remaining members, potentially all from the ruling



party, could hold sway over recommendations, jeopardizing the committee's diversity and independence. This creates a scenario where the government could effectively pick and choose election commissioners without proper checks and balances.

#### **Financial Dependence on the Executive:**

Linking the salaries of the Chief Election Commissioner (CEC) and Election Commissioners (ECs) to that of the Cabinet Secretary, whose salary is set by the government, raises concerns about financial independence. Unlike the fixed salary of a Supreme Court Judge, this arrangement risks making the commission beholden to the executive for financial matters, potentially compromising its impartiality.

#### **Limited Talent Pool:**

Restricting eligibility to individuals who have served as top-level civil servants excludes other potentially qualified candidates with diverse backgrounds and expertise. This narrow definition for eligibility could hinder the ECI from acquiring the best possible talent pool.

#### **Unequal Removal Process:**

The Bill retains the existing discrepancy in removal procedures. While the CEC enjoys the same protection as a Supreme Court Judge, requiring an impeachment-like process, the removal of ECs requires only the recommendation of the CEC. This lack of parity in removal raises questions about fairness and accountability within the commission.

# APPOINTMENT OF ELECTORAL BODIES ACROSS THE WORLD

#### **UNITED STATES:**

In the United States, members of the Federal Election Commission (FEC) are appointed by the President and

confirmed by the Senate. The FEC oversees campaign finance regulations and enforces election laws.

#### **UNITED KINGDOM:**

In the United Kingdom, members of the Electoral Commission, which oversees elections and regulates political finance, are appointed through an open competition process. The Speaker of the House of Commons and the Lord Speaker are involved in the appointment process.

#### **SOUTH AFRICA:**

South Africa involves key figures such as the President of the Constitutional Court, representatives of the Human Rights Court, and advocates for gender equality in the selection process for the electoral body.

#### CANADA:

In Canada, the Chief Electoral Officer is appointed by the Governor in Council (Cabinet) on the recommendation of the Prime Minister.

#### **AUSTRALIA:**

The Australian Electoral Commission members are appointed by the Governor-General on the advice of the government. The Electoral Commissioner is appointed for a fixed term.

CONCLUSION: The Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Bill, 2023, marks a significant legislative stride in reforming the appointment processes for the Election Commission of India (ECI). While driven by the Supreme Court's directive to introduce transparency, the bill also raises concerns about potential threats to diversity, financial dependence on the executive, and unequal removal procedures

#### **CONSECRATION DONE, PM CALLS IT A HISTORIC DAY**

**CONTEXT:** The pran pratishtha, or consecration, of the idol of Lord Ram at the Ram Temple in Ayodhya took place on Monday 22nd of January 2024, amid chanting of hymns and performance of rituals, with Prime Minister Narendra Modi and other dignitaries in attendance.



**STORY IN SHORT:** The consecration of the Ram Temple idol in Ayodhya was a momentous occasion marked by chanting, rituals, and the presence of Prime Minister Modi. Modi called it a historic day of breaking free from a slave mentality and creating a new future. He participated in rituals as a designated conductor and even entered the sanctum sanctorum. After the ceremony, he broke his 11-day fast and addressed the

crowd, saying the deity would no longer be in a makeshift arrangement. He emphasized the moment's significance, not just for victory, but also for humility and inclusion.

The event was a grand celebration of the temple's completion and a symbol of moving forward. Modi's speech highlighted its historical significance and his desire for reconciliation with those who opposed the project.

#### **JUDICIAL PROCESS:**

In his address after the consecration ceremony, Prime Minister Modi:

- Expressed gratitude to the judiciary for upholding the law and building the temple "in a judicial manner," drawing a parallel between the legal battles for Ram's existence and the temple's construction.
- Invited his critics to introspect, describing the temple as a symbol of peace and harmony. He challenged their concerns about social unrest, stating that they misunderstood the maturity of Indian society.
- Highlighted the inclusiveness and service spirit of the Ramayana characters. He drew lessons from Hanuman's loyalty, Shabari's faith, Nishad Raj's help, and even the smaller creatures like squirrels and Jatayu who contributed to Lord Ram's cause.

Overall, Modi emphasized the peaceful and inclusive nature of the temple while acknowledging the legal and social aspects surrounding its construction. He also used the occasion to celebrate the values embodied by the Ramayana characters.



#### **SEEKING FORGIVENESS**

- Seeking forgiveness from Lord Ram: He expressed regret for the centuries it took to complete the Ram Temple, acknowledging possible shortcomings in past efforts. This adds a layer of humility and acknowledges the long and complex history surrounding the temple.
- Vision for a new India: Looking ahead, Modi emphasized the Ram Temple as a symbol of a "magnificent" and "divine" India. He called for a national pledge to build a capable, developed, and strong nation, drawing inspiration from the temple's construction as a testament to collective effort and perseverance. This section shifts the focus towards

the future and national transformation.

**CONCLUSION:** The consecration of the Ram Temple reverberated in Ayodhya with chants, rituals, and a nation's hopes. Prime Minister Modi, a pivotal figure in this historic moment, acknowledged both the past struggles and the future possibilities. He sought forgiveness for delays, highlighting the temple's role in moving beyond divisions. His call for a grand and unified India, echoing the characters of Ramayana, resonated through the celebrations. As the echo of hymns fades, it leaves behind a promise of a new dawn, built on unity, progress, and the enduring spirit of Rama.

#### THE IDEA OF ONE NATION, ONE ELECTION IS AGAINST FEDERALISM

CONTEXT: The Union Government's establishment of a 'High Level Committee on One Nation, One Election' chaired by former President Ramnath Kovind has stirred concerns about potential constitutional and legal implications. As the committee explores the feasibility of synchronizing elections to the Lok Sabha and State Legislative Assemblies, the impending recommendations could trigger a constitutional showdown, requiring the Supreme Court's intervention to assess the impact on federal structure, legal concerns, and the autonomy of the Election Commission.

STORY SO FAR: In September 2023, the Union Government formed the 'High Level Committee on One Nation, One Election,' chaired by former President Ramnath Kovind. As the committee engages with political parties, gathers public opinions, and seeks input from jurists, concerns arise over its potential impact on the democratic framework, especially considering the absence of a definite timeline for recommendations. With indications suggesting a move towards synchronized elections for the Lok Sabha and State Legislative Assemblies, the focus shifts to the Supreme Court, reminiscent of the U.S. Baker v. Carr moment, where the Indian apex court's role as the "sentinel on the qui vive" becomes crucial in swiftly addressing constitutional and legal implications that could reshape the fundamentals of Indian democracy.

# ARE COMMON ELECTIONS FEASIBLE? ARGUMENTS IN FAVOR OF ONE NATION, ONE ELECTION:

**Cost Reduction:** Supporters emphasize the substantial expenditure incurred in conducting separate elections, citing the ₹3,870 crore spent on the 2014 general elections. They argue that a common election schedule for the Union Parliament and State Assemblies would lead to significant cost savings.

**Minimizing Governance Downtime:** Proponents assert that the current system, with the Model Code of Conduct coming into effect twice in a five-year cycle, leads to 'governance downtime.' They argue that synchronized elections would alleviate this issue, allowing for a more seamless conduct of government business.

#### **OPPOSING VIEWS ON ONE NATION, ONE ELECTION:**

**Inherent Democratic Cost:** Opponents challenge the notion that the cost of holding free and fair elections is too high, asserting that it is an essential price for ensuring democratic representation and government by the people's choice.

**Democratic System Expression:** Critics argue that occasional elections due to a government not completing a full term are inherent expressions of the democratic system and should be

accepted rather than considered a drawback.

**Importance of Model Code of Conduct:** Opponents stress the significance of the Model Code of Conduct and other guidelines issued by the Election Commission, stating that these measures are necessary to minimize executive influence over voters and maintain a level playing field during election periods.

Contradictions in Governance Concerns: Skeptics find it contradictory for the Union government and the Election Commission to express strong concerns about governance downtime when they have refrained from holding Assembly elections in Jammu and Kashmir for nearly five years. LEGAL

**S.R. Bommai Case Precedent:** The Supreme Court's decision in S.R. Bommai v. Union of India (1994) emphasized the independent constitutional existence of States, underscoring their crucial role in various aspects of public life. The specific tenure of State Legislatures, set at five years from the first meeting, is constitutionally defined.

**Constitutional Violation:** The introduction of a common election process, as proposed by the High-Level Committee, would necessitate altering the duration of State Legislatures, conflicting with the Constitution's express language. Such alteration would be viewed as anti-federal and unconstitutional, contradicting the principles established in the S.R. Bommai case.

Language Bias and Inequality: The examination of the High-Level Committee's website reveals a bias towards English and Hindi, raising concerns about bias, exclusion, and inequality in the consultation process. Conducting a landmark consultation in only two out of the 22 official languages of the Union may undermine inclusivity and equal representation.

Questioning the Independence of the Election Commission: There are concerns about the Election Commission's apparent passivity in the process initiated by the High-Level Committee. Similar to the lack of transparency during demonetization, the Election Commission's silence raises questions about its independence and autonomy in making decisions related to elections.

### WHAT IS "BAKER VS CARR" AND SUPREME COURT AS "SENTINEL ON THE QUI VIVE"

**1. Reminiscent of Baker v. Carr:** This refers to a landmark case where the US Supreme Court ruled that malapportionment of congressional districts violated the "one person, one vote" principle of the Equal Protection Clause. This decision led to widespread redistricting across the US and had a <u>lasting</u>



impact on American politics.

2. "Sentinel on the qui vive": This is a figurative expression used to describe the Supreme Court's role as a vigilant protector of the Constitution. "Qui vive" is a French phrase meaning "who goes there?" and is used to metaphorically portray the Court's constant alertness in safeguarding the principles enshrined in the Constitution.

#### CAN ONE NATION, ONE ELECTION BE STOPPED?

Parliamentary Supremacy vs. Judicial Review: In the U.K., where common law jurisprudence prevails, Parliament holds supreme authority. However, the Indian constitutional framework differs, providing higher courts, particularly the Supreme Court, with inherent and broad powers of judicial review. This contrast sets the stage for a potential constitutional showdown.

Constitutional Showdown Anticipation: The unique Indian constitutional architecture, with its emphasis on judicial review, suggests the likelihood of a constitutional showdown in the near future. The impending question revolves around whether constitutional courts, particularly the Supreme Court, will intervene when executive actions, such as the implementation of One Nation, One Election, exceed their designated boundaries.

**Entering the Political Thicket:** The metaphorical "political thicket" signifies the complex and challenging terrain of political decisions. The current scenario appears to necessitate the

involvement of constitutional courts, especially the Supreme Court, in addressing the legal and constitutional aspects of the One Nation, One Election initiative.

**Preserving Constitutional Architecture:** Given the constitutional complexities and potential conflicts arising from the proposed initiative, it seems inevitable that constitutional courts will need to engage in navigating this thicket. The preservation of the constitutional architecture of the country may hinge on the judiciary's active role in scrutinizing the legality and constitutionality of One Nation, One Election.

#### **CONCLUSION:**

The establishment of the 'High Level Committee on One Nation, One Election' by the Union Government has sparked concerns over its impact on federalism and constitutional principles. As the committee explores synchronized elections for the Lok Sabha and State Legislative Assemblies, legal and constitutional issues arise, including potential violations highlighted by the S.R. Bommai case. The contrasting views on cost reduction and governance downtime are countered by opposition emphasizing democratic principles and the importance of the Model Code of Conduct. The Supreme Court's role as a "sentinel on the qui vive" becomes pivotal, reminiscent of the US Baker v. Carr case, indicating a potential constitutional showdown over the proposed initiative's legality and its impact on India's constitutional architecture.

#### ON EQUAL ACCESS TO BENEFITS FOR ALL SCS

**CONTEXT:** Prime Minister forms committee to address unequal distribution of benefits among Scheduled Castes in India, prompted by Madiga community's demand and similar concerns across the country.

#### **THE GIST**

- The Union government has formed a high-level committee of secretaries to evaluate and work out a method for the equitable distribution of benefits to the most backward communities among the over 1,200 Scheduled Castes.
- The Madiga community constitutes at least 50% of the SC population in Telangana. For decades, the Madiga community has said that despite their numbers, they are crowded out of government benefits meant for SCs, including reservation, by the Mala community – another SC – which is dominant and relatively forward.
- The erstwhile Attorney General of India had opined that the sub-categorisation of Scheduled Castes was possible and that the Constitution could be amended to bring this about.

#### THE STORY SO FAR:

Formation of High-Level Committee: The Union government establishes a high-level committee chaired by the Cabinet Secretary.

**Objective:** The committee is tasked with evaluating and devising a fair and equitable method for the distribution of benefits, schemes, and initiatives.

**Target Group:** Focus is on over 1,200 Scheduled Castes (SCs) across the country, specifically addressing the most backward communities within this category.

**Addressing Disparities:** The aim is to rectify the existing disparities where relatively forward and dominant SCs have received more attention, leaving the most backward

communities marginalized.

Equitable Distribution: The committee's primary goal is to ensure a more balanced and just distribution of government benefits and initiatives among the SCs.

#### WHY THIS COMMITTEE AND WHY NOW?

Committee Formation Background: The Union government establishes a high-level committee of secretaries in response to Prime Minister Narendra Modi's meeting in December 2023. The decision follows the PM's commitment to addressing the demand for sub-categorization of Scheduled Castes (SCs), particularly raised by the Madiga community in Telangana during the previous Assembly elections.

**Madiga Community Concerns:** The Madiga community, constituting 50% of Telangana's SC population, has expressed grievances about being marginalized in government benefits by the dominant Mala community within the SC category.

**Widespread Issue:** Similar concerns have been voiced by SC communities in various states, asserting that dominant and forward communities within the SC category deprive them of rightful benefits. State and Union government commissions support this argument.

**State-Level Attempts:** States like Punjab, Bihar, and Tamil Nadu have attempted state-level reservation laws to subcategorize SCs, but these efforts face legal challenges.

**Mandate of the Committee:** The high-level panel is mandated to explore alternative solutions for addressing grievances faced by various SC communities nationally, extending beyond the Madiga community's specific concerns in Telangana.

Constitutional Bench Involvement: A seven-judge Constitution Bench of the Supreme Court is expected to begin hearings on the permissibility of sub-categorization for SCs and STs.



#### WHAT WILL THE PANEL DO?

**Committee Composition:** The Committee comprises Secretaries from key ministries, including Home, Law, Tribal Affairs, Social Justice, and Department of Personnel and Training, chaired by the Cabinet Secretary.

**Scope of Inquiry:** The committee will not address the issue of breaking up the Scheduled Caste (SC) quota. Instead, its focus is on devising methods to direct benefits from various government schemes and initiatives specifically towards SC communities facing disparities.

**Objective:** To explore ways to design special initiatives tailored to the needs of SC communities, ensuring a more equitable distribution of benefits. This includes reorienting existing programs towards these communities.

**No Specific Deadline:** While no specific deadline is set, the committee is urged to present its findings at the earliest.

Criteria for Attention: The panel will determine the basis for shortlisting SC communities that require special attention, assess the extent to which unique initiatives are needed for each community, and develop a delivery mechanism for these initiatives.

**Possible Consideration of SC Quota Breakup:** Although explicitly instructed not to delve into the question of breaking up the SC quota, the committee has the flexibility to form an opinion on this matter for potential government consideration if deemed necessary.

#### HAVE THERE BEEN ATTEMPTS IN THE PAST?

**Long-standing Demand:** The Madigas' demand for subcategorization dates back to 1994, prompting the Union government to explore legal options in 2005.

**Legal Opinion:** In 2005, the then Attorney General of India opined that sub-categorization of Scheduled Castes (SCs) was possible through a constitutional amendment. However, he stressed that empirical evidence indicating an unequivocal

necessity for sub-categorization must be established.

Opposition from National Commissions: Both the National Commissions for Scheduled Castes (NCSC) and Scheduled Tribes (NCST) opposed the constitutional amendment in 2005. They argued that merely setting aside a quota within the quota would not suffice, emphasizing the urgency of ensuring existing schemes and benefits reach the communities on a priority basis.

**Constitutional Ambiguity:** Articles 341 and 342 of the Constitution grant the President the power to notify SC and ST lists and Parliament the authority to create these lists. However, there is no explicit instruction on sub-categorization within these lists. The NCST and NCSC contended in 2005 that nothing in Articles 341 and 342 prevents Parliament from sub-categorizing SCs and STs.

**Article 16(4) Provision:** The Commission highlighted that Article 16(4) of the Constitution already empowers States to create special provisions for any backward classes they deem under-represented, further supporting the argument for subcategorization.

CONCLUSION: In response to longstanding disparities within Scheduled Castes (SCs), the Indian government's formation of a high-level committee underscores its commitment to rectify the unequal distribution of benefits. Addressing grievances raised by the Madiga community and echoing concerns nationwide, the committee aims to ensure equitable access to government initiatives. While steering clear of the SC quota breakup, its mandate includes exploring tailored solutions, reflecting a broader scope. Past attempts highlight the complexity, involving legal opinions, opposition from commissions, and constitutional ambiguities. This initiative signals a proactive approach to enhance inclusivity and address historical imbalances within SC communities.

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#### THE IDEA OF ONE NATION, ONE ELECTION IS AGAINST FEDERALISM

CONTEXT: The Union Government's establishment of a 'High Level Committee on One Nation, One Election' chaired by former President Ramnath Kovind has stirred concerns about potential constitutional and legal implications. As the committee explores the feasibility of synchronizing elections to the Lok Sabha and State Legislative Assemblies, the impending recommendations could trigger a constitutional showdown, requiring the Supreme Court's intervention to assess the impact on federal structure, legal concerns, and the autonomy of the Election Commission.

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**Preserving Constitutional Architecture:** Given the constitutional complexities and potential conflicts arising from the proposed initiative, it seems inevitable that constitutional courts will need to engage in navigating this thicket. The preservation of the constitutional architecture of the country may hinge on the judiciary's active role in scrutinizing the legality and constitutionality of One Nation, One Election.

#### **CONCLUSION:**

The establishment of the 'High Level Committee on One Nation, One Election' by the Union Government has sparked concerns over its impact on federalism and constitutional principles. As the committee explores synchronized elections for the Lok Sabha and State Legislative Assemblies, legal and constitutional issues arise, including potential violations highlighted by the S.R. Bommai case. The contrasting views on cost reduction and governance downtime are countered by opposition emphasizing democratic principles and the importance of the Model Code of Conduct. The Supreme Court's role as a "sentinel on the qui vive" becomes pivotal, reminiscent of the US Baker v. Carr case, indicating a potential constitutional showdown over the proposed initiative's legality and its impact on India's constitutional architecture.

#### WHY WAS FCRA REGISTRATION FOR SEVERAL NGOS CANCELLED?

**CONTEXT:** The Foreign Contribution Regulation Act, 2010 (FCRA) registration of two prominent non-governmental organisations (NGOs) — Centre for Policy Research (CPR) and World Vision India (WVI) have been cancelled this month. THE GIST

- Through the FCRA, the ministry regulates foreign donations to ensure that such funds do not adversely affect the country's internal security. It is compulsory to register under the Act if an association, group or NGO intends to receive foreign donations.
- The FCRA registration of two prominent nongovernmental organisations (NGOs) – Centre for Policy Research (CPR) and World Vision India (WVI) have been cancelled this month.
- The MHA alleged that CPR diverted foreign donations to fund "protests and legal battles against developmental projects". It alleged that the think tank engaged in the production of current affairs programmes that violated FCRA norms.

#### WHO MONITORS THE PROCESS?

**FCRA Monitoring:** The Union Ministry of Home Affairs (MHA) oversees the implementation of the Foreign Contribution (Regulation) Act (FCRA), regulating foreign donations to prevent adverse effects on India's internal security.

**Registration Renewal:** Thousands of NGOs faced registration renewal in 2020-2021, disrupted by the COVID-19 pandemic and 2020 FCRA amendments. The MHA provided relief until September 30, 2021, for NGOs with expiring registration between September 29, 2020, and September 30, 2021.

Deadline Extensions: The MHA extended the renewal deadline

multiple times, with the latest extension until March 31, 2024. **FCRA Purpose:** Enacted in 1976, FCRA ensures proper regulation of foreign donations. NGOs must register under

FCRA to receive foreign contributions, with the registration valid for five years, and renewable upon compliance with norms.

**2020 Amendments:** The FCRA underwent amendments in 2020, emphasizing the need for regulation to safeguard India's internal security.

**Renewal Process:** NGOs registered under FCRA can receive foreign contributions for various programs, such as social, educational, religious, economic, and cultural initiatives. Registration renewal is mandatory every five years.

#### **HOW MANY HAVE LOST REGISTRATION?**

**FCRA Registration Status:** Since 2015, more than 16,000 NGOs had their FCRA registrations cancelled due to violations. As of January 22, 2022, there were 16,989 active FCRA-registered NGOs in India. Nearly 6,000 NGOs ceased operations from January 1, 2022, either due to MHA's refusal to renew or non-application.

**Vulnerabilities Highlighted:** A 2012 MHA report emphasized the vulnerability of India's NGO sector to money laundering and terrorist financing risks, constituting less than 2% of over 20 lakh registered NGOs in the country.

**Record Registrations in 2023:** In 2023, a record 1,111 associations received fresh FCRA registrations. Data analysis revealed that almost half of the new registrations under the religious category were for Christian NGOs.

FCRA Application Statistics: The MHA reported that out of 1,615 FCRA registration applications in 2021 and 2022, 722



received clearance, while 225 applications were rejected. Foreign Contribution Details: A total of 13,520 associations received ₹55,741.51 crore in foreign contributions during the financial years 2019-2020, 2020-21, and 2021-22.

### WHY WERE CPR AND WVI'S REGISTRATIONS CANCELLED?

**Allegations Against CPR:** The Ministry of Home Affairs (MHA) accused the Center for Policy Research (CPR) of diverting foreign donations to support protests and legal battles against developmental projects, misusing funds to impact India's economic interests. It claimed CPR violated FCRA norms by engaging in the production of current affairs programs, prohibited under Section 3 of the FCRA.

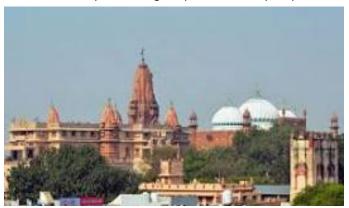
**Specific Violations:** The MHA pointed to CPR's publication of a report on air pollution, stating that using foreign funds for publishing current affairs programs is against FCRA regulations.

**Response from CPR:** CPR expressed incomprehension and viewed the ministry's decision as disproportionate. CPR argued that equating the publication of policy reports on its website with current affairs programming challenges the fundamental functioning of a research institution.

**World Vision India's Registration Cancelled:** The registration of World Vision India (WVI) was cancelled due to alleged FCRA violations spanning from 2012-13 to 2020-21. WVI is noted as the highest recipient of foreign donations among all NGOs registered under the FCRA in 1986.

#### MOTIVATED LITIGATION

**CONTEXT:** The Supreme Court of India has ordered a stay on an Allahabad High Court order for inspecting the Shahi Idgah mosque of Mathura. Petitioners in Allahabad High Court allege that there was a pre-existing temple in the mosque's premises.



#### **MAJOR POINTS:**

1. THE PLACES OF WORSHIP ACT: The main argument against these lawsuits is that they violate the Places of Worship (Special Provisions) Act, 1991. This Act prohibits the conversion of any place of worship as it existed on August 15, 1947, essentially aiming to prevent further religious conflicts related to disputed sites.

#### WHAT IS THE PLACES OF WORSHIP ACT?

The Places of Worship (Special Provisions) Act, 1991, is legislation enacted by the Indian Parliament to freeze the religious character of all places of worship as they existed on August 15, 1947, the day of India's independence. This essentially means that any place of worship, regardless of its historical ownership or claims, cannot be legally converted into another religion's place of worship.

#### WHY WAS IT FORMULATED?

The Act was formulated in the aftermath of the Babri Masjid demolition in Ayodhya in 1992, a highly contentious event that triggered widespread communal violence and highlighted the potential for religious disputes over places of worship to destabilize the nation.

#### THE ACT AIMED TO ACHIEVE SEVERAL OBJECTIVES:

**Prevent future religious conflicts:** By freezing the status quo, the Act sought to discourage legal or extra-legal attempts to change the religious character of any place of worship.

Promote religious harmony: The Act aimed to reassure different religious communities that their places of worship

would be protected and that their religious sentiments would be respected.

**Uphold secularism:** The Act was seen as a crucial step in upholding the principle of secularism enshrined in the Indian Constitution, which guarantees equal rights to all religions.

#### **CONSEQUENCES:**

#### a) Legal:

**Reduced litigation:** The Act has significantly reduced the number of legal disputes over places of worship.

**Challenges:** The Act is not without its critics. Some argue that it unfairly favors the status quo and prevents historical injustices from being rectified. The recent legal challenges to the Shahi Idgah Mosque in Mathura and the Gyanvapi Mosque in Varanasi highlight these ongoing critiques.

**Uncertainty:** Some legal ambiguities remain within the Act, particularly regarding its applicability to pre-1947 disputes and its limitations on judicial intervention.

#### b) Political:

**Religious appeasement:** Critics accuse the Act of being politically motivated and catering to Hindu sentiments. The BJP government's recent statements hinting at possible amendments to the Act further fuel these concerns.

**Communal tensions:** While the Act has largely succeeded in preventing large-scale religious conflicts, the issue of disputed places of worship remains a sensitive topic and can be easily exploited for political gains, potentially exacerbating communal tensions.

#### c) Other impacts:

**Social harmony:** The Act has contributed to a relative sense of peace and stability in India's diverse religious landscape. Historical amnesia: Some argue that the Act risks obscuring historical complexities and potentially suppressing certain narratives.

**Debate on secularism:** The Act has sparked ongoing debates about the nature and practice of secularism in India, with implications for the country's future socio-political trajectory. Overall, the Places of Worship Act remains a contested piece of legislation, with its impact ranging from promoting religious harmony to generating legal ambiguities and fuelling political controversies. Understanding its complex history, objectives, and potential consequences is crucial for navigating the sensitive landscape of religious disputes in India.

**2. LEGAL STRATEGIES:** The legal strategy employed by Hindu groups in both cases of Ram Janma Bhoomi and Gyan



vyapi Mosque cases are criticised by some groups. They argue that the appointment of commissions to inspect the mosques and gather evidence appears to be a way to circumvent the Act and potentially alter the religious character of the sites.

### Legal Strategies of Hindu Groups in Ram Janmabhoomi and Gyanvapi Mosque Cases

The legal strategies employed by Hindu groups in both the Ram Janmabhoomi and Gyanvapi Mosque cases share some commonalities but also have distinct features:

Similarities:

**Historical claims:** Both cases rely heavily on historical narratives claiming that the disputed sites were originally Hindu temples demolished by Muslim rulers to build mosques. The Ram Janmabhoomi case claimed the Babri Masjid was built on Lord Rama's birthplace, while the Gyanvapi case contends the mosque stands on the ruins of the Kashi Vishwanath temple.

**Archaeological evidence:** In both cases, Hindu groups have pushed for archaeological surveys and excavations to gather evidence supporting their claims about the existence of earlier Hindu structures. The Ram Janmabhoomi case involved extensive excavations in the 1990s, and the Gyanvapi case recently gained court approval for a similar survey.

**Judicial intervention:** Both cases involve seeking judicial intervention to gain control of the disputed sites. In the Ram Janmabhoomi case, this culminated in the 2019 Supreme Court verdict awarding the land to Hindus for temple construction. The Gyanvapi case currently challenges the mosque's status and seeks its conversion into a temple.

Differences:

Constitutional arguments: The Ram Janmabhoomi case also heavily relied on arguments around constitutional rights and principles like equality and non-discrimination. Hindu groups argued that the demolition of the Babri Masjid violated their fundamental rights and challenged the Places of Worship Act as discriminatory against Hindus. This angle is less prominent in the Gyanvapi case.

**Use of legal precedents:** The Gyanvapi case draws inspiration from the Ram Janmabhoomi verdict, citing it as a legal precedent for awarding disputed sites to Hindus based on historical claims. This strategy is specific to the Gyanvapi case and not applicable to the Ayodhya dispute.

**Nature of legal challenges:** The Ram Janmabhoomi case involved multiple lawsuits over ownership and control of the site, culminating in a final verdict by the Supreme Court. The Gyanvapi case currently involves contesting the mosque's maintainability under the Places of Worship Act and seeking permission for a survey, making it an ongoing legal battle.

**3. THE 1968 COMPROMISE:** In Mathura, a compromise was reached between the Hindu and Muslim parties in 1968, dividing the disputed land. The current lawsuits challenge this agreement, raising concerns about the stability of such settlements.

#### The 1968 Compromise in Mathura and its Challenges

The 1968 agreement in Mathura between the Sri Krishna Janmasthan Seva Sansthan (a Hindu temple management) and the Shahi Idgah Trust (representing the mosque) holds significance in understanding the ongoing legal dispute surrounding the Shahi Idgah Mosque. The details and

the challenges it faces are as follows Details of the 1968 Compromise:

- The disputed land, about 13.77 acres, was divided:
- Approximately 13.37 acres went to the Shahi Idgah Trust to maintain the mosque.
- 0.40 acres were allocated to the temple management for the construction of a new temple adjacent to the mosque.
- The boundaries were redrawn, creating a clear separation between the two places of worship.
- The Idgah agreed to remove certain temporary structures from the land.
- Both parties agreed to respect each other's religious activities and maintain peace.

#### **CHALLENGES TO THE 1968 COMPROMISE:**

Validity: Some Hindu groups contend that the agreement was unfair and signed under duress, questioning its legal validity. Maintainability: Recent lawsuits filed by Hindu groups challenge the agreement's maintainability under the Places of Worship Act, 1991. They argue that the Act bars such compromises and seek the return of the entire land to the temple management. Stability: These challenges raise concerns about the stability of similar agreements reached in the past to resolve religious disputes. If the 1968 compromise can be challenged, it sets a precedent for reopening other settlements, potentially jeopardizing interfaith harmony.

**Social tensions:** The ongoing legal battle and challenges to the compromise can stoke religious tensions and create a sense of uncertainty within the local community.

### POTENTIAL CONSEQUENCES OF CHALLENGING THE COMPROMISE:

**Legal complexities:** If the courts accept the challenges, it could lead to a lengthy and complex legal battle with no easy resolution.

**Religious disharmony:** Challenging the agreement could reignite animosity between Hindu and Muslim communities, disrupting interfaith peace and harmony.

**Political manipulation:** The issue might be exploited for political gains, further exacerbating social tensions and posing a risk to national security.

#### **CONCLUSION: A CROSSROADS OF FAITH AND LAW**

The ongoing dispute surrounding the Shahi Idgah Mosque in Mathura highlights a complex intersection of faith, law, and historical memory in contemporary India. While the Places of Worship Act seeks to maintain religious harmony by freezing the status quo of places of worship, the legal challenges mounted against the 1968 compromise and the appointment of a commission raise concerns about potential circumvention and the unsettling of settled agreements.

Navigating this sensitive landscape demands a nuanced approach. Understanding the historical context, legal arguments, and potential social consequences of these disputes is crucial for finding solutions that respect both religious sentiments and the rule of law. Upholding the Places of Worship Act and engaging in interfaith dialogue remain vital steps in ensuring peace and harmony in a nation where diverse faiths coexist. Ultimately, the path forward lies not in revisiting past wrongs but in building bridges of understanding and respect for shared spaces in a pluralistic society.







A REVIVAL OF THE IMEC IDEA AMID CHOPPY GEOPOLITICS

THE GROWTH OF INDIA-BANGLADESH TIES

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INDIA'S MULTI-PRONGED RESPONSE:

TOUGH ROAD AHEAD FOR TAIWAN'S LAI WITH PRESSURE FROM CHINA AND NO MAJORITY



#### A REVIVAL OF THE IMEC IDEA AMID CHOPPY GEOPOLITICS

**CONTEXT:** The Yemen conflict has seen an alarming erosion in the shipping industry's confidence in the Suez Canal continuing to be the backbone of east-west trade. Shippers are not balking at taking the long, circuitous voyage around Africa.



The core of IMEC connect Al Haditha in Saudi to Haifa in Israel. Rail projects such as Etihad Rail and the GCC Railway (Gulf Railway), one of whose routes is proposed to terminate at Al Haditha, are already underway in the United Arab Emirates and Saudi Arabia independently, which would dovetail with IMEC that targets ports such as Fujairah and Jebel Ali.

#### There will be a changed West Asia

Geopolitics is probably the biggest hurdle before IMEC. Turkey, which has been explicitly left out of IMEC, has already been expressive about its irritation and proposed an alternative to Saudi Arabia and Israel through Iraq and itself to access the Mediterranean.

#### Hydrogen and containerisation

Besides trade, electricity and digital cables, IMEC is proposed to carry hydrogen pipelines. As the world moves towards decarbonisation, hydrogen produced from fossil fuel-based processes such as methane reforming will continue to be the transition fuel until electrolysis or other "green" processes become practical. Hydrogen sourced from fossil fuels would keep Gulf nations in business in the hydrogen economy too with the corridor serving that purpose.

For India, however, the containerisation through rail and road in IMEC is a big draw. Containerisation radically quickens trade, reduces port costs. India's National Logistics

Policy, unveiled in 2022, seeks to lower logistics costs to global levels by 2030. In India, some 70 % of containers move by road but optimum splits should be 30 % road, 30 % rail and the rest, coastal and inland shipping.

The dedicated rail freight corridors that link to two IMEC ports of Mundra and the Jawaharlal Nehru Port Trust (JNPT) will play into IMEC logic. But these rail projects skirt southern India, by and large. Containers in the south typically find their way to the Colombo transshipment container terminal via Chennai, Tuticorin / Thoothukudi and so on. The south can potentially leverage IMEC that promises to cut delivery schedules by 40 % if it also sees dedicated freight corridors as part of an all-India network.

#### Possible template

Haifa cannot be India's main gateway to the West since its current container traffic is barely one third of Mundra or JNPT and a tenth of India's current container exports. The Adani stake in Haifa port could help sync it with Adani-owned Mundra in terms of planning for capacity expansion.

IMEC will be likely to draw U.S., European, and Saudi financing, coupled with Indian financing and implementation capacity, particularly in ports. The United States International Development Finance Corporation funding for Adani Portsowned Colombo deepwater container terminal could be a template for Haifa.



#### THE GROWTH OF INDIA-BANGLADESH TIES

**CONTEXT:** Bangladesh Prime Minister Sheikh Hasina's recent electoral victory for a historic fourth term has solidified the close bilateral relationship with India. The two countries have strengthened ties in various sectors, including trade, infrastructure, and energy. However, India faces challenges with the deepening relationship between Bangladesh and China, marked by substantial Chinese investments, raising concerns about strategic influence in the region.

#### **THE GIST**

- Prime Minister Sheikh Hasina returned to power in Bangladesh for a historic fourth straight term earlier this month after her party, the Awami League, secured twothirds of the seats in the January 7 national elections.
- PM Modi and Sheikh Hasina made history last year when they inaugurated the Akhaura-Agartala rail link that connects Bangladesh and the northeast through Tripura.
- Adding to India's concerns is the deepening relationship between Bangladesh and China, marked by substantial Chinese investments in infrastructure in recent years.

#### THE STORY SO FAR:

 Earlier this month, Prime Minister Sheikh Hasina secured a historic fourth consecutive term in Bangladesh after her party, the Awami League, won an overwhelming majority in the January 7 national elections. Prime Minister Narendra Modi was quick to extend his congratulations, underscoring the strong and close bilateral ties between the two nations.



#### **HOW HAVE TIES FLOURISHED?**

#### **Origins in Conflict:**

The India-Bangladesh relationship began with a baptism by fire. India's crucial support during the 1971 liberation war laid the foundation, but initial euphoria gave way to tension in the mid-70s. Military regimes in Bangladesh and disputes over borders, water sharing, and insurgency strained the bond.

#### **Renewal Under Hasina:**

The tide turned in 1996 with the rise of Sheikh Hasina. Her landmark 1996 treaty on Ganga water sharing marked a new chapter. Since then, both nations have actively nurtured cooperation in diverse areas:

- **Trade:** Bangladesh is India's biggest South Asian trade partner, fostering robust economic exchange.
- Energy: Cross-border energy projects bring mutual benefit
- **Infrastructure:** Joint efforts tackle connectivity challenges for both countries.
- **Connectivity:** The development of land, air, and water links strengthens regional integration.
- **Defense:** Security cooperation enhances regional stability.
- China's Presence: While India-Bangladesh ties flourish, China's growing role adds a new layer. Economic engagement and infrastructure projects raise concerns about debt traps and geopolitical influence. Bangladesh faces the delicate task of balancing relations with both its powerful neighbours.

#### WHAT ABOUT ECONOMIC COOPERATION?

- Trade Boom: Bilateral trade between India and Bangladesh has soared over the past decade, making Bangladesh India's largest South Asian trade partner and India Bangladesh's second-largest. Figures paint a vivid picture:
- Trade value: \$18 billion in 2021-22, a steep rise from \$10.8 billion in 2020-21.
- Indian exports to Bangladesh: \$2 billion in 2022.
- **Dip in 2022-23:** Slight decline due to pandemic and Russia-Ukraine war.
- CEPA: Promising Future
- Both nations concluded a joint feasibility study in 2022 for a Comprehensive Economic Partnership Agreement (CEPA). This potential game-changer could
- Reduce/eliminate customs duties: Boosting trade volume and competitiveness.
- **Simplify trade norms:** Streamlining procedures and easing business transactions.
- **Open new opportunities:** Expanding social and economic collaboration.
- Bangladesh's LDC Status Transition: Losing Least Developed Country (LDC) status after 2026 means Bangladesh risks losing duty-free and quota-free access to Indian markets. This fuels their urgency for:
- Finalizing a Free Trade Agreement (FTA) with India: Securing continued preferential access.
- **Exploring China-backed RCEP:** Diversifying options and hedging against potential Indian limitations.

#### **CONCERNS FOR INDIA:**

- Balancing Interests: Navigating Bangladesh's desire for broader trade options while protecting Indian domestic industries can be challenging.
- Chinese Influence: RCEP membership strengthens China's economic presence in the region, potentially impacting India's trade advantage.

### INDIA-BANGLADESH INFRASTRUCTURE COOPERATION: BUILDING BRIDGES (AND PORTS) FOR MUTUAL GROWTH

Beyond booming trade, India and Bangladesh are actively forging strong ties in infrastructure, driven by India's role as a "major development partner." Key highlights include:



- Financial Backbone: Since 2010, India has extended over \$7 billion in Lines of Credit for various infrastructure projects in Bangladesh.
- Historic Connectivity: The Akhaura-Agartala rail link inaugurated in 2022 stands as a landmark achievement. It not only connects northeast India to Bangladesh but also provides India access to crucial Chittagong and Mongla ports, boosting trade and development in Assam and Tripura.
- Energy Ties: Bangladesh imports nearly 2,000 megawatts of electricity from India, signifying vital energy cooperation.
- Regional Integration: The BIMSTEC Master Plan for Transport Connectivity envisions connecting major transport projects across India, Bangladesh, Myanmar, and Thailand, fostering a broader shipping network.
- Strategic Port Focus: India's attention rests on Bangladesh's Matarbari Port, located near Tripura. This upcoming port holds immense potential as it can create a crucial industrial corridor linking Dhaka and northeast India, propelling economic growth in both regions.

#### **ADDITIONAL POINTS TO CONSIDER:**

- Infrastructure cooperation extends beyond the mentioned examples, encompassing sectors like roads, waterways, and digital connectivity.
- These projects not only enhance bilateral trade and movement of goods but also boost regional development and integration.
- Challenges like project delays and ensuring transparency in funding require continued focus.
- Continued cooperation on infrastructure, alongside initiatives like the CEPA, can unlock tremendous potential for both nations.

## CHINA'S INFRASTRUCTURE COOPERATION IN BANGLADESH: A COMPLEX TAPESTRY OF INVESTMENT, DEVELOPMENT, AND CONCERN

Alongside India's significant presence, China also plays a major role in Bangladesh's infrastructure development. This cooperation, while offering substantial benefits, comes with its own set of complexities:

- Investment Powerhouse: China has emerged as a major investor in Bangladesh's infrastructure, with projects spanning diverse sectors:
- Transportation: The Padma Bridge, a 6.15 km bridge across the Padma River, is a flagship project funded by China. It aims to improve connectivity and boost economic activity in the region.
- Power: China has invested in several power plants, contributing significantly to Bangladesh's energy needs.
- Ports: China is involved in the development of Chittagong port, the country's largest, and Matarbari deep sea port, which could further enhance trade and logistics.
- **Development and Growth:** This Chinese engagement offers undeniable benefits for Bangladesh:
- Increased infrastructure: Improved transportation, power generation, and port facilities stimulate economic growth and development.
- Job creation: Infrastructure projects generate employment opportunities, benefiting local communities.
- Financial aid: Chinese loans and investments provide Bangladesh with much-needed financial resources.

**CONCERNS AND CHALLENGES:** However, China's involvement also raises concerns:

- **Debt Burden:** Large Chinese loans could lead to unsustainable debt levels for Bangladesh, potentially hindering its economic independence.
- Transparency and Accountability: Lack of transparency in project details and funding can lead to concerns about corrupción and mismanagement.
- Environmental Impact: Some projects raise environmental concerns, requiring careful consideration and mitigation strategies.

#### **BALANCING ACT FOR BANGLADESH:**

Navigating this complex landscape requires careful strategy from Bangladesh:

- Prioritizing national interests: Infrastructure projects should align with Bangladesh's long-term development goals and priorities.
- Diversifying partnerships: Engaging with various partners like India, Japan, and others can reduce dependence on any single source.

#### **LOOKING AHEAD:**

China's infrastructure cooperation in Bangladesh presents both opportunities and challenges. Balancing these effectively will determine its long-term impact on the country's development and economic trajectory.

- The Belt and Road Initiative (BRI) plays a significant role in Chinese infrastructure projects in Bangladesh.
- Security concerns surrounding Chinese involvement are also a factor to consider.
- Bangladesh's ability to negotiate favorable terms and maintain transparency will be crucial in ensuring mutually beneficial outcomes.

### WHAT ARE THE POINTS OF TENSION BETWEEN INDIA AND BANGLADESH?

Major Points of Tension Between India and Bangladesh: 1)Water Resources:

**Teesta River Dispute:** Unresolved issue of equitable water sharing, vital for Bangladesh.

**Other Shared Rivers:** Lack of comprehensive treaties and concerns over Manu, Khowai, Muhuri, and Feni.

#### 2)Rohingya Crisis:

**Repatriation Impasse:** Bangladesh's failed attempts, straining relations with Myanmar and India.

**Varying Approaches:** Bangladesh seeks India's help with Myanmar, while India maintains junta ties and considers Rohingya deportation.

#### 3)Internal Security:

**Cross-border Terrorism and Infiltration:** Porous borders facilitating illegal activities and security threats.

**Rise of Indian Majoritarianism:** Increased violence against Muslims in India impacting bilateral relations.

#### 4)Other potential areas:

**Trade and Economic Issues:** Non-tariff barriers, visa challenges, and trade imbalances.

**Border Issues:** Enclaves, land disputes, and illegal crossings. Security and Political Concerns: Regional dynamics, arms smuggling, and insurgent activities.

**Environmental Issues:** Air and river pollution, transboundary impact, and lack of coordination.

#### WHAT ABOUT GLOBAL TIES?

U.S. Concerns: The U.S. criticizes Sheikh Hasina's government





for "democratic backsliding" and imposed sanctions on an anti-crime task force citing human rights abuses.

**Visa Restrictions:** U.S. announced visa restrictions on individuals allegedly undermining Bangladesh's electoral process, further straining relations.

**China's Growing Role:** Deepening China-Bangladesh ties worry India, with China investing heavily in Bangladeshi infrastructure projects.

Hasina's Balancing Act: Despite China's involvement, Hasina asserts careful management of the partnership to avoid overdependence.

**CONCLUSION:** Bangladesh's Prime Minister Sheikh Hasina's recent electoral triumph solidifies ties with India, marked by trade growth, joint infrastructure projects, and energy cooperation. However, concerns arise from deepening Bangladesh-China relations, as China invests substantially in Bangladeshi infrastructure, impacting regional dynamics. India-Bangladesh ties face challenges like the Teesta River dispute and Rohingya crisis, while global concerns involve U.S. criticism of democratic issues, visa restrictions, and China's increasing role. Balancing these complex dynamics will shape the future of regional geopolitics and economic cooperation between India, Bangladesh, and their global partners.

#### THE ISSUE OF GENOCIDE AND THE WORLD COURT

**CONTEXT:** The International Court of Justice (ICJ) is currently examining a case where South Africa accuses Israel of violating the International Convention on the Prevention and Punishment of the Crime of Genocide in its military operations in Gaza. The ICJ held a hearing on provisional measures, and the outcome is awaited, with various countries expressing support or opposition to the case.

BACKGROUND: Accusing Israel of Gaza genocide, South Africa takes Israel to the ICJ. Citing civilian losses and Israeli statements, South Africa invokes the "erga omnes" duty to prevent genocide. Israel denies intent, blaming Hamas. The ICJ could order a ceasefire, aid access, or limit statements. This crucial case, beyond Gaza and Israel, tests the "rulesbased international order" and exposes potential colonial bias. The ICJ's ruling and global response will be defining moments.



### SOUTH AFRICA ACCUSES ISRAEL OF GAZA GENOCIDE AT THE ICJ: A COMPLEX LEGAL CLASH

The Accusation: South Africa argues that Israel's military operations in Gaza violate the Genocide Convention, citing civilian casualties, infrastructure destruction, and potentially genocidal statements by Israeli officials.

**Legal Basis:** South Africa invokes its "erga omnes" obligation to prevent genocide regardless of location and the lower bar for "provisional measures" to protect rights pending a final ruling.

**Israel's Defense:** Israel denies genocidal intent, claiming the operation targets Hamas in response to their attacks and that statements are misconstrued.

**Next Stage:** The ICJ will rule on provisional measures, potentially ordering a ceasefire, humanitarian aid access, or limits on Israeli statements.

Beyond the Law: The case raises questions about the ICC's role, the divide between former colonial powers and others, and the legitimacy of international law itself.

#### **Key Points:**

- The case targets Israel, with Hamas not present due to being a non-state actor.
- The split in support reflects historical colonial lines, raising bias concerns.
- The ICJ's ruling and global response will be crucial for Gaza's suffering and international law's future.
- This case transcends the Israel-Palestine conflict, testing the "rules-based international order" and exposing potential bias in global responses to accusations of genocide.

#### **CONCLUSION:**

The ICJ's upcoming ruling on South Africa's accusation against Israel holds immense weight not just for Gaza and the ongoing conflict, but for the entire international legal order. The court's decision and subsequent global response will be a defining moment, potentially shaping the future of how accusations of genocide are addressed and how international law is upheld.

Beyond the immediate humanitarian concerns in Gaza, this case raises crucial questions about the role of the International Criminal Court, the historical bias woven into global power dynamics, and the very legitimacy of international law itself.

The ICJ's ruling will be closely watched, with the potential to set a precedent for future accountability in the face of such grave accusations. Whether it can uphold the "rules-based international order" and navigate the complex political landscape remains to be seen.

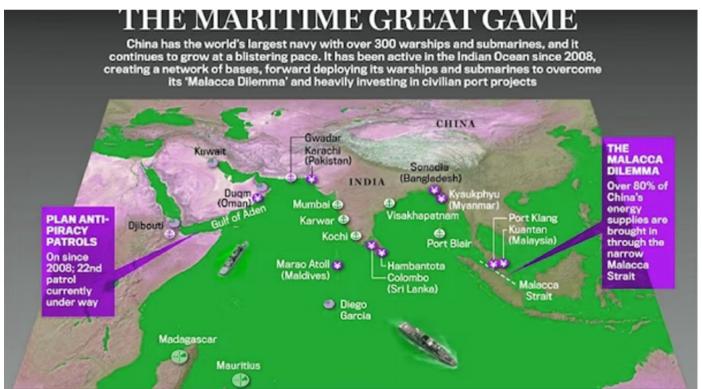
"Intelligence plus character-that is the goal of true education. — Martin Luther King Jr.





#### THE LARGER MESSAGE TO NEW DELHI FROM THE RED SEA

**CONTEXT:** China is increasing its presence in the Indo-Pacific, posing a potential maritime threat to India and aiming to contain its regional influence. India needs a well-thought-out maritime grand strategy to counter this challenge and secure its interests in the Indo-Pacific.



STORY SO FAR: China's rising presence in the Indo-Pacific poses a new two-front challenge for India, both on land and at sea. China's expanding navy, military bases, and strategic partnerships threaten to contain India. India needs to develop a well-thought-out maritime grand strategy, involving likeminded partners, to counter this challenge and secure its interests in the region. While initiatives like QUAD are helpful, they are insufficient. New Delhi must act now to build a cohesive and effective response to China's growing influence.

#### **BACKGROUND OF CHINESE STRATEGY:**

The whispers of the Red Sea carry echoes of a distant past, of Zheng He's majestic fleet traversing the Indian Ocean and etching China's name onto the maritime map. This historical ambition resonates in China's contemporary actions, a dragon reawakening its ancient hunger for dominance. New Delhi, cannot afford to ignore these echoes. Learn from history, understand China's enduring maritime ambitions, and prepare our symphony for the waves of the future."



Zheng He's Legacy: It's not prudent just to see China's current naval expansion as a sudden surge. Remember the voyages of Zheng He, the legendary Ming Dynasty admiral who led 7 epic expeditions across the Indian Ocean in the early 15th century. His fleets, dwarfing anything seen at the time, reached as far as East Africa, showcasing China's ancient maritime prowess and laying the groundwork for their contemporary ambitions.

**Aspirations:** Imperial China's historical maritime aspirations weren't just about exploration. They were fuelled by imperial desires for trade, tribute, and political influence. Zheng He's expeditions served as a potent display of China's power and secured lucrative trade routes,



paving the way for their long-held desire to dominate the region.

A Cycle of Reassertion: This resurgence in Chinese maritime activity isn't entirely unprecedented. Throughout history, China has experienced periods of expansion and contraction, often driven by internal dynamics and changing leadership. The current push can be seen as a reassertion of their historical ambitions, albeit in a more modern and sophisticated form.

### ECONOMIC DIMENSION OF CHINA'S GRAND STRATEGY PORT INVESTMENTS:

**String of Pearls:** China's investments in ports like Gwadar (Pakistan), Hambantota (Sri Lanka), Kyaukpyu (Myanmar), and Djibouti form a strategic network facilitating trade, resource access, and naval deployment.

**Belt and Road Initiative (BRI):** BRI aims to connect China with other countries through infrastructure projects, many in the Indian Ocean region. Ports serve as key nodes, promoting Chinese trade and influence.

**Debt-Trap Diplomacy:** Critics argue China uses strategically placed port investments to leverage debt against borrowing countries, potentially gaining control over key infrastructure.

#### **TRADE INITIATIVES:**

Free Trade Agreements (FTAs): China has FTAs with several Indian Ocean countries, boosting trade volume and economic dependence.

**Regional Trade Agreements:** China actively participates in regional trade agreements like the Regional Comprehensive Economic Partnership (RCEP), strengthening its economic ties with the region.

**Resource Security:** The Indian Ocean is vital for China's energy import needs. Investments in ports and infrastructure aim to secure access to resources and mitigate supply chain vulnerabilities.

#### **IMPACT ON INDIA:**

**Competition:** China's port investments challenge India's traditional maritime dominance and could divert trade away

from Indian ports.

**Regional Influence:** China's economic reach translates to political influence, potentially undermining India's position in the region.

**Opportunities:** Increased trade and infrastructure development also present opportunities for Indian businesses and coastal communities.

#### **MAJOR ISSUES:**

#### **India's Maritime Turn: From Opportunity to Challenge?**

**Shifting Focus:** India has moved its strategic focus from the landlocked continent to the Indo-Pacific maritime region.

**Emerging Threats:** The Indo-Pacific, despite its promise, is becoming a new theatre of conflict and competition, highlighted by the recent Houthi attacks on Indian ships.

**Limited Response:** India's current response to maritime challenges seems reactive and insufficient, relying on occasional manoeuvres and budget increases.

**Lacking Strategy:** A clear and defined maritime grand strategy is missing, raising questions about India's long-term vision and effectiveness in the Indo-Pacific.

**Need for Action:** Despite its initial shift, India needs to develop a comprehensive maritime strategy to secure its interests and navigate the increasingly complex Indo-Pacific.

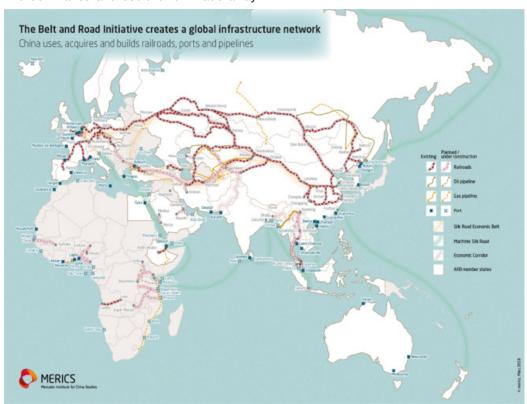
#### A DIFFERENT 'NEW' TWO FRONT SITUATION

**New Two-Front Challenge:** India faces a combined continental and maritime challenge, not just land threats from Pakistan and China.

**China's Growing Influence:** China has quietly expanded its naval presence in the Indian Ocean while India focused on land borders.

**Missed Opportunity:** India's continental focus allowed China to gain a strategic advantage in the maritime space.

Pressure from Land and Sea: China applies pressure on India through both the People's Liberation Army (LAC) and the People's Liberation Army Navy (Indian Ocean).





#### **NUMBERS DO NOT LIE:**

#### **OVERSEAS MILITARY BASES:**

- China has established a military base in Djibouti, signaling its global military ambitions.
- Growing Chinese activities in Gwadar (Pakistan) and Hambantota (Sri Lanka) are of concern, even if not officially military bases.
- The construction of the Kyaukpyu port in Myanmar enables China's PLAN to approach the Bay of Bengal, challenging India's traditional maritime dominance.
- Numbers Don't Lie: China has a significantly larger navy than India (370+ ships vs. 132) and plans to expand further. Not only in the number of platforms, but the capabilities of these platforms are also increasing. China is projected to have at least around 5 operationally deployed aircraft carriers by the end of 2030. At Least one carrier-based group can be expected to be deployed in the Indian Ocean shortly.

Also submarine arm is expected to have around 70 vessels with some of them being SSN.

#### **Expansion in Strategic Locations:**

- China is reportedly expanding an artificial island in the Maldives, strengthening the China-Maldives strategic partnership.
- Strategic investments and a naval base in Ream, Cambodia, indicate China's extended influence in Southeast Asia.

 Comoros, a small Indian Ocean Island, aligns with China, further expanding its presence in the Indo-Pacific.

#### **Containment of India:**

- China's actions, from Djibouti to Gwadar and the Maldives, suggest a strategy to contain India in the broader Indo-Pacific region. it is popularly known as the String of Pearls Strategy.
- This approach includes challenging India's traditional dominance in the Indian Ocean and strategic locations like Gwadar. Global Outreach and Influence:

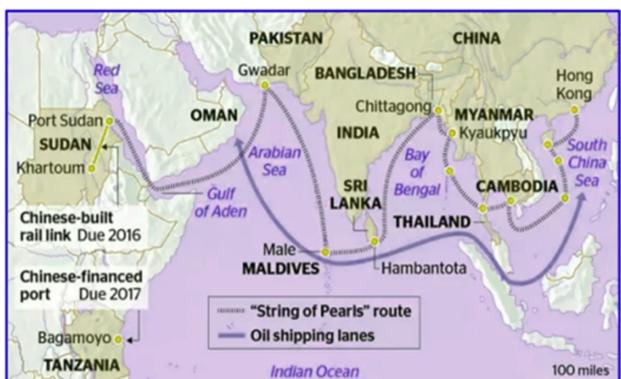
China's expanding outreach to the global South, port-building efforts worldwide, and strengthened relations with West Asia and Africa contribute to its global influence.

#### **Insufficient Assessment:**

- India's assessment of China's containment strategy in South Asia is not misplaced but insufficient.
- China is concurrently attempting to extend its containment strategy to the larger maritime theatre, challenging India's influence in the Indian Ocean.

#### **Historical and Cultural Influence:**

- China aims to influence regions historically engaged with by India, including the Indian Ocean region and Africa.
- The zero-sum game implies that China's gain in these regions comes at the expense of India, affecting its traditional spheres of influence.







#### INDIA'S MULTI-PRONGED RESPONSE:

India is adopting a multi-pronged approach to counter China's strategy:

**MILITARY MODERNIZATION:** Investing in naval expansion, submarine capabilities, and advanced maritime technologies to bridge the current power gap.

As the Indian Navy is the primary responder of the Indian State in the vast Indian Ocean region, India is significantly investing in expanding its capabilities and capacities. In this regard Indian govt. is expanding both the capabilities and capacity of the Indian Navy to make it respond effectively to surface, sub-surface, surface, and space-based challenges. But it needs to do more heavy lifting if it has to build a navy capable of playing the role it aspires and needs to play.

#### **EXPANDING BASES OF INDIA NAVY.**

Militarily, India has expanded its presence in the Andaman and Nicobar Islands, strategically positioned to monitor potential Chinese movements.

In response to the limited capabilities of its maritime patrol aircraft, India acquired twelve P-8I aircraft from the United States, enhancing surveillance and anti-submarine warfare capabilities. Despite environmental concerns, India extended the runway at Baaz Naval Air Station on Great Nicobar Island to accommodate these aircraft. Similar plans are in place for Kohassa Naval Air Station on North Andaman Island.

Andaman Nicobar base is home to India's Tri-Service command.

**Campbell Bay:** Located in the Great Nicobar Island, Campbell Bay is being developed as a major naval base with deep-water docking facilities and infrastructure to support aircraft carriers and submarines.

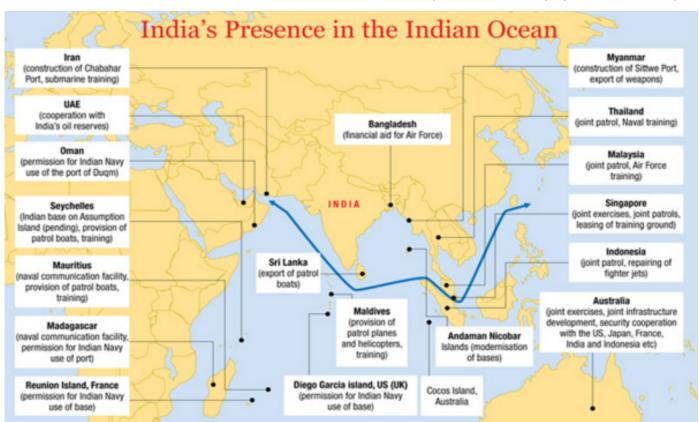
**Project Sea-Bird:** As China's maritime presence in the Indian Ocean intensifies, India counters with Project Seabird. This colossal \$3 billion undertaking will see the rise of a formidable naval base at Karwar, India's largest naval base on the west coast, and indeed the largest east of the Suez Canal. It is expected to bolster India's strategic position in the region.

**Ezhimala Naval Academy,** is the premier defence training establishment for officer cadre of the Indian Navy and the Indian Coast Guard. Located in Ezhimala, Kannur district, Kerala. Founded in 2009, INA is the largest naval academy in Asia and the third largest in the world.

INS Varsha is a new naval base being developed under Project Varsha for the Indian Navy. This base will be the home of the navy's new fleet of nuclear submarines and ships. It was planned to be located within a radius of approximately 200 kilometres (124.27 statute miles) from Visakhapatnam, the headquarters of the navy's Eastern Naval Command.

**STRENGTHENING ALLIANCES:** Deepening cooperation with the QUAD (US, Japan, Australia, India), ASEAN nations, and other like-minded countries to create a united front against China.

**INDIA'S NECKLACE OF DIAMONDS:** As a counter to China's necklace of pearls, some have proposed India develop its



chain of strategically located military bases and economic partnerships in countries like Seychelles, Maldives, Mauritius, and Sri Lanka. These "diamonds" would not only project Indian power and influence but also provide logistical support for its navy and secure vital sea lanes.





#### **Key Points of this strategy**

**Emphasis on Partnerships:** Unlike China's primarily infrastructure-based approach, India's String of Diamonds focuses on cultivating diplomatic and economic partnerships with smaller Indian Ocean nations.

**Multi-Pronged Approach:** This strategy goes beyond just military bases, encompassing investments in port development, maritime security cooperation, and economic engagement. Balancing Act: Implementing this strategy requires careful balancing of geopolitical considerations, economic feasibility, and respecting the sovereignty of partner nations.

Maritime Infrastructure Development: Upgrading domestic ports, building new bases, and investing in coastal infrastructure to compete with China's regional connectivity projects.

**Economic Diplomacy:** Leveraging India's economic strengths to negotiate favourable trade deals and strengthen economic ties with regional partners.

**Countering Debt-Trap Diplomacy:** Offering alternative financing options and promoting good governance practices to prevent smaller nations from falling into China's debt trap.

#### **UTILISING GLOBAL ATTENTION:**

**Global Attention on Indo-Pacific:** 

- Leverage the growing global interest in the Indo-Pacific, recognizing it as a crucial geopolitical construct.
- The Indian Ocean's strategic importance makes it imperative for the international community to prevent China's dominance.

#### **Coalitions and Partnerships:**

- Form coalitions with like-minded countries in the Indo-Pacific to counter China's influence.
- Utilize the current scenario where Beijing lacks significant great power support in the maritime theatre.

#### Strategic Importance of India:

- Acknowledge India's pivotal role in the Indo-Pacific moment, serving as a counterbalance to Chinese expansion.
- Strengthen partnerships with other nations sharing similar regional concerns and objectives.

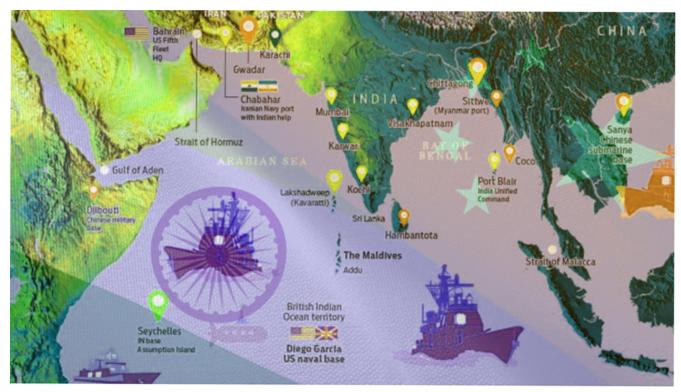
#### **Cohesive Indo-Pacific Strategy:**

- Develop a comprehensive and well-thought-out Indo-Pacific strategy that goes beyond noble intentions.
- The existing initiatives like Quad and Malabar are commendable but need integration into a purposeful and cohesive maritime grand strategy.

\*91-9383432123 +91-7777875588 +91-0484-4527777







#### **LONG-TERM VISION:**

- Recognize the unfolding grand challenge in the Indo-Pacific region and plan for a long-term vision.
- Emphasize the need for a strategic response beyond immediate situations, considering the evolving dynamics.

#### **DECISION ON COLLECTIVE EFFORTS:**

- While refraining from joining 'Operation Prosperity Guardian' might be suitable for now, acknowledge the potential limitations.
- Realize that addressing the China challenge in the longer run may require active participation in collective efforts and initiatives.

**SIGNIFICANCE:** India stands at a critical juncture as it navigates the complex geopolitical landscape of the Indo-Pacific. The Red Sea incidents and China's expanding influence underscore the urgency for New Delhi to formulate a robust maritime grand strategy. Shifting from a continental focus to the Indo-Pacific demands a proactive approach, transcending reactive responses.

The numerical superiority of China's navy and its strategic bases raise significant concerns, necessitating a

comprehensive and well-defined long-term vision. India must leverage global attention on the Indo-Pacific, forging coalitions, strengthening partnerships, and integrating existing initiatives into a cohesive strategy.

The maritime challenge requires a collective effort, and while current decisions may be suitable in the short term, active participation in collaborative endeavours becomes imperative for effectively countering China's ambitions in the evolving Indo-Pacific theatre. India's response will shape not only its maritime destiny but also contribute to regional stability and global security.

**CONCLUSION:** The larger message from Red Sea's whispers urges India to act. While opting out of "Operation Prosperity Guardian" might be a wise pause, remember, the final act requires collective effort. It's not wise for New Delhi to be a lone wolf in this maritime maelstrom. NEW DELHI needs to join the dance, lead the orchestra, and compose a symphony that resonates not only with our maritime destiny but with the very future of regional stability and global security.

The curtain is rising, India. The stage is yours. Will you be the protagonist or the silenced chorus? The Red Sea awaits your answer, and the world watches with bated breath.



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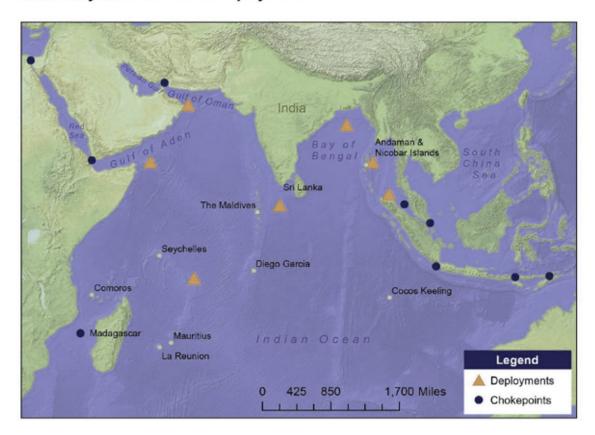
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#### **Indian Navy's Mission-Based Deployment**



SOURCE: Directorate of Strategy, Concepts, and Transformation, Integrated Headquarters, "Ensuring Secure Seas: Indian Maritime Security Strategy," Naval Strategic Publication 1.2, Indian Navy, October 2015, https://www.indiannavy.nic.in/sites/default/files/Indian\_Maritime\_Security\_Strategy\_Document\_25Jan16.pdf; Press Information Bureau, "Year End Review—2019 Ministry of Defense," Government of India Ministry of Defense, December 27, 2019, http://pibarchive.nic.in/newsite/PrintRelease.aspx?relid=196160; Sujan Dutta, "Indian Navy Informs Government About the Fleet's Reoriented Mission Pattern," New Indian Express, April 1, 2018, https://www.newindianexpress.com/nation/2018/apr/01/indiannavy-informs-government-about-the-fleets-reoriented-mission-pattern-1795404.html; based on maps from Natural Earth, https://www.naturalearthdata.com/downloads/50m-raster-data/50m-natural-earth-1/.

### TOUGH ROAD AHEAD FOR TAIWAN'S LAI WITH PRESSURE FROM CHINA AND NO MAJORITY

**CONTEXT:** Ruling party candidate Lai Ching-te secured a comfortable presidential victory in the Taiwanese election, but his joy was tempered by his party's parliamentary defeat.

**STORY SO FAR:** Taiwan's President-elect Lai Ching-te faces a challenging four-year term with no parliamentary majority, an opposition keen on restarting a contentious service trade deal with China, and the looming threat of military action from Beijing. Despite Mr. Lai's comfortable electoral win, the Democratic Progressive Party (DPP) lost control of Parliament, crucial for legislative approval and spending.

China swiftly pointed out that most electors voted against Mr. Lai, emphasizing that the DPP does not represent mainstream public opinion. Concerns are raised about a tough term, particularly on China-related issues, as the opposition, holding a legislative majority, may seek to revive a controversial service trade pact shelved a decade ago due to mass protests. Lin Fei-fan, a senior DPP member, expresses worry about the challenges ahead for the new government.





#### PRESSURE FROM ALL SIDES:

The concerns revolve around the potential collaboration of local governments and Parliament to pressure the central government in Taiwan. Both the Kuomintang (KMT) and Taiwan People's Party (TPP) campaigned to restart the trade services pact, with uncertainty about whether they will cooperate in Parliament. The defeated KMT candidate did not confirm collaboration but emphasized the opposition's responsibility.

China rejects President-elect Lai's calls for talks, as he and the DPP reject Beijing's sovereignty claims, insisting that only Taiwan's people can determine their future. A Chinese commentator downplays the election outcome, asserting that the mainland's strength and the will of 1.4 billion people for reunification matter more than the election results.

China framed the vote as a choice between war and peace, cautioning electors to make the "correct choice" without endorsing specific candidates. Analysts suggest China is using the election outcome to justify its approach to Taiwan by highlighting its impact on the DPP's Parliament majority.

#### **ELECTION RESULTS:**

- Lai Ching-te (DPP) won the presidency but his party lost control of Parliament.
- China claims this outcome means no change in their "hard line" towards Taiwan.

#### **TENSIONS AND POTENTIAL FUTURE:**

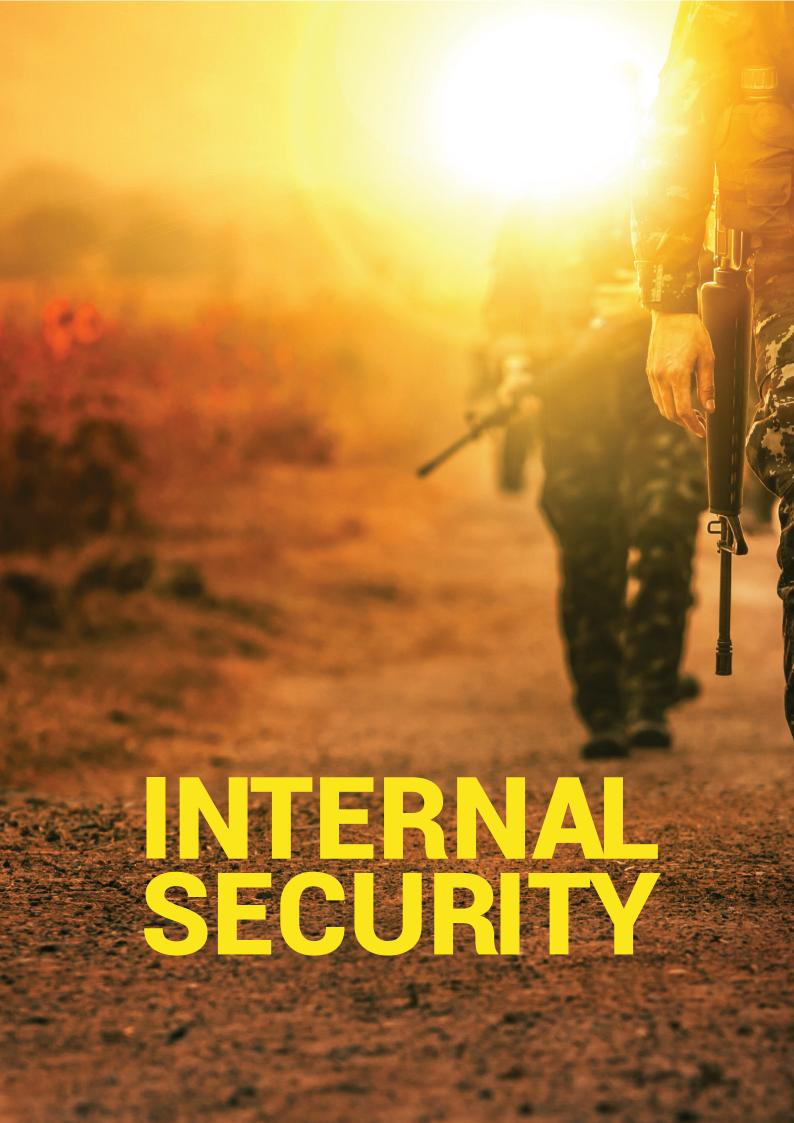
- China is expected to continue increasing pressure on Taiwan through trade restrictions and military exercises, but experts don't anticipate an immediate military conflict.
- China insists on peaceful reunification and blames proindependence Taiwan forces for any risks.
- Taiwan's military think tank believes China will observe Lai's actions before deciding next steps.

#### **ADDITIONAL POINTS:**

- 60% of voters did not support Lai, suggesting potential public opposition to a hardline stance against China. But it does not mean that the population may support a meek response to China. They may not want to deliberately provoke China and invite war.
- China's military showcased exercises but stopped short of directly commenting on the election.
- China also understands that a more provocative approach might be counterproductive and would be alienating any future peaceful integration.
- Already integration of Hong Kong is not without challenges.
   Tibet which was annexed more than 75 years ago is still a work in progress at best.
- Despite all the bravado, China is not yet confident of a military solution to Taiwanese integration.
- China's internal power struggle is also another dimension to the integration of Taiwan.
- Despite all shows of bullying or threatening neighbouring powers around China, including in the South China Sea, the Chinese military is yet to demonstrate willingness for a bloody conflict with a near-peer power like India or an established power like Russia or USA.
- Great power status which China and especially the Chinese communist party aspire for does not come from sitting on fringes of active power play. More importantly, no one is going to hand it over to them as an appeasement.

**SIGNIFICANCE:** The election results present a mixed picture for Taiwan-China relations. While Lai's victory might suggest a potential shift in Taiwan's approach, China's strong stance and continued pressure likely mean tensions will remain high in the foreseeable future. The key question remains: will any escalation lead to open conflict or will both sides prioritize peaceful resolution.









MAJOR EXERCISES - 2024
INAUGURAL JOINT MILITARY
EXERCISE SADA TANSEEQ
INDIA-KYRGYZSTAN JOINT
MILITARY EXERCISE 'KHANJAR'
INDIA, THAILAND CONDUCTS
INAUGURAL BILATERAL
MARITIME EXERCISE
OPERATION SARVASHAKTI
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**FORCES** 

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INDIA, UAE LAUNCH MAIDEN
MILITARY EXERCISE 'DESERT
CYCLONE'



#### **MAJOR EXERCISES - 2024**

The Indian Air Force (IAF) will conduct three major exercises in 2024, emphasizing jointness across India's defense forces as they work towards establishing theater commands. The key focus areas are integration and coordination in modern warfare.

VAYU SHAKTI-2024: The first exercise, Vayu Shakti-2024, will demonstrate the firepower capacities of the IAF's fighter fleet. It will be held on February 17 in Jaisalmer as a major firepower show. The IAF will utilize all its frontline aircraft like the Rafale, Su-30MKIs, LCA Tejas, Mirage 2000 and MiG-29s. They will launch different missiles and bombs at designated ground targets. Elements of the Indian Army and Navy, including attack helicopters, will also display their strike prowess.

**EXERCISE GAGANSHAKTI:** The next wargame is Exercise Gaganshakti, planned for April 2024. It will witness a full-scale activation of the entire IAF, from Ladakh to the Indian Ocean

and Bhuj to Arunachal Pradesh. Almost all IAF combat fleet, transports, helicopters and drones will participate in offensive and defensive manoeuvres along the borders. Key assets like the S-400 air defence systems will also be activated on the Western and Northern fronts. There will be close coordination between IAF fighters and naval assets like the P-8Is and MiG-29Ks

**TARANG SHAKTI-2024:** The third exercise is the first-ever multinational air exercise called Tarang Shakti-2024. It could see the participation of leading air forces like Germany, France, Italy and the United States. The wargame is presently planned for August 2024 at the Jodhpur airbase. The exact foreign participants will be finalized by June. Last year, the IAF had focused more on multinational exercises abroad across Europe, West Asia and the Asia-Pacific.

#### **INAUGURAL JOINT MILITARY EXERCISE SADA TANSEEQ**

The inaugural India-Saudi Arabia joint military exercise 'SADA TANSEEQ' commenced on January 29th in Rajasthan. The aim is to develop interoperability, camaraderie and friendship between the troops. The exercise will continue until February 10. The Saudi contingent comprises 45 personnel from the Royal Saudi Land Forces. The Indian contingent has 45 personnel from a Mechanised Infantry battalion.

**KEY FOCUS AREAS:** The exercise focuses on training for joint operations in semi-desert terrain under Chapter VII of the UN Charter. This enables both sides to share best practices in tactics, techniques and procedures for sub-conventional domain operations. The activities include establishing mobile checkpoints, conducting cordon and search operations, house raid drills, shooting exercises, rappelling and sniper firing.

**ENHANCING BILATERAL RELATIONS:** The exercise facilitates building bonds between the troops and achieving shared security objectives. It enhances the level of India-Saudi defence cooperation and furthers bilateral diplomatic ties. The joint exercise provides real-world experience in an unfamiliar

desert environment. It will validate newly developed tactics and procedures.

**STRATEGIC PARTNERSHIP:** India and Saudi Arabia have strengthened strategic cooperation in recent years. This includes signing a landmark Green Strategic Partnership agreement in 2021. Defence and security collaboration is a key pillar. The inaugural joint exercise represents deepening bilateral defence ties. It also helps India demonstrate its growing military profile with key partners. For Saudi Arabia, it aligns with transforming its armed forces.

BROADER SIGNIFICANCE: The joint exercise comes at a time of evolving regional geopolitics. Saudi Arabia faces threats from groups like Yemen's Houthi rebels. India contends with cross-border terrorism from Pakistan. The exercise creates potential for more counterterrorism cooperation and intelligence sharing. As major oil producers, ensuring West Asian stability is a mutual interest. It can help secure vital trade routes.

#### INDIA-KYRGYZSTAN JOINT MILITARY EXERCISE 'KHANJAR'

The 11th edition of the India-Kyrgyzstan joint military exercise, 'Khanjar', commenced on January 22 in Himachal Pradesh. The two-week long exercise aims to boost defence cooperation and exchange expertise on counterterrorism operations.

**KHANJAR EXERCISE:** Khanjar is an annual joint military exercise between India and Kyrgyzstan, conducted alternately in the two countries. The current edition is being organised at the Special Forces Training School in Bakloh, Himachal Pradesh. The 11-day exercise involves drills and simulations for counterterrorism operations in mountainous areas.

**KEY OBJECTIVES:** The Khanjar exercise focuses on honing special forces skills, including insertion, extraction and ambush techniques. It aims to address shared security threats like terrorism and extremism. The exercise also offers an opportunity to display indigenous military equipment capabilities. Overall, it intends to fortify India-Kyrgyzstan defence collaboration.

**PARTICIPANTS:** The Indian contingent comprises 20 personnel from the elite Parachute Regiment's Special Forces. The Kyrgyzstan contingent also has 20 personnel, from the

Scorpion Brigade. Senior military officials from both sides will be closely observing the exercise.

**FOCUS AREAS:** As part of the United Nations Charter, the drill concentrates on counterterrorism scenarios in built-up areas as well as mountainous terrain. This involves planning and executing special operations while neutralising simulated terrorist threats. Use of high-tech equipment for surveillance and combat operations is also being demonstrated.

**WIDER COOPERATION:** Beyond joint exercises, India and Kyrgyzstan have an extensive defence partnership spanning capacity building, training military personnel, servicing equipment and cooperation in border security. As part of this, India gifted vehicles and bulletproof jackets to Kyrgyzstan's forces last December.

**IMPORTANCE OF MOUNTAIN WARFARE CAPACITY:** Enhancing Mountain warfare abilities is a priority for both India and Kyrgyzstan due to the terrain and persistent terrorism concerns. Control over mountain passes is also strategically vital. The Khanjar exercise develops specialised skills like scaling cliffs and surviving in tough conditions – crucial to secure borders.



**EQUIPMENT DISPLAY:** The exercise envisions exhibiting cutting-edge military gear produced indigenously, aligning with India's self-reliance push. This serves to showcase domestic defence industry capabilities. For instance, Indian Army contingents have deployed newly-introduced assault rifles during the Khanjar exercise.

**DIPLOMATIC SIGNAL:** The Khaniar drill comes just months after clashes erupted between Kyrgyzstan and Tajikistan troops over a disputed segment of their mountainous border. The exercise indicates India's support for Kyrgyzstan amidst regional tensions. It also signals New Delhi's widening Central Asia engagement.

#### INDIA, THAILAND CONDUCTS INAUGURAL BILATERAL MARITIME EXERCISE

In December 2023, the Indian Navy and Royal Thai Navy conducted their first ever bilateral maritime exercise. The four-day event was held from December 20 to 23.

#### **PARTICIPANTS**

Indian Naval ships Kulish and LCU 56 took part, both indigenously built. Thailand was represented by patrol ship HTMS Prachuap Khiri Khan. The coordinating patrol Indo-Thai CORPAT was also held alongside.

INS Kulish: The Indian naval ship INS Kulish, currently in active duty, belongs to the Kora-class of corvettes. Ordered in October 1994 and with its keel laid in October 1995, Kulish was launched in August 1997 before being commissioned into service on August 20, 2001. As the third of the four vessels designed under Project 25A for the Kora-class corvettes, Kulish is equipped with P-15 Termit anti-ship missiles and Strela-2 surface-to-air missiles. She represents part of the offensive and defensive capabilities the Indian Navy possesses to protect national maritime interests.

IN LCU L-56: The Indian Navy ship IN LCU L-56 is the sixth vessel in the Landing Craft Utility MK IV class of amphibious ships. Its main role is transporting and deploying Main Battle Tanks, armoured vehicles, troops and equipment from sea to shore. As an amphibious warfare ship, LCU L-56 has the capability to conduct seaborne assaults and support land operations. The ship will be based in Port Blair as part of the Naval Component Command under the Andaman and Nicobar Command. With its shallow draft enabling beaching, LCU L-56 strengthens the Indian Navy's amphibious capabilities and littoral warfare operations.

AIR FORCES JOIN MARITIME DRILLS: Maritime patrol aircraft from both countries participated in the sea phase of the joint exercise. Surface ship anti-air exercises were conducted with weapon firing and naval maneuvers.

**GROWING REGIONAL NAVAL TIES:** As part of India's SAGAR vision of maritime growth and security for the region, its navy is actively engaging Indian Ocean countries. These inaugural navy drills with Thailand highlights growing bilateral naval cooperation.

**BUILDING OPERATIONAL BONDS:** Conducting the maiden bilateral exercise and patrols together has enabled both navies to strengthen operational ties and progressively increase exercise complexity for the future.

HISTORIC CITIES INSPIRE DRILL NAME: The India-Thailand naval exercise has been aptly named "Ex-Ayutthaya" after two ancient cities - Ayodhya and Ayutthaya - which represent the deep cultural links and shared history between the nations.

#### OPERATION SARVASHAKTI

The Indian Army has launched Operation Sarvashakti in Jammu and Kashmir. It involves security forces on both sides of the Pir Panjal range. The goal is to flush out terrorists who have ambushed Indian troops in Rajouri and Poonch.

**BACKGROUND:** Over the past few years, 7 soldiers have been killed in Kashmir ambushes and 20 more were killed in attacks in the Rajouri-Poonch belt. Authorities suspect the terrorists responsible for the 2023 ambushes on security forces in Rajouri-Poonch are concealing themselves in these remote areas. Sources among the security forces indicate that most of the remaining terrorists currently active in Jammu & Kashmir are of foreign origin.

ABOUT PIR PANJAL RANGE: The Pir Panjal Range constitutes a mountain chain in the Lower Himalayan region within the Western Himalayas of the northern Indian subcontinent. Extending southeast to northwest between the Beas and Neelam/Kishanganga rivers, it spans the Indian territories of Himachal Pradesh and disputed Jammu and Kashmir, with its northwestern end reaching into Pakistan. Serving as the largest range in the Lesser Himalayas, Pir Panjal exhibits a gradual elevation towards the Dhauladhar and Pir Panjal ranges. Adjacent to the Sutlej River, it separates from the Himalayas, forming a division between the Beas and Ravi rivers on one side and the Chenab on the other. Further west, the Pir Panjal range acts as a barrier, dividing the Kashmir Valley from the hills of the Jammu region.

MULTI-AGENCY EFFORT: Troops from 15 Corps and 16 Corps are operating together. Other agencies and paramilitary forces are also participating. The operation aims to eliminate Pakistan-sponsored terrorists.

INTELLIGENCE-BASED ACTIONS: According to sources, intelligence inputs at all levels are being collected and acted upon. Additional reserve troops have moved into the Rajouri-Poonch area.

PATTERNED AFTER 2003 OPERATION: Sarvashakti is modeled on 2003's Operation Sarpvinash in the region south of Pir Panjal. Operation Sarpvinash was implemented by the Indian Army and the Rashtriya Rifles. That three-month operation killed nearly 100 terrorists. It brought peace until 2017-2018.

"Ge not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them." - WILLIAM SHAKESPEARE





#### **NEW INDIGENOUS ASSAULT RIFLE 'UGRAM' FOR ARMED FORCES**



The Defence Research and Development Organisation (DRDO) has developed and launched a new 7.62mm caliber assault rifle named 'Ugram' intended as a standard-issue weapon for the Indian Armed Forces replacing some aging INSAS rifles. The firearm was engineered in collaboration with private industry to meet military and law enforcement operational requirements. Its design focuses on reliability, accuracy, and lightweight ruggedness.

#### **KEY FEATURES AND SPECIFICATIONS**

Officially designated as a 7.62x51mm assault rifle, the Ugram fires the same large-calibre cartridge in use with NATO forces globally ensuring abundant ammunition compatibility. Weighing less than 4 kg fully-loaded, the rifle incorporates materials like steel in critical components for durability while keeping weight manageable for troops on patrol. An effective range of 500 meters makes the Ugram suitable for most infantry combat scenarios. Its accuracy and stopping power exceed the 5.56mm INSAS rifle to give soldiers better tactical versatility. The gun's gas-operated short stroke piston system paired with a rotating bolt design also enhances reliability by efficiently dispelling heat and fouling from rapid firing.

#### **ONGOING DEVELOPMENT AND PRODUCTION**

Functional prototypes of the Ugram were recently demonstrated to senior officials from the Indian Army and Ministry of Home Affairs, garnering strong interest for initial batch production and field trials. Before approval for full induction, the authoritative Armament Research & Development Establishment (ARDE) laboratory will conduct exhaustive independent tests assessing durability, safety,

accuracy parameters and compatibility with all standard-issue 7.62mm ammunition. This new assault rifle project exemplifies India's expanding self-reliance in small arms to replace aging imported platforms with locally engineered weapons leveraging the country's maturing military-industrial base.

#### STRATEGIC SIGNIFICANCE

The successful development of the Ugram assault rifle holds both tactical and strategic significance for Indian defence. At the soldier's level, the weapon provides upgraded lethality and accuracy over decades-old INSAS rifles, building the infantry's confidence that their basic kit delivers maximal advantage. Strategically, attaining self-sufficiency across the majority of conventional armaments like rifles, artillery and munitions reduces import dependence that can be vulnerable to geopolitical coercion. And the project showcases Indian R&D capabilities in weapon miniaturization fitting greater firepower into lightweight, modular platforms to match global technology growth.

#### **FUTURE SMALL ARMS GOALS**

Unveiling the new Ugram rifle, senior DRDO officials highlighted India's ambition to position itself at the vanguard of infantry arms advancement. The organization aspires becoming a hub for next-generation small weapon design trending toward adaptability, precision and integrated technologies like sights, guidance and non-lethal capabilities. With its expanding defence industrial base and engineering talent pool, India seems poised to achieve this vision – if the promising new made-in-India Ugram assault rifle proves a glimpse of firearms of the future.

#### INDIA AND MAURITIUS TO JOINTLY BUILD AND LAUNCH SMALL SATELLITE

India has signed an agreement with Mauritius to jointly develop a small satellite, which will be launched by ISRO in early 2024. The cooperation will be between ISRO and Mauritius Research and Innovation Council (MRIC).

BENEFITS TO INDIA: The joint satellite project will ensure continued Mauritian government support for ISRO's critical ground tracking station located in the island country. This station aids India's launch missions. Additionally, MRIC agreeing to provide their ground infrastructure for ISRO's future small satellite projects signals widened scope of bilateral space collaboration.

**BACKGROUND ON PARTNERSHIP:** India set up the Mauritius ground tracking station back in 1986 to assist its satellite and

launcher missions. The current cooperation is guided by a 2009 country-level agreement on space.

ABOUT MRIC: The Mauritius Research and Innovation Council (MRIC) constitutes the apex advisory body on matters related to research, innovation and development in the country. Legally constituted in 2019 via the MRIC Act, the council is mandated to steer the research ecosystem, spur innovation and boost industry-academic links.

The Act outlines objectives like coordinating needdriven research, fostering entrepreneurship culture, aligning advanced technologies to industry requirements and promoting commercialisation of R&D outputs.

By synergizing players and priorities, MRIC aims



to catalyse innovation-led growth to improve economic and social welfare. collaborations like the joint satellite with ISRO aid building technological capacities. So through its charter and activities, the council strives to bolster Mauritius' research environment and steering it towards national developmental priorities for boosting prosperity.

#### **CSIR-CRRI'S REJUPAVE TECHNOLOGY**

India's premier road construction agency, Border Roads Organization (BRO) has utilized an indigenous road construction technology called "REJUPAVE" developed by CSIR-Central Road Research Institute (CSIR-CRRI), part of the Ministry of Science and Technology. REJUPAVE allows the construction of high-altitude bituminous roads under low and sub-zero temperatures.

This innovative technology was recently implemented by BRO to construct parts of the world's highest Sela Road Tunnel and the LGG-Damteng-Yangste (LDY) road near the China border in Arunachal Pradesh.

#### **ISSUES**

Construction and maintenance of high-altitude bituminous roads under the low and sub-zero temperatures in Arunachal Pradesh has always been a challenge for Border Roads Organization. Most bituminous road construction grinds to a halt or faces delays during the winter months. The production of hot bituminous mix for paving requires heating to 160-170°C in the hot mix plant. Additionally, the mix must remain sufficiently hot during transport to the work site for proper compaction and durability. But the increased travel time down hilly roads often cause the mix to cool too rapidly before paving can begin.

#### **CHALLENGES**

REJUPAVE utilizes several innovations to overcome the difficulties posed by frigid conditions.

First, it increases the heat retention properties of bituminous mix by coating the aggregate mix with special hydrocarbon-based additives. This allows the mix to stay workably hot even during extended transportation times from the hot mix plant to distant work sites.

Second, it allows a unique construction sequence called Pre-Fab paving where a base layer is paved and allowed to completely cool and set prior to overlaying with the top hot bituminous layer.

Finally, it utilizes special dominant stone skeleton gradations which have better resistance to deformation under rolling/compaction at relatively cold temperatures, allowing for easier placement and compaction.

#### **SUCCESSFUL DEPLOYMENTS & BENEFITS**

REJUPAVE's successful use by BRO in Arunachal Pradesh helped accelerate critical strategic road projects that get hampered during 6-month long winters. It also delivered superior long-term road performance by overcoming challenges caused by steep gradients, adverse weather, and sub-zero temperatures.

Wider adoption of this cost-effective indigenous technology developed by Indian scientists has the potential to transform construction schedules for strategic infrastructure along northern borders. This can bolster all-weather connectivity for defence forces and border populations while reducing dependence on foreign solutions.

#### **CSIR-CRRI'S REJUPAVE TECHNOLOGY**

India's premier road construction agency, Border Roads Organization (BRO) has utilized an indigenous road construction technology called "REJUPAVE" developed by CSIR-Central Road Research Institute (CSIR-CRRI), part of the Ministry of Science and Technology. REJUPAVE allows the construction of high-altitude bituminous roads under low and sub-zero temperatures.

This innovative technology was recently implemented by BRO to construct parts of the world's highest Sela Road Tunnel and the LGG-Damteng-Yangste (LDY) road near the China border in Arunachal Pradesh.

#### **ISSUES**

Construction and maintenance of high-altitude bituminous roads under the low and sub-zero temperatures in Arunachal Pradesh has always been a challenge for Border Roads Organization. Most bituminous road construction grinds to a halt or faces delays during the winter months. The production of hot bituminous mix for paving requires heating to 160-170°C in the hot mix plant. Additionally, the mix must remain sufficiently hot during transport to the work site for proper compaction and durability. But the increased travel time down hilly roads often cause the mix to cool too rapidly before paving can begin.

#### **CHALLENGES**

REJUPAVE utilizes several innovations to overcome the difficulties posed by frigid conditions.

First, it increases the heat retention properties of bituminous mix by coating the aggregate mix with special hydrocarbon-based additives. This allows the mix to stay workably hot even during extended transportation times from the hot mix plant to distant work sites.

Second, it allows a unique construction sequence called Pre-Fab paving where a base layer is paved and allowed to completely cool and set prior to overlaying with the top hot bituminous layer.

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INDIA'S FUTURE GROWTH

UNION CABINET APPROVES ₹ 8,500 CR VGF FOR COAL GASIFICATION

GLOBAL HYDROGEN PRICE INDEX

U.S. TROOPS KILLED IN DRONE HIT IN JORDAN; BIDEN BLAMES IRANIAN-BACKED MILITANTS

INSAT-3DS SATELLITE SENT TO LAUNCH PORT IN SRIHARIKOTA

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FACTORIES GRIND TO A HALT AS RED SEA ATTACKS CREATE TRADE BOTTLENECKS

ANALYSING CHINA'S TIES WITH AFRICA

WHAT ARE THE RBI'S GUIDELINES ON STATE 'GUARANTEES'?

WHAT IS END-TO-END ENCRYPTION AND HOW DOES IT SECURE INFORMATION?

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SIXTEENTH FINANCE
COMMISSION CONSTITUTED
UNDER ARVIND PANAGARIYA



#### INDIA'S FUTURE GROWTH

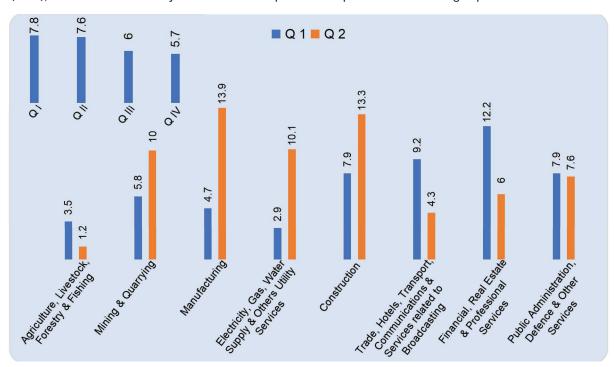
The Centre released the First Advance Estimates (FAE) for 2023-24 that projected the economy to expand 7.3 %, faster than the 7.2 % growth achieved in 2022-23 on the back of robust domestic demand. The First Advance Estimates (FAE), published by January first week every fiscal year offer the earliest snapshot of national income growth trends based on initial months' data. This allows policymakers finalised the upcoming budget accounting for latest projections.

The First Advance Estimates (FAE) reveal private consumption and investments remain primary growth engines firing up overall economic momentum, followed by government expenditure and export-import spending. However, private consumption which accounts for 60 % of Gross Domestic Product (GDP), estimated to rise only 4.4 % this fiscal point

to persisting weakness in consumer sentiment limiting bigger purchases.

By contrast, investments directed towards augmenting industrial capacity and output registered healthier 9.3 % increase this fiscal – signalling business confidence as capacity utilization levels rise after pandemic, encouraging new capital outlays. Public expenditures grew only 3.9 % – lower than private demand, indicating fiscal support for economic revival remains subdued despite need for concrete stimulus in distressed sectors.

Moreover, Indian's higher spending on imports over exports drags down GDP calculations. The 'negative' growth jumped 144 % signifying relatively improved trade competitiveness enabling export boost.



**FIGURE:** Column chart representation of the Quarterly Estimates of sectorial GVA growth rates. (Inset) Column chart representation of the quarterly GVA growth rates.

#### **IMF FORECASTS**

According to the IMF's chief economist, Pierre-Olivier Gourinchas, the updated World Economic Outlook forecasted a "soft landing" for global economic growth, upgrading the outlook for both the United States and China — the two largest economies, though overall growth and global trade still remained lower than the historical average.

The IMF forecast a global growth of 3.1 % in 2024, 0.2 % higher than its October projection. The historical average for the 2000-2019 period was 3.8 %. Global trade was expected to expand by 3.3 % in 2024 and 3.6 % in 2025, well below the historical average of 4.9 %. The IMF stuck with its October forecast for headline inflation of 5.8 % for 2024, but

lowered the 2025 forecast to 4.4 %. from 4.6 % in October. The average oil prices would drop 2.3 % in 2024, versus the 0.7 % decline it had predicted in October, and said prices were expected to drop 4.8 % in 2025.

The IMF project a domestic growth rate of 6.5 % during the upcoming financial year, upgrading from October by 0.2 % for both years, on resilient domestic demand. The new commodity price spikes from geopolitical shocks, including continued attacks on shipping in the Red Sea, could prolong tight monetary conditions. The IMF was watching developments in West Asia closely, but the broader economic impact appeared "relatively limited" as of now.

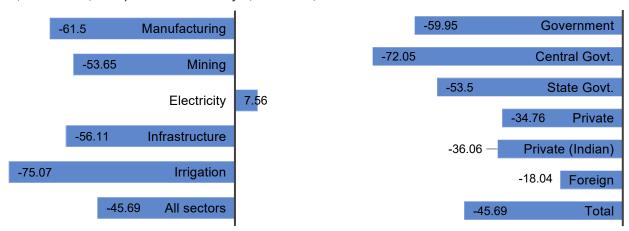


## INDIA'S LARGEST ONLINE IAS COACHING ACADEMY

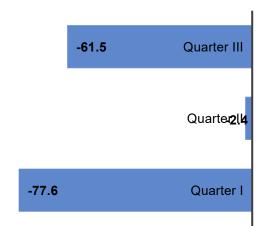


#### **NEW INVESTMENTS SLID 46 % IN Q3**

Fresh investment plans in India have almost halved between October-December, 2023 and July-September, 2023, marking the third consecutive quarter of decline in new investment projects. Public capital expenditure projects have tripped at a faster pace (almost 60 %) than private sector outlays (down 35 %).

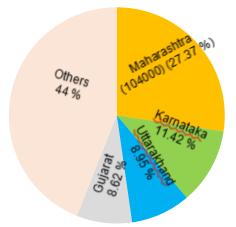


**FIGURE:** (L) Bar chart representation of Quarter wise decline in fresh projects by major sectors (FY 2023-24). (R) Bar chart representation of Quarter wise decline in fresh projects by ownership (FY 2023-24).



**FIGURE:** (L) Quarter-wise investments in manufacturing sector (FY 2023-24). (R) State-wise investments in manufacturing sector during quarter III. (FY 2023-24).

Among the States, Maharashtra emerged as the top investment destination in Q3 with 470 new projects worth ₹ 1.04-lakh Cr., followed by Karnataka (₹ 43,383 Cr), Uttarakhand (₹ 34,024 Cr), and Gujarat (₹ 31,379 Cr). These four States accounted for 56 % of the total new investments announced between October and December.



The investments in critical sectors such as automobiles, steel and cement fell by 63.8 %, 74.8 % and 89 %. The investments planned in Q 3 for manufacturing projects accounted for 21 % of the ₹ 3.83 lakh Cr., compared to 30 % of the ₹ 7.05 lakh Cr. of new investments announced in Q 2 of this year. The overall investment plans dropped quarterwise by 45.7 %, attributed to factors like a below-normal monsoon, upcoming Lok Sabha elections, reduced capex initiatives by state governments, and the global slowdown.

#### PRODUCTIVITY LINKED INCENTIVE (PLI) SCHEME

The PLI scheme was launched in 2020 to scale up domestic manufacturing capability, accompanied by higher import substitution and employment generation. PLI schemes are aimed at enhancing competitiveness and leveraging the untapped potential of Indian industries to fulfil the vision of an Atmanirbhar Bharat. Under the PLI Scheme, incentives are calculated on the basis of incremental sales, ranging from as low as 1 % for electronics to as high as 20 % for the manufacturing of APIs and bulk drugs and disbursed over five years after setting up their manufacturing units. The PLI schemes, presently in place for 14 sectors, are being implemented by the concerned ministries and departments.

#### PLI SCHEME FOR AUTOMOBILE SECTOR

The Production Linked Incentive (PLI) program for the automobile sector has been extended by one year through March 2028. Simultaneously, amended rules provide added clarity and concessions to approved applicants. Initially envisaged for five years starting 2023-24, the extension allows companies more time to leverage the PLI fund of ₹ 25,938 Cr. for boosting domestic manufacturing and exports.



Fresh investment commitments by the State and Central governments in the infrastructure sector fell for the second successive quarter on a sequential basis, contracting 56.1 % in Q 3 after a 10.9 % fall in Q2. The investments in new road projects slumped 56 %, with 194 projects worth ₹ 25,904 Cr., fresh railway investment plans plummeted by a much sharper 92.2 %, with only 28 new projects announced between October and December worth ₹ 5,758.6 Cr. compared with 48 projects worth ₹ 74,000 Cr. in the previous guarter.

The value of new mining projects also dropped 53.7 % sequentially to  $\ref{fig:projects}$  5,813 crore, but the construction sector saw a relatively milder decline of 21.5 %, with 675 projects worth  $\ref{fig:projects}$  81,350 crore announced in the third quarter.

According to United Nations population projections, the share of India's working age population is projected to peak at 68.9 % in 2030 while its overall dependency ratio would be at its lowest at 31.2 %. These patterns call for increased allocation of resources for training and skilling India's growing working age population.

Employment growth is critically dependent on GDP growth and the structure of output. The growth rate of the working age population is projected to progressively fall from 1.2 % in 2023-24 to 0 % in 2048-49. In 2022-23, according to the Periodic Labour Force Survey (PLFS), the worker population ratio, showing the number of employed persons in the population above 15 years of age, increased to 51.8 %





FIGURE: Line chart representation of the household financial savings and physical assets as a share of GDP.

from 44.1 % in 2017-18, depicting an average increase of 1.5 % points per year. The non-agricultural growth will have to be high enough to absorb labour released from agriculture which is estimated at 45.8 % in 2022-23 by the PLFS.





#### **GST RECEIPTS**

India's Goods and Services Tax (GST) revenues crossed

₹ 1,64,800 crore in December 2023, with year-on-year growth slowing to a three-month low of 10.3 % from a 15.1 % rise in the previous month.

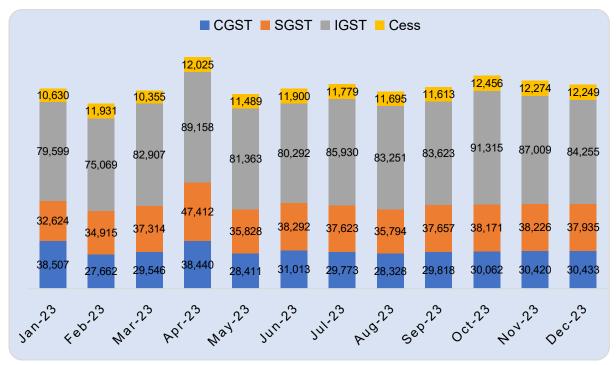
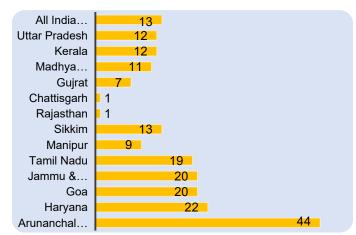


FIGURE: Column chart representation of components of GST receipts (Cr.) (on Y-o-Y basis).

December's gross GST revenue of ₹ 1,64,882 Cr. included central GST (CGST) revenues of ₹ 30,443 Cr., State GST (SGST) collection of ₹ 37,935 Cr. and ₹ 84,255 Cr. of Integrated GST (IGST), which included ₹ 41,534 Cr. from import of goods. GST Compensation Cess collections stood at ₹ 12,249 Cr., of which ₹ 1,079 Cr. was levied on goods imports.

During the April-December 2023 period, gross GST collection witnessed a robust 12 % y-o-y growth, reaching ₹ 14.97 lakh Cr., as against ₹ 13.40 lakh Cr. collected in the same period of the previous year. The average monthly gross GST kitty in the first nine months of 2023-24 stands at ₹ 1.66 lakh Cr., compared to ₹ 1.49 lakh Cr. a year earlier.

December's GST kitty, for transactions undertaken in November 2023, is about 1.8 % lower than the nearly ₹ 1.68 lakh Cr. collected a month earlier, which marked the third highest monthly receipts from the tax and the seventh month so far this year with collections exceeding ₹ 1.60 lakh Cr. that was launched in July 2017. The revenues from domestic transactions [including import of services] are 13 % higher than the revenues from these sources during the same month last year.



**FIGURE:** Bar chart representation of growth rates of GST receipts (Cr.) (on Y-o-Y basis).





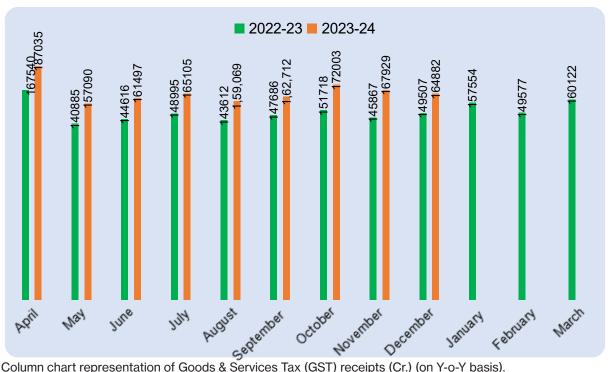


FIGURE: Column chart representation of Goods & Services Tax (GST) receipts (Cr.) (on Y-o-Y basis).

The first nine months of 2023-24 clocked a 12 % rise in GST collections, with the monthly intake averaging ₹ 1.66 lakh Cr., from ₹ 1.49 lakh Cr. in 2022-23. The Budget factored monthly GST revenues of around ₹ 1.59 lakh Cr., maintaining the current rate should translate into an additional inflow of ₹ 80,000-odd Cr. Any fresh pre-poll handouts from the Centre ahead of the general election, an expected slowdown in the final quarter of the year may moderate the gains. The Reserve Bank of India's projection was for growth to taper off from 7.7 % in the first half of the year to 6.5 % in the October to December 2023 quarter and further to 6 % in the current quarter. December's GST collections for transactions undertaken in November indicate some moderation in momentum already.

Both the headline number and the growth rate for December were the lowest in three months. In fact, the 10.3 % growth was far weaker than the 15.1 % recorded a month earlier, and just marginally better than September's 10.2 % uptick, which in turn marked a 27-month low. Revenues from domestic transactions grew 13 % in December, down from the 14-month high growth of 20 % in November, suggesting that the initially healthy festive fervour may have partly hit the 'snooze' button. This is corroborated somewhat by e-way bills generated in November which slid to 87 million from 100 million in October.

The Centre emphasised resilient domestic consumption steered the economy despite global headwinds. Indicators such as car sales, which crossed the four-million mark in 2023, led by high-end sport utility vehicles, can buttress that belief. But with rural demand likely to be fragile amid bleak prospects for the farm sector, and the festive push already in the past, policymakers, for whom this is the last month of official data to base their Interim Budget premises on, must note the slowing pace while factoring in the additional inflow that seems set to exceed expectations.

#### **GST REVENUES**

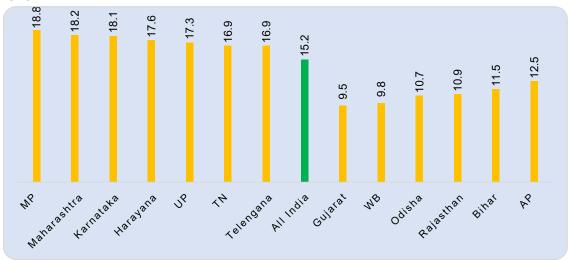


FIGURE: Column chart representation of GST growth rates of Major States. (Source: Bank of Baroda's analysis of the Finance Ministry data)





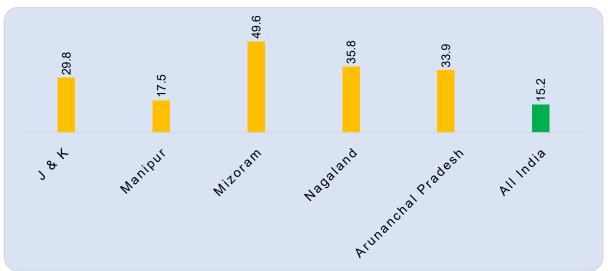


FIGURE: Column chart representation of GST growth rates of Smaller States and Union Territories. (Source: Bank of Baroda's analysis of the Finance Ministry data)

The National Statistical Office estimated Private Final Consumption Expenditure (PFCE) to grow just 4.4 % this year, the slowest since 2002-03, barring the pandemic-affected year of 2020-21. After recovering to 6 % in the April to June 2023 quarter from below 3 % in the second half of 2022-23, the growth of PFCE slipped to 3.1 % in the second guarter.

Goods & Services Tax (GST) revenues for the first quarter (2023-24) grew at 11.7 %, State GST collections have grown at a sharper pace of 15.2 %. GST, a consumption-based tax can broadly signal the consumption trends in the economy. Gujarat, West Bengal, Delhi and Odisha are among the top 10 GST contributors where growth was slower, while eight States have driven the overall collections with growth higher than the national average, indicative of consumption being uneven across geographies.

Gujarat, West Bengal, and Andhra Pradesh are among the states with weaker consumption growth, despite robust overall GST revenue collection. States like Madhya Pradesh, Maharashtra, Karnataka, and Uttar Pradesh are seeing high consumption growth. This uneven growth is attributed to factors like tepid rural demand, lack of significant wage growth, and income inequality. Smaller states and Union Territories are generally showing higher growth in State GST collections than the national average.

In States like Odisha, Rajasthan and Chhattisgarh, where GST revenues have grown less than 11 % so far this year, tepid rural demand due to weaker farm sector outcomes could have played a factor, they reckoned.

The wage growth, which turned marginally negative for lower income households while rising 6.4 % for their upper income counterparts in the second quarter of this year has been cited as a major reason for consumption growth. Ongoing consumption demand continues to be an area of worry as it is skewed in favour of goods and services consumed largely by households belonging to the upper income bracket. For sustained PFCE growth, recovery in consumption demand has to be more broad-based where by a significant contribution comes from goods and services consumed by households in the lower income bracket as well.



FIGURE: Column chart representation of Goods & Services Tax (GST) receipts (Cr.) (on Y-o-Y basis).



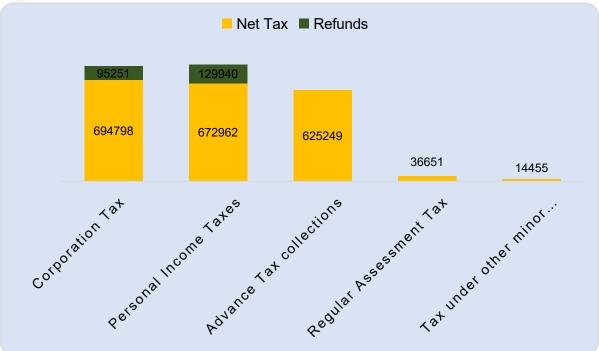


FIGURE: Column chart representation of different components of direct tax receipts (Cr.)

### MANUFACTURING RECOVERY AND SERVICES SECTOR GROWTH:

#### **MANUFACTURING PMI:**

According to the HSBC India Manufacturing Purchasing Managers' Index (PMI), compiled by S&P Global, India's manufacturing PMI fell to 54.9 in December, the lowest since October 2022, when the reading came in at 55.3. The growth was reportedly curbed by fading demand for certain types of products, adding that while new orders placed with Indian manufacturers rose sharply, the pace was still slower in December compared to previous months. Growth of both output and new orders softened, but on the other hand, the future output index rose since November. Rates of increase in input and output prices were broadly unchanged.

The PMI survey also showed a general lack of pressure on the capacity of manufacturers at the end of the third quarter. This was evidenced by only a marginal uptick in outstanding business volumes. Subsequently, employment was largely stable in December, with the respective seasonally adjusted index registering only fractionally above the 50.0 nochange mark.

The latest PMI numbers, based on a survey of 400 manufacturers, come a month after data showed that the Indian economy grew at an impressive 7.6 % in the second quarter on the back of higher government spending and strong performance in the manufacturing, mining and construction sectors. The fall in manufacturing PMI also comes at a time when inflation is still high, exports have moderated and core

sector growth has fallen.

#### **SERVICES PMI:**

The HSBC flash India Composite Purchasing Managers' Index (PMI), compiled by S&P Global, climbed to a high of 61 in January from 58.5 in December, marking its highest level since September. Service providers noted a stronger increase in activity than manufacturers, but growth accelerated in both cases. The Reserve Bank of India (RBI) in December revised its growth forecast for the Indian economy to 7 % for the current fiscal year, an increase from the earlier projection of 6.5 %. This revision was based on higher-than-anticipated growth in the first two quarters.

The economy grew at a faster pace in January, led by stronger manufacturing output, as well as more robust business services activity. New orders rose at a faster pace than a month ago, and within that, international orders were stronger than before. Input prices rose quickly, but output prices were raised to a smaller extent. Activity in the services industry also accelerated at a sharper rate, with the HSBC Flash India Services PMI Business Activity Index rising to 61.2 during January from 59 in December.

Survey participants attributed this growth to favourable economic conditions, strong demand, and continuous improvements in new business inflows. Indeed, aggregate sales increased at a sharp pace in January, and one that was the fastest in six months. Both manufacturing firms and their services counterparts recorded quicker rates of expansion in new orders.

"De not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them."



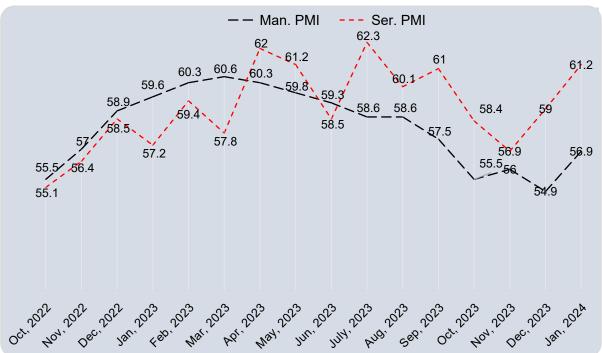
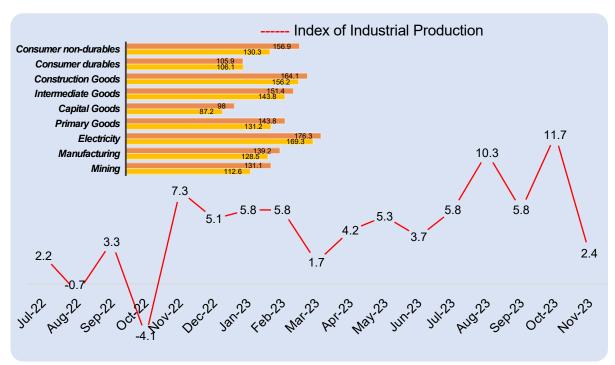


FIGURE: Column chart representation of the monthly S&P Global India Manufacturing Purchasing Managers' Index (PMI) and Services Purchasing Managers' Index (PMI).

#### INDEX OF INDUSTRIAL PRODUCTION

The Quick Estimates of Index of Industrial Production (IIP) for the month of November 2023 with Base Year (BY) 2011-12 stands at 141.



**FIGURE:** Line chart representation of the Index of Industrial Production growth rates (on Y-o-Y basis in per cent). Inset: Bar chart representation of the Indices of Industrial Productions of major items.

#### **CORE SECTOR INDUSTRIES**

The combined Index of Eight Core Industries (ICI) increased by 7.8 % (provisional) in November 2023 as compared to the Index of November 2022. The production of coal, electricity, fertilizers, natural gas, refinery products and steel recorded positive growth in November 2023. The details of annual and monthly indices and growth rates are provided at Annex I and Annex II respectively. The ICI measures combined and

individual performance of production of eight core industries viz. cement, coal, crude oil, electricity, fertilizers, natural gas, refinery products and steel. The Eight Core Industries comprise 40.27 % of the weight of items included in the Index of Industrial Production (IIP). The final growth rate of Index of Eight Core Industries for August 2023 is revised to 13.4 %. The cumulative growth rate of ICI during April to November, 2023-24 is 8.6 % (provisional) as compared to the corresponding



period of last year.

Sectorial monthly growth rates: Sector (per cent growth rates)

Fertiliser (3.4), Steel (9.1), Refinery products (12.4), Crude oil

(-0.4)

Cement (-3.6), Coal (10.9), Natural Gas (7.6), Electricity (5.6) (Source: Union Ministry of Commerce and Industries)



FIGURE: Line chart representation of the core sector growth rates (on Y-o-Y basis in per cent)

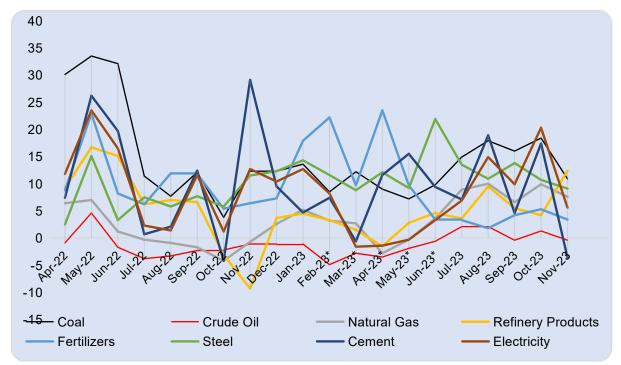


FIGURE: Line chart representation of the sub-sectorial growth rates (on Y-o-Y basis in per cent) of core sector industries.



You have to dream before your dreams can come true..

- A. P. J. ABDUL KALAM





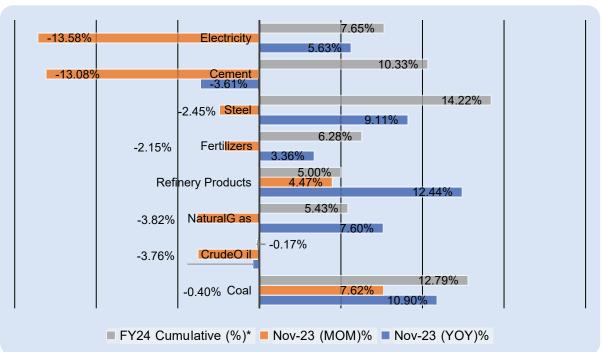


FIGURE: Bar chart representation of the sub-sectorial growth rates (on Y-o-Y basis in per cent) of core sector industries.

#### RBI BI MONTHLY POLICY REVIEW

The Monetary Policy Committee (MPC) of the Reserve Bank of India (RBI) in its Bi Monthly Policy Review unanimously decided to keep key interest rates unchanged at 6.5 %. The objective of the monetary policy is not only to achieve 4 % inflation but to maintain it at that level on a durable basis and it is not possible to provide a "forward guidance" in the current scenario when there is excessive uncertainty. The target of 4 % inflation is yet to be reached.

India's retail inflation has declined from an average of 7.1 % in April-October 2022 to 5.4 % in the corresponding period of 2023. Retail inflation is now stable and within the notified tolerance band of 2 % to 6 %, adding that the pace of

price rise had been "mostly within acceptable limits" since the introduction of the tolerance band in 2016.

Consumer prices rose at a three-month high pace of 5.55 % in November from 4.87 % in October, with food price inflation surging to 8.7 % from 6.6 % driven by a surge in the inflation rate for vegetables, pulses, fruits, and sugar. Temporary increases in inflation "on a few occasions were caused by demand-supply mismatches arising out of global shocks and adverse weather conditions" and the government and the Reserve Bank of India had helped resolve such mismatches and reined in inflation through proactive supplyside initiatives and effective demand stabilisation measures.



FIGURE: Line chart representing the Liquidity Adjustment Facility (LAF). Source: Reserve Bank of India (RBI) Handbook of Statistics



The retail inflation has moderated since the MPC last met in early October, with the headline reading softening by almost two percentage points, from August's 6.83 % to 4.87 % in October. The RBI's latest 'Households' Inflation Expectations Survey', undertaken in November, reveals that most households expect faster inflation in the three-months- ahead and one-year-ahead time horizons, and at median levels of 9.1 % and 10.1 %, respectively, unequivocally underlining the fact that price gain expectations are still far from durably anchored.

The RBI Monetary Policy Committee flagged food price shocks-induced volatility in inflation. The "uncertainties in food prices along with unfavourable base effects are likely to lead to" headline inflation quickening in November-December, and that "recurring food price shocks are impeding the ongoing disinflation process" forced RBI to keep reporate unchanged at 6.5 % for a fifth straight bi-monthly meeting.

The Central Bank has cited robust investment, besides continued strengthening in manufacturing, buoyancy in construction and a gradual rural recovery to upgrade its projection for real GDP growth in the fiscal year ending in March 2024 to 7 %, from 6.5 % as recently as in October. The CPI inflation would ease to an average of 4.6 % in the first three quarters of 2024-25 from CPI inflation rate of 5.6 % in November as the recurrence of food price spikes punctured a brief respite in September and October.

The RBI predicted a likely 'uptick' in in headline retail inflation. The National Statistical Office's provisional reading of headline inflation shows the Consumer Price Index rose by 5.55 % year-on-year to a three-month high, from October's 4.87 %, food price gains measured by the Consumer Food Price Index accelerated by a steep 209 basis points to 8.7 % last month.

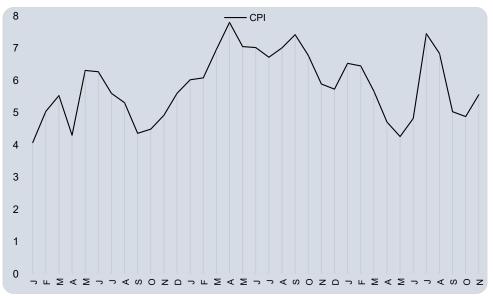
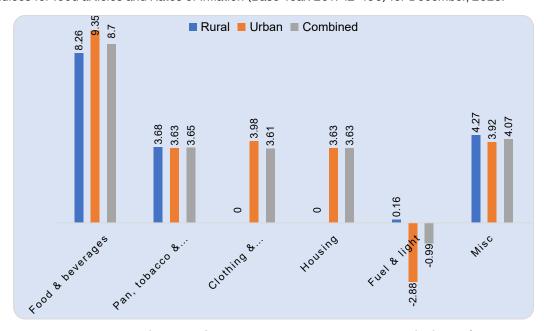


FIGURE: Line chart representation of retail price index-based inflation rates. Inset. Bar chart representation of the of All India Retail Price Indices for food articles and Rates of Inflation (Base Year: 2011-12=100) for December, 2023.



**FIGURE:** Column chart representation of All India Consumer Price Indices based rates of Inflation (Base Year: 2011-12=100) for December, 2023.



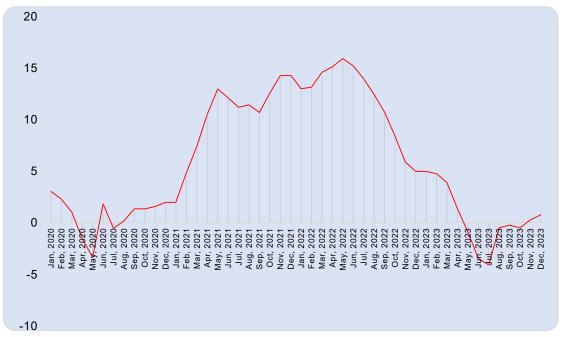
Among the 22 major States that the National Statistical Office computes inflation rates for, Odisha recorded the highest inflation at 7.65 % in November, followed by Rajasthan at 7 %, and Haryana with 6.8 %.

The inflation rate was above the central bank's

tolerance threshold of 6 % in eight States, including Gujarat, Bihar, Punjab, Karnataka and Telangana. Uttar Pradesh, with a 5.56 % inflation, was the only other major State to witness higher inflation than the national average of 5.55 %.

#### WHOLESALE PRICE INFLATION

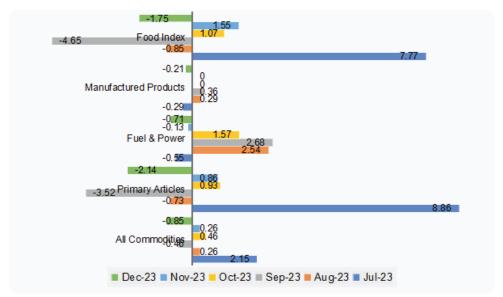
In December 2023, the Wholesale Price Index (WPI)-based inflation surged to a nine-month high of 0.73 %, marking a significant rebound from the negative zone observed from April to October. This positive trajectory, a continuation from November's 0.26%, was primarily driven by notable increases in food prices.



**FIGURE:** Line chart representation of wholesale price index-based inflation rates. Inset. Bar chart representation of the of All India Wholesale Price Indices for food articles and Rates of Inflation (Base Year: 2011-12=100) for December, 2023.

The spike in WPI inflation is attributed to a sharp rise in prices of food articles, machinery & equipment, other manufacturing, other transport equipment, and computer, electronics & optical products. Food inflation soared to 9.38 % in December, up from 8.18 % in November. Notably, vegetable prices witnessed a remarkable increase of 26.30 %, while pulses recorded a 19.60 % inflation rate.

Simultaneously, the retail or Consumer Price Index (CPI) for December reached a four-month high of 5.69 %, as revealed in recent data. In response to the inflationary trends, the Reserve Bank, in its bi-monthly monetary policy last month, maintained interest rates, flagging concerns over the escalating food inflation observed in November and December.



**FIGURE:** Line chart representation of topic-based wholesale price index-based inflation rates. Inset. Bar chart representation of the of All India Wholesale Price Indices for and Rates of Inflation (Base Year: 2011-12=100) for December, 2023



#### **PUBLIC CAPEX**

The Centre has committed to bring down its fiscal deficit to 4.5 % of GDP by 2025-26, from a target of 5.9 % of GDP this year. The Union government's capital expenditure growth is expected to slow down to 12 % in 2024-25 from 37.4 % laid down in this year's Budget. While the rating firm expects capex growth to end up at 31.4 % in 2023-24, it reckoned that fresh capex next year may slow down due to multiple factors, including the pickup in private capex in a few sectors, the forthcoming elections and the fiscal consolidation goal for 2025-26.

Capex and fiscal consolidation path followed in the vote on account would be monitored closely, given their impact on growth and interest rates. A balance will have to be struck as higher capex could postpone the fiscal consolidation journey. Since 1989-90, there have been eight instances where the government has reduced the fiscal deficit by over 140 basis points (bps) of GDP over two years. The Centre was likely to stay on the fiscal course-correction glide path in the Interim Budget, while seeking to shun populist spending.

#### TRANSBORDER TRADE

India's overall exports - merchandise and services in December 2023\* is estimated to be US \$ 66.33 billion, contracting by 4.25 % over December 2022. The overall imports in December 2023\* is estimated to be US \$ 71.50 Billion, contracting by 7.18 % over December 2022. India's overall exports - merchandise and services in April-December 2023\* are estimated to be US \$ 565.04 billion, contracting by 1.87 % over April-December 2022. An overall import in April-December 2023\* are estimated to be US \$ 634.39 billion, contracting by 7.24 % over April-December 2022.





**FIGURE:** (L) Column chart representation of monthly value of exports of goods and services. (R) Column chart representation of monthly value of imports of goods and services.

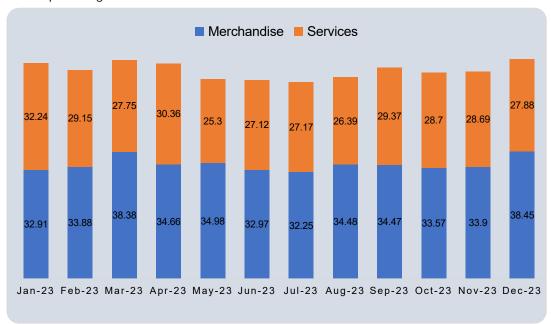


FIGURE: Column chart representation of monthly value of merchandise and services exports





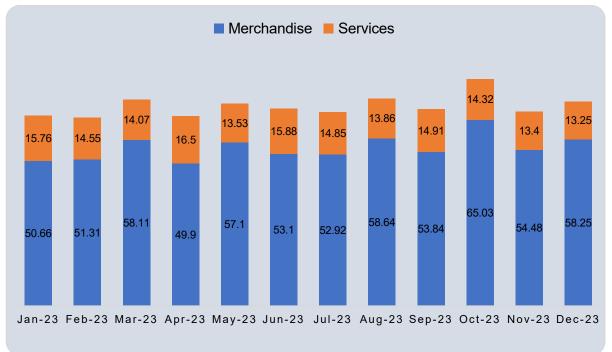


FIGURE: Column chart representation of monthly value of merchandise and services imports

India's merchandise exports in December 2023 registered 0.96 % growth at US \$ 38.45 billion over US \$ 38.08 billion in December 2022. The major contributors to export growth in December 2023 include engineering goods, iron ore, gems & jewellery, electronic goods and drugs & pharmaceuticals. The tightening of interest rates due to nagging inflation, especially in advanced economies, has led to a slowdown in business, investment and trade. Conflicts in Ukraine and West Asia have also threatened to push up commodity prices, leading to greater inflationary pressures.

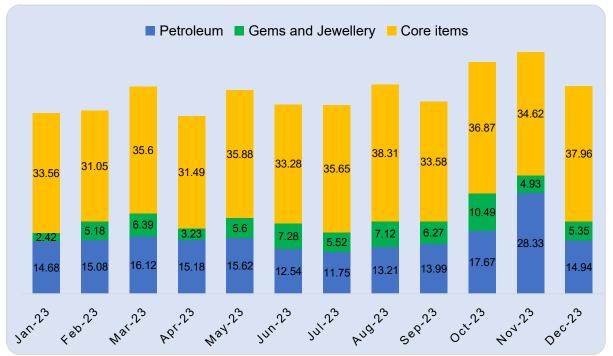


FIGURE: Bar chart representation of the import profile of Indian imports. Gems & Jewellery\*: Gold, Silver & Pearls, precious & Semi-precious stones.



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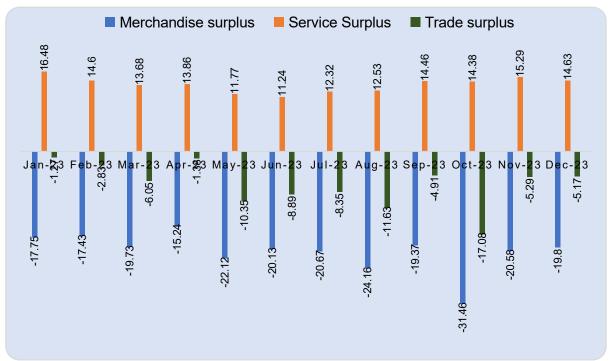


FIGURE: Column chart representation of trade surplus.

BUDGET TO SET FISCAL DEFICIT TARGET OF 5.3 %

Rating firm ICRA expects the government to set a fiscal deficit target of 5.3 % of GDP in the upcoming Union Budget for next year, covering half the distance to its commitment to achieve a deficit of 4.5 % of GDP for 2025-26.

The National Statistical Office estimate a lower nominal GDP growth of  $8.9\,\%$  compared with 10.5 % estimated in the Budget, the fiscal deficit is expected to hit 6 % of GDP for 2023-24, instead of the 5.9 % target. The fiscal deficit is unlikely to overshoot the target of ₹ 17.9 lakh Cr.

Factoring in the 3 % of Gross State Domestic Product (GSDP) borrowing limit for States set by the 15th

Finance Commission for 2024-25, ICRA expects the General Government deficit to dip to 8.3 % of GDP next year from 9.2 % of GDP expected this year. This would be the lowest level of the General Government deficit since 2019-2020, when it was 7.2 % of GDP.

ICRA believes the government will have fiscal room to raise its capex target by 10 % over this year's levels to around ₹ 10.2 lakh Cr., noting a higher capex target would impinge on the Centre's ability to bridge half the required fiscal consolidation next year and make meeting the 2025-26 target even more challenging.

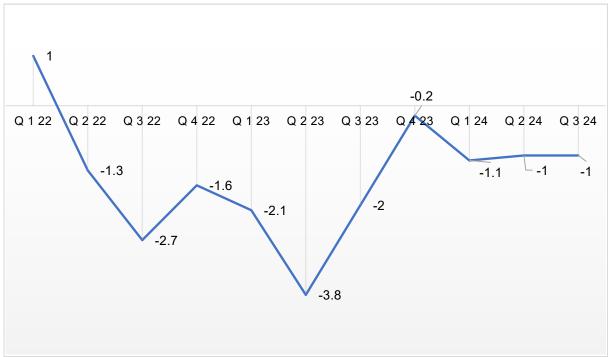


FIGURE: Column chart representation of share of Current Account Deficit as a per centage of GDP.



### Remission of Duty and Taxes on Exported Products (RoDTEP)

India's exports during April-December 2023 shrunk 5.7 % to \$ 317.12 billion compared with the same period last year on adverse geopolitical conditions, including the Red Sea crisis that disrupted India's exports to the EU, U.S. east coast and parts of West Asia and Africa.

The RoDTEP scheme, announced in January 2021 as a replacement for the WTO-incompatible MEIS scheme, remits embedded duties/taxes on inputs to exporters. These include VAT on fuel used in transportation, mandi tax and duty on electricity used during manufacturing, and input taxes not rebated under other schemes. During inception, the scheme covered 8,731 items from most export sectors with the exception of organic and inorganic chemicals, pharmaceuticals and iron and steel. At present, benefits under the scheme are available till June 30, 2024 for the three identified sectors.

The budgetary allocation for the popular export benefit scheme, Remission of Duty and Taxes on Exported Products (RoDTEP), is likely to get a 10 % increase in 2024-25, over the ₹ 15,069 Cr. allocated last fiscal, which may allow the Commerce Department to extend the scheme for iron and steel, pharmaceuticals and chemical sectors for the entire financial year.

Unlike most other sectors that get covered under RoDTEP on a permanent basis, the scheme incorporates iron and steel items, pharmaceuticals and chemicals on a piecemeal basis depending on the availability of funds. As exports are not likely to increase steeply because of the strained geopolitical conditions, it can be anticipated the RoDTEP amount will be enough to meet the demand of the additional three sectors as well.

### **GREEN ENERGY**

The Centre has halved the capital support given to State-owned oil marketing companies, which was ostensibly aimed at beefing up investments in energy transition projects, but government officials had indicated that the provision had been made to compensate the fuel retailers who had suffered huge losses in 2022 when they held retail petrol and diesel prices despite a spike in crude oil prices following Russia's invasion of Ukraine.

The Union Budget for FY24 made a provision of ₹ 30,000 Cr. of capital support to Indian Oil Corporation, Bharat Petroleum Corporation Ltd. and Hindustan Petroleum Corporation Ltd. The Union Finance Minister had proposed ₹ 5,000 Cr. for buying crude oil to fill strategic underground storages at Mangalore in Karnataka and Visakhapatnam in Andhra Pradesh. The equity support has been halved to ₹

15,000 Cr. and the plan for filling strategic reserves has been deferred.

During the Expenditure Finance Committee meeting held on November 30, 2023, it was decided that a maximum of ₹15,000 Cr. could be provided for equity infusion into OMCs in FY2023-24.

### RBI TO INFUSE ₹ 2.5 trillion

The Reserve Bank of India will infuse liquidity amounting to  $\ref{thmspace}$  2.50 lakh Cr. via a 15-day Variable Rate Repo (VRR) auction as the overall funds deficit in the banking system widened to  $\ref{thmspace}$  3.34 lakh Cr. as on January 23 as compared with  $\ref{thmspace}$  1.29 lakh Cr. as on January 1.

The Centre has built up huge cash balances with the RBI as the inflows from GST and advance tax remain unspent. The overall liquidity in the banking system includes VRR auctions, liquidity drawn from the marginal standing facility, surplus funds parked at the standing deposit facility, and liquidity infused by the RBI via various long-term repo operations during the COVID-19 period (2021).

The Central Bank has so far infused ₹ 1.75 lakh Cr. via a 13-day VRR on January 12. Banks are facing liquidity pressure on the liquidity front as there were outflows last month on account of GST payments and advance tax outflows, even as the government accumulated cash balances with the RBI estimated at about ₹ 2 lakh Cr.

Banks are also up against stiff competition from non-banking finance companies for garnering resources. Non-convertible debentures floated by NBFCs are offering relatively higher returns (up to 10%) vs bank term deposit rates of 6.50 % - 7.25 % for over a one-year tenor. Further, with equity markets in a bull phase, retail investors have been moving out of bank deposits to actively invest in mutual funds or directly in markets, especially initial public offers. The liquidity pressure could ease if the government starts spending the balances accumulated with the RBI. When RBI absorbs the dollars that foreign portfolio investors are bringing into the Indian equity market, it could result in enhancement of liquidity.

The overall tightening of liquidity conditions is attributed mainly to higher currency leakage during the festival season, government cash balances, and the RBI's market operations. Driven by these autonomous factors, system liquidity tightened significantly compared to what was envisaged in the October policy statement. The RBI will necessarily have to infuse more durable liquidity if the tight liquidity conditions persist. On a net basis, the RBI has injected liquidity averaging ₹ 1.8 lakh Cr. between during December 16 and January 14.





### UNION CABINET APPROVES ₹ 8,500 CR VGF FOR COAL GASIFICATION

The Union Cabinet approved a Viability Gap Funding (VGF) scheme worth ₹ 8,500 Cr. to promote coal gasification projects in India. The Viability Gap Funding (VGF) scheme aims to encourage adoption of cleaner coal technologies for power generation and production of chemicals.

**BACKGROUND:** The Centre has been actively promoting coal gasification under National Coal Gasification Mission. The National Coal Gasification Mission focuses on creating awareness, developing an implementation roadmap and achieving the target to gasify 100 MTPA of coal by 2030.

**COAL GASIFICATION:** In coal gasification, coal is chemically transformed into syngas using steam and controlled oxygen. The syngas can then be converted into chemicals like ammonia, fertilizers, methanol, DME, and synthetic natural gas. Coal gasification process is considered cleaner than directly burning coal in thermal power plants. Usage of syngas can reduce India's imports of petroleum products and is aligned to the country's net-zero emission goals.

CATEGORIES OF VGF SUPPORT: The Viability Gap Funding (VGF) scheme has been divided into three segments. Three central Public Sector Units (PSUs) cumulatively provide a grant of ₹ 4,050 Cr. for projects. Bids from public and private players would be invited to allot projects worth ₹ 3,850 Cr. Approximately, ₹ 600 Cr. is earmarked for small gasification plants and demonstration projects.

Under this scheme, projects will receive Viability Gap Funding up to 15 % of the total capital cost. This support will incentivize companies to set up coal gasification plants, which require large investments initially.

**POTENTIAL APPLICATIONS:** The chemicals produced via gasification have wide industrial applications. For instance, ammonia is used in fertilizers, methanol in fuels, and synthetic natural gas can substitute LPG.

### **New JV Projects Approved**

The Cabinet approved equity participation by Coal India in two joint ventures for setting up coal-to-chemical projects:

- Joint Venture (JV) between Coal India and GAIL India Ltd to establish a Coal-to-synthetic natural gas plant with an estimated project cost of ₹ 13,052 Cr. The synthetic natural gas produced by the Coal India-GAIL JV will be offloaded by fertilizer plants ensuring consistent demand.
- Joint Venture (JV) between Coal India and BHEL Ltd to establish a Coal-to-ammonium nitrate project with an anticipated expenditure of ₹ 11,782 Cr. Ammonium nitrate from the Coal India-BHEL project will be used for mining explosives.

The final project costs for both these ventures can vary by plus or minus 25 % as per the sanctioned scope. Through equity investment in these projects, Coal India aims to foster adoption of coal gasification technologies and contribute towards building domestic capacity for manufacturing value-added coal derivatives.

The increased adoption of coal gasification will enable reduction of India's dependence on energy imports and transition towards self-reliance, in line with government's Atmanirbhar Bharat vision.

### **GLOBAL HYDROGEN PRICE INDEX**

The International Financial Services Centre (IFSC) at Gujarat International Finance Tec-City (GIFT) City in Gandhinagar announced a new collaboration with the Indian Gas Exchange (IGX) and Gujarat State Petroleum Corporation (GSPC). The goal is to jointly develop a Global Hydrogen Price Index.

### GLOBAL HYDROGEN TRADING PLATFORM

Gujarat State Petroleum Corporation (GSPC), in conjunction with the Indian Gas Exchange (IGX), will create a platform to enable global institutions to trade hydrogen contracts and derivatives within the GIFT City Special Economic Zone (SEZ). GIFT City is an International Financial Services Centre (IFSC) in India with existing capabilities across banking, capital markets, and other financial verticals.

### **OBJECTIVES**

Global Hydrogen Price Index is a benchmark that will enable price discovery and provide key market information to support the growing green hydrogen industry in India. The new mechanism aims to boost transparency and investor confidence in the emerging hydrogen market. Global Hydrogen Price Index facilitate reliable price indexing and trading avenues, it can help attract greater global capital inflows into India's green hydrogen sector.

### **GIFT IFSC**

The GIFT International Financial Services Centre (GIFT IFSC) is a financial hub and special economic zone established in 2015 in GIFT City, Gujarat. Spanning 106

hectares, it aims to provide world-class infrastructure and services to financial institutions in banking, insurance, capital markets and asset management. GIFT IFSC operates as an international finance center regulated by the International Financial Services Centres Authority. Since its launch, it has emerged as a nerve center for global banking, markets and insurance in India.

BACKGROUND: The first International Financial Service Centre (IFSC) in India has been set up at the Gujarat International Finance Tec-City (GIFT City), a multi-service Special Economic Zone (SEZ) located at Gandhinagar. The SEZ Act, 2005 allows setting up an IFSC in an SEZ or as an SEZ after approval from the Centre. The office of IREDA at GIFT City, Gandhinagar, will be classified as an overseas office, allowing the IREDA to avoid foreign exchange hedging costs.

**SIGNIFICANCE:** Gandhinagar can emerge as a global financial centre. The IFSC at Gandhinagar provide transborder financial products and services to customers outside the jurisdiction of the domestic economy.

### **SERVICES OFFERED BY IFSC**

Currently, commodities like gold and silver are largely traded on the India International Bullion Exchange situated in GIFT IFSC. The overarching goal is to position GIFT IFSC as a price discovery hub for various globally traded commodities

- Fund-raising services for individuals, corporations and governments.
- Asset management and global portfolio diversification undertaken by pension funds, insurance companies and



- mutual funds.
- Wealth management.
- Global tax management and cross-border tax liability optimization.
- Global and regional corporate treasury management operations.
- Risk management operations such as insurance and reinsurance.
- Merger and acquisition activities among trans-national corporations.

### INTERNATIONAL FINANCIAL SERVICES CENTRES AUTHORITY

- **TYPE:** Statutory organisation.
- STATUTE: IFSCA Act, 2019.
- **HEADQUARTERS:** GIFT City.
- MANDATE: Develop and regulate financial products, services and institutions in the IFSC in India.

### U.S. TROOPS KILLED IN DRONE HIT IN JORDAN; BIDEN BLAMES IRANIAN-BACKED MILITANTS



**CONTEXT:** President Joe Biden blamed Iran-backed militants for a drone attack on a U.S. base in Jordan that killed three

American troops. It is the first time American military personnel have been killed by hostile fire in West Asia since the start of the Israel-Hamas war. The incident will further raise tensions in the region and fuel fears of a broader conflict directly involving Iran.

### 'Regional explosion'

U.S. Central Command put the number of wounded from the attack near the Syrian border at 25, and said the identities of those killed will be withheld pending notification of their families.

### Frequent target

U.S. and allied forces in Iraq and Syria have been targeted in more than 150 attacks since mid-October, according to the Pentagon, and Washington has carried out retaliatory strikes in both countries. Many of the attacks on U.S. personnel have been claimed by the Islamic Resistance in Iraq, a loose alliance of Iran-linked armed groups that oppose US support for Israel in the Gaza conflict.

### INSAT-3DS SATELLITE SENT TO LAUNCH PORT IN SRIHARIKOTA



**CONTEXT:** The Indian Space Research Organisation (ISRO) has flagged off the INSAT-3DS satellite to the launch port at the Satish Dhawan Space Centre in Sriharikota.

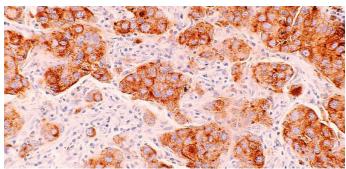
The satellite likely to be launched on board the GSLV F14 next month is an exclusive meteorological satellite with the primary objective to provide continuity of services to the existing in-orbit INSAT-3D and 3DR satellites and significantly enhancing the capabilities of the INSAT system.

The satellite is a user-funded project with the Ministry of Earth Sciences, configured around the ISRO's well-proven I-2k bus platform with a lift-off mass of 2,275 kg. The satellite is designed for enhanced meteorological observations and monitoring of land and ocean surfaces for weather forecasting and disaster warning with state-of-the-art payloads such as a six-channel imager and 19-channel sounder meteorology payloads, communication payloads, a data relay transponder (DRT) and a satellite-aided search and rescue (SAS&R) transponder.

The DRT instrument receives meteorological, and oceanographic data from automatic weather stations and augments weather forecasting capabilities. The SAS&R transponder is incorporated in the satellite to relay a distress signal/ alert detection for search and rescue services with global receive coverage.



### GLOBAL HYDROGEN PRICE INDEX



**CONTEXT:** Cancer has emerged as a major public health concern worldwide with about 20 million new patients being added every year. The World Health Organization has estimated the cancer burden will increase by almost 60 % over the next decade, potentially rendering it the second major cause of death. India alone adds approximately 1.4 million new cancer cases every year, with almost 1 in 1,000 Indians being diagnosed annually, per the National Cancer Registry.

Cancer is a disease of the genome. It is caused by changes in genes that cause some cells to divide in an uncontrolled way. These changes can be inherited or acquired. Inherited genetic variants form the basis of many hereditary cancers, including breast and ovarian cancer. Advancements in genomic technologies in the past couple of decades, including global initiatives such as the Cancer Genome Atlas, have provided a shot in the arm to understand the molecular underpinnings of cancer, which, in turn, have yielded a new generation of therapies that target molecular defects.

### **Precision oncology**

Of the 200-odd precision oncology therapies, the U.S. Food and Drug Administration has approved, almost a third have a DNA-based test as biomarker. As part of the U.K.'s ongoing '100,000 Genome Program', a study of over 13,800 cancer patients, published last week, suggested cancer genomics could indeed transform cancer care. The 100,000 Genome Program' reportedly demonstrated that genome sequencing integrated with routine clinical data could render cancer treatments more customisable. The implications of this study extend far beyond the boundaries of current practice of medicine, and mark a leap forward in the era of precision oncology.

At the heart of this transformation lies whole-genome sequencing, a tool that can sequence a person's DNA in its entirety – all 3.2 billion nucleotides – in a single comprehensive test. The sequencing and in-depth analysis do not treat the genome (derived from the blood) in isolation; instead, they happen together with the sequence of the genome obtained from cancerous tissue or a tumour.

### Insights into cancer

Researchers obtained, sequenced, and analysed the genomes

of people from blood and tumour tissues with different types of cancers. Researchers can be applied in clinical settings to guide treatment strategies for cancer patients. A higher fraction of individuals diagnosed with brain tumours as well as those dealing with bowel or lung cancers had distinct DNA changes that could become new targets for therapy. The study also provided novel insights that could reshape even our understanding of challenging conditions such as ovarian cancers and sarcomas.

For example, approximately 10 % of sarcomas (rare cancers of the bone and soft tissue) exhibited genetic changes that could impact treatment decisions. The researchers also identified a corresponding proportion of ovarian cancers as being potentially inherited.

### Consequences of genomic medicine

The U.K. Hospital trusts in East Midlands are incorporating insights from pre-emptive genome-sequencing and referring individuals with certain genetic mutations to clinical trials for certain therapies or steering clear of treatments or modifying the dosages of therapies that might potentially result in adverse side-effects. This underscores the immediate impact of ground-breaking genomics research: on implementing patient care in clinical settings.

But amid the optimism surrounding this breakthrough study, many researchers have also advised caution and urged a more nuanced perspective on the consequences of genomic medicine. One crucial consideration is the use of information gleaned from whole-genome sequencing in practice - especially in a scenario where, say, a particularly harmful genetic change has been identified in an individual but for which there are no treatments available.

### Shifts in clinical testing

Advances in precision oncology therapies are rapidly closing. Research is moving towards a more comprehensive understanding of tumours, one that integrates genomics, along with studies on proteins and metabolites in the body - also known as 'multi-omics'. At the same time, it is gaining wider application in identifying newer molecular subtypes of cancer with implications for cancer progression and treatment. However, integrating these new insights into clinical care will require a paradigm shift in clinical testing as it exists.

In sum, while the new study is a milestone in genomics and genomic medicine, we can see why it will also spark a broader conversation on the nuances of integrating genomics and genomics-guided treatments into the standard protocols of cancer care. As lessons from genomics research into oncology continue to unfold, it opens up new horizons, opportunities and - unmistakably - challenges. Research from such studies will lay the foundation for a future where genomics insights and evidence can seamlessly inform clinical decision-making on the population-scale

"Ge not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them."



### FACTORIES GRIND TO A HALT AS RED SEA ATTACKS CREATE TRADE BOTTLENECKS



**CONTEXT:** Houthi rebels in Yemen, seeking to stop Israel's offensive against Hamas in Gaza, are attacking cargo ships plying the waters connecting Asia with Europe and the U.S., forcing traffic away from the Suez Canal and around the tip of Africa.

Attacks on ships in the Red Sea are delivering another shock to global trade, coming on top of pandemic-related logjams at ports and Russia's invasion of Ukraine. Disruption to Red Sea trade lasting a year could surge goods inflation by up to 2 %, piling on pain while the world already struggles with higher prices for groceries, rent and more. The disruption

is causing delays and driving up costs – at a time when the world has yet to vanquish a resurgence of inflation. Passage through another crucial trade corridor – the Panama Canal – is restricted by low water levels caused by drought.

### Rising costs

The cost of shipping a standard 40-foot container from Asia to northern Europe has surged from less than \$ 1,500 in mid-December to nearly \$ 5,500. Getting Asian cargoes to the Mediterranean is even costlier: almost \$ 6,800, up from \$ 2,400 in mid-December. At the height of supply chain backups two years ago, it costed \$15,000 to ship a container from Asia to northern Europe and nearly \$14,200 to take one from Asia to the Mediterranean.

In 2021 and 2022, American consumers, stir-crazy from COVID-19 lockdowns and armed with government relief checks, went on a spending spree, ordering furniture, sports equipment and other goods. Their orders overwhelmed factories, ports and freight yards, leading to delays, shortages and higher prices.

Red Sea shipping snags posed a risk to global food security by slowing the distribution of grain to parts of Africa and Asia, which depend on wheat from Europe and the Black Sea area. It would be even worse if the conflict in West Asia widens and drives up oil prices, which are now lower than they were the day before Hamas attacked Israel on October 7.

### **ANALYSING CHINA'S TIES WITH AFRICA**



**CONTEXT:** Wang Yi, the Chinese Minister of Foreign Affairs visited four African countries, Egypt, Tunisia, Togo and the Ivory Coast from January 13-18, marking his 11th annual trip to Africa to enhance economic and security cooperation with the continent.

### Why is Africa China's first stop for the past 34 years?

In the 1950s and 60s, China provided crucial support to African liberation movements against colonial powers, building ideological and political ties. During the 1970s, African nations played a decisive role in supporting China's successful campaign to replace Taiwan on the UN Security Council. This solidified the bond between the two

continents. From the late 1990s onward, China's "Go Out Policy" prioritized foreign investment, leading to a surge in Chinese companies entering the African market. The focus shifted from ideology to economic engagement.

The Forum on China-Africa Cooperation (FOCAC) has been instrumental in solidifying and expanding economic and diplomatic ties between China and African countries. Its evolution from focusing on trade and aid to encompassing "mutual security assistance" reflects the depth and breadth of the relationship. The Belt and Road Initiative (BRI) with 52 signatories among African countries has further amplified China's engagement with Africa, fostering infrastructure development and increasing connectivity. China's economic dominance in Africa is undeniable, with over one-fourth of its raw material exported to China. Between 2000 and 2022, loans worth \$170.08 billion were granted by China to 49 African countries. This dependency raises questions about resource management and economic diversification for African nations. The presence of a Chinese military base in Djibouti marks a significant shift in China's role in Africa. It demonstrates China's growing strategic interests beyond purely economic partnerships.

### What was the visit about?

Wang Yi's visit to Africa had multiple objectives. The major agenda was to

- Implement the outcomes of the China-Africa Leaders
  Dialogue held in August 2023 in Johannesburg, South
  Africa
- Execution of three initiatives, including support for Africa's industrialisation, agricultural modernisation, and cooperation on talent development.



 Communicated its intention to be a global actor, mediating peace in Gaza.

### What are China's objectives in Africa?

First, access to key resources. Africa supplies 90 % of the world's cobalt and platinum, and 75 % of coltan, essential for electronics. China has the largest refineries in Africa for rare earths and minerals that are vital to its emerging tech industry. The dominance in the mining sector has made the U.S. dependable on China for key minerals from Africa.

Second, the African alliance and its geopolitical aspirations. In the UN General Assembly, Africa is the largest bloc and has the power to swing resolutions on contentious issues like the South China Sea. Africa has been vocal in supporting China in the international arena including its "One China" policy for Taiwan and Hong Kong.

Third, strengthening the Yuan (RMB). China is encouraging Africa to trade in Chinese currency. The RMB offers cross-border yuan-based "panda bonds," by which foreign governments can issue funds from China at lower interest rates. Additionally, China's debt restructuring of Zambia's \$4.1 billion loan has incentivised borrowers towards RMB. With lower Chinese interest rates and the depreciation of African local currency, the RMB stands as an alternative to the dollar.

Fourth, commercial opportunities. Africa imports largely from China for finished goods. The African markets

for Chinese exports are beneficial for the Chinese economy. Africa's young population and cheap labour force support Chinese exports globally and in Africa.

### What does the visit mean for Africa?

Africa receives investment, trade and development aid from China in return for natural resources. China has also become a significant source of foreign direct investment. Chinese-built infrastructure and industrial parks have provided employment opportunities and has made the idea of "Made in Africa" a reality. Additionally, Chinese support in advancing hybrid crops helped Africa further its agricultural sector. In Africa, cooperation with China is perceived with a high degree of mutual trust and as a 'win-win partnership'. Besides, the China-Africa partnership featuring non-intervention has gained momentum across the continent. Chinese disregard for imposing political conditionality on development aid, unlike the West, has given opportunities to African countries to secure their interests. However, the West has voiced fears that Chinese investments are predatory, hinting at debt traps. Although some countries including Kenya and Zambia have poorly managed their debt, other African countries have manageable debt arrangements with China. However, the Chinese debt trap narrative cannot be outrightly dismissed. Besides, Chinese 'non-interference' rhetoric has given several authoritarian regimes in Africa a space to stay in power.

### WHAT ARE THE RBI'S GUIDELINES ON STATE 'GUARANTEES'?

**CONTEXT:** On January 16, the Reserve Bank of India (RBI) Working Group recommended to address issues relating to guarantees extended by State governments. The Working Group prescribed a uniform reporting framework for the guarantees extended, besides expanding the definition of what constitutes a 'guarantee.'

### What constitutes a 'guarantee'?

A 'guarantee' is contingent liability of a State, processed by an accessory contract, that protects the lender/investor from the risk of borrower defaulting. They promise to be answerable for the debt, default or miscarriage of the latter. The entity to whom the guarantee is given is the 'creditor', the defaulting entity on whose behalf the guarantee is given is called the 'principal debtor' and the entity giving the guarantee (State governments in this context) is called the 'surety'.

The RBI working group's report notes that while guarantees are innocuous in good times, it may lead to significant fiscal risks and burden the State at other times. This may result in unanticipated cash outflows and increased debt. State governments are often required to sanction, and issue guarantees, on behalf of State-owned enterprises, cooperative institutions, urban local bodies and/or other State-governed entities, to respective lenders. The latter could be commercial banks or other financial institutions. In return, the entities are required to pay a guarantee fee to the governments.

### What about definition of guarantee?

The Working Group suggested to use the term 'guarantee' in a broader sense and include all instruments, by whatever name they may be called, if they create obligation on the guarantor (State) to make a payment on behalf of

the borrower at a future date. No distinction should be made between conditional or unconditional, or financial or performance guarantees in order to assess the fiscal risk.

### What about according guarantees?

The Working Group has recommended that government guarantees should not be used to obtain finance through State-owned entities, which substitute budgetary resources of the State Government. Additionally, they should not be allowed to create direct liability/de-facto liability on the State. It further recommends adherence to the Government of India guidelines that stipulate that guarantee be given only for the principal amount and normal interest component of the underlying loan. Furthermore, they must not be extended for external commercial borrowings, must not be extended for more than 80 % of the project loan and must not be provided to private sector companies/ institutions.

### What about risk determination?

The Group suggested that States assign appropriate risk weights (indicative of the holding the lender should ideally have to adjust the associated risk) before extending guarantees. The categorisation could be high, medium or low risk. These must also consider past record of defaults.

Additionally, it deemed a ceiling on issuance of guarantees as "desirable." The report argues that should a guarantee be required to be invoked, it could lead to significant fiscal stress on the State government. To manage the potential stress, for incremental guarantees (additional guarantees) issued during a year, it proposes a ceiling at 5% of Revenue Receipts or 0.5% of GSDP — whichever is less.

### What about disclosures?

The Working Group has recommended that the apex banking regulator may consider advising banks/NBFCs to



disclose the credit extended to State-owned entities, backed by State-government guarantees. Availability of data, both from issuer and the lender, the report states, may improve

the credibility of the data reported by the State government. It has also sought a proper database capturing all extended guarantees.

### WHAT IS END-TO-END ENCRYPTION AND HOW DOES IT SECURE INFORMATION?

**CONTEXT:** End-to-end (E2E) encryption in particular protects information in a way that has transformed human rights organisations', law-enforcement agencies', and tech companies' outlook on their ability to access information about individuals to protect, prosecute or profit from their engagement, as the case may be.

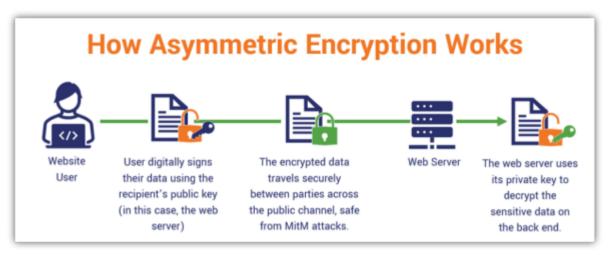
### What is E2E encryption?

E2E is encryption that refers to particular locations between which information moves. Say you are chatting with your friend on a messaging app. When you send a message, it first goes to a server maintained by the company that built the app; based on its instructions, the server routes the message to your friend. In this setup, two important forms of encryption are encryption-in-transit and E2E encryption.

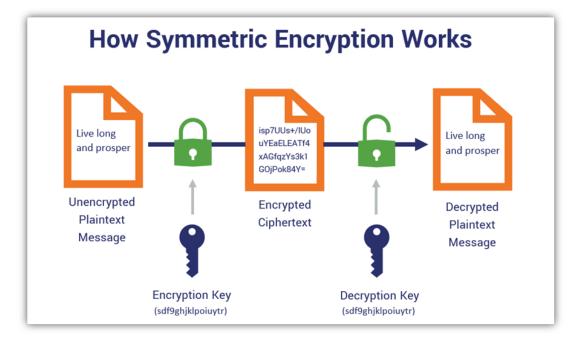
Encryption-in-transit means before a message is relayed from the server to you (or vice versa), it is encrypted. This scheme is used to prevent an actor from being able to read the contents of the message by intercepting the relay. In E2E encryption, the message is encrypted both in transit and at rest — that is when being relayed from your phone to the server (or vice versa) and when it is sitting inside the server. It is only decrypted when your friend receives the message.

### How is information encrypted?

There are several ways to encrypt information depending on the level of secrecy and protection required. If some information is to remain encrypted for 100 years, a computer must require more than 100 years to decrypt it without the key.



Asymmetric encryption will work as long as the private key and the correspondence between the public key and the private key are kept secret. In advanced implementations of asymmetric encryption, this correspondence is 'stored' in the solution of a mathematical problem that even a computer would require a long time to solve. It is useful when the sender and the recipient are different. The level of protection it confers is greater the longer the key is.





### Can E2E encryption be 'cracked'?

Messaging apps with E2E encryption promise that even their parent companies won't be able to read messages sent and received by its users. However, the informational content of the messages can still be acquired in other ways.

A common example is the man-in-the-middle (MITM) attack. This is related to the example earlier of an unnoticed man in the middle of the room jumping up to intercept your message to your friend. In that instance, the man didn't have the key and couldn't decrypt the message. In an MITM attack, this man is the attacker and he has been able to acquire the key to decrypt the message, either by hacking your device to obtain the encryption key as well as the correspondence between the encryption and decryption keys or by hacking your friend's device to acquire the decryption keys. MITM attacks can be prevented by using and comparing fingerprints. Each fingerprint is some data that uniquely identifies a key. Users can compare the fingerprints of their public keys in a separate channel (that is different from the one susceptible to an MITM attack) to make sure an attacker doesn't intercept a message, modify it, re-encrypt it with a different key and send it to the recipient.

Another issue with E2E encryption is that it could induce complacency in a user who believes an attacker can't access, say, an image they're sending over a messaging app in any other way. Since the image may be stored on the sender's device, an attacker can hack the device to obtain it. Some potent malware can also 'snoop' on your messages by infiltrating your device via other means, an SMS, and reading them before they are encrypted.

Finally, the company that installs E2E encryption on its products can install a backdoor or an exception that allows the company to surmount the encryption and access the messages. Such a thing may be required by law, such as companies being expected to retain and, in the event of litigation, share that information with lawyers. Illegal use also abounds, of course, such as that exposed in the Edward Snowden affair in 2013. The whistle-blower revealed, for example, that Skype had installed a backdoor on its application that allowed it to access and make copies of the contents of messages to share with the U.S. National Security Agency even though the messages were E2E-encrypted.





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### WHAT ARE THE RBI'S GUIDELINES ON STATE 'GUARANTEES'?

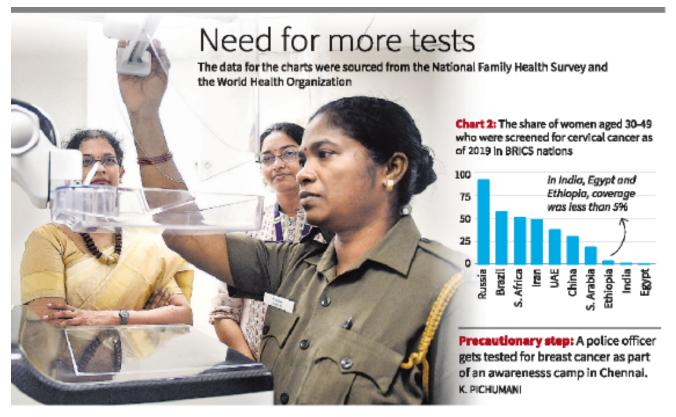


Table 1: The share of women aged 15-49 who underwent specific screening tests for cancer in 2019-21, across States

	Cervix	Breast	Oral
Punjab	1.9	0.3	0,4
UP	1	0.3	0.6
Himachal	0.7	0.3	0.3
Haryana	0.5	0.2	0.3
Delhi	0.4	0.2	0.7
J&K	0.3	0.2	0.6
Rajasthan	0.3	0.1	0.2
Uttarakhand	0.3	0.1	0.3
МЬ	0.7	0.5	0.7
Chhattisgarh	0.3	0.2	0.2
Odisha	0.7	0.1	0.2
Bihar	0.5	0.2	0.3
Jharkhand	0.4	0.1	0.2
WB	0.1	0.1	0.1
Mizoram	3.8	1.6	0.7
Manipur	1.3	1	0.6
Arunachal	0.7	0.3	0.4
Meghalaya	0.4	0.3	0.4
Sikkim	0.5	0.2	0.6
Tripura	0.4	0.3	0.4
Assam	0.2	0.2	0.2
Nagaland	0.2	0.2	0.3
Maharashtra	1.7	1	1
Goa	0.9	1	0.5
Gujarat	0.2	0.1	0.2

	Cervix	Breast	Oral
Tamil Nadu	7	3.8	0.9
Andhra	3.2	0.6	5
Kerala	2.3	1.5	0.5
Telangana	2.1	0.3	1.8
Kamataka	0.5	0,2	0.4
India	1.2	0.6	0.7

Chart 3: Share screened for breast cancer in Tamil Nadu, across age-groups

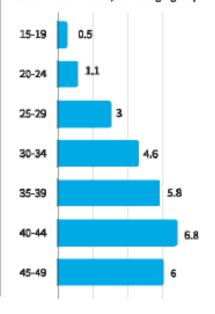


Chart 4: % tested for cervical cancer in TN, across years of schooling

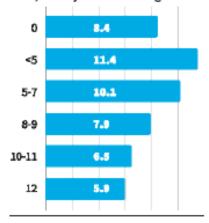
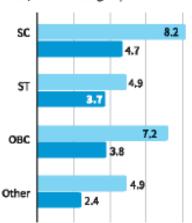


Chart 5: Share of women screened for cervical and breast cancer in Tamil Nadu, across social groups





### SIXTEENTH FINANCE COMMISSION CONSTITUTED UNDER ARVIND PANAGARIYA

The Indian government has formed the 16th Finance Commission to review fiscal distribution between the Union and States for 5 years from 2026. Dr Arvind Panagariya, former NITI Aayog Vice Chairman, will helm the panel.

BACKGROUND: Despite the Constitution's mandate to establish an FC every five years, breaking the trend, the 15th FC's term was extended by a year, ending in 2025-2026. In late 2019, the Commission was asked to give a standalone report for 2020-21 and another report for an extended fiveyear period till 2025-26. Since the FFC report covered six years (instead of five), the next FC must be selected this year. The last time an FC was granted a six-year time frame was for the 9th FC, formed in June 1987. The 10th FC was still constituted in June 1992 within the five-year deadline specified by Article 280 of the Constitution, which has not been the case this time. The 15th Finance Commission chaired by NK Singh was set up in November 2017 with a mandate to make recommendations for the five-year period from 2020-21. The Commission is usually granted about two years to deliberate on its terms of reference, consult States and frame its recommendations.

**RECENT HAPPENINGS:** The government has set a deadline of October 31, 2025, for the panel to submit its recommendations. Apart from the key recommendation on distribution of net proceeds of taxes between the Centre and States and allocation among States of the respective share of such proceeds, the panel will also prescribe measures needed to augment the Consolidated Fund of a State to supplement

resources of the panchayats and local bodies on the basis of recommendations made by the respective State Finance Commissions.

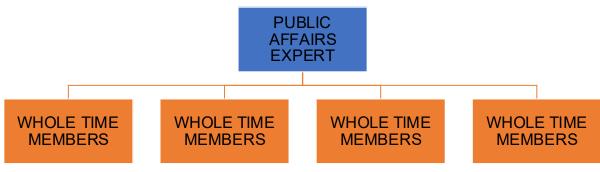
Under the ToR, the panel will recommend principles that should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States by way of grants-in-aid of their revenues. Also, it may review the existing arrangements on financing Disaster Management initiatives and make appropriate recommendations.

The Government had established an Advance Cell in the Finance Ministry on November 21, 2022, to oversee the preliminary work pending formal constitution of the panel. Subsequently, a Working Group headed by Finance Secretary and Secretary (Expenditure) and comprising several senior officials was set up to assist in the formulation of the ToRs. As part of the consultative process, views and suggestions were sought from the State governments and Union Territories (with legislature) on the ToRs and duly deliberated by the group.

### **FINANCE COMMISSION**

The President of India appoints the Finance Commission every fifth year or at such earlier time as he considers necessary. Article 280 (2) empowers the Parliament to make laws that lay down procedures and qualifications for appointment as members to the Finance Commission. The Parliament enacted the Finance Commission (Miscellaneous Provisions) Act, 1951. The Finance Commission make non-binding recommendations to the Government of India.

### **COMPOSITION**



Judges of the High Court of India

Specialised knowledge in finance, economics or practical experience in financial matters. Practical experience in public administration

### **CONSTITUTIONAL FUNCTIONS AND MANDATE**

- Formulate principles governing vertical devolution of net proceeds from divisible pool of taxes between the Union and the States and horizontal distribution among States respectively.
- Recommend principles governing transfer of Grants-inaid to the States from the Consolidated Fund of India.
- Recommends measures needed to augment Consolidated

Fund of States, including supplementing resources of Panchayats and Municipalities.

 Recommends any other matter referred to the Commission by the President in the interests of sound finance of the State Treasury.

### **SIGNIFICANCE**

The Commission shapes vital financial contours stirring economic growth across India's federal structure. An eminent economist helming policy strategy for enabling responsible, equitable resource allocation underscores the priority on cooperative fiscal federalism.



# INDIA'S LARGEST ONLINE IAS COACHING ACADEMY



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NATIONAL TRANSIT PASS SYSTEM

EXPERTS URGE IUCN: ELEVATE HORN OF AFRICA CHEETAH TO 'ENDANGERED'

WETLAND CITY ACCREDITATION (WCA)

FIRST SIGHTING: HOG DEER IN RAJAJI TIGER RESERVE, UTTARAKHAND

GREEN FUELS ALLIANCE INDIA LAUNCHED BY DENMARK

FIRST IUCN ASSESSMENT OF

**HIMALAYAN WOLF RELEASED** 

FIRST-EVER EURASIAN OTTER SIGHTING IN KERAL CLIMATE CONFERENCE 2024

EMERGENCY CAQM MEETING ON DELHI-NCR AIR QUALITY



### **NATIONAL TRANSIT PASS SYSTEM**

**CONTEXT:** Union Minister launched National Transit Pass System (NTPS) nationwide for smooth transport of timber, bamboo, and forest produce, replacing state-specific transit permits.

**HIGHLIGHTS:** The National Timber Permit System (NTPS) aims for a "One Nation-One Pass" approach, simplifying timber transit permits across India. Special Pan Indian vehicles, flagged-off by Minister Bhupender Yadav, showcase the system's ease, using QR-coded permits for seamless cross-country transport of forest produce.

About Pass System

- NTPS Launch: National Transit Pass System streamlines timber and forest produce transit across India with an online pass generation system.
- User-Friendly Process: Applicants register online, apply for a transit pass, and receive instant issuance, eliminating the need to visit forest offices.
- Nationwide Validity: Transit passes issued through NTPS are valid across India, easing movement without additional

permits at state borders.

- Applicant Registration: Simple registration process with mobile verification and document uploads for identity proof, making it accessible and efficient.
- Transit Pass Categories: System categorizes species for either transit pass or NOC based on state exemptions, simplifying the application process.
- No Objection Certificate (NOC): Facility for exempted species, allowing hassle-free movement across states without transit pass requirements.
- Real-time Monitoring: Forest departments receive instant notifications about issued NOCs, ensuring transparency and regulatory oversight.

The NTPS eliminates the cumbersome process of obtaining separate transit permits from each state for timber and forest products, streamlining inter-state and intra-state transportation. It ensures seamless transit permits, simplifying the movement of forest produce across diverse sources.

### **EXPERTS URGE IUCN: ELEVATE HORN OF AFRICA CHEETAH TO 'ENDANGERED'**

**CONTEXT:** Experts urge IUCN to reclassify Northeast African Cheetah to 'endangered' from 'vulnerable' due to rampant trafficking of its cubs, threatening genetic diversity and population

**BACKGROUND:** Ethiopia recognizes Somaliland and gains access to Red Sea ports. Researchers find 55 cheetahs, confiscated from Somaliland, are 100% of the soemmeringii subspecies. Trafficking poses a threat to the already vulnerable soemmeringii population, with significant off-take and potential for continued decline.

### **Government Report: Cheetah Project Progressing Towards Success in India**

- Successful Criteria Met: India's cheetah reintroduction program achieves 4 out of 6 short-term success criteria, according to a government report.
- Positive One-Year Assessment: Released on the program's first anniversary, the report highlights progress

- within envisioned limitations and a favorable trajectory.
- Path to Success: The project is deemed on the right path for successful large carnivore conservation, with acknowledgment of formidable challenges.
- Global Collaboration: Success attributed to concerted efforts from India, Namibia, and South Africa, supported by the highest offices in all three countries.
- Cheetah Action Plan: Six short-term success criteria include survival rate, home range establishment, wild cheetah reproduction, F1 generation breeding, and community contributions.
- Four Achieved Criteria: Highlights include 50% survival, home range establishment, cheetah cub births, and direct revenue contributions to local communities.
- One-Year Milestone: India's ambitious cheetah reintroduction initiative, launched by Prime Minister Narendra Modi, marks its first anniversary with ongoing global scrutiny.

### African Cheetah





### WETLAND CITY ACCREDITATION (WCA)

**CONTEXT:** India proposes Indore, Bhopal, and Udaipur for Wetland City Accreditation (WCA) under Ramsar Convention, seeking global acknowledgment for their commitment to safeguarding natural or human-made wetlands.

**BACKGROUND:** Indore, Bhopal, and Udaipur are the first Indian cities nominated for the Ramsar Convention's voluntary Wetland City Accreditation (WCA) scheme. Proposals from state wetlands authorities and municipal corporations highlight the vital role of wetlands in flood regulation, livelihoods, and cultural values. The WCA aims to promote conservation, sustainable socio-economic benefits, and international recognition for cities valuing their wetlands.

### **About Wetland City Accreditation**

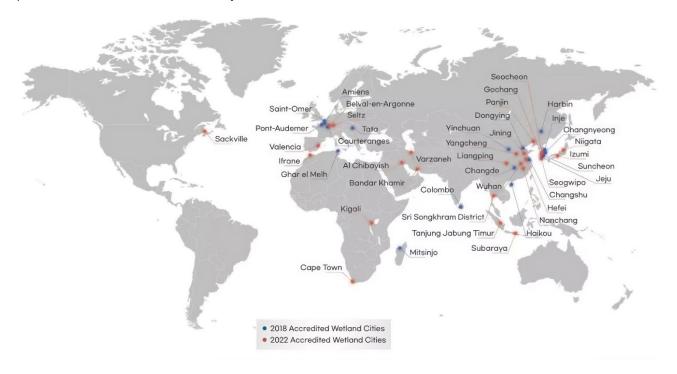
- Ramsar Convention Initiative: Wetland City Accreditation, established in 2015, recognizes cities preserving urban wetlands, approved under Resolution XII.10 during COP12.
- Conservation Focus: Aims to promote wise use, conservation, and socio-economic benefits of urban and peri-urban wetlands globally.
- Encouraging Positive Relationships: Urges cities near Wetlands of International Importance to strengthen positive connections with these ecosystems for mutual

benefit.

- Formal Accreditation Criteria: Candidates must meet international standards and the six criteria outlined in the Operational Guidance for WCA.
- International Recognition: Voluntary scheme offers cities with valuable wetlands an opportunity for global acknowledgment and positive branding for conservation efforts.

### **About Indian Cities**

- Indore, established by Holkars, is India's cleanest city, winning the 2023 Smart City Award for sanitation. Sirpur Lake is acknowledged for water bird congregation, evolving into a Bird Sanctuary.
- Bhopal, among India's cleanest cities, plans conservation zones around wetlands in City Development Plan 2031, emphasizing Bhoj Wetland's significance with a dedicated Lake Conservation Cell.
- Udaipur in Rajasthan, surrounded by significant wetlands
   Pichola, Fateh Sagar, Rang Sagar, Swaroop Sagar, and
   Doodh Talai crucial for culture, identity, and microclimate maintenance.







### FIRST SIGHTING: HOG DEER IN RAJAJI TIGER RESERVE, UTTARAKHAND

CONTEXT: Endangered hog deer sighted in Uttarakhand's Rajaji Tiger Reserve's Chilla Range, captured by trap cameras in a historic first.

**BACKGROUND:** The Rajaji Tiger Reserve in India demonstrates a growing biodiversity range with the sighting of hog deer captured by trap cameras. The reserve attributes this to urgent habitat improvement efforts, including increasing vegetation and prey to enhance living conditions for herbivores and carnivores.



### **GREEN FUELS ALLIANCE INDIA LAUNCHED BY DENMARK**

**CONTEXT:** Denmark launches Green Fuels Alliance India (GFAI) to enhance collaboration with India in sustainable energy solutions, working towards a shared global objective of carbon neutrality.

**BACKGROUND:** The Green Fuels Alliance of India (GFAI), led by the Danish Embassy and Consulate General of Denmark in India, aims to advance the Green Fuels sector, particularly Green Hydrogen, by fostering collaboration and innovation between Danish and Indian industries. Nine Danish organizations, including Maersk and Danfoss, have committed as founding members to promote sustainable energy growth in India.

### HIGHLIGHTS

- GFAl's Objective: GFAI aims to promote sustainable energy growth in India, fostering collaboration among businesses, government, research institutions, and financial stakeholders.
- Founding Members: Nine Danish organizations, including Maersk and Danfoss, committed to GFAI, emphasizing collaboration in green fuel initiatives.
- Advisory Board: GFAI's advisory board includes entities like India Hydrogen Alliance and the Danish Energy Agen-

- cy, ensuring diverse expertise.
- Green Strategic Partnership: GFAI aligns with the Green Strategic Partnership to inspire India's green development efforts, emphasizing global collaboration.
- Energy Transition Focus: Head of Energy Transition at Maersk highlights the challenge of green energy availability and the potential of India in renewable energy production.
- Business Collaboration: GFAI facilitates knowledge sharing, business opportunities, and partnerships between Indian and Danish stakeholders in green fuels, including Green Hydrogen.
- Global Shipping Impact: Maersk sees GFAI as crucial in addressing the shipping industry's net-zero journey, leveraging India's potential in the green energy value chain.

Green Fuels Alliance India, with support from Maersk, focuses on overcoming challenges in global shipping's net-ze-ro journey by promoting green energy and fuel collaborations between Indian and Danish stakeholders, fostering knowledge sharing, business opportunities, and strategic partnerships in the realm of green fuels, including Green Hydrogen.

"Re not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them."







### **Comparable Partnership Initiatives**

#### **Global Biofuels Alliance**

- Global Biofuel Alliance Launch: Initiated by India's G20 presidency, the alliance, including Brazil and the US, aims to expand sustainable biofuel markets globally.
- Major Biofuel Producers: Brazil, the US, and India, accounting for 85% of ethanol production, collaborate to decarbonize vehicle emissions and promote eco-friendly fuel practices.
- International Collaboration: The alliance, with 19 countries and 12 international organizations, creates a virtual marketplace for sharing biofuel technologies, supporting global sustainability efforts.

### **India-USA Strategic Clean Energy Partnership**

- Establishment and Background: The India-USA Strategic Clean Energy Partnership, launched in 2018, is part of the US-India Climate and Clean Energy Agenda 2030 Partnership.
- Technical Pillars and Goals: The partnership focuses on five technical pillars, including power and energy efficiency, renewable energy, and responsible oil and gas, aiming to achieve shared climate and clean energy goals by 2030.
- Key Initiatives and Collaboration Areas: The partnership addresses grid strengthening, renewable energy development, energy efficiency, decarbonizing transportation and industrial sectors, and enhancing cooperation between Indian and U.S. energy agencies for low-carbon technologies.

### FIRST IUCN ASSESSMENT OF HIMALAYAN WOLF RELEASED

**CONTEXT:** Himalayan Wolf, a elusive predator in the Himalayas, assessed for the first time on IUCN Red List, revealing concerning conservation status.

### **HIGHLIGHTS:**

- Himalayan Wolf Vulnerability: Classified 'Vulnerable' on the IUCN Red List due to a population estimate of 2,275-3,792 mature individuals.
- Single Subpopulation: All individuals concentrated in one subpopulation across the Himalayas of Nepal, India, and the Tibetan Plateau.
- Continuous Decline Suspected: Ongoing threats and insufficient conservation action raise concerns about the Himalayan Wolf's population decline.
- Indian Section Estimate: India has 227-378 mature individuals, based on a 2020 estimate by researcher Shivam Shrotriya, including Ladakh and Spiti Valley.
- Additional Habitat Potential: Small wolf habitats in Uttarakhand and Sikkim may host more individuals, indicating potential conservation needs in these areas.





# INDIA'S LARGEST ONLINE IAS COACHING ACADEMY



### FIRST-EVER EURASIAN OTTER SIGHTING IN KERALA

**CONTEXT:** Eurasian otter, identified as Lutra lutra, discovered in Kerala's Chinnar Wildlife Sanctuary by a research team led by Kerala Agricultural University.

**BACKGROUND:** A recent discovery of the Eurasian otter in the Chinnar Wildlife Sanctuary in Idukki, Kerala, marks the first documented presence in the state. The Eurasian otter joins

two other otter species in Kerala, the smooth-coated otter and the small-clawed otter. The last documented evidence of Eurasian otters in the Western Ghats dates back to the first half of the 20th century, making this recent discovery significant after over 70 years. The otter's presence was confirmed through DNA studies on a carcass found in Tamil Nadu in 2017.



### **CLIMATE CONFERENCE 2024**

**CONTEXT:** Mumbai hosts the Climate Conference 2024 on "Decoding the Green Transition for India," emphasizing the private sector, climate startups, and investors' role in climate action.

BACKGROUND: The Conference, organized under the Green Climate Fund Readiness Programme with UNDP India, highlighted India's commitment to achieving net-zero by 2070. It focused on leveraging government efforts, engaging civil society, and promoting innovative climate services and adaptation technologies to drive green transition investments, reduce CO2 emissions, and enhance climate resilience. Discussions included the current climate finance landscape in India and strategies to boost financing in the climate-tech ecosystem.

### **HIGHLIGHTS:**

- Climate Change Urgency: MoEFCC Secretary stresses immediate global action, planning, and finance mobilization due to the impactful climate change events.
- Ministry Initiatives: Green Credits Programme and reinvented ECOMARK labeling under LiFE highlighted for informed consumer choices and environmental awareness.
- Risk Mitigation Importance: Emphasis on insurance, risk mitigation, and mainstreaming climate startups for upscaling to industry and business models.
- Public-Private Collaboration: Proposal for a combination of public and private funds, involving MDBs, IFIs, and philanthropists for supporting high-risk climate projects.



# INDIA'S LARGEST ONLINE IAS COACHING ACADEMY



### **EMERGENCY CAQM MEETING ON DELHI-NCR AIR QUALITY**

CONTEXT: Emergency meeting called by CAQM Sub-Committee to implement Graded Response Action Plan (GRAP) due to the sudden decline in Delhi-NCR air quality.

BACKGROUND: The Sub-Committee reviewing air quality in Delhi notes a surge in the Air Quality Index (AQI) due to unfavourable climatic conditions, including low wind speed,

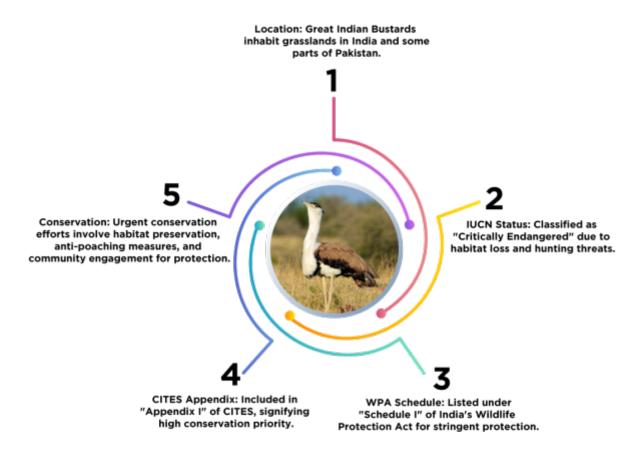
increased moisture levels, low mixing heights, and local pollution sources. The spike is expected to persist in the 'Severe' category for a few days, as forecasted by IMD/IITM, attributing it to ongoing unfavourable meteorological conditions.

### 8-point action plan as per Stage-III of GRAP

- 1. Further intensify the frequency of mechanised/vacuum-based sweeping of roads.
- 2. Ensure daily water sprinkling along with dust suppressants, before peak traffic hours, on roads and right of ways including hotspots, heavy traffic corridors and ensure proper disposal of the collected dust in designated sites/landfills.
- 3. Further intensify public transport services. Introduce differential rates to encourage off-peak travel.
- 4. Construction & Demolition activities: Enforce strict ban on construction and demolition activities in the entire NCR, except for some categories of projects.
- 5. Close down operations of stone crushers
- 6. Close down all mining and associated activities in NCR.NCR State Govts. / GNCTD to impose strict restrictions on plying of BS III petrol and BS IV diesel LMVs (4 wheelers) in Delhi and in the districts of Gurugram, Faridabad, Ghaziabad and Gautam Budh Nagar.
- 7. State Govts. in NCR and GNCTD may take a decision on discontinuing physical classes in schools for children up to Class V and conducting classes in an online mode.

### About Commission for Air Quality Management in NCR & Adjoining Areas

- Status: A statutory authority, the Commission has legal standing for robust air quality management.
- Powers: Empowered to issue directions, coordinate actions, and enforce measures for air quality improvement.
- Difference with CPCB: Distinct from the CPCB, it focuses
- solely on NCR, ensuring regional specificity.
- Composition: Multidisciplinary, comprising experts, officials, and representatives for comprehensive air quality governance.
- Accountability: Holds local authorities accountable, bridging gaps for effective and targeted air quality solutions.









**CHAMELEON TROJAN** 

ISRO'S COMMERCIAL ARM TO LAUNCH GSAT-20

**GoIDN** 

ISRO'S FUEL CELL FLIGHT TESTED IN PSLV C58

**XPoSat** 

DIRECT-TO-MOBILE (D2M)
TECHNOLOGY

KOCHI-LAKSHADWEEP ISLANDS SUBMARINE OPTICAL FIBRE CONNECTION

**BIO-IMAGING BANK** 

INTERNATIONAL CLASSIFICATION OF DISEASES (ICD)

VACCINE DRIVE TO FIGHT CERVICAL CANCER

**SAMAVESHA PROJECT** 

**FILOBOT** 



### **CHAMELEON TROJAN**

**CONTEXT:** New version of 'Chameleon Trojan' malware discovered by security researchers, capable of disabling biometric authentication (fingerprint and face unlock) to steal phone PINs.

BACKGROUND: Cameleon Trojan, tracked by Cybersecurity Company ThreatFabric, embeds itself into legitimate Android apps like Google Chrome to avoid detection. It operates discreetly in the background, with threat actors claiming undetectability during runtime, bypassing Google Protect alerts and security software. The malware uses the Accessibility service for unauthorized access on Android 12 and earlier versions, while adapting to new security restrictions on the latest OS versions.

### What is Trojan' malware?

A Trojan is malicious software disguised as legitimate, tricking users into unknowingly installing it, allowing unauthorized access or causing harm to the system.

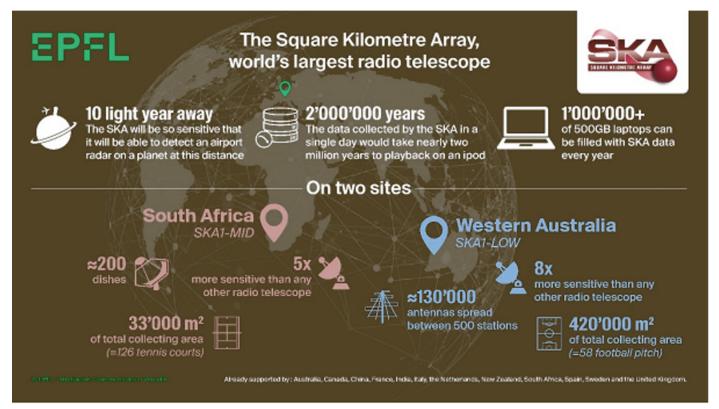
- Origin: "Trojan" malware disguises itself as legitimate software, deceiving users during installation.
- Functionality: Stealthy and harmful, it allows unauthorized access or control once inside a system.
- Payload: Carries a malicious payload, compromising data security, and often facilitating additional cyber threats.
- · Spread: Spreads through deceptive emails, fake websites,

- or infected downloads, exploiting user vulnerabilities.
- Prevention: Regular updates, reputable antivirus software, and cautious online behavior help prevent Trojan infections.

### Ways to prevent attack

- Up-to-Date Software: Regularly update operating systems and security software for the latest protection patches.
- Email Vigilance: Avoid opening suspicious emails or clicking on unknown attachments to prevent Trojan infections.
- Firewall Protection: Enable and maintain a robust firewall to monitor and control incoming and outgoing network traffic.
- Download Caution: Only download files or software from reputable sources to minimize the risk of Trojan contamination.
- User Education: Educate users on safe online practices, emphasizing the importance of cautious internet browsing behavior.

Trojan malware poses a significant threat to Cybersecurity. Mitigation involves employing robust security measures, including updated antivirus software, vigilant user practices, and regular backups to safeguard against potential attacks and data compromise.



### Radio Telescope

- Purpose: Radio telescopes detect and study radio-frequency emissions from celestial objects.
- · Components: Antennas capture radio waves, which are then converted into electrical signals for analysis.
- Observations: They reveal unique astronomical phenomena, such as pulsars, quasars, and cosmic microwave background.
- Advantages: Radio telescopes operate day and night, overcoming obstacles like clouds and atmospheric interference.
- Array Configurations: Arrays of multiple telescopes enhance resolution and sensitivity, allowing deeper insights into the cosmos.



### **ISRO'S COMMERCIAL ARM TO LAUNCH GSAT-20**

**CONTEXT:** NewSpace India Limited (NSIL), ISRO's commercial arm, plans to launch GSAT-20 (now GSAT-N2) aboard SpaceX's Falcon-9 in Q2 2024.

HIGHLIGHTS: NewSpace India Limited (NSIL), the commercial arm of ISRO, will launch the GSAT-20 (renamed GSAT-N2) aboard SpaceX's Falcon-9 in the second quarter of 2024. Weighing 4700 kg, the high-throughput Ka-band satellite, fully

funded and operated by NSIL, provides Pan-India coverage with 32 beams, including remote regions, offering an HTS capacity of nearly 48 Gbps. As part of India's space sector reforms, NSIL is mandated to build, launch, own, and operate satellites in a demand-driven mode to meet user service needs.



#### **Mission Details**

- Mission Overview: NSIL plans GSAT-20 satellite launch in 2024 for cost-effective broadband and communication services.
- HTS Capacity: GSAT-20 focuses on Ka-Ka band HTS, with a major portion allocated to Indian service providers.
- Launch Details: NSIL collaborates with SpaceX's Falcon-9 for the GSAT-20 mission during Q2 2024.
- SpaceX's Falcon 9: A reusable rocket, Falcon 9 by SpaceX is designed for reliable Earth orbit transport.
- Space Sector Reforms: NSIL, ISRO's commercial arm, operates under India's 2020 space sector reforms.

### Falcon 9





### **GolDN**

**CONTEXT:** IIT Bombay researchers create GoIDN, a machine that mechanically recycles leftover plastic polymers, transforming them into composites for paver blocks, tiles, and bricks

HIGHLIGHTS: IIT Bombay has developed a single screw

extruder, GoIDN, for mechanical recycling of waste thermoplastic polymers and inorganic fillers. Unlike commercially available equipment, GoIDN is robust enough to handle polymers with contaminants, facilitating the production of polymer composites for paver blocks, tiles, and bricks.



Fig. 1a. GolDN



Fig. 1b. TGeosA

#### **About Machine**

- Continuous Melt Mixing: Developed technology enables continuous melt mixing in laboratory settings for realistic conditions.
- Department of Science and Technology (DST) Support: DST supported the project through Waste Management Technologies.
- Cost Reduction: Commercialization aims to reduce the
- instrument cost to INR 5 lakhs, making it more affordable.
- Efficient Mixing: Key parameters like compression ratio and clearance depth enhance efficient mixing of waste polymers.
- TGeosA Development: Researchers also created a Thermogravimetric Analyzer (TGeosA) for analyzing polymer composites obtained from the melt-mixing instrument.

### ISRO'S FUEL CELL FLIGHT TESTED IN PSLV C58

**CONTEXT:** ISRO tests 100 W class Polymer Electrolyte Membrane Fuel Cell in orbital platform POEM3 aboard PSLV-C58, aiming to assess its space operation for future mission designs.

**HIGHLIGHTS:** The experiment aimed to evaluate Polymer Electrolyte Membrane Fuel cell performance in space, generating 180 W power from onboard hydrogen and oxygen. Conducted on the POEM satellite, the test provided valuable data on system performance and physics, informing the design of power systems for future space missions.

### What is Hydrogen Fuel Cells?

Hydrogen fuel cells generate electricity by combining hydrogen and oxygen, producing water and releasing energy. This clean and efficient process offers a promising alternative for powering vehicles and various applications, reducing environmental impact.

- Clean Energy: Hydrogen fuel cells produce electricity through a clean chemical reaction, emitting only water.
- **Efficiency:** High energy efficiency, converting fuel directly into electricity with minimal waste.
- **Zero Emissions:** The only emission is water vapor, contributing to a zero-emission energy source.
- · Versatility: Applicable in various sectors, including

transportation, industry, and portable power generation.

**Research Advances:** Ongoing research focuses on improving efficiency, affordability, and expanding applications for hydrogen fuel cells.

### Significance of Hydrogen Fuel Cells in Space

- Zero Gravity Compatibility: Hydrogen fuel cells work efficiently in space, unaffected by gravity variations.
- **Water Generation:** Produces water as a byproduct, vital for astronaut consumption and life support.
- Long Endurance: Provides continuous power, crucial for extended space missions and exploration.
- Clean Propulsion: Hydrogen fuel cells offer clean and efficient propulsion, minimizing environmental impact in space.
- Reduced Payload Weight: Compared to traditional batteries, hydrogen fuel cells offer energy with lower weight, enhancing spacecraft efficiency.

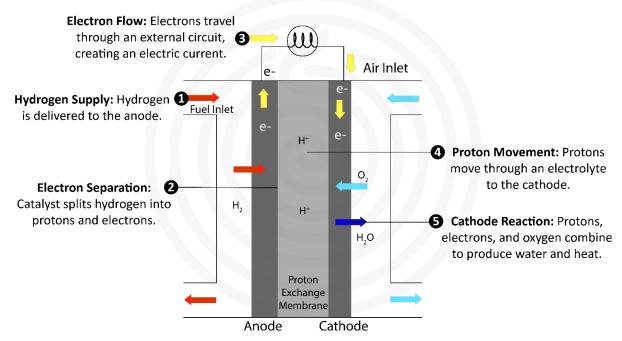
Fuel cells offer significant societal applications, serving as an ideal solution to replace engines in various vehicles and power standby systems. With comparable range and recharge time to conventional engines, fuel cells hold an advantage over batteries, contributing to emission-free transportation.



## INDIA'S LARGEST ONLINE IAS COACHING ACADEMY



### WORKING OF FUEL CELLS



### **XPoSat**

**CONTEXT:** ISRO successfully places X-ray Polarimeter Satellite (XPoSat), the world's second X-ray polarimetry mission, into a precise 650 km circular orbit after a 21-minute flight.

HIGHLIGHTS: Emission mechanisms from astronomical sources like black holes, neutron stars, and active galactic nuclei are complex and challenging to comprehend. Spectroscopic and timing data offer valuable insights, but the nature of emissions remains elusive. Polarimetry measurements, providing polarization degree and angle, serve as a crucial diagnostic tool, enhancing our understanding of emission processes.

### What is XPoSat?

- XPoSat Mission: India's first X-ray Polarimeter Satellite analyzes polarization in medium-frequency X-rays.
- Payloads: Comprises Indian X-ray Polarimeter (POLIX) and X-ray Spectroscopy and Timing (XSPECT).
- Built by: Developed by Raman Research Institute and UR Rao Satellite Centre in Bengaluru.
- Observation: XPoSat observes polarized X-rays emitted by magnetars or neutron stars.
- Mission Life: Estimated at five years, focusing on Earth's shadow during celestial events.



### Two scientific payloads on-board XPoSat

POLIX, the world's first instrument operating in the 8 to 30 keV medium X-ray energy band, equipped with a collimator and scatterer, observes astronomical sources, developed at RRI.

XSPECT, designed for fast timing and high spectroscopic resolution in the 0.8-15 keV soft X-ray energy band, observes various sources, including X-ray pulsars, black hole binaries, and AGNs.

### Significance of XPoSat mission

- XPoSat's Uniqueness: A groundbreaking X-ray Polarimeter Satellite exploring medium-energy band polarization (8-30 keV).
- Data Sources: Shifts reliance from optical and radio to X-ray data for polarisation measurements.
- Targeted Sources: Observes persistent (known) and transient sources (pulsars, black holes) emitting X-rays.
- Scientific Insight: Studies polarized X-rays from celestial sources, revealing details about magnetic fields and surrounding environments.
- Game-Changing Technology: XPoSat introduces unprecedented capabilities, enabling X-ray polarisation measurements from bright celestial sources.





### **DIRECT-TO-MOBILE (D2M) TECHNOLOGY**

**CONTEXT:** The central government is developing direct-to-mobile (D2M) technology, enabling users to watch live TV on smartphones without internet. Trials to be conducted in 19 cities soon.

**BACKGROUND:** Information and Broadcasting Secretary Apurva Chandra announced the development of a homegrown Direct-to-Mobile (D2M) broadcasting technology. Trials are scheduled in 19 cities, following successful pilot projects in Bengaluru, Kartavya Path, and Noida last year.

### About Direct-To-Mobile (D2M) Technology

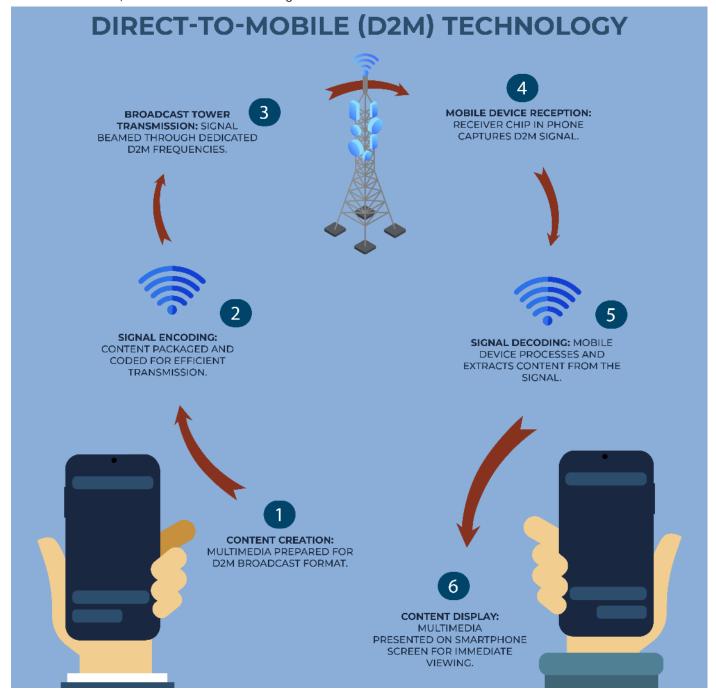
The Ministry of Communications highlights the capabilities of Direct-to-Mobile (D2M) technology, allowing multimedia content transmission to smartphones without an active internet connection. Traditionally used for emergency alerts, it offers mobile-centric delivery, hybrid broadcast, real-time/on-demand content, and interactive services. The government

emphasizes that D2M can directly deliver information to users' mobile phones without burdening network bandwidth, potentially easing congestion on 5G networks.

### Working of Direct-To-Mobile (D2M) Technology

Direct-to-Mobile (D2M) technology operates like FM radio or direct-to-home (DTH) broadcasting, transmitting signals to receivers without requiring an internet connection. A paper by IIT Kanpur highlights that existing mobile devices do not currently support D2M technology.

The Department of Telecommunications (DoT) has formed a committee to explore the feasibility of using the spectrum band 526-582 MHz for providing broadcast services directly to smartphones. This band, currently utilized by the Ministry of Information & Broadcasting for TV transmitters, is envisioned to coordinate with both mobile and broadcast services.





### KOCHI-LAKSHADWEEP ISLANDS SUBMARINE OPTICAL FIBRE CONNECTION

**CONTEXT:** Prime Minister inaugurates Kochi-Lakshadweep islands submarine optical fiber connection (KLI-SOFC) project, part of over Rs 1,150 crore developmental projects spanning technology, energy, water resources, healthcare, and education.

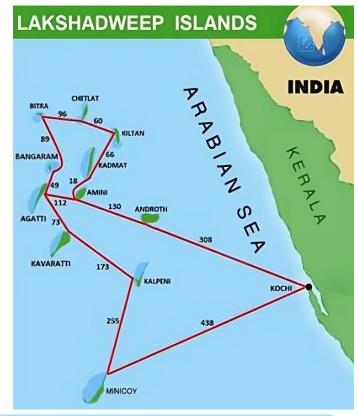
BACKGROUND: The Kochi-Lakshadweep Islands Submarine Optical Fiber Connection (KLI-SOFC) project, inaugurated by the Prime Minister, marks a historic development connecting Lakshadweep through a dedicated submarine optic fiber cable. This initiative promises a significant boost to internet speed, transforming communication infrastructure in the region and fostering advancements in telemedicine, e-governance, education, digital banking, and digital literacy. The project aligns with the Prime Minister's commitment to ensuring fast internet within 1,000 days, bringing about a positive impact on government services, healthcare, education, and the potential for Lakshadweep to become a logistics hub.

### **About the Project**

- Digital Connectivity Need: Lakshadweep required improved communication beyond limited satellite bandwidth capacity.
- KLI Project: Kochi-Lakshadweep Submarine OFC Project connects mainland (Kochi) to eleven Lakshadweep Islands
- Timely Completion: Department of Telecommunications executed the KLI project promptly, enhancing communication infrastructure.
- Funding Source: Universal Services Obligation Fund (USOF), Department of Telecommunication, supported the project financially.
- Execution: BSNL managed the project, awarded to NEC Corporation India Pvt Ltd through global tendering.

The Kochi-Lakshadweep Islands Submarine Optical

Fiber Connection (KLI-SOFC) project aligns with the 'Digital India' and 'National Broadband Mission' objectives, enhancing e-governance, tourism, education, health, commerce, and industries in Lakshadweep. The initiative is expected to elevate standards of living, drive social and economic development, and provide high-speed wireline broadband connectivity to the island's population, utilizing FTTH and 5G/4G mobile networks.



### **OPTICAL FIBER CABLES**

- Construction: Optical fiber cables comprise a core of glass fibers surrounded by protective layers.
- · Working Principle: Transmit data as pulses of light, utilizing total internal reflection within the fibers.
- Applications: Widely used in telecommunications, internet, and data transmission for high-speed communication.
- Advantages: Faster data transfer, immunity to electromagnetic interference, and long-distance capabilities make them versatile.
- Professional Datas: Key specifications include core diameter, refractive index, and attenuation, critical for efficient signal transmission.

### **BIO-IMAGING BANK**

**CONTEXT:** Tata Memorial Hospital in Mumbai, India's largest cancer treatment facility, employs artificial intelligence (AI) to tackle the rising challenge of cancer cases.

BACKGROUND: Mumbai's Tata Memorial Hospital (TMH), recognizing the shortage of cancer specialists amid rising cases, leverages artificial intelligence (AI) to address the challenge. Establishing a 'Bio-Imaging Bank' for cancer, the hospital employs deep learning to create a customized algorithm for early-stage cancer detection, incorporating data from 60,000 patients in the past year.

### **Bio-Imaging Bank**

The Bio-Imaging Bank is a comprehensive repository of pathology and radiology images, clinical data, and treatment information, funded by the Department of Biotechnology and

collaboratively managed by RGCIRC, PGIMER, IIT-Bombay, and AIIMS. It aims to gather extensive data on lung and headneck cancers for training and testing AI algorithms in critical medical tasks.

- Repository Objective: Create a robust Bio-Imaging Bank with linked clinical, outcome, and treatment data.
- Cancer Focus: Initially targets head neck and lung cancers with a minimum 1000 patients each.
- Al Algorithm Training: Involves training algorithms for tasks like screening, segmentation, biomarker prediction, and therapy response.
- Data Commitment: Aims to exceed the committed patient data for both cancer types.
- Medically Relevant: Strategic resource for Al algorithm training, validation, and testing in cancer imaging.



### INTERNATIONAL CLASSIFICATION OF DISEASES (ICD)

**CONTEXT:** World Health Organization launches Tra ditional Medicine Morbidity codes for Ayurveda, Siddha, and Unani in ICD-11, incorporating data and terminology from these systems into global health classification.

BACKGROUND: The International Classification of Diseases (ICD) serves diverse global purposes by providing essential insights into the extent, causes, and consequences of human disease and death. It is crucial for health recording and statistics, supporting various aspects such as payment systems, service planning, quality administration, safety, and health services research. ICD's diagnostic guidance ensures standardized data collection and facilitates large-scale research, establishing it as the foundation for comparable statistics on causes of mortality and morbidity for over a century.

### **HIGHLIGHTS**

 Global Health Data Standard: ICD-11 allows systematic recording, analysis, and comparison of global mortality and morbidity data.

- Semantic Interoperability: Ensures data consistency and reusability for diverse use cases beyond health statistics.
- Legally Mandated Standard: ICD-11 is a legally mandated health data standard effective from January 2022.
- End-to-End Digital Solution: Offers a digital framework with APIs, tools, and online/offline accessibility.
- Inclusive and Up-to-Date: Independent of language, culturally inclusive, and reflects the latest scientific knowledge.

The inclusion of traditional medical terminology in the International Classification of Diseases (ICD) will enhance India's public healthcare, research, Ayush insurance coverage, and policy-making systems. It will support the development of strategies to control various diseases, including infectious and lifestyle-related ones. Other World Health Organization member countries are also considering a similar format. ICD-11 will internationally code and notify prevalent diseases of Ayurveda, Siddha, and Unani Medicine, contributing to a standardized and globally recognized classification system.



### **VACCINE DRIVE TO FIGHT CERVICAL CANCER**

**CONTEXT:** Government to launch HPV vaccination campaign for girls aged 9-14, a crucial step in reducing cervical cancer, the second most common cancer among Indian women.

**BACKGROUND:** The cervical cancer immunization drive, planned in three phases over three years, is set to commence in the second quarter of this year. The government aims to have 6.5-7 crore vaccine doses for the first phase. The vaccine provides protection against HPV strains causing various

cancers and genital warts.

### How does the vaccine prevent cancers?

The government's cervical cancer immunization campaign will utilize the indigenously developed and cost-effective Cervavac, a quadrivalent vaccine preventing common HPV types 16, 18, 6, and 11. Targeting these strains helps prevent infections, genital warts, and cervical cancer, with HPV 16 and 18 being the most oncogenic globally.

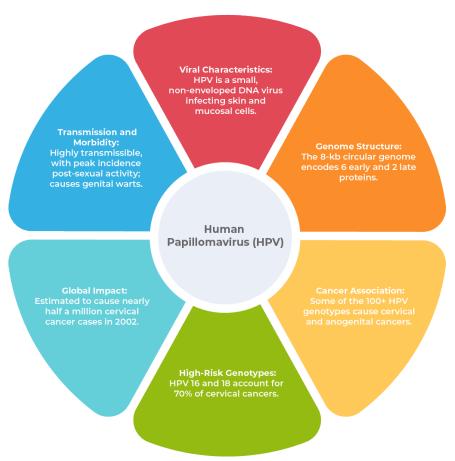


### Importance of Vaccination in India

- High Cervical Cancer Burden: India contributes a fifth of global cases, with 1.25 lakh new cases yearly.
- Leading Cause of Death: Cervical cancer ranks second among women, causing 75,000 deaths annually.
- HPV Association: 83% of invasive cervical cancers in In-

dia linked to HPV 16 or 18.

- HPV Strain Impact: Persistent infections, especially highrisk HPV strains, lead to 85% of cervical cancers.
- Oncogenic HPV Types: HPV 16 and 18, the most oncogenic, responsible for 70% of global cases.



### SAMAVESHA PROJECT

CONTEXT: I-STEM initiates Samavesha project at IISc., Bengaluru, aiming to boost research collaboration in India by improving accessibility to scientific and engineering facilities. HIGHLIGHTS: I-STEM, an initiative of the Office of Principal Scientific Advisor, Government of India, plans to organize approximately 50 Samavesha events across India in 2024. The initiative aims to connect researchers and industries with scientific institutes through an online portal, facilitating the rental of advanced scientific equipment for experiments. I-STEM envisions a future where one million researchers are seamlessly connected to a network of 10,000 cutting-edge labs across India.

### **About Project**

I-STEM Vision: Aims to connect one million researchers to

10,000 labs fostering collaboration.

- 2024 Goal: Beyond equipment connection, I-STEM aims to ignite collaborative innovation.
- Collaborative Ecosystem: Envisions a culture where startups, industries, and academia co-create innovations.
- Role of I-STEM: Essential in boosting India's Science and Technology sector.
- Impact of Samavesha: Expects increased indigenous product innovation, a thriving knowledge exchange ecosystem, and national advancements.
- Visionary Approach: I-STEM's success depends on a shared culture of collaboration among institutions and researchers.





### **FILOBOT**

**CONTEXT:** Italian and French researchers reveal FiloBot, a robot with the capability to 3D print its own body, enabling it to elongate like a growing vine or snake.

**BACKGROUND:** FiloBot is designed with inspiration from climbing plants, adopting a snake-like structure. Its unique design includes a spinning head that dispenses a special plastic ink, essentially 3D printing additional body mass as it moves, mimicking the growth patterns of climbing plants in the natural world.



### **HIGHLIGHTS**

- Elongation Capability: FiloBot can extend itself on demand, potentially growing towards light sources.
- Inner Mechanism: It utilizes a tube to channel 3D printer ink, coiling material into new segments.
- Autonomous Operation: Rear houses an inkwell, pump, and power source for self-sustained growth.
- Sensors and Electronics: External sensors feed data for controlling spin, ink flow, and growth.
- Versatile Applications: Suitable for monitoring in unstructured environments, assessing avalanche risks, or measuring pollution.
- Potential Advancements: Can be programmed to grow towards light or defy gravity by growing upwards.

FiloBot's plant-inspired design, utilizing 3D printing for growth, presents a sustainable alternative to energy-intensive and complex robotic systems. Its efficient navigation across diverse terrains hints at transformative applications in outdoor environments, particularly in areas with limited or hazardous human accessibility, showcasing the potential of robotics and 3D printing integration.

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**READING COMPREHENSION** 



### [Passage 1]

What climate change will undeniably do is cause of amplify events that hasten the reduction of resources. Competition over these diminishing resources would ensue in the form of political or even violent conflict. Resource based conflicts have rarely been overt and are thus difficult to isolate. Instead they take on veneers that appear more politically palatable. Conflicts over resources like water are often cloaked in the guise of identity or ideology.

What does the above passage imply?

- (a) Resource-based conflicts are always politically motivated.
- (b) There are no political solutions to resolve environmental and resource-based conflicts.
- (c) Environmental issues contribute to resource stresses and political conflicts
- (d) Political conflicts based on identity or ideology cannot be resolved.

### [Passage 2]

The man who is perpetually hesitating which of the two things he will do first, will do neither. The man who resolves, but suffers his resolution to be changed by the first countersuggestion of a friend – who fluctuates from opinion to opinion and veers from plan to plan-can never accomplish anything. He will at best be stationary and probably retrograde in all. It is only the man who first consults wisely, then resolves firmly and then executes his purpose with inflexible perseverance, undismayed by those petty difficulties which daunt a weaker spirit – that can advance to eminence in any line.

The keynote that seems to be emerging from the passage is that

- (a) we should first consult wisely and then resolve firmly
- (b) we should reject suggestions of friends and remain unchanged
- (c) we should always remain broad-minded
- (d) we should be resolute and achievement-oriented

### [Passage 3]

During the summer in the Arctic Ocean, sea ice has been melting earlier and faster, and the winter freeze has been coming later. In the last three decades, the extent of summer ice has declined by about 30 per cent. The lengthening period of summer melt threatens to undermine the whole Arctic food web, atop which stand polar bears.

Which among the following is the most crucial message conveyed by the above passage?

- (a) Climate change has caused Arctic summer to be short but temperature to be high
- (b) Polar bears can be shifted to the South Pole to ensure their survival
- (c) Without the presence of polar bears, the food chains in Arctic region will disappear
- (d) Climate change poses a threat to the survival of polar bears [Passage 4] Why do people prefer open defecation and not want toilets or, if they have them, only use them sometimes? Recent research has shown two critical elements: ideas of purity and pollution, and not wanting pits or septic tanks to fill because they have to be emptied. These are the issues that nobody wants to talk about, but if we want to eradicate the practice of open defection, they have to be confronted and dealt properly.

Which among the following is the most crucial

message conveyed by the above passage?

- (a) The ideas of purity and pollutions are so deep-rooted that they cannot be removed from the minds of the people
- (b) People have to perceive toilet use and pit-emptying as clean and not polluting
- (c) People cannot change their old habits
- (d) People have neither civic sense nor sense of privacy

### [Passage 5]

In the last two decades, the world's gross domestic product (GDP) has increased 50 percent, whereas inclusive wealth has increased by a mere 6 percent. In recent decades, GDP-driven economic performance, has only harmed inclusive wealth like human capital; and natural capital like forests, land and water. While the world's human capital which stands at 57 percent of total inclusive wealth grew by only 8 percent, the natural which is 23 percent of total inclusive wealth declined by 30 per cent worldwide in the last two decades.

Which of the following is the most crucial inference from the above passage?

- (a) More emphasis should be laid on the development of natural capital
- (b) The growth driven by GDP only is neither desirable nor sustainable
- (c) The economic performance of the countries of the world is not satisfactory
- (d) The world needs more human capital under the present circumstances

### [Passage 6]

By 2020, when the global economy is expected to run short of 56 million young people, India, with its youth surplus of 47 million, could fill the gap. It is in this context that labour reforms are often cited as the way to unlock double-digit growth in India. In 2014, India's labour force was estimated to be about 40 per cent of the population, but 93 per cent of this force was in unorganized sector. Over the last decade, the compound annual growth rate (CAGR) of employment has slowed to 0.5 per cent, with about 14 million jobs created during last year when the labour force increased by about 15 million.

Which of the following is the most rational inference from the above passage?

- (a) India must control its population growth so as to reduce its unemployment rate
- (b) Labour reforms are required in India to make optimum use of its vast labour force

productively

(c) India is poised to achieve the double-digit growth very soon(d) India is capable of supplying skilled young people to oil countries

### [Passage 7]

The very first lesson that should be taught to us when are old enough to understand it, is that complete freedom from the obligation to work is unnatural, and ought to be illegal, as we can escape our share of the burden of work only by throwing it on someone else's shoulders. Nature ordains that the human race shall perish of famine if it stops working. We cannot escape from this tyranny. The question we have to settle is how much leisure we can afford to allow ourselves.

The main idea of the passage is that

- (a) it is essential for human beings to work
- (b) there should be a balance between work and leisure



- (c) working is a tyranny which we to face
- (d) human's understanding of the nature of work is essential [Passage 8] There is no harm in cultivating habits so long as they are not injurious. Indeed, most of us are little more than bundle of habits. Take away our habits and the residuum would hardly be worth bothering about. We could not get on without them. They simplify the mechanism of life. They enable us to do a multitude of things automatically, which, if we had to give fresh and original thought to them each time, would make existence an impossible confusion.

The author suggests that habits

- (a) tend to make our lives difficult
- (b) add precision to our lives
- (c) make it easier for us to live
- (d) tend to mechanize our lives

#### [Passage 9]

We have hard work ahead. There is no resting for any of us till we redeem our pledge in full, till we make all the people of India what destiny intends them to be. We are citizens of a great country, on the verge of bold advance, and we have to live up to that high standard. All of us, to whatever religion we may belong, are equally the children of India with, equal rights, privileges and obligations. We cannot encourage communalism or narrow-mindedness, for no nation can be great whose people are narrow in thought or action.

The challenge the author of the above passage throws to the public is to achieve

- (a) a high standard of living, progress and privileges
- (b) equal privileges, fulfilment of destiny and political tolerance
- (c) spirit of adventure and economic parity
- (d) hard work, brotherhood and national unity

# [Passage 10]

"The individual, according to Rousseau, puts his person and all his power in common under the supreme direction of the General Will and in our corporate capacity we receive each member as an indivisible part of the whole."

In the light of the above passage, the nature of General Will is best described as

- (a) the sum total of the private wills of the individuals
- (b) what is articulated by the elected representatives of the individuals
- (c) the collective good as distinct from private wills of the individuals
- (d) the material interests of the community

#### [Passage 11]

In a democratic State, where a high degree of Political maturity of the people obtains, the conflict between the will of the sovereign law-making body and the organized will of the people seldom occurs.

What does the above passage imply?

- (a) In a democracy, force is the main phenomenon in the actual exercise of sovereignty
- (b) In a mature democracy, force to a great extent is the main phenomenon in the actual exercise of sovereignty
- (c) In a mature democracy, use of force is irrelevant in the actual exercise of sovereignty
- (d) In a mature democracy, force is narrowed down to a marginal phenomenon in the actual exercise of sovereignty

## [Passage 12]

A successful democracy depends upon widespread interest

and participation in politics, in which voting is an essential part. To deliberately refrain from taking such an interest, and from voting, is a kind of implied anarchy, it is to refuse one's political responsibility while enjoying the benefits of a free political society.

This passage relates to

- (a) duty to vote
- (b) right to vote
- (c) freedom to vote
- (d) right to participate in politics

#### [Passage 13]

In a free country, the man who reaches the position of leader is usually one of outstanding, character and ability. Moreover, it is usually possible to foresee that he will reach such a position, since early in life one can see his qualities of character. But this is not always true in the case of a dictator; often he reaches his position of power through chance, very often through the unhappy state of his country.

The passage seems to suggest that

- (a) a leader foresees his future position
- (b) a leader is chosen only by a free country
- (c) a leader must see that his country is free from despair
- (d) despair in a country sometimes leads to dictatorship

# [Passage 14]

The greatest blessing that technological progress has in store for mankind is not, of course, an accumulation of material possessions. The amount of these that can be effectively enjoyed by one individual in one lifetime is not great. But there is not the same narrow limit to the possibilities of the enjoyment of leisure. The gift of leisure may be abused by people who have had no experience of making use of it. Yet the creative use of leisure by a minority in societies has been the mainspring of all human progress beyond the primitive level

With reference to the above passage, the following assumptions have been made:

1.People always see the leisure time as a gift and use it for acquiring more material possessions.

2.Use of leisure by some people to produce new and original things has been the chief source of human progress.

Which of these assumptions is/are valid?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

#### [Passage 15]

There is more than a modicum of truth in the assertion that "a working knowledge of ancient history is necessary to the intelligent interpretation of current events". But the sage who uttered these words of wisdom might well have added something on the benefits of studying particularly the famous battles of history for the lessons they contain for those of us who lead or aspire to leadership. Such a study will reveal certain qualities and attributes which enabled the winners to win—and certain deficiencies which caused the losers to lose and the student will see that the same pattern recurs consistently, again and again, throughout the centuries.

With reference to the above passage, the following assumptions have been made:

1.A study of the famous battles in history would help us



understand the modern warfare.

2.Studying the history is essential for anyone who aspires to be a leader.

Which of these assumptions is/are valid?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

# SOLUTION

01:

02:

If we sum up the passage in our language it basically says that climate change will lead to resource crunch, this crunch would lead to conflicts and that many identity or ideology based conflicts are in fact conflicts engenders by resource scarcity. Now let us evaluate each option:

- (a) Resource-based conflicts are always politically motivated The passage, in fact, contends just the opposite i.e. many politically palatable conflicts are, in truth, resource-based.... OUT
- (b) There are no political solutions to resolve environmental and resource-based conflicts....The passage is talking about the problem and not the solution and as such is not asserting whether there can be any political situation to the looming crisis.....OUT
- (c) Environmental issues contribute to resource stresses and political conflicts...This is exactly how we summed-up the passage and is indeed the needed implication....ANSWER
- (d) Political conflicts based on identity or ideology cannot be resolved.....The passage is not about whether and how political conflicts can be resolved...OUT

Again summing-up the passage – we should take wise consul, then take a resolution and stand our ground. If we keep vacillating we will never reach anywhere.

Now let us evaluate the options:

- (a) we should first consult wisely and then resolve firmly...YES, it is a contender for answer choice but let us go on with other options first.
- (b) we should reject suggestions of friends and remain unchanged....The passage is about our ability to stay focused and not about rejecting the suggestions of friends. In fact rejecting a suggestion just for the sake of it might be counterproductive as it may be a wise suggestion.
- (c) we should always remain broad-minded......lt is not really clear what the option means by being 'broad-minded' so this option can be avoided at this stage.
- (d) we should be resolute and achievement-oriented....YES, this is another contender for the answer choice and but compared with option (a), we see that what option (a) says is stated very clearly in the passage and thus it should be preferred over option (d).

Hence option (a) should be marked as answer choice as the most appropriate among the options given.

03:

The passage asks for the most crucial massage. As we can see that the passage goes on to lament the conditions in the Arctic and closes the passage with the assertion that these conditions threaten the food chain atop which sits the polar bear. Basically the passage was a built-up to drive home the point that polar bears are at risk due to conditions that Arctic

now faces. Now let us evaluate the options:

- (a) Climate change has caused Arctic summer to be short but temperature to be high...The passage does talks about the havoc that climate change is wreaking in the Arctic region but that is not the most crucial message. The whole revelation about increasing melt and delayed winter freeze is to drive home the point of its effect on the food chain in Arctic and thus this, in itself, is not the most crucial message of the passage......OUT
- (b) Polar bears can be shifted to the South Pole to ensure their survival......This is one-of-a-kind solution for the survival of the Polar bears but this is not what the passage proffers. The passage is not even discussing any solution, plausible or adventurous.....OUT
- (c) Without the presence of polar bears, the food chains in Arctic region will disappear....Again the passage is not discussing the effect of presence or absence of Polar bear on the Arctic food chain.....OUT
- (d) Climate change poses a threat to the survival of polar bears....This is the most plausible among the options given that qualifies as the most crucial message of the passage as it syncs with what the passage eventually leads to.....ANSWER

Let us evaluate the options:

- (a) The ideas of purity and pollution are so deep-rooted that they cannot be removed from the minds of the people....If the passage were to suggest that ideas of purity and pollution, arguably the reason behind people's preference for open defecation, are so entrenched that they cannot be altered then it shall not suggest remedy to bring out behavioral changes in people....OUT
- (b) People have to perceive toilet use and pit-emptying as clean and not polluting .....This is indeed the message of the passage that we have being about a change in the perception of the people and make them see toilet use and pit-emptying as clean.......ANSWER
- (c) People cannot change their old habits.....If the passage meant that people cannot change their old habits it would not go on to suggest that we should counter the people's perceived notions to bring about a change in their preference for open defecation...OUT
- (d) People have neither civic sense nor sense of privacy.......

  The passage is not a commentary on the civic sense of the people and is rather in the nature of trying to figure out the reason behind the preference for open defecation......OUT 05:

Let us evaluate the options for the crucial inference of the passage. But before that, let us sum-up the passage: GDP driven growth – inequity – harming inclusive wealth. Now let us get back at the options:

- (a) More emphasis should be laid on the development of natural capital.....Where is the passage making any such suggestion?....OUT
- (b) The growth driven by GDP only is neither desirable nor sustainable.....This can be inferred from the passage as the passage mentions that GDP driven growth is harming inclusive wealth like human and natural capital. And thus we can infer that only GDP driven growth is undesirable....ANSWER
- (c) The economic performance of the countries of the world is not satisfactory....The passage says GDP grew by 50 percent.



If that is not satisfactory then what is?....OUT

(d) The world needs more human capital under the present circumstances...Human capital already stands at 57 percent and there is no suggestion in the passage that we need any more of it....OUT

06:

The passage, in our words, can be re-written as – a shortage of labour force is imminent and if India wants to tap into this opportunity with its young labour force, labour reforms are a necessity. Everything else is customary paraphernalia to underscore this suggestion.

Now let us evaluate the options and check which one comes closest to our understanding of the passage:

- (a) India must control its population growth so as to reduce its unemployment rate...Passage is about labour reforms and not population control.....OUT
- (b) Labour reforms are required in India to make optimum use of its vast labour force productively...This is what gels well with our understanding of the passage...ANSWER
- (c) India is poised to achieve the double-digit growth very soon.....Passage suggests that India can achieve double-digit growth if we take care of labour reforms and not that such growth is automatic and imminent.....OUT
- (d) India is capable of supplying skilled young people to oil countries.....Supplying young people to other countries? And oil countries in specific??....OUT

07:

As we understand it, the passage suggests that we should not succumb to ergophobia (aka abnormal fear or aversion to work). We have to ensure that we maintain a healthy balance between work and leisure. And that work-leisure balance is the main idea of the passage is corroborated by the last statement which ends the passage by throwing a challenge to identify how much leisure can be allowed. Now let us evaluate the options:

- (a) it is essential for human beings to work...YES, this is an answer-contender
- (b) there should be a balance between work and leisure.....YES, again an answer-contender. Rather a more potent answer contender as the passage ends with a call to limit leisure to healthy proportion.
- (c) working is a tyranny which we to face....The passage has used nature's tyranny as a simile to drive home the point that we must work and this is not the main idea of the passage.. OUT
- (d) human's understanding of the nature of work is essential... The passage is not about the understanding of nature of work but about its necessity...OUT

Thus between option (a) and option (b), option (b) seems to be more appropriate as it combines both leisure and work, the two themes touched upon in the passage.

08:

Let us evaluate the options:

- (a) tend to make our lives difficult...The passage suggests just the opposite...OUT
- (b) add precision to our lives.....The passage talks about making our lives easy and not precise...OUT
- (c) make it easier for us to live...This is definitely suggested in the passage in the statement, They simplify the mechanism of life....YES...but before locking it as answer we will also look at

option d

(d) tend to mechanize our lives...The passage does mentions that habits enable us to handle several chorus automatically but it does not suggest that habits make our life mechanical which is sort of a pessimistic view of the author's view and the passage does not seem to be a pessimistic take on habits.... OUT

09:

In first glance, the passage seems to be some kind of exhortation by the author to work for the achievement of the high ideals. Now let us evaluate the options:

- (a) a high standard of living, progress and privileges....The tone and tenor of the exhortation suggests that is not about standard of living but is about greater things...OUT
- (b) equal privileges, fulfilment of destiny and political tolerance.....privilege and political tolerance is not what the challenge is about. The author does use the word destiny but the usage appears to be more figurative in the sense that people should achieve what they are capable of....OUT
- (c) spirit of adventure and economic parity....spirit of adventure? The passage does not exhort people to become adventurous...OUT
- (d) hard work, brotherhood and national unity....This gels most with the tone of the passage...ANSWER

10:

In common parlance, the passage means, individuals are part of a whole which is guided by the 'General Will' or, in more general terms, by the collective good that overrides the individual good. Hence the answer option is option (c).

(c) the collective good as distinct from private wills of the individuals

11:

A tangential look at the option leads to the consternation about what is the relevance of words like 'force' and 'sovereignty' which find no mention at all in the passage. But if we read the passage again and try to connect it with the options, we realize that the passage is really about the fact that conflict seldom occurs in mature democracy and the use of 'force' is minimal and yet again the force is not obliterated completely. Now under the aegis of our such mature understanding of the passage let us evaluate the options:

- (a) In a democracy, force is the main phenomenon in the actual exercise of sovereignty...force as main phenomenon?...OUT
- (b) In a mature democracy, force to a great extent is the main phenomenon in the actual exercise of sovereignty...force to great extent?...OUT
- (c) In a mature democracy, use of force is irrelevant in the actual exercise of sovereignty...force is irrelevant?..OUT
- (d) In a mature democracy, force is narrowed down to a marginal phenomenon in the actual exercise of sovereignty... force is there but is minimal...ANSWER

12:

The passage is in the form of a commentary on the people who take democracy for granted and shy away from their responsibility and duty to vote to ensure a healthy vibrant democracy. Here there is no need to evaluate each option separately and the answer is clearly option (a).

(a) duty to vote...ANSWER

13:

Our understanding of the passage: leader show signs from



childhood while dictators may be incidental.

Now lets us evaluate the options:

- (a) a leader foresees his future position.....The passage does not talk about the clairvoyant skills of a leader...OUT
- (b) a leader is chosen only by a free country.....The passage is not discussing who chooses a leader and who chooses a dictator...OUT
- (c) a leader must see that his country is free from despair.... The passage is not about what a leader should or should not do...OUT
- (d) despair in a country sometimes leads to dictatorship.... This gels really well with the passage which suggests that dictatorship is often result of despairing conditions of a country...ANSWER

14:

Our reading of the passage is: material possessions is not everything as no one can have every material possession and still enjoy it. But the possibility to enjoy leisure is unbounded. And during this leisure time, a minuscule population gets sucked up in creative and original pursuits that engender human advancement.

Now if we evaluate the two assumptions we can see that

the word 'always' makes the assumption one a sweeping generalisation and is thus out.

Assumption 2 is almost verbatim from the passage and is thus valid. So the answer option is (b):

(b) 2 only

15:

Here we are evaluating the validity of the assumptions made. Now, see that eventually assumptions may or may not come out to be true but we need to only check whether we can make these assumptions from the passage or not without bothering about their eventual outcome. For example, if we consider the second assumption, we cannot discard it by countering it by claiming that it is not true that every leader must study history but we can certainly say from the passage that for an aspiring leader a study of history is essential! Did that make sense? I hope it did.

As for the first assumption, the passage does not make out a case suggesting that studying past battle shall help us understand modern warfare.

Hence answer is

(b) 2 only

SPACE FOR ROUGH WORK				



Head Office: Vedhik IAS Academy Mercy Estate, MG Road, Ravipuram, Ernakulam-682 015, Corporate office: Vedhik IAS Academy amkalp Bhawan, Plot No.

Samkalp Bhawan, Plot No.15, Sector 4, Rama Krishna Puram, New Delhi,Delhi-110022 Regional office

**Vedhik IAS Academy** 202, Raheja Chambers, 12, Museum Road. Bangalore -560001. Karnataka, India. GCC Office:

Bobscoedu,

Bobsco Trading & Contracting Co. W. L . L Office 22, Dream Tower 1, Road: 2701, Adliya, Kingdom of Bahrain

www.bobscoedu.com











# **ETHICS AND MORALITY IN LIFE**

Ethics help in answering the questions of human morality by providing a set definition for the concepts of right and wrong, good and evil, vice and virtue and so on. When in doubt we always think about the moral and ethical values we have been taught since our early years and almost immediately get clarity of thoughts.

While the ethics have been set for the well-being of the society and the overall good of the people living there, these can even be a cause of unhappiness for some. This is because people have gone overboard with these. For instance, in earlier times women in Indian culture were seen as home makers. They were not allowed to go out and work or question the decisions of the male members of the family. While these days women are being given freedom to go out and work and take various decisions on their own, many people still stick to the ethics and norms defined centuries back. They still believe that a woman's place is in the kitchen and that it is ethically wrong for her to go out and work.

So while ethics and moral values must be embedded in people for the smooth functioning of the society and must be redefined from time to time for the proper growth and development of individuals as well as the society as a whole. Introduction

The term ethics has been derived from the Ancient Greek word Ethos that means habit, custom or character. This is what ethics are in the real sense. A person's habits and character speak volumes about the ethical values he/she possesses. In other words, a person's ethical values define his character. We are all told as to what is good and what is bad based on the ethical norms set by the society.

# THE PHILOSOPHY OF ETHICS

The philosophy of ethics is deeper than it appears on the surface level. It is divided into three arenas. These are the normative ethics, applied ethics and meta-ethics. Here is a brief look at these three categories:

- Normative Ethics: It deals with the content of moral judgement. It analyses the questions that spring up while considering how to act in different situations.
- Applied Ethics: This category analyses the norms set about the way a person is supposed to or rather allowed to behave in a given situation. It deals with controversial topics such as animal rights and nuclear weapons.
- Meta- Ethics: This field of ethics questions how we understand the concept of right and wrong and what all we know about it. It basically looks at the origin and fundamental meaning of the ethical principles.

Ethics are defined as moral principles that describe the norms of good and bad and right and wrong. As per French Author, Albert Camus, "A man without ethics is a wild beast loosed upon this world".

# **TYPES OF ETHICS**

Ethics have broadly been classified into four different categories. Here is a brief look at these:

 Duty Ethics: This category associates ethics with religious beliefs. Also known as deontological ethics, these ethics categorize behaviors and acts as being right or wrong. People are expected to act as per them to fulfill their duty. These ethics are taught to us from the very beginning.

- Virtue Ethics: This category relates ethics with a person's
  personal behaviour. It focuses on a person's moral values,
  the way he thinks and the kind of character he bears.
  Virtue ethics are also embedded in us since our childhood.
  We are taught what is right and wrong even though there
  is no logic behind it in many cases.
- Relativistic Ethics: As per this, everything is equal. Each
  individual has the right to analyze the situation and form
  his own version of right and wrong. The advocates of
  this theory strongly believe that what may be right for
  one person may not be correct for the other. Also what
  is correct in certain situation may not be appropriate in
  the other.
- Consequential Ethics: During the age of Enlightenment, there was a quest for rationalism. This category of ethics is associated with that quest. As per this ethical theory, the outcome of an individual's behaviour determines the wrongness or rightness of his behaviour.

#### **ETHICS DIFFER IN DIFFERENT CULTURES**

As per some, ethics are the values that must be taught since childhood and that one must strictly abide by them. A person who defies these is considered to be ethically wrong. Some people are quite rigid about following the ethical codes. They constantly judge others based on their behaviour. On the other hand, there are people who are flexible about the same and believe that these can be altered to some extent based on the situation.

Now, the basic code of conduct and ethics expected from individuals is almost the same across nations. However, there may be certain ethical behaviours that may be right as per certain cultures but not accepted in others. For instance, in the Western countries women have the freedom to wear any kind of dress they want but in many of the eastern countries wearing short dresses is considered ethically wrong.

Ethics define the way a person should behave in any given situation. They are embedded in us from our childhood and almost every decision we make in our life is largely influenced by our ethical values. A person is considered good or bad based on his/ her ethical conduct.

Ethics hold immense importance in both our personal and professional life. A person who holds high ethical values, truly believes in them and follows them would be much more sorted as compared to those who follow the set ethical norms but do not really believe in the same. Then, there is yet another category of people – those who do not believe in the ethical norms and thus do not follow them. These may be a cause of disruption of peace in the society.

## IMPORTANCE OF ETHICS IN OUR PERSONAL LIFE

The minds of the people are conditioned as per the accepted moral and ethical values existent in the society they are brought up in. The importance of ethics cannot be undermined. A child needs to be taught what behaviour is accepted in the society and what is not from the very beginning in order for him to live in harmony with the society. This system has basically been put in place so that people know how to act right and maintain peace and harmony in the society.

Taking decisions becomes easier for people as the right and wrong has already been defined. Imagine if the right





doings and wrong doings were not defined, everyone would act as per their will based on their own versions of right and wrong. This would make things chaotic and give rise to crime.

#### IMPORTANCE OF ETHICS IN OUR PROFESSIONAL LIFE

Maintaining ethical conduct is extremely important at work place. Besides the basic ethics and values defined by the society, every organization determines its set of ethical values. Every individual working in that organization must follow them to maintain the code of conduct. Some examples of common ethical codes set by organizations can be to treat employees fairly, deal with honesty, never leak the company's inside information, respect your co-workers and if something appears wrong with the company's management or some employee it must be addressed politely and directly rather than creating unnecessary issue about the same.

Setting these workplace ethics helps in smooth functioning of the organization. Any employee seen violating the ethical code is issued warning letter or penalized in different ways based on the severity of the issue.

In case of absence of the set ethical codes in an organization, things are likely to become chaotic and unmanageable. It is thus essential for every organization to set these norms. Ethical codes in an organization do not only help in ensuring good work environment but also teach the employees as how to deal with the clients in different situations.

A company's ethical code basically echoes its core values and responsibilities.

# **ETHICS VS MORALS**

Ethics and moral values are usually used interchangeably. However, there is a difference between the two. While ethics are the standards set by the culture one follows, the society one dwells in and the organization one works in to ensure that a person behaves righteously, moral values on the other hand are embedded in a person's behaviour and define his character.

Ethics are based on external factors. For instance, women in the Middle-Eastern culture are required to cover themselves from head to toe. In certain middle-eastern countries they are not allowed to work or even go out without being accompanied by a man. If a woman tries to challenge this norm, she is considered to be ethically wrong. Ethical behaviour is also set based on a person's profession. For instance, doctors, policemen and teachers are expected to behave in a certain manner to fulfil their professional duty. They cannot go against the ethical code set for them.

The moral values of a person are mainly influenced by his culture and the family atmosphere. These are the principles he creates for himself. These principles define his character and he takes his personal decisions based on these. While the ethical code one is expected to follow may vary based on the organization he works with and the society he lives in, the moral values of a person remain the same throughout. However, certain events in a person's life may change his beliefs and he may imbibe different values based on the same.

# HOW ARE ETHICS AND MORAL VALUES RELATED TO **EACH OTHER?**

As mentioned above, ethics are imposed on us by the society and moral values are our own understanding of what is right and what is wrong. These are closely related to each other. An individual whose moral values match the ethical standards set by the society is considered to have high moral values. For instance, a man who respects his parents and obeys everything they say, visits the temple daily, gets back home on time and spends time with his family is said to have good moral values.

On the other hand, an individual who may not be religiously inclined, may question what his parents say based on logic, hang out with friends and return late from the office may be considered to be one with low moral values as he does not conform to the ethical code set by the society. Even if this person is not harming anyone or is not doing anything wrong he would still be considered one with low morals. While this may not be so in every culture but in India people are judged based on such behaviour.

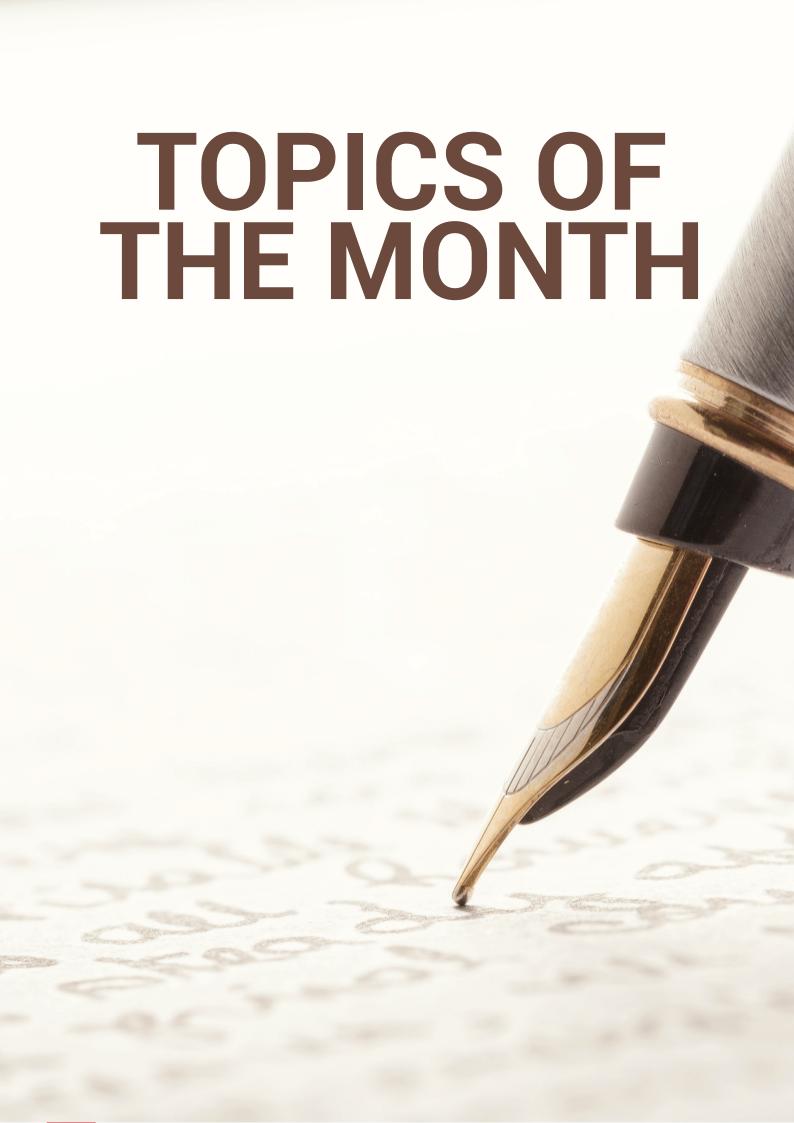
#### **CONFLICT BETWEEN MORAL VALUES AND ETHICS**

At times, people are caught between their moral values and the defined ethical code. While their moral values may stop them from doing something, the ethical code set by their profession might require them to do so. For instance, the corporate culture these days is such that you may be required to have a drink or two to build PR during the official parties. While it is alright as per the ethical code of the organization and may even be required at times to maintain relations with the clients, a person's moral values may suggest him to do otherwise.

While the ethical realists believe that individuals realize ethical truths that already exist, ethical non-realists, on the other hand, are of the opinion that individuals explore and invent ethical truths on their own. Both have their own arguments to back their opinions. Most people blindly follow the ethics defined by the society. They stick to habits that are considered good as per the ethical norms and refrain from indulging in those that are considered to break these norms. However, there are some who question these values and go by what they think is right or wrong. There are various schools of thoughts that have their own versions of ethics. Many people go by the norms of right and wrong others make their own version.

Setting an ethical code for the society as well as at work places and other institutions is essential. It helps the people recognize as to what is right and what is wrong and encourages them to behave the right way.

Ethical codes are set to ensure peace and harmony in the society. However, these must not be blindly passed on from generation to generation. This is because what may be right during one age or culture might not be appropriate when applied to another.







HISTORY REPEATS ITSELF, FIRST AS A TRAGEDY, SECOND AS A FARCE

- DR. Alexander Jacob IPS

MATHEMATICS IS THE MUSIC OF REASON
-DR. Babu Sebastian

NOT ALL WHO WANDER ARE LOST
-DR. G. Prasanna Kumar IAS

A SOCIETY THAT HAS MORE JUSTICE IS A SOCIETY THAT NEEDS LESS CHARITY
-Mr.Solomon John



# HISTORY REPEATS ITSELF, FIRST AS A TRAGEDY, SECOND AS A FARCE

'The farther backward you can look, the farther forward you are likely to see.'

Winston S. Churchi

In the Indian context, Marx's statement "History repeats itself, first as tragedy, second as farce" holds immense relevance. India is a nation with a rich and complex history, with various cycles of events repeating themselves over time.

Communal riots have been a recurring problem in India, both before and after independence. These riots are conflicts between religious communities, and they often result in violence, property damage, and loss of life. The nature and intensity of communal riots have varied in pre- and post-independence India. These riots were often triggered by religious or political factors, such as the demand for a separate Muslim homeland or the assassination of a prominent political leader. There were several communal riots that took place in pre-independent India, fueled by religious, linguistic and ethnic differences. The Moplah Rebellion was a violent rebellion that took place in 1921 in the Malabar region of Kerala. The rebellion was led by Muslim tenants against their Hindu landlords and the British government. The rebellion resulted in the deaths of around 2,000 people, mostly Hindus. The Direct Action Day was a call for a communal strike by the Muslim League on 16 August 1946. It was observed as a "Day of Action" by the Muslim community to demand the creation of a separate Muslim state of Pakistan. The strike led to widespread communal violence, especially in the city of Calcutta (present-day Kolkata), resulting in the deaths of around 4,000 people. The Punjab Riots took place in 1947 during the partition of India and Pakistan. The riots were fueled by religious tensions between the Hindu, Muslim, and Sikh communities. The riots resulted in the deaths of thousands of people, with estimates ranging from 200,000 to 2 million. There have been several instances of communal riots that have taken place in India even after independence.

Gujarat Riots, 2002 communal violence broke out in Gujarat following the burning of a train carrying Hindu activists in Godhra. The riots lasted for several weeks, resulting in the deaths of over 1,000 people Muslims. Delhi Riots in 2020, communal riots broke out in several areas of Delhi, primarily between Hindus and Muslims. The riots were triggered by protests against the Citizenship Amendment Act (CAA) and resulted in the deaths of around 50 people. Mumbai Riots in 1992-1993, communal riots broke out in Mumbai after the demolition of the Babri Masjid in Ayodhya. The riots lasted for several months and resulted in the deaths of over 900 people. Sikh riots in 1984 were triggered by the assassination of Prime Minister Indira Gandhi. After India gained independence in 1947, the country continued to witness communal riots. These riots have been caused by a variety of factors, including religious differences, political tensions, and socio-economic disparities.

India faced several economic crises during the preindependence period, some of which were a result of British colonial policies. The Great Famine of 1876-78 was one of the worst famines in India's history, which occurred during the British colonial rule. The famine was caused by a combination of factors, including drought and the export of food grains from India to Britain. It is estimated that between 5.5 million and 10 million people died due to the famine. The Bengal Famine of 1943 During World War II, India faced another severe famine in Bengal, which was exacerbated by British policies such as the export of food grains and the diversion of resources to the war effort. It is estimated that between 2.1 million and 3 million people died due to the famine.

The Great Depression of 1929 had a severe impact on India's economy. The prices of agricultural products fell, leading to a decline in the income of farmers. The depression also led to a decline in international trade, which affected India's exports and industrial production. The Partition of India in 1947 had a significant impact on the country's economy. The partition led to the division of industries, railways, and other resources between India and Pakistan. The migration of people also resulted in the displacement of skilled workers and entrepreneurs, leading to a decline in industrial production. India has faced several economic crises after independence, some of which were caused by internal factors and others by external factors. Balance of Payments Crisis (1991) was a severe balance of payments crisis, caused by a combination of factors, including a large trade deficit, high oil prices, and a decline in remittances. The crisis forced India to seek a loan from the International Monetary Fund (IMF) and implement economic reforms, including liberalization, privatization, and globalization. Inflation Crisis (2013-14), India faced a high inflation crisis, with consumer price inflation exceeding 10%. The inflation was caused by a combination of factors, including a decline in the value of the Indian rupee, high food prices, and supply-side constraints. The crisis forced the government to implement monetary and fiscal measures to control inflation. Agricultural Crisis in India's agricultural sector in recent years due to factors such as declining farm incomes, low productivity, and climate change. The crisis has resulted in farmers' protests and demands for better prices and support from the government.

Covid-19 Pandemic had a severe impact on India's economy, causing a decline in economic growth, loss of jobs, and reduced consumer spending. The pandemic also highlighted structural weaknesses in India's healthcare system and led to a humanitarian crisis, with millions of people facing hunger and poverty.

Ideological repetition refers to the continuation of certain ideas and beliefs before and after a significant event, such as independence. In the context of India, there are some ideological repetitions that can be observed before and after independence. The idea of Indian nationalism was prominent before independence, as leaders like Mahatma Gandhi and Jawaharlal Nehru emphasized the need for an independent India that was free from British rule. The idea of secularism was also a part of the pre-independence ideology, as leaders like Nehru advocated for a secular India that would not discriminate on the basis of religion.

The idea of Indian nationalism continued after independence, as the country sought to establish itself as a sovereign nation and maintain its territorial integrity. The idea of secularism also continued after independence, as it was enshrined in the Indian Constitution and remains an important principle in Indian society. The idea of social justice



also continued after independence, as the government has implemented various policies and programs to address the social and economic inequalities that exist in Indian society. India has a long and complex history of war, both before and after its independence from British rule in 1947. The Anglo-Mysore Wars (1767-1799) is a series of four wars fought between the British East India Company and the Kingdom of Mysore, led by Tipu Sultan. The Anglo-Maratha Wars (1775-1818) is a series of five wars fought between the British East India Company and the Maratha Empire. The First Anglo-Sikh War (1845-1846) is a war fought between the British East India Company and the Sikh Empire. The Indian Rebellion of 1857 also known as the Sepoy Mutiny, this was a major uprising against British rule in India, which ultimately failed but had lasting impact.

The India-Pakistan War of 1947 was the first of several wars fought between India and Pakistan over the disputed territory of Kashmir. India-China War of 1962 was a border conflict between India and China that resulted in China gaining control of Aksai Chin. The India-Pakistan War of 1971 led to the creation of Bangladesh, as well as India's victory over Pakistan. Karqil War (1999) is a limited war fought between India and Pakistan over the Kargil district in Kashmir. India-China Border Conflict (2020) is a border dispute between India and China that resulted in a violent clash in the Galwan Valley, resulting in the deaths of 20 Indian soldiers. There have been many wars in India's history, both before and after independence, the causes and contexts of these conflicts have varied widely. However, it is important to remember the human cost of these conflicts and work towards peaceful resolution of disputes in the future.

Caste-based discrimination has been a long-standing issue in India, both before and after its independence from British rule in 1947. The practice of untouchability was a severe form of caste-based discrimination, whereby certain castes were considered "untouchable" and subjected to extreme social and economic marginalization. Social reform movements such as the Brahmo Samaj and Arya Samaj emerged in the 19th century, seeking to challenge the caste system and promote equality. The Constitution of India, includes provisions prohibiting caste-based discrimination and ensuring equal opportunities for all citizens. The Indian government has implemented a reservation system, whereby a certain percentage of government jobs, educational institutions, and political positions are reserved for members of historically disadvantaged castes and tribes. Antidiscrimination laws have been enacted to address castebased discrimination, including the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989.

Despite these measures, caste-based discrimination continues to be a pervasive issue in India, affecting millions of people from historically disadvantaged castes and tribes. The Peshtigo Forest fire is often referred to as the deadliest in U.S. history, as it claimed the lives of over 1,500 people. The fire was caused by a combination of drought, high winds, and human activities such as logging and clearing land for farming. The Great Hinckley Forest fire in Minnesota was caused by a combination of dry weather, high winds, and sparks from logging operations. The fire killed over 400 people and destroyed much of the town of Hinckley. The Black Saturday Bushfires (2009) wildfires in Australia were caused by a combination of extreme heat, drought, and human activities such as arson and negligence. The fires killed 173 people and destroyed over 2,000 homes.

The Oil spill incidence Amoco Cadiz Oil Spill (1978) a supertanker, ran aground off the coast of Brittany, France, spilling more than 200,000 tons of crude oil into the ocean. The spill caused significant environmental damage and killed thousands of marine animals. Gulf War Oil Spill (1991) during the Persian Gulf War, Iraqi forces intentionally released approximately 240 million gallons of crude oil into the Persian Gulf, causing one of the largest oil spills in history. The oil polluted more than 600 miles of coastline and killed thousands of marine animals. An explosion on the Deepwater Horizon oil rig (2010) in the Gulf of Mexico caused more than 200 million gallons of crude oil to spill into the ocean over the course of several months. The spill killed 11 people and caused significant environmental damage to the Gulf Coast.

The recurrence of past mistakes is a complex occurrence that brings up inquiries about human nature and our ability to learn and progress. It implies that our aptitude to identify patterns and derive lessons from experience is not entirely dependable, and we have a tendency to replicate the same errors, even with the advantage of hindsight.

These inquiries highlight essential philosophical queries regarding the essence of knowledge and wisdom. Is wisdom merely a product of experience, or is it a more elusive attribute that requires profound contemplation and understanding? Can we gain knowledge from the mistakes of others, or do we need to encounter the outcomes of our actions directly to truly comprehend them?

'Study the past and you would define the future.'
Confucius





# MATHEMATICS IS THE MUSIC OF REASON

Pure mathematics is, in its way, the poetry of logical ideas.

— Albert Einstein

Mathematics, often described as the universal language, has been an essential part of human civilization for millennia. It is more than just a subject or a tool for solving practical problems; it is, in essence, the music of reason. Through the exploration of historical developments, the beauty of mathematical concepts, and their diverse applications, we will witness how mathematics orchestrates the symphony of reason in our world.

At its core, mathematics is a system of abstract concepts and symbols used to describe and quantify the properties of the world around us. From counting stones to calculating the orbits of planets, mathematics has played a pivotal role in human development. But what makes mathematics uniquely suited to be the music of reason?

The arrangement of notes in music and symbols in mathematics shares a common thread. Just as notes form harmonious rhythms in music, symbols in mathematics create logical structures. Music connects with emotions, while mathematics delves into objective truths, yet both reveal our innate desire to find patterns and meaning in the world, transcending barriers of interpretation with their respective languages of sound and reason.

It transcends cultural and linguistic boundaries. This universality stems from the objectivity of mathematical truths. Unlike many other fields of human knowledge, mathematics relies on pure logic and deduction. Two plus two equals four, not because someone says so, but because it is a logical consequence of the axioms and rules of arithmetic.

Unparalleled precision and clarity are provided by mathematics in its expressions. The unambiguous communication of ideas is facilitated, allowing effective collaboration among scientists, engineers, and thinkers from different backgrounds. A common language is served by mathematical notation, conveying complex concepts with conciseness and accuracy.

The appreciation of mathematics as the music of reason can be achieved by delving into its historical development. Over centuries, mathematical ideas have evolved, shaped by the contributions of countless mathematicians and cultures.

The 20th century witnessed a mathematical revolution of unprecedented magnitude. The advent of computers expanded the scope of mathematical exploration, leading to the emergence of computational mathematics.

Physics, the study of the fundamental laws governing the physical world, relies heavily on mathematics. Albert Einstein's theory of relativity, expressed through complex mathematical equations, revolutionized our understanding of space, time, and gravity. Similarly, the laws of motion formulated by Isaac Newton are described by differential equations.

Agriculture, the cultivation of the land and the production of food, relies on mathematics for precision in various aspects of crop management. The use of mathematical models to assess soil composition, weather patterns, and crop characteristics, ensuring accurate decisions for irrigation.

pest control, and overall crop health.

In agriculture, the NPK ratio in fertilizers exemplifies the marriage of science and mathematics to optimize crop growth. The NPK ratio refers to the proportion of essential nutrients: nitrogen (N), phosphorus (P), and potassium (K). The careful calculation and application of these ratios involve mathematical precision to ensure that crops receive the right balance of nutrients.

Furthermore, mathematical models play a crucial role in predicting crop growth, estimating harvest yields, and managing irrigation schedules. These models leverage mathematical equations to analyze data on factors such as weather patterns, soil moisture levels, and nutrient content. By applying mathematical principles, farmers can make informed decisions to enhance efficiency and sustainability in agricultural practices.

The practical applications of mathematics in technology and engineering further exemplify its role as the music of reason. Mathematical concepts and techniques underpin the development of innovative technologies and the design of complex engineering systems.

Engineers use math for designing structures, systems, and processes. Civil engineers calculate bridge load capacity, electrical engineers model circuits, and aerospace engineers optimize aircraft performance. In information technology, math in coding ensures efficient data transmission and error correction.

Mathematics provides a structured framework for problem-solving. It encourages logical thinking, critical reasoning, and precision. When faced with a problem, mathematicians and scientists often break it down into smaller, manageable parts and use mathematical techniques to solve each component before combining the solutions.

**Decision-making** processes various fields, such as economics, finance, and logistics, rely models evaluate on mathematical to options assess potential outcomes. These models help individuals and organizations make informed choices in a complex, data-driven world.

As we delve into this numerical philosophy, we find that mathematics not only elucidates economic phenomena but also unveils the underlying principles i.e reason that governs our collective destiny.

Gross Domestic Product (GDP) growth is like a nation's heartbeat, a mathematical pulse reflecting the vitality of its economy. The ups and downs of these numerical rhythms tell a story of collective efforts and dreams, creating a narrative that goes beyond mere digits to showcase the overall health and aspirations of a society. It's essentially a dynamic tale written in numbers that reveals the intricate interplay of economic forces and societal ambitions.

The GDP of a nation serves as a comprehensive measure of the total economic output within a given year. It encompasses the value of all goods and services produced, reflecting the overall economic activity. The growth or contraction of a nation is intricately tied to the trajectory of its GDP. Essentially, the GDP becomes a pivotal indicator,





portraying not just the monetary transactions but the broader pulse of economic health. A rising GDP often signifies prosperity, increased employment, and a thriving economy, while a decline may indicate challenges that need attention. In this way, understanding and monitoring GDP provides valuable insights into the economic well-being and progress of a nation.

In the sphere of government systems, India follows a parliamentary democratic system, employing the first-past-the-post voting (FPTP or FPP) method. Under this system, voters express their support for a single candidate, and the candidate with the most votes is declared the winner. In the parliamentary system, the president invites the party with the highest number of seats in the Lok Sabha election (for the Union government) or the party winning the most seats in the state legislative or Vidhan Sabha elections (for state government) to form the government.

This illustrates how mathematics expresses its rationale in a democratic system through the principle of majority rule, playing a crucial role in the governance of a nation.

Beyond its practical applications, mathematics deepens our understanding of the world and challenges our intellectual boundaries. It encourages abstract thinking, fosters intellectual curiosity, and enriches our lives in profound ways.

Mathematics invites us to explore abstract concepts and structures that may have no direct physical

analogy. For example, mathematician studies abstract algebraic structures, like groups and rings, which find applications in diverse areas, from cryptography to physics. Mathematics presents intellectual challenges that stimulate creativity and problem-solving skills. The pursuit of unsolved mathematical problems, known as conjectures, has inspired generations of mathematicians.

Mathematics education imparts valuable skills, such as logical reasoning and critical thinking, which extend beyond mathematical contexts. It equips individuals with the ability to analyze information, make informed decisions, and adapt to new challenges.

Mathematics, as the music of reason, resonates throughout human history, culture, and scientific discovery. Its universal language, historical development, beauty, and practical applications demonstrate its central role in our lives. From understanding the fundamental laws of the universe to solving everyday problems, mathematics empowers us to explore the depths of human knowledge and creativity.

As we contemplate the profound connection between mathematics and reason, we find that mathematics is not merely a subject in school or a tool for calculation; it is a symphony that harmonizes our understanding of the world. Its melodies echo in the equations of physics, the algorithms of computer science, the designs of engineering, the systems of governance, economic models and the patterns of nature. Mathematics is both the foundation of human knowledge and the bridge to new frontiers, inviting us to join in the eternal quest for truth and understanding.



"De not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them."





# **NOT ALL WHO WANDER ARE LOST**

The quote "Not all who wander are lost" holds profound meaning and strikes a deep chord within the heart of India. India's rich tapestry of cultures, spiritual traditions, and diverse landscapes creates a fertile ground for the exploration of purposeful wandering. Wandering in India encompasses a wide range of experiences, each deeply rooted in the country's unique history and culture. It takes on physical, spiritual, and intellectual dimensions, offering diverse paths for individuals seeking purpose and self-discovery.

Physical wandering in India often takes the form of pilgrimages, journeys to sacred sites, and explorations of the country's diverse landscapes. India's geographical and cultural diversity offers countless opportunities for those who seek adventure, spiritual growth, and a deeper connection with the land.

One remarkable example is the Char Dham Yatra, a pilgrimage that takes travellers through the sacred Hindu shrines of Yamunotri, Gangotri, Kedarnath, and Badrinath in the Himalayan region. This challenging expedition entails navigating through rough landscapes, traversing rivers, and enduring adverse weather conditions. Pilgrims undertake this journey not as aimless wanderers but as seekers of divine blessings and spiritual transformation. The physical challenges they face along the way contribute to their growth and resilience.

Spiritual and philosophical wandering is deeply ingrained in Indian culture. It involves the search for inner peace, enlightenment, and a profound understanding of one's place in the universe. Spiritual wanderers often seek guidance from gurus, engage in meditation and yoga, and explore the depths of their consciousness.

A prominent example of spiritual wandering is the life of Swami Vivekananda. He embarked on a spiritual journey across India, engaging with different spiritual traditions and seeking answers to life's fundamental questions. His wanderings eventually led him to the teachings of Sri Ramakrishna, and he went on to become a renowned spiritual leader who played a pivotal role in introducing Indian spirituality to the West.

Intellectual and artistic wandering in India encompasses the pursuit of knowledge, creativity, and the exploration of diverse perspectives. Scholars, artists, and writers often embark on intellectual journeys to deepen their understanding of India's rich heritage and contribute to its intellectual and cultural tapestry.

The renowned poet and philosopher Rabindranath Tagore was an intellectual wanderer who explored the realms of literature, music, and education. His travels, both within India and abroad, influenced his works and allowed him to connect with a global audience. Tagore's intellectual wandering shaped his perspective on education, leading to the establishment of Visva-Bharati University, which emphasized holistic learning and the fusion of Eastern and Western knowledge.

Cultural exploration through wandering is a prevalent motivation in India, a country full of traditions, languages, and art forms. Individuals often travel to different regions to immerse themselves in local customs, festivals, and cuisines. This form of wandering fosters cultural understanding and appreciation.

A prime example is the Kumbh Mela, one of the largest religious gatherings in the world. Held at the confluence of sacred rivers in India, the Kumbh Mela attracts millions of pilgrims and travellers from across the country and beyond. People gather to bathe in the holy waters, engage in spiritual discussions, and experience the cultural diversity of India. This wandering brings together people of varied backgrounds, fostering a sense of unity amid diversity.

Moreover, the wanderers have had a profound impact on the world through their diverse journeys. People like Ravi Shankar, Dr. B.R. Ambedkar, Raja Ravi Varma, Medha Patkar, and Nelson Mandela, popularized Indian culture, fought for social justice and equality, celebrated art, advocated for marginalized communities, and symbolized resilience, leaving a profound and enduring legacy in various fields.

One of the most iconic spiritual wanderers in India's history is Mahatma Gandhi. Gandhi's spiritual journey took him on a path of nonviolence, self-discipline, and social justice. His wanderings led him to understand the transformative power of truth and nonviolent resistance, ultimately shaping India's struggle for independence.

Ravi Shankar, the legendary sitar virtuoso, was deeply influenced by his wanderings and encounters with various musical traditions. His explorations of Indian classical music, combined with his collaborations with Western musicians, led to the popularization of Indian music on the global stage. Shankar's wandering was instrumental in bridging cultural divides through the universal language of music. Wandering has played a pivotal role in social change and

Wandering has played a pivotal role in social change and activism in India. Activists, reformers, and leaders have often travelled to mobilize communities, understand social issues, and advocate for change.

Dr. B.R. Ambedkar, the architect of the Indian Constitution and a champion of social justice, embarked on a lifelong journey to uplift the marginalized Dalit community. His wandering took him to different parts of India, where he witnessed the harsh realities of caste-based discrimination and untouchability. Ambedkar's wandering fuelled his commitment to social reform and the fight for equality, ultimately leading to significant legislative changes and social transformation. By witnessing the socio-economic disparities, caste discrimination, and other social issues prevalent in the country, individuals become more aware of the need for social change and justice.

Raja Ravi Varma, the renowned Indian painter, wandered through the country, capturing the beauty and diversity of Indian culture in his art. His paintings not only celebrated India's rich heritage but also introduced it to the world. Varma's wandering was a testament to the cultural enrichment that exploration can bring.

Medha Patkar, an activist and social worker, embarked on a wandering journey to rural India to understand the plight of marginalized communities affected by dam construction projects. Her experiences led to the founding of the Narmada Bachao Andolan (Save the Narmada Movement), which advocated for the rights of displaced communities. Patkar's wandering was instrumental in raising social consciousness and advocating for the rights of marginalized populations.



Nelson Mandela's life exemplifies the resilience acquired through wandering. His 27 years of imprisonment symbolised a metaphorical journey through the oppressive darkness of apartheid. Mandela emerged from this experience with an unwavering commitment to justice, equality, and reconciliation, ultimately becoming the President of South Africa and a symbol of resilience.

One of the most renowned intellectual wanderers of history is Leonardo da Vinci. His notebooks are filled with sketches, inventions, and observations on subjects ranging from anatomy and engineering to art and philosophy. Da Vinci's relentless curiosity and intellectual wandering allowed him to make ground-breaking discoveries and leave a lasting legacy that transcends time.

Charles Darwin's expedition aboard the HMS Beagle serves as a notable instance of intellectual exploration that

culminated in a more profound comprehension. Throughout his five-year voyage, Darwin recorded numerous observations that would subsequently influence the development of his ground-breaking theory of natural selection and evolution. His exploratory journeys expanded our insight into the intricate web of life on Earth, emphasizing its diversity and interrelatedness. The essence of purposeful wandering unfolds, revealing its multifaceted dimensions. From spiritual seekers to intellectual explorers, each journey, driven by unique motivations, contributes to personal growth and societal transformation. As individuals wander through physical, spiritual, and intellectual realms, they not only discover themselves but also celebrate the tapestry of diversity. These purposeful wanderings, rooted in a profound quest for understanding and meaning, affirm that in India, as in the world, not all who wander are lost.





# A SOCIETY THAT HAS MORE JUSTICE IS A SOCIETY THAT NEEDS LESS CHARITY

"Justice in the life and conduct of the State is possible only as first it resides in the hearts and souls of the citizens."
- Plato

Justice and charity are two fundamental pillars of any civilized society. While justice seeks to establish and maintain fairness, equity, and equal opportunities for all members of society, charity aims to address the immediate needs of those who are disadvantaged or suffering. In an ideal society, the prevalence of justice should reduce the need for charity, as it ensures that individuals have access to the resources and opportunities necessary for a dignified life.

Justice, at its core, is about fairness and equality. It involves the distribution of resources, opportunities, and rights in a manner that does not favour any particular group or individual over another. In a just society, the rule of law is upheld, and all members have the same access to education, employment, healthcare, and other essential services. As justice prevails, it minimizes the disparities in wealth, power, and privilege, creating a more equitable society.

One of the key aspects of justice is providing equal opportunities for all. A just society ensures that regardless of one's background, race, gender, or socioeconomic status, individuals have an equal chance to succeed. This means that individuals are not held back or disadvantaged due to circumstances beyond their control. When equal opportunities are available, people can achieve success based on their abilities and efforts rather than their starting point in life.

Justice also entails wealth redistribution to bridge the economic gap between the rich and the poor. Through progressive taxation, social welfare programs, and policies that support the vulnerable, a just society works to reduce income inequality. When wealth is more evenly distributed, fewer individuals are left in dire need, reducing the necessity for charity to fill the gaps.

In a just society, access to education and healthcare is not determined by one's ability to pay. Equal access to quality education and healthcare services ensures that everyone has a fair chance to lead a fulfilling life. This means that fewer individuals will require charitable assistance to access these fundamental services.

While justice is a noble goal, it is important to acknowledge that no society can completely eliminate all injustices. There will always be individuals who, due to unforeseen circumstances or systemic failures, find themselves in need of help. Charity serves as a safety net for those who have fallen through the cracks of a just society, providing immediate assistance and relief.

Charitable organizations play a crucial role in responding to emergencies, such as natural disasters, pandemics, and unforeseen personal crises. They provide immediate relief to those affected, offering food, shelter, and medical assistance when needed most. In a society with more justice, the frequency and severity of these emergencies may be reduced, but charity remains essential for times when justice alone cannot prevent or mitigate such events.

Certain groups in society, such as the homeless, refugees, and victims of violence, may still require charity

even in the presence of justice. Justice can provide long-term solutions to some of these problems by addressing systemic issues, but charity remains vital in the interim to alleviate suffering and protect the most vulnerable.

While justice and charity serve different purposes, they are not mutually exclusive. In fact, they can work together to create a more compassionate and equitable society. When justice is the foundation, charity can be more effective in addressing immediate needs without perpetuating dependency.

A just society empowers its citizens by providing them with the tools and opportunities needed to improve their lives. When individuals are given the means to overcome challenges and achieve self-sufficiency, they are less reliant on charity. Justice fosters a sense of self-worth and dignity, reducing the stigma often associated with receiving charitable assistance.

In a just society, charity can be more focused and strategic in its efforts. Instead of providing blanket assistance to a wide range of individuals, charitable organizations can target their resources to address specific needs or support groups that still face barriers despite the presence of justice. This allows for more sustainable solutions that address the root causes of poverty and inequality.

A society that prioritizes justice as a cornerstone can envision a future with reduced reliance on charity. While charity will always have a role in addressing immediate crises and supporting vulnerable individuals, the goal should be to minimize its necessity by creating a just and equitable society.

Investing in education is one of the most powerful ways to create a just society with reduced reliance on charity. When education is accessible and of high quality, individuals have the skills and knowledge needed to secure meaningful employment and contribute positively to society. This not only reduces poverty but also decreases the need for charitable assistance.

A just society should have robust social safety nets that provide support to those in need without stigmatization. Comprehensive healthcare, unemployment benefits, and social assistance programs can help individuals and families weather difficult times without resorting to charity. These safety nets should be designed to promote self-sufficiency and provide a bridge to economic stability.

Policies that promote economic justice, such as fair wages, progressive taxation, and worker protections, can significantly reduce income inequality. In a society where wealth is more evenly distributed, fewer individuals will require charitable assistance to meet their basic needs. Economic justice aligns with the principle that charity should not be a substitute for fair compensation and equitable opportunities.

A just society encourages active community engagement and support for one another. Building a strong sense of community can reduce isolation and loneliness, which are often factors leading to the need for charity. In



such a society, neighbors and local organizations may step in to help those facing challenges before charitable assistance becomes necessary.

Justice and charity are intertwined aspects of a well-functioning society. While charity is essential for providing immediate relief to those facing crises and vulnerabilities, justice serves as the foundation for long-term equity and fairness. A society that prioritizes justice can substantially reduce the need for charity by ensuring that all its members have equal opportunities, access to essential services, and a social safety net that supports them during challenging times.

While it may not be feasible to entirely eliminate the need for charity, the goal should be to minimize its necessity by addressing systemic injustices and creating a society where individuals can thrive independently. By investing in education, economic justice, and strong social safety nets, we can move closer to a future where charity is less about addressing systemic failures and more about providing a helping hand to those who face exceptional circumstances. In such a society, justice and charity can work in harmony to create a more compassionate and equitable world for all.

"The True Measure of Any Society Can Be Found in How It Treats Its Most Vulnerable Members."

— Mahatma Gandhi



# MODEL QUESTION PAPER-MCQ





1.With reference to the 'Balance of Payment crisis, 1991, consider the following statements:

1.India took conditional loan from the International Monetary Fund (IMF) during the Balance of Payment crisis, 1991.

2.India used the Reserve Tranche facility with IMF to overcome the Balance of Payment crisis, 1991.

Which among the above statement(s) is / are true?

a.1 only b.2 only c.Both 1 and 2

d.Neither 1 and 2

2. Which of the following organizations brings out the publication known as 'World Economic Outlook'?

a.The International Monetary Fund

b.The United Nations Development Programme

c.The World Economic Forum

d.The World Bank

3. With reference to Union Budget, which of the following is/are covered under Non-Plan Expenditure?

1.Defence expenditure2.Interest payments3.Salaries and pensions

4.Subsidies

Select the correct answer using the code given below.

a.1, 2 and 3 only b.1, 3 and 4 only c.2, 3 and 4 only d.All of the above

4.The balance of payments of a country is a systematic record

a.all import and transactions of a during a given period normally a year

b.goods exported from a country during a year

c.economic transaction between the government of one

country to another

d.capital movements from one country to another 5. Which of the following constitute Capital Account?

1.Foreign Loans

2.Foreign Direct Investment3.Private Remittances4.Portfolio Investment

Select the correct answer using the codes given below.

a.1, 2 and 3 b.1, 2 and 4 c.2, 3 and 4 d.1, 3 and 4

6.Consider the following: "the difference between the current year's Fiscal Deficit and interest payment on previous borrowings. It indicates the borrowing requirements of the government, excluding interest." Which among the following

deficit best describes the above statement?

a.Monetised Deficit b.Primary Deficit

c.Revenue Account Deficit d.Effective Revenue Deficit

7.The Capital Account Convertibility of the Indian Rupee implies:

athat the Indian Rupee can be exchanged by the authorised dealers for travel

b.that the Indian Rupee can be exchanged for any major

currency for the purpose of trade in goods and services c.that the Indian Rupee can be exchanged for any major currency for the purpose of trading financial assets

d.None of the above

8.One of the important goals of the economic liberalisation policy is to achieve full convertibility of the Indian rupee. This is being advocated because:

a.convertibility of the rupee will stabilize its exchange value against major currencies of the world

b.it will attract more foreign capital inflow in India

c.it will help to promote exports

d.it will help India secure loans from the world financial markets at attractive terms

9.Consider the following statements.1.External Commercial Borrowings2.Trade in goods and services

3. Private remittances.

Which among the above is part of Revenue Account within the Balance of Payments?

a.1 only b.1 and 3 only c.2 and 3 only d.1, 2 and 3

10. Which of the following developments may likely reduce the

fiscal deficit?

1.Increasing Foreign Direct Investment (FDI)

2. Providing budgetary support to public sector enterprises

3. Waiving off farm loans.

4. Austerity measures should be adopted.

Select the correct answer code:

a.1 and 4 only b.2 and 3 only c.2, 3 and 4 only d.1, 2 and 3 only

11.A SWIFT Code, sometime seen in the news, is related to

a.International Banking Transaction b.Payment Gateway System

c.Quick Toll Plaza Electronic Payment

d.None of the above12.Consider the following:

1.National Compensatory Afforestation Fund

2.Goods and Services taxes.

3. Education Cess.

Which of the above is/are part of the Public Account of India?

a.1 only b.1 and 3 only c.2 and 3 only d.1, 2 and 3

13.Consider the following:1.Proceeds from disinvestments.2.Interest received from loans granted.

3. Salaries and pensions.

Which of the above is/are belong to a Capital Receipt?

a.1 only b.1 and 3 only c.2 and 3 only d.1, 2 and 3

14.Consider the following: 1.Special Drawing Rights (SDR)

2. Government Securities.



3. Reserve Tranche Position (RTP)

15. Which among the above constituted the Foreign Exchange Reserves?

a.1 only

b.1 and 3 only

c.2 and 3 only

d.1, 2 and 3

16. With reference to 'Fiscal Easing', consider the following: 1. Increasing public expenditures.

2.Reducing interest rates.

3.Lowering taxation rates.

Which among the above statement(s) is / are true?

a.1 only

b.1 and 3 only

c.2 and 3 only

d.1, 2 and 3

16)Consider the following statements regarding the POST OFFICE BILL 2023

1. The President of India approved the Post Office Bill, 2023, set to replace the old Indian Post Office Act, 1898

2.The present Bill has removed Section 4 of the 1898 Act, which allowed the Centre the exclusive privilege of conveying all letters by post from one place to another.

3.The recently enacted Post Office Act does not include provisions for procedural safeguards, raising concerns about potential misuse of its interception powers.

4.The Post Office Act grants narrow powers for interception compared to the IT Act 2000.

5.The Bill's interception provisions also raise concerns about Article 21

Which of the following is/are true regarding the above statements

a)Only 1 and 3

b)Only 2,3 and 4

c)All the statements

d)Only 4 and 5

The correct answer is (a) Only 1 and 3.

17)How many of the following schemes/initiatives are exclusively aimed at addressing gender imbalance and encouraging women scientists?

1)ATL Programme

2)KIRAN Scheme

3)SERB-POWER Scheme

4)NIDHI Programme

Chose the correct answer from the following

a)Only 1 and 2

b)2 and 3

c)1, 2 and 3

d)All the above

ATL Programme: not correct. The Atal Tinkering Labs program by NITI Aayog focuses on fostering innovation and scientific temperament among school students, but it's not exclusively aimed at girls or women scientists.

KIRAN Scheme: correct. The Knowledge Involvement in Research Advancement through Nurturing (KIRAN) program by DST has the Women Scientist Scheme (WOS) which specifically targets career development and research opportunities for women scientists. It offers fellowships, grants, and career development programs to address the challenges faced by women in scientific careers.

SERB-POWER Scheme: correct. The Science and Engineering Research Board (SERB) launched this scheme specifically to promote opportunities for women researchers in exploratory research. It provides them with structured support through fellowships and research grants, aiming to address the lower participation of women in R&D activities.

NIDHI Programme: incorrect. This DST program aims to empower young women researchers through fellowships and career development support, but it also includes researchers from developing countries, not solely addressing the gender imbalance within India.

Therefore, only the KIRAN Scheme and SERB-POWER Scheme exclusively focus on addressing gender imbalance and encouraging women scientists. Hence, option b) 2 and 3 is the correct answer.

18) Consider the following statements regarding the right to movement in India.

1) the right to travel throughout the territory of India is a fundamental right guaranteed by the Constitution of India in Article 19(1)(d).

2)Certain reasonable restrictions can be imposed by the government regarding travel, as outlined in Article 19(5)

3)Indian citizens do not need any permit to visit Lakshadweep, whereas foreigners do require a permit from the administration 4)the most common tourist permit (Special Entry Permit) allows online applications, visiting sensitive areas within Lakshadweep requires a Protected Area Permit from the District Collector in Kavaratti.

Which of the following is / are true regarding the above statements

a)Only 2, 3 and 4

b)1, 3 and 4

c)1.2 and 4

d)All the statements are true

1) The right to travel throughout the territory of India is a fundamental right guaranteed by the Constitution of India in Article 19(1)(d): This statement is true, as previously mentioned. 2) Certain reasonable restrictions can be imposed by the government regarding travel, as outlined in Article 19(5): This statement is also true. Article 19(5) allows for restrictions on travel based on public safety, security, health, morality, and other factors.

3) Indian citizens do not need any permit to visit Lakshadweep, where foreigners do require a permit from the administration: This statement is false. All visitors to Lakshadweep, including Indian citizens, require a permit. While the application process and types of permits might differ for citizens and foreigners, the permit requirement itself applies to everyone.

4) The most common tourist permit (Special Entry Permit) allows online applications, visiting sensitive areas within Lakshadweep requires a Protected Area Permit from the District Collector in Kavaratti: This statement is true. You accurately described the two main types of permits and their application processes for Lakshadweep.

Therefore, statements 1, 2, and 4 are accurate regarding the right to movement in India and the regulations for Lakshadweep. Statement 3, however, is incorrect as all visitors, regardless of nationality, require permits for this sensitive region.



- 19) Consider the following statements about the inner line permit and protected area permit
- 1) Indian citizens do not require any Inner line permit to travel across India is a fundamental right under Article 19 of the Constitution.
- 2) The Inner Line Permit is the basic permit required by all Indian citizens from outside the respective state who wish to enter the ILP-regulated area usually valid for a specific period, like 15 days.
- 3) A Protected Area Permit (PAP) is a special permit required for visiting certain ecologically sensitive or culturally significant areas within the ILP zone.
- 4) A Registration Certificate is a document issued to nonresidents who intend to stay for a longer period, typically for work or business purposes.

Chose the correct option from the following

- a) Only 12 and 3 are correct
- b) 2 and 4
- c) 3 and 4 are correct
- d) 2, 3, and 4 are correct
- 1) Indian citizens do not require any Inner line permit to travel across India is a fundamental right under Article 19 of the Constitution. This statement is incorrect. While Article 19(1) (d) guarantees the right to move freely within India, it also mentions in Article 19(5) that reasonable restrictions can be imposed by the government for public safety, public order, and morality. The ILP system falls under such reasonable restrictions within specific states to protect indigenous communities and sensitive ecosystems.
- 2) Inner Line Permit is the basic permit required by all Indian citizens from outside the respective state who wish to enter the ILP-regulated area usually valid for a specific period, like 15 days. This statement is correct. As you mentioned, ILP is required for non-residents entering the designated areas in specific states.
- 3) A Protected Area Permit (PAP) is a special permit required for visiting certain ecologically sensitive or culturally significant areas within the ILP zone. This statement is also correct. PAPs provide additional protection for specific areas within the broader ILP zone.
- 4) A Registration Certificate is a document is issued to non-residents who intend to stay for a longer period, typically for work or business purposes. This statement is correct. A Registration Certificate allows non-residents to stay beyond the typical validity period of an ILP for extended work or business needs.

Therefore, only statement 1 is incorrect as it misinterprets the limitations of Article 19(1)(d) regarding the ILP system. Statements 2, 3, and 4 accurately describe the different types of permits and their purposes within the ILP and PAP framework.

- 20) Consider the following statements regarding the Know India Programme.
- 1. Know India Programme is an orientation programme for the elder generation in Persons of Indian Origin (PIOs) conducted to promote awareness of different facets of life in India and the progress made by India in various fields.

- 2. It is the initiative of the Ministry of External Affairs Which of the above statements is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

21) Consider the following statements:

1.The Good Governance Index is prepared by the Department of Administrative Reforms and Public Grievances (DARPG).

2.The Good Governance Index takes into consideration 10 sectors.

3.25th December is celebrated as the National Good Governance Day

How many of the given statements are correct?

- a) One statement only
- b) Two statements only
- c) All three statements
- d) None of the above

The Good Governance Index is prepared by the Department of Administrative Reforms and Public Grievances (DARPG): This is true. The DARPG, under the Ministry of Personnel, Public Grievances and Pensions, is responsible for developing and implementing the Good Governance Index (GGI) in India. Good Governance Index takes into consideration 10 sectors: This is also true. The GGI framework currently assesses ten sectors, including agriculture, education, health, infrastructure, social welfare, and judicial systems.

25th December is celebrated as the National Good Governance Day: This statement is indeed correct. India celebrates Good Governance Day on December 25th every year to promote transparency, accountability, and citizen participation in governance.

22) Consider the following Statements regarding PM Cares fund

1.The Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM CARES Fund) was created on 27 March 2020.

2.It is audited by the Comptroller and Auditor General of India. 3.The fund operates independently of the government budget, relying entirely on voluntary contributions.

4.The Prime Minister is the Chairman of the PM CARES Fund and some of his colleagues of the cabinet are its trustees.

Which of the following is/are true about the above statements a)Only 1

b)2, 3, and 4 are true

c)1. 3 and 4 are true

d)All the statements are true

23) Consider the following statements regarding Brahmos missiles.

1.It is a supersonic cruise missile developed indigenously by India.

2.It can fly at speeds nearly Mach 3.

Which of the following is / are true regarding the above statements

a)Only 1

b)Only 2

c)Both 1 and 2

d)Neither 1 nor 2

24) The Market Access Initiative (MAI) Scheme, is administered



by which of the following Ministry? a)Ministry of Commerce and Industry

b) Ministry of Micro, Small & Medium Enterprises

c)Ministry of Agriculture d)Ministry of Defence

23) The International Court of Justice (ICJ) recently issued a landmark ruling on Israel's actions in Gaza, following a case

filed by a)Australia b)South Africa c)Saudi Arabia

d)Iran

25) Consider the following statements regarding elections in Bhutan

1.The election was conducted in Bhutan and results were declared on 10th January

2.People's democratic party won the election winning 30 seats out of the total 47 seats in the National Assembly

3.This was the fourth National Assembly election since democratisation

Which of the above statements is / are false

a)Only 1 b)Only 2

c)All the three statements are false

d)None of the above

26) Pradhan Mantri Suryodaya Yojana targets to provide

a)1 crore households to get rooftop solar

b)One crore electric vehicle to be built by end of this decade c)It is to be implemented as part of Corporate social security activities

d)None of the above

27) consider the following statements regarding Archeoalogical survey of India's Gyanvapi mosque complex

1.ASI used ground penetrating radar, differential global positioning systems and scientific dating methods for the survey.

2.The Persian text Maasir-i-Alamgiri written soon after Aurangzeb's death in 1707 has reference to Gyan Vapi mosque Which of the above statements is /are true?

a)Only 1 b)Only 2 c)Both 1 and 2 d)None of the above

28) The Economic Community of West African States (ECOWAS) is a regional political and economic union established on 28 May 1975 through the

a)Oslo Agreement b)Treaty of Lagos c)Montreux Protocol d)Paris Protocol

29) 19th Non Aligned Movement Summit was held at

a)South Africa b)Indonesia c)Uganda d)Kenya

30. With reference to 'National Transit Pass System' often seen in news, consider the following statements.

1. The pass exclusively focuses on timber transit, while the other forest produce requires separate online pass generation system.

2. The pass ensures applicants receive instant transit passes eliminating the need for physical visits to forest offices.

3.Transit passes issued through NTPS have nationwide validity enabling seamless movement without additional permits at state borders.

How many of the above statement/s is/are correct?

A.Only One B.Only Two C.All the Three D.None of the above

31. Consider the following statements regarding Cheetahs.

1.Both African and Asiatic Cheetahs classifies as 'Critically Endangered' under IUCN Redlist.

2.India Introduce both African and Asiatic Cheetahs as a part of Cheetah Reintroduction program.

Which of the above statement/s is/ are correct?

A.1 only
B.2 only
C.Both 1 and 2
D.Neither 1 nor 2

32. Which international convention recognizes the 'Wetland City Accreditation (WCA)' as a mechanism to promote

sustainable management of urban wetlands?

A.Ramsar Convention B.Basel Convention C.Stockholm Convention

D.Convention on Biological Diversity

33. With reference to 'Global Biofuels Alliance' often seen in news, consider the following statements.

1.The alliance is established by the collaboration of Brazil, India, and the United States for sustainable biofuels development.

2.Strengthening markets, facilitating global biofuels trade, and sharing policy lessons are key goals of the Global Biofuels Alliance.

3.The Alliance plans to complement existing initiatives like the Clean Energy Ministerial Bio future Platform and Mission Innovation Bioenergy.

How many of the above statement/s is/are correct?

A.Only One
B.Only Two
C.All the Three
D.None of the above

34. What is the current IUCN Red List status of the Himalayan

Wolf (Canis lupus chanco), a subspecies of the gray wolf?

A.Endangered
B.Vulnerable
C.Near Threatened

D.Least Concern

35. Consider the following statements regarding acid rain.

1. Acid rain results from pollutants like sulphur dioxide and

nitrogen oxides reacting with atmospheric moisture to form acids.

2.It harms ecosystems by affecting soil, water bodies, and vegetation, causing adverse impacts on aquatic life.

3.Buildings and monuments are not affected by acid rain, as the acidity has no corrosive effect on construction materials.

How many of the above statement/s is/are correct?

A.Only One B.Only Two C.All the Three



D.None of the above

36. With reference to 'Great Indian Bustard' often seen in news, consider the following statements.

A.They are bird species commonly found in North Eastern part of India.

B.They are classified as 'Critically Endangered' in IUCN Redlist. C.They are protected under Schedule II of Wild Life (Protection) Amendment Act, 2022.

How many of the above statement/s is/are correct?

A.Only One

**B.Only Two** 

C.All the Three

D.None of the above

37. Consider the following statements.

1. These malware disguises itself as legitimate software to deceive users and gain unauthorized access or control.

2. These malware usually do not replicate themselves like viruses but can create backdoors for other malicious activities. Which of the above statement/s is/ are correct?

A.1 only

B.2 only

C.Both 1 and 2

D.Neither 1 nor 2

38. The 'Square Kilometre Array (SKA) Project' often seen in news is a global initiative aimed at advancing research in which scientific field?

A.Genomics

**B.Quantum Computing** 

C.Particle Physics

D.Radio Astronomy

39. Consider the following statements regarding 'NewSpace India Limited (NSIL)' sometimes seen in news.

1.It is a government-owned company dedicated to commercializing space products and services.

2.lt facilitates the transfer of ISRO's technologies to industries for commercial applications in space exploration.

Which of the above statement/s is/ are correct?

A.1 only

B.2 only

C.Both 1 and 2

D.Neither 1 nor 2

40. With reference to 'fuel cells' often seen in news, consider the following statements.

1.These cells use combustion processes, releasing pollutants like carbon dioxide and contributing to air pollution.

2. They are less energy-efficient than traditional combustion engines, resulting in higher energy consumption.

3. They are primarily used for large-scale power generation

and are not suitable for portable applications.

How many of the above statement/s is/are correct?

A.Only One

**B.Only Two** 

C.All the Three

D.None of the above

41. Which among the following statements accurately describes Lagrange points, often in the news?

A.These points are stable equilibrium locations in a celestial system.

B.Lagrange points are fast-moving asteroids orbiting the Earth.

C.They represent regions with high solar radiation in outer space.

D.Lagrange points are fixed positions on the Earth's surface for satellite launches.

42. With reference to 'D2M technology' sometimes seen in news, consider the following statements.

1.Similar to FM radio, D2M sends signals via a station to receivers aiming to optimize content delivery to smartphones. 2.Direct-to-home (DTH) broadcasting involves a dish antenna receiving broadcast signals directly from satellites, transmitting to set-top boxes.

3.D2M facilitates direct streaming of multimedia content like live TV matches to smartphones without relying on the internet.

How many of the above statement/s is/are correct?

A.Only One

**B.Only Two** 

C.All the Three

D.None of the above

43. Which among the following feature of light used as the working principle of Optical Fibre cables?

A.Total Internal Reflection

**B.Total Internal Refraction** 

C.Dispersion of light

D.Polarization of light

44. Consider the following statements.

1.Cervical cancer is predominantly caused by high-risk human papillomaviruses (HPV), transmitted through sexual contact.

2. There is no effective secondary prevention for cervical cancer, and screening for precancerous lesions is not a recommended approach.

Which of the above statement/s is/ are correct?

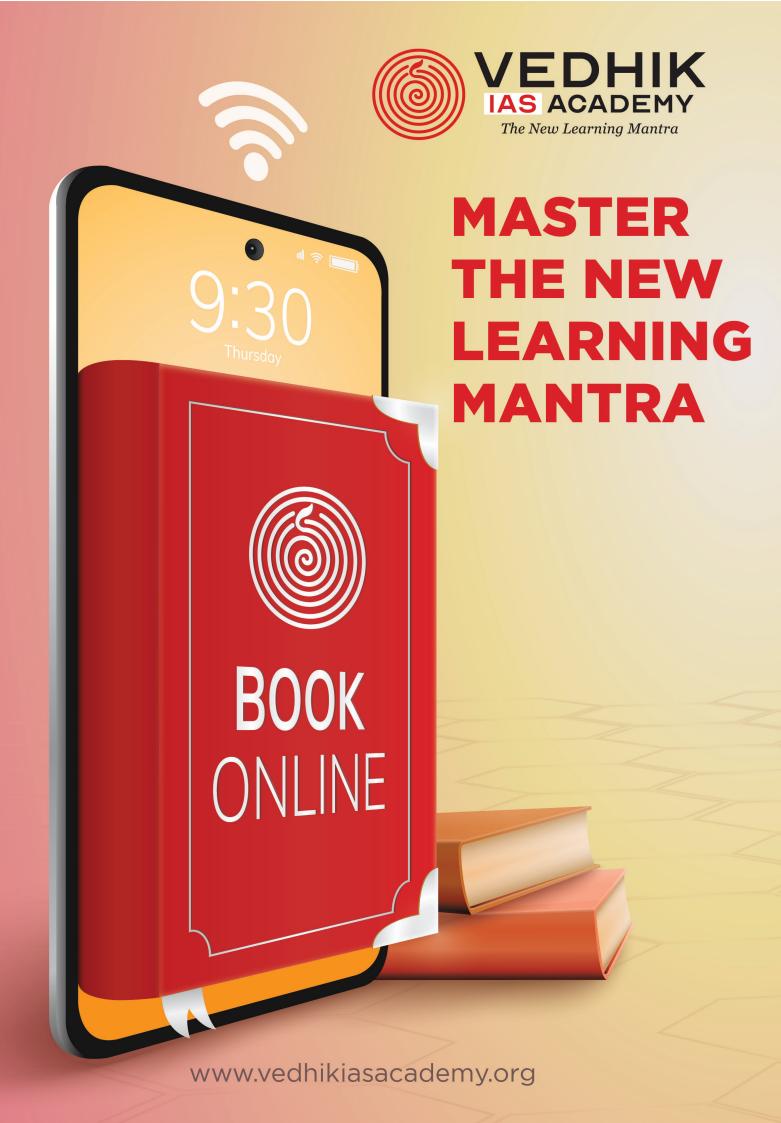
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B.2 only

C.Both 1 and 2

D.Neither 1 nor 2







# OMR ANSWER SHEET

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SPACE FOR ROUGH WORK				





# **VEDHIK IAS ACADEMY**