

The Hindu Important News Articles & Editorial For UPSC CSE

Saturday, 07 March, 2026

Edition : International Table of Contents

Page 01 Syllabus : GS II : International Relations	U.S. 'allows' India to buy Russian oil for 30 days
Page 01 Syllabus : GS II : Social Justice / Prelims Exam	Karnataka, A.P. plan social media ban for children
Page 02 Syllabus : GS III : Environment / Prelims Exam	204 of 238 Indian cities did not meet air quality standards: CREA
Page 05 Syllabus : GS III : Science and Tech / Prelims Exam	'Scientists, diplomats must discuss evolution of quantum computing'
Page 11 Syllabus : GS III : Indian Economy / Prelims Exam	Merchant ships stranded near Strait of Hormuz
Page 08 : Editorial Analysis Syllabus : GS II : Social Justice	Balancing innovation with women's digital safety

The global energy landscape is witnessing a significant shift as the U.S. Treasury Department recently issued a 30-day "waiver" allowing India to import Russian oil currently stranded at sea.

This move comes amidst a volatile geopolitical climate marked by Iran's blockade of the Strait of Hormuz, which has spiked Brent crude prices to nearly \$88 per barrel. For India, this development represents a delicate balancing act between maintaining strategic autonomy, ensuring energy security, and managing its diplomatic ties with both Washington and Moscow.

U.S. 'allows' India to buy Russian oil for 30 days

Oil from Russia may no longer be available at a discount, with Beijing competing for supplies

India has 25 days of crude oil in reserve, and 25 days of petrol and diesel each, sources say

Global oil supplies are currently constrained due to Iran's blockade of the Strait of Hormuz

T.C.A. Sharad Raghavan
Saptaparno Ghosh
NEW DELHI

The U.S. Treasury Department on Friday issued an order that would "allow" India to import Russian oil for 30 days, U.S. Treasury Secretary Scott Bessent said while sharing the order on X.

Analysts say this will help mitigate the spike in the price of oil and delays in oil shipments to import-dependent India.

However, government sources confirmed that Russian oil may no longer come at a discount and that China was also competing for it. The government is currently studying the legal order, they added.

Mr. Bessent said the U.S. was granting India this reprieve to "alleviate pressure caused by Iran's attempt to take global energy hostage".

"This deliberately short-

term measure will not provide significant financial benefit to the Russian government as it only authorises transactions involving oil already stranded at sea," Mr. Bessent said.

The price of Brent crude has increased to nearly \$88 a barrel, a jump of about 20% in a week.

Global oil supplies are currently constrained due to Iran's blockade of the Strait of Hormuz and tankers avoiding the region due to the conflict.

This comes at a time when the Indian government has made assurances that the country has adequate amounts of crude oil, petrol and diesel in reserve. According to sources, India currently has 25 days of crude oil in reserve, and 25 days of petrol and diesel each.

Current status

A previous analysis by *The Hindu* of the latest preliminary data from the Ministry of Commerce and

Congress slams Centre over U.S. remarks

NEW DELHI
Criticising the Centre over U.S. remarks, the Congress on Friday said it is "deeply humiliating for India's sovereignty". Congress president Mallikarjun Kharge, in a post on X, alleged that India's strategic autonomy and national sovereignty are under dire threat "because PM [Narendra Modi] is getting blackmailed on Epstein files and Adani case". » PAGE 5

Industry shows that India imported \$1.98 billion worth of crude oil from Russia in January 2026, the month before India and the U.S. issued a joint statement about an interim trade agreement between the two countries. This was the lowest in 44 months.

As a result of this, Russia's share in Indian oil im-



ports fell to 19.3% in January 2026, the lowest since December 2022. In comparison, Russia's share was 27.5% two months earlier, and 33% in May 2025.

"Considering more than 55% of India's oil imports pass through the Strait of Hormuz, elevated price and delays will stretch India's oil bill (\$11.5bn/month) unless India ramps

up imports from Russia (19% currently versus 43% in July 2024)," JM Financial Services said in a note.

It added that, in the "extreme" scenario of Brent crude prices breaching the \$90 per barrel mark, India's current account deficit (CAD) could stretch to 1.4% of GDP, and the rupee could depreciate to ₹95 per U.S. dollar.

Consumers told to use cooking fuel judiciously

CHENNAI
With restrictions placed on LPG supplies for both domestic and commercial consumers, the public has been advised to use the fuel judiciously. Single bottle domestic consumers will be allowed to make fresh bookings only after 21 days from the date of last booking. Commercial consumers using 19 kg cylinders were told they will not be given supplies, sources said. » PAGE 11

raise inflation, worsen the current account balance and complicate monetary policy as well as fiscal management if they lead to expanded subsidies to help offset the economic shock," Moody's said.

The sources in the government, however, said that Indian refiners have sourced more crude stocks from other parts of the world than what is currently stuck in the Strait of Hormuz.

In his post, Mr. Bessent further said that "India is an essential partner of the United States", and that the U.S. anticipates that India will "ramp up" purchases of U.S. oil.

Data show that India has been increasing its imports from the U.S. over the past few months. That is, India imported \$11.6 billion worth of crude oil from the U.S. between April 2025 and January 2026, which is 32% higher than in the same period of the previous financial year.

Key Highlights of the Analysis

The 30-Day Reprieve: The U.S. order is a "deliberately short-term measure" intended to alleviate the energy crunch caused by Iranian actions. It specifically targets oil already in transit to prevent a global supply shock.

Vanishing Discounts: Unlike the early days of the Ukraine conflict, Russian oil is no longer available at deep discounts. Increased competition from China and logistical hurdles have normalized the pricing.

Strategic Reserves: India currently holds approximately 25 days of crude oil and 25 days of refined products (petrol/diesel) in reserve. While stable, this is a thin margin during a prolonged blockade of the Strait of Hormuz, through which 55% of India's imports pass.

Economic Vulnerabilities: Financial analysts warn that if oil breaches \$90/barrel, India's **Current Account Deficit (CAD)** could widen to 1.4% of GDP, potentially pushing the Rupee to ₹95 per U.S. Dollar.

Shift in Import Partners: Data indicates a strategic pivot; while Russian imports hit a 44-month low in January 2026, imports from the U.S. have surged by 32%, signaling a deepening India-U.S. energy trade partnership.

Static Section

The Strait of Hormuz

Located between the Persian Gulf and the Gulf of Oman, it is the world's most important oil transit chokepoint. Approximately one-fifth of the world's total oil consumption passes through this narrow waterway daily.

Strategic Petroleum Reserves (SPR) of India

To ensure energy security, India has established underground rock caverns for storage of crude oil at:

Visakhapatnam (Andhra Pradesh)

Mangaluru (Karnataka)

Padur (Karnataka) Note: Phase II expansion includes sites at Chandikhol (Odisha) and Padur.

Current Account Deficit (CAD) and Oil

As a net importer of crude oil (importing ~85% of its needs), India's CAD is highly sensitive to global prices. High oil prices lead to:

Imported Inflation: Rising transport costs increase the price of essential goods.

Currency Depreciation: Increased demand for Dollars to pay for oil weakens the Rupee.

Strategic Autonomy in Foreign Policy

This refers to India's ability to take decisions based on its own national interests without being unduly influenced by other states. The "multi-aligned" approach allows India to engage with the U.S. for technology/defense while maintaining energy ties with Russia.

Conclusion

The 30-day window provided by the U.S. serves as a temporary breather for the Indian economy, yet it underscores India's vulnerability to West Asian instability. While the increase in U.S. oil imports shows a diversifying energy basket, the loss of the "Russia discount" and the blockade of the Strait of Hormuz present a dual challenge of high inflation and fiscal pressure. Moving forward, India must accelerate its transition toward renewable energy and expand its Strategic Petroleum Reserves to insulate the domestic economy from such external shocks.

UPSC Mains Exam Practice Question

Ques: The Strait of Hormuz is often described as the world's most critical oil chokepoint. Examine its significance for India's energy security and discuss the measures India should adopt to reduce its vulnerability to such geopolitical disruptions. **(150 Words)**

Following the legislative precedent set by Australia in late 2025, the Indian states of Karnataka and Andhra Pradesh have announced plans to implement a ban on social media usage for children. While Karnataka proposes a threshold of under 16 years, Andhra Pradesh is targeting those below 13 years with additional regulations for the 13–16 age bracket. This move highlights a growing global and domestic concern regarding the "darker side" of the digital world and its impact on the cognitive and psychological development of minors.

Karnataka, A.P. plan social media ban for children

The Hindu Bureau
 BENGALURU

Karnataka and Andhra Pradesh are set to ban social media for children to prevent the adverse effects of increasing mobile phone use.

Karnataka Chief Minister Siddaramaiah made an announcement in this regard on Friday, during the presentation of the State Budget. He did not spell out a road map for the implementation of the ban.

While Karnataka said it proposes to ban social media for children under 16, Andhra Pradesh Chief Minister N. Chandrababu Naidu said the government would impose the restriction on children aged below 13.

Speaking in the Assem-



Screen lock: The States say the steps are aimed at preventing the adverse impact of social media use on children. FILE PHOTO

ly, Mr. Naidu said the ban is likely to be in place within the next 90 days. He added that the government is also examining possible regulations for children in the 13-16 age group.

It was during a recent meeting with the Vice-Chancellors of State public universities chaired by the

Governor, that Mr. Siddaramaiah had proposed a mobile ban for schoolchildren and sought opinion from all stakeholders.

There has been a public debate on this issue since, and experts are divided on the impact and feasibility of a blanket ban.

Mr. Naidu emphasised

that the government is committed to safeguarding children from the harmful effects of excessive social media usage and ensuring their overall well-being.

A similar ban on social media for children below the age of 16 was made into a law in Australia in December 2025.

The law forces social media platforms to restrict access to children below 16 years of age and violations can attract very high penalties up to \$32 million for serious and repeated violations.

Reacting to Karnataka's proposal, A.P. Minister for IT and Education Nara Lokesh posed on X: "Imitation is the sincerest form of flattery" and said he was pleased to see Karnataka considering restrictions on

social media for young users.

He noted that Andhra Pradesh had earlier proposed similar measures aimed at protecting young minds from the darker side of the digital world, and wished the Karnataka government success in implementing the idea.

Student union elections

During the Budget presentation, Mr. Siddaramaiah also announced the re-introduction of student union elections in colleges and universities, after it was banned nearly four decades ago.

He said it would "foster leadership, responsibility, and democratic values among students". Both have been much-debated contentious issues.

Key Highlights of the Analysis

Age Thresholds: Divergent approaches between the two states (16 in Karnataka vs. 13 in Andhra Pradesh) reflect the lack of a standardized national framework for digital age verification.

Global Precedent: The move mirrors Australia's December 2025 law, which imposes heavy penalties (up to \$32 million) on platforms failing to restrict access to under-16s.

Implementation Challenges: Critics point to the "feasibility of a blanket ban," citing issues with age verification technology, VPN usage, and the risk of driving children toward unregulated corners of the internet.

Wider Educational Reforms: Alongside the ban, Karnataka has proposed reintroducing student union elections after 40 years to foster democratic values, indicating a shift toward holistic student development.

Digital Wellbeing: The stated goal is to mitigate "adverse effects" such as cyberbullying, screen addiction, and exposure to inappropriate content, prioritizing mental health over digital liberty for minors.

Static Section

Right to Privacy vs. State Protection

The Supreme Court in the **K.S. Puttaswamy judgment (2017)** declared privacy a fundamental right. However, the state can impose "reasonable restrictions" in the interest of public order or the protection of vulnerable groups (like children). This ban tests the balance between parental rights, child autonomy, and state intervention.

The Digital Personal Data Protection (DPDP) Act, 2023

Under Section 9 of the DPDP Act, "Data Fiduciaries" (social media platforms) are already prohibited from processing personal data that causes "harmful effect" on children. It also requires **verifiable parental consent** for processing data of those under 18. The state-level bans would add a layer of total restriction on top of these federal data regulations.

Ethical Perspectives

Paternalism: The state acting as a "father figure" to protect citizens from their own choices. Is it justified for the state to override parental discretion?

Digital Citizenship: The debate on whether "banning" is more effective than "digital literacy" and "responsible usage" education.

Major Committees on Digital Safety

Justice B.N. Srikrishna Committee: Provided the foundation for data protection and emphasized the special status of "children's data" due to their inability to provide informed consent.

Conclusion

The proposed bans in Karnataka and Andhra Pradesh signify a "precautionary approach" to the digital crisis affecting the youth. While the intent—safeguarding mental health and preventing cyber-exploitation—is aligned with constitutional mandates of social justice, the success of these measures will depend on technological enforcement and inter-state coordination. Without a robust mechanism to verify age without compromising the privacy of adults, these bans risk remaining symbolic. A balanced model involving parental controls, platform accountability, and school-level awareness may prove more sustainable than a blanket prohibition.

UPSC Prelims Exam Practice Question

Ques: With reference to the Digital Personal Data Protection (DPDP) Act, 2023, consider the following statements:

1. It requires verifiable parental consent before processing personal data of children.
2. It prohibits data processing that may cause harmful effects on children.
3. The Act defines a child as a person below 18 years of age.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1, 2 and 3
- (d) 1 and 3 only

Ans: c)

UPSC Mains Exam Practice Question

Ques: Excessive use of social media has raised concerns regarding the mental health and cognitive development of children. Examine the need for regulation of social media platforms for minors in India. **(150 Words)**



A recent report by the Centre for Research on Energy and Clean Air (CREA) reveals a grim picture of India's air quality. Analysing data from 238 cities between October 2025 and February 2026, the study found that a staggering 85% of cities (204) failed to meet the National Ambient Air Quality Standards (NAAQS). The concentration of PM2.5 remains a critical public health emergency, particularly in the Indo-Gangetic Plain, with the National Capital Region (NCR) continuing to dominate the list of the most polluted zones.

204 of 238 Indian cities did not meet air quality standards: CREA

The Hindu Bureau
NEW DELHI

During the last winter, 204 out of 238 Indian cities recorded average PM2.5 (a chief pollutant) levels above the Indian standard of 40 g/m³, as per the Central Pollution Control Board (CPCB) data analysed by the Centre for Research on Energy and Clean Air (CREA).

Ghaziabad was the most polluted city, recording an average PM2.5 concentration of 172 g/m³, followed by Noida (166 g/m³), and Delhi (163 g/m³), as per CREA, a Finland-based independent research group.

As per the analysis, Greater Noida was the fourth most polluted, followed by Bahadurgarh,

Dharuhera, Gurugram, Bhiwadi, Charkhi Dadri, and Baghpat. Uttar Pradesh and Haryana accounted for four cities each in the top ten most polluted cities, along with Delhi and one city from Rajasthan.

PM2.5 (particulate matter 2.5) are fine inhalable particles that can get into the lungs and bloodstream and lead to various respiratory and other diseases.

The analysis was based on Continuous Ambient Air Quality Monitoring Stations (CAAQMS) data from the CPCB between October 1, 2025 and February 28, 2026.

Also, none of the cities analysed met the World Health Organization's (WHO) PM2.5 standard of 5 g/m³, as per the analysis.

"Among India's megacities, Delhi (163 g/m³), Kolkata (78 g/m³), Mumbai (48 g/m³), and Chennai (44 g/m³) recorded winter 2025-26 average PM2.5 concentrations above the national standard. Bengaluru recorded an average PM2.5 concentration of 39 g/m³, slightly below the NAAQS limit," CREA said in a statement.

Cleanest city

Chamarajanagar in Karnataka was the cleanest city in India during the last winter, with an average PM2.5 concentration of 19 g/m³. The ten cleanest cities included eight cities from Karnataka and one each from Madhya Pradesh and Meghalaya, as per the analysis.

Key Highlights of the Analysis

The NCR Crisis: Ghaziabad (172 µg/m³), Noida (166 µg/m³), and Delhi (163 µg/m³) emerged as the top three most polluted cities, significantly exceeding the national safety limit.

National vs. Global Standards: While 204 cities breached the Indian standard of 40 µg/m³, zero cities met the stringent World Health Organization (WHO) guideline of 5 µg/m³.

Regional Contrast: The cleanest cities were predominantly from Southern India, with Chamarajanagar (Karnataka) leading the list. Karnataka accounted for 8 out of the 10 cleanest cities, highlighting a sharp geographical divide in air quality.

Megacity Trends: Among major hubs, Bengaluru was the only megacity to stay (narrowly) within national limits (39 µg/m³), while Mumbai, Kolkata, and Chennai all recorded unsafe levels.

Health Implications: The focus on PM2.5 is critical because these fine particles bypass the body's natural filters, entering the bloodstream and causing long-term respiratory and cardiovascular damage.

Static Section

National Ambient Air Quality Standards (NAAQS)

NAAQS are standards for air quality that are set by the **Central Pollution Control Board (CPCB)** under the Air (Prevention and Control of Pollution) Act, 1981. They monitor 12 pollutants:

PM10, PM2.5, SO2, NO2, CO, NH3, O3, Lead, Benzene, Benzopyrene, Arsenic, and Nickel.

National Clean Air Programme (NCAP)

Launched in 2019, NCAP is a long-term, time-bound national strategy to achieve a 20% to 30% reduction in Particulate Matter concentration by 2024 (later revised to 40% by 2026). It targets "non-attainment cities" that do not meet NAAQS.

Factors for Winter Pollution in North India

Meteorological Factors: Temperature inversion (cold air trapping pollutants near the ground) and low wind speeds.

Stubble Burning: Post-harvesting residue burning in Punjab and Haryana.

Topography: The Himalayas act as a barrier, preventing the escape of pollutants from the Indo-Gangetic Plain.

Local Sources: Dust from construction, vehicular emissions, and biomass burning for heating.

Air Quality Index (AQI) Categories

The AQI transforms complex air quality data of various pollutants into a single number/color:

Good: 0–50

Satisfactory: 51–100

Moderate: 101–200

Poor: 201–300

Very Poor: 301–400

Severe: 401–500

Conclusion

The CREA report underscores a persistent "pollution inequality" in India, where the North remains trapped in a toxic winter cycle while the South benefits from coastal ventilation and different topographical features. The fact that not a single Indian city meets WHO standards indicates that even our "clean" cities are unsafe by global health benchmarks. Addressing this requires moving

beyond city-specific fixes to a regional airshed management approach, strictly enforcing NCAP targets as the 2026 deadline approaches.

UPSC Prelims Exam Practice Question

Ques: With reference to the National Ambient Air Quality Standards (NAAQS), consider the following statements:

1. These standards are notified by the Central Pollution Control Board (CPCB).
2. They are issued under the Air (Prevention and Control of Pollution) Act, 1981.
3. NAAQS monitor pollutants such as PM2.5, Benzene, Arsenic and Nickel.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: d)

UPSC Mains Exam Practice Question

Ques: Explain the role of meteorological and geographical factors in aggravating winter air pollution in the Indo-Gangetic Plain. (250 words)



At the recently concluded **Raisina Dialogue**, global experts and India's Principal Scientific Adviser (PSA) emphasized the urgent need for a "Science-Diplomacy" nexus to govern **Quantum Computing**. As technology moves from theoretical stages to practical disruption, the traditional "reactive" governance model—where laws are made only after technology matures—is being deemed inadequate. The call is for proactive international frameworks to manage the exponential growth of quantum capabilities and Artificial General Intelligence (AGI).

'Scientists, diplomats must discuss evolution of quantum computing'

Jacob Koshy
NEW DELHI

Quantum computing is in a nascent stage of development and therefore this is a time that experts in the field and scientists should be engaging with diplomats to be able to form governance frameworks, partnerships, coalitions, international collaboration, and be "concretely ready" when the technology matures, Marilyne Andersen, Director General, Geneva Science and Diplomacy Anticipator (GESDA), said in an interview.

Quantum computing refers to computers that use an entirely different non-binary architecture from conventional computers and thus can exponentially accelerate calculation but at the same time threaten cybersecurity measures, that are premised on binary ones and zeros ar-

chitecture. Ms. Andersen, who was a participant at the ongoing Raisina Dialogue here, met India's Principal Scientific Adviser (PSA), Ajay Sood, on Friday along with members of the PSA office and around 60 representatives from science, government, diplomacy, business and civil society to "anticipate and govern emerging scientific and technological breakthroughs," according to a press statement from the Swiss Embassy.

"As technology matures and disruption occurs, a governance gap becomes visible... this conventional reactive cycle served us adequately in eras when the pace of change was measured in decades. However, it is no longer adequate... The governance choices we make in the next decade will determine the effectiveness with which technologies such as



Marilyne Andersen

quantum computing, artificial general intelligence will serve humanity," Mr. Sood said in a statement.

Deeper insight

Ms. Andersen, who was formerly a Professor at the Massachusetts Institute of Technology, Boston and the Swiss Federal Technology Institute of Lausanne (EPFL), said scientists weren't always able to forecast the course of technology as they, like other humans, thought "linearly rather than

exponentially".

However because scientific funding cycles usually worked in five- or 10-year cycles, they did have a deeper insight into the stage of development of certain fields. Around 2021, the scientific community was largely confident of the emergence of something like GPT3 – the Generative Pre-Trained Transformer-3 (by OpenAI with its 175 billion-parameters).

"What they didn't anticipate was that someone would put it out in the open – the 'chat' aspect of it. Many didn't want to do that because they knew that once it is out in the general population it is a whole new game. So while scientists can't precisely forecast, being experts and participants at conferences at the cutting edge of their science, they have a special voice," she explained.

Key Highlights of the Analysis

The Governance Gap: PSA Ajay Sood highlighted that the pace of technological change has outstripped the ability of policymakers to react. A "Governance Gap" exists where technology matures faster than the laws intended to regulate it.

Non-Binary Architecture: Unlike classical computers that use bits (0 or 1), quantum computers use qubits, allowing for exponential calculation speeds. While this revolutionizes research, it poses a direct threat to current **RSA encryption** and global cybersecurity.

Science-Diplomacy Anticipation: Organizations like the Geneva Science and Diplomacy Anticipator (**GESDA**) argue that scientists must collaborate with diplomats now to create "coalitions of the willing" before the technology becomes a tool for geopolitical conflict.

The "Chat-GPT" Lesson: The analysis draws a parallel with Generative AI; while scientists knew the tech existed by 2021, they failed to anticipate the social disruption of making it publicly accessible. This "open-access" shock must be avoided in the Quantum era.

India's Role: India is positioning itself as a key player in quantum governance, evidenced by the high-level meetings between the PSA's office and Swiss delegations to "anticipate" technological breakthroughs.

Static Section

Quantum Computing Basics

Quantum computers leverage the principles of quantum mechanics:

Superposition: The ability of a qubit to exist in multiple states (0 and 1) simultaneously.

Entanglement: A phenomenon where two qubits become linked, and the state of one instantaneously influences the other, regardless of distance.

National Quantum Mission (NQM)

Launched by India, this mission aims to:

Develop intermediate-scale quantum computers with 50-1000 physical qubits.

Establish "Quantum Hubs" (T-Hubs) for R&D in quantum communication, sensing, and metrology.

Significance: It puts India in the elite league of nations (like the US, China, and France) having a dedicated quantum budget.

Science Diplomacy

This involves three main dimensions:

Science in Diplomacy: Using scientific advice to inform foreign policy objectives (e.g., IPCC reports informing climate treaties).

Diplomacy for Science: International cooperation to facilitate large-scale science (e.g., the **CERN** Hadron Collider or the **ITER** fusion project).

Science for Diplomacy: Using scientific cooperation to improve relations between countries (e.g., the "Science Bridge" during the Cold War).

The "Y2Q" (Years to Quantum) Problem

Similar to the Y2K bug, Y2Q refers to the point in time when quantum computers will become powerful enough to break all current public-key encryption. This necessitates the development of Post-Quantum Cryptography (PQC).

Conclusion

The evolution of quantum computing represents a double-edged sword: a "Sputnik moment" for scientific discovery but a "Pandora's Box" for global security. The dialogue between scientists and diplomats is no longer a luxury but a strategic necessity. For India, being "concretely ready" means not just building the hardware through the National Quantum Mission, but also

leading the global conversation on ethical guardrails and "Quantum-Safe" protocols to ensure that these exponential technologies serve, rather than destabilize, humanity.

UPSC Prelims Exam Practice Question

Ques: With reference to Quantum Computing, consider the following statements:

1. It uses quantum bits (qubits) instead of classical binary bits.
2. Qubits can exist in multiple states simultaneously due to superposition.
3. Quantum computers are expected to strengthen existing cybersecurity encryption systems.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: a)

UPSC Mains Exam Practice Question

Ques: Quantum computing has the potential to revolutionize computing but also pose significant cybersecurity risks. Explain the opportunities and challenges associated with quantum computing. **(250 Words)**

The escalation of conflict in West Asia has reached a critical bottleneck at the Strait of Hormuz, where a de facto blockade by Iran has stranded hundreds of merchant vessels.

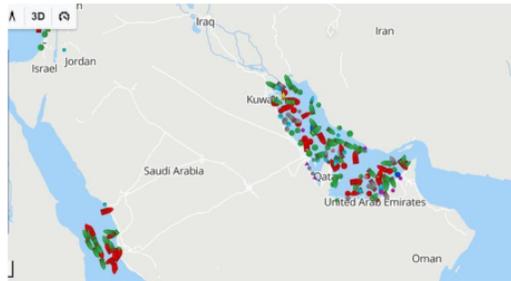
The crisis has transitioned from a purely military standoff to a massive logistical and financial "war of attrition." With the U.S. Navy preparing to escort tankers and the U.S. Treasury providing unprecedented "war risk insurance" subsidies, the global shipping industry is facing its most significant disruption since the 1980s "Tanker War." For India, the stakes are exceptionally high, with dozens of Indian-flagged vessels and over 1,000 seafarers currently caught in the crossfire.

Merchant ships stranded near Strait of Hormuz

M. Kalyanaraman
CHENNAI

With the conflict in West Asia escalating, merchant ships continue to be stranded upstream of Strait of Hormuz, even as the world awaits the rollout of the U.S. government's promise of deploying its Navy to escort the ships and funding war risk insurance for the vessels.

On Thursday, Sonangal Namibe, a crude oil carrier whose owners and managers are based in Houston, Texas, as per Equasis database, became the ninth ship attacked in the region since the conflict started. Skylight, a ship sanctioned by the U.S. for Iranian links and manned mostly by Indian crew, was also among the ships attacked. Insurance companies are seek-



Fear reigns:: Ships on the Persian Gulf route may have to pay 10 times or 15 times more for insurance coverage.

ing to renegotiate their coverage of ships serving the Persian Gulf.

War risk cover

War risk insurance policies that can cover ship transit through the Strait of Hormuz come with premiums of 1% to 3% of the vessel cost itself, says David Osler, Law and Insurance Editor of Lloyds List Intelligence.

This means vessels transiting the Strait of Hormuz will now need to pay weekly insurance premiums of nearly the same amount they would pay for an entire year, he says.

Insurance premiums have registered increases across the world since the recent conflict started. Ships on the Persian Gulf route may have to pay 10

times or 15 times more for insurance coverage, which is a basic requirement for any merchant ship to embark on a voyage. Experts talk of affiliative risk - vessels may have owners formally based in neutral countries and the ships may fly flags of other nations but if they have links with not just Iran but also the U.S. and Israel, then they may have to pay much higher premiums.

Governments such as the U.K. had historically footed the bill for such war risk insurance. In December of last year, Denmark passed a law providing such a cover for its ships.

One fifth of the world's oil and gas supplies pass through the strait.

More than 600 ships are estimated to be trapped, out of whom some 250 are

oil tankers and gas carriers. At least 10% of the oil and gas ships are estimated to be Indian flagged vessels bound for India. Government-owned Shipping Corporation of India is among the leading ship owners whose vessels have been stranded in the Persian Gulf west of the strait.

Though oil and gas facilities have been hit and some such as Qatar's facilities have been shut down, many Persian Gulf ports continue to be operational.

Lloyds List Intelligence reports that there has been a 95% decrease in the number of ships transiting the Strait of Hormuz.

No India related ship has transited the strait. SCI has ships with some nine lakh tonne cargo capacity in the area while Sanmar has some 3 lakh tonne.

Key Highlights of the Analysis

The Insurance Crisis: Shipping insurance has become a "legitimacy paper." Premiums have skyrocketed by **1000% to 1500%**, turning a routine voyage into a multi-million dollar gamble. Weekly premiums now equal what shipowners previously paid for an entire year.

Affiliative Risk: A new dimension of maritime risk has emerged where even "neutral" ships (flying flags of convenience) are being targeted or charged higher premiums if they have any underlying links to the U.S., Israel, or Iran.

Stranded Indian Assets: Approximately 37 to 38 Indian-flagged ships and over 1,100 Indian seafarers are currently stationary in the Persian Gulf and Gulf of Oman. Major state-owned entities like the Shipping Corporation of India (SCI) are severely affected.

U.S. Intervention: In a rare move, the U.S. government (via the DFC) has promised to fund "war risk insurance" to lower costs for shippers, while the U.S. Navy prepares for Operation Epic Fury style escorts.

Global Supply Chain Collapse: A 95% decrease in transits through the Strait has been recorded. Since one-fifth of global oil and gas passes here, the blockade is causing cargo to pile up at Indian ports, leading to severe congestion and "vessel bunching."

Static Section

Maritime Insurance: Hull and War Risk

Hull Insurance: Covers physical damage to the ship's structure.

War Risk Insurance: A specialized cover for damage caused by acts of war, including shelling, torpedoes, and hijacking. During active conflicts, this is often "excluded" from standard policies and must be bought separately as an "Additional Premium" (AP).

Chokepoints and Global Geopolitics

The Strait of Hormuz is the world's most sensitive **Maritime Chokepoint**. Unlike the Red Sea (where ships can divert around the Cape of Good Hope), ships trapped inside the Persian Gulf (ports in Iraq, Kuwait, Qatar, UAE) have no alternative sea route if the Strait is closed.

India's Energy Dependency

India imports nearly **85-90%** of its crude oil.

Roughly **46-50%** of these imports traditionally pass through the Strait of Hormuz.

Alternative Routes: India is exploring the Habshan-Fujairah pipeline (UAE) and East-West pipeline (Saudi Arabia) to bypass the Strait, though these have limited capacity.

Directorate General of Shipping (DGS)

The DGS is an attached office of the Ministry of Ports, Shipping and Waterways. It is the apex executive body responsible for the safety of life at sea, maritime education, and regulating the Indian shipping industry during such crises.

Conclusion

The crisis at the Strait of Hormuz is a stark reminder of the fragility of the "just-in-time" global energy supply chain. For India, the immediate priority is the evacuation and safety of seafarers, followed by the stabilization of energy costs.

While the U.S. naval escorts and insurance subsidies provide a temporary "safety net," they also deepen India's strategic alignment with Western security frameworks. In the long run, this crisis validates India's push for Strategic Petroleum Reserves (SPR) and the diversification of energy sources (like the 30-day Russian oil window) to insulate the economy from West Asian volatility.

UPSC Prelims Exam Practice Question

Ques: The Strait of Hormuz connects which of the following water bodies?

- (a) Red Sea and Gulf of Aden
- (b) Persian Gulf and Gulf of Oman
- (c) Arabian Sea and Red Sea
- (d) Gulf of Oman and Gulf of Aden

Ans: b)

UPSC Mains Exam Practice Question

Ques: The Strait of Hormuz is often described as the world's most critical maritime chokepoint. Explain its significance for global energy trade and India's energy security. **(250 words)**



Balancing innovation with women's digital safety

The conversation around artificial intelligence (AI) has taken centre stage, and after the India AI Impact Summit 2026, in February, India's engagement with AI has heightened. While there is enough to appreciate how the world has transformed in terms of technology and innovation, on the occasion of International Women's Day 2026 (March 8), the need is to focus on "ethical AI" and women's digital safety.

With a steady rise in accessible Internet, women are continuously bearing the brunt of digital threats and humiliation. About 16%-58% of women have faced online harassment and abuse, a number that could rise further. Even as one in three women face physical or sexual violence, abuse against women has now crossed physical boundaries and geographies.

In the physical world, women can take a "degree of precaution", though never foolproof, to protect themselves. But in the digital world, protecting oneself from harm, doxing and abuse is significantly difficult. This is driven by technology's deep integration into daily life and the anonymity that the digital world affords the perpetrators of abuse.

This is the deepfake era

The rise of deepfakes and the recent Grok AI issue are a case in point. Deepfakes are digitally altered images, audio, or videos created using AI that appear as though someone has said or done something they never actually did. Grok AI, an AI chatbot developed by xAI, is being used to generate non-consensual sexualised images of women.

In India, women endure deep inequalities and widespread violence. With the use of AI and



Prachi Dutta

is a corporate lawyer licensed in New York and India, advises companies and funds, and serves as an Adjunct Professor at Jindal Global Law School and Shiv Nadar University

Ensuring the digital safety of women must guide AI development and its ethical use

access to deepfake technologies, the traditional and societal restraints of unacceptable behaviour melt away due to online anonymity. While one is not denouncing the use of AI and technology, the dialogue around the ethical use of AI is paramount now more than ever.

No women developers

One of the major concerns about AI and a lack of women's digital safety is the lack of representation of women at the stage of designing AI tools. According to a report by UN Women, many deepfake tools – mostly built by men – rarely work on images of men. According to the United Nations Development Programme, women make up only 22% of AI professionals and below 14% work at senior levels.

This lack of women's representation at the stage of AI development leads to fewer diverse viewpoints shaping innovation. Research suggests that with more women and diversity in AI development teams, the overall effectiveness and applicability of AI increases. It has been proposed by UN Women that if there are more women researchers in AI, then the unique lived experiences of women can "profoundly shape the theoretical foundations of technology" and open new applications of the technology". When this is achieved and diverse expertise is integrated in AI development, the hope is that AI supports and weaves in women as equal stakeholders in the digital world. This should help in creating safer online spaces and technologies, including swiftly removing harmful content and responding effectively to abuse at the source.

Stronger laws to ensure prompt investigations into the unethical use of AI are key to ethical AI use. While Indian legislation attempts to do its bit to address online abuse, implementation is far from prompt.

The new notification introduced by the Ministry of Electronics and Information Technology directs that online intermediaries must take down reports of deepfakes within three hours of receiving a takedown notice. Notwithstanding the criticism of the new guidelines and the strong review process, the hope is that these guidelines are a step towards strengthening legislation to protect women from irreparable harm caused by unethical AI-like deepfakes.



Start young

A third way to address the unethical use of AI is to address the issue at the ground level. As one in three Internet users are children, one must accept that they are "digital natives" who are dependent on the web. Therefore, the emphasis on digital safety being taught at an elementary level to children is more crucial than ever. Children and young adults must be sensitised to the issue of digital abuse and AI misuse as seriously as the issue of sexual and physical abuse.

Resisting technological change, especially to AI, is futile and is not a sustainable solution as its integration into daily life is inevitable. However, on the occasion of International Women's Day 2026, prioritising women's digital safety and ethical AI use is essential so that women are not left bearing the brunt of advancement and technology.

GS Paper II : Social Justice

UPSC Mains Practice Question: The rise of Generative AI and deepfake technologies has created new challenges for women's digital safety. Discuss the nature of these threats and the need for regulatory safeguards. **(250 Words)**

Context :

The editorial coincides with International Women's Day 2026, highlighting a critical paradox: while AI drives global innovation, it simultaneously scales digital violence against women. As India positions itself as a leader following the India AI Impact Summit 2026, the author argues that progress is hollow if it compromises the digital safety and dignity of half its population. The focus shifts from mere technological advancement to the urgent need for "Ethical AI" and gender-inclusive development.

Core Themes and Analysis

The Digital Frontier of Gender-Based Violence

Scale of Harassment: Online abuse affects 16%–58% of women globally. Unlike physical threats, digital threats like doxxing and harassment are borderless and persistent.

The Anonymity Factor: The digital world provides a "cloak of invisibility" for perpetrators, lowering the psychological barriers that traditionally restrain antisocial behavior in the physical world.

The Menace of Deepfakes and Generative AI

Weaponization of AI: Tools like Grok AI and other deepfake generators are being used to create non-consensual sexualized imagery (NCII).

Societal Impact: In a country like India, where societal reputation is often tied to a woman's "modesty," deepfakes cause irreparable psychological and social harm.

The "Gender Gap" in AI Development

Lack of Representation: Only **22%** of AI professionals are women, and even fewer (14%) are in senior roles.

Biased Innovation: Most deepfake tools are built by men and, as per UN Women, often fail to recognize or work on male images, essentially "targeting" women by design.

The Solution: Diversity is not just a metric but a functional necessity. Women researchers bring "lived experiences" that can steer AI toward safer, more inclusive applications.

Legal and Regulatory Framework in India

Intermediary Responsibility: Recent MeitY (Ministry of Electronics and Information Technology) notifications mandate that platforms must remove deepfake content within three hours of a report.

Implementation Gaps: While laws are being drafted, the author notes that "implementation is far from prompt," emphasizing the need for swift investigative mechanisms.

Relevant Static Section

Constitutional Provisions

Article 15: Prohibits discrimination on grounds of sex.

Article 21: Right to Life and Liberty, which includes the Right to Privacy (as per the *Puttaswamy* judgment) and the right to live with dignity.

Legislative Framework

Information Technology (IT) Act, 2000: Section 66E (Privacy violation), Section 67 & 67A (Obscene/Sexual content).

IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021: Recently updated to tackle deepfakes.

Bhartiya Nyaya Sanhita (BNS): Replaced the IPC, containing updated provisions for stalking and harassment.

Global Initiatives

Bletchley Declaration (2023): The first global agreement on AI safety.

UN Women's Gender Snapshot: Tracking the gender gap in the digital revolution.

The Way Forward

Inclusive Design: Mandating gender-diversity quotas in AI research labs to prevent "algorithmic bias."

Digital Literacy at Grassroots: Introducing digital safety in school curriculums. Children must be taught that "digital consent" is as vital as "physical consent."

Technological Redressal: Using AI to fight AI—developing robust watermarking and automated detection tools for deepfakes.

Conclusion

Innovation cannot be considered "progress" if it acts as a tool for regression in human rights. To achieve the vision of "AI for All," India must move beyond reactive policing and embrace "Safety by Design." By integrating women into the core of AI development and tightening legal enforcement, the digital world can become a space for empowerment rather than a theater for humiliation.

