

GS II

SYLLABUS: BILATERAL, REGIONAL AND GLOBAL GROUPINGS AND AGREEMENTS INVOLVING INDIA.

INDIA-CHINA

THE HINDU, PG.NO: 12.

News: "An India-China reset needs bold and new thinking."

Boarder Disputes reasons:

- **Sino-Indian War 1962** over disputed Himalayan borders.
- **No clear demarcation of LAC spanning 3,488km:**
 - *Doklam standoff 2017, Galway Valley clash 2020.*
- **Cabbage strategy or salami Slicing tactic:** Acquiring new territories at expense of its neighbours.
- **Growing Power imbalance:** Eg. China-Indian Ocean Region forum for marine disaster prevention and cooperation with Indian Ocean countries except India.
- **Geopolitical Interests:** Eg. India's closer ties with USA and allies; Neighbourhood first policy.

Security Concerns between Both Countries:

- **China-Pakistan Nexus under China-Pakistan Economic Corridor (CPEC),** which passes through Pakistan-occupied Kashmir, raises sovereignty concerns for India.
- **String of Pearls:** China's strategy of developing ports and facilities in the Indian Ocean region is perceived by India as encirclement. Eg. *Hambantota* (Srilanka), *Gwadar* (Pakistan).
- **Quad Alliance:** India's engagement with the Quadrilateral Security Dialogue (India, US, Japan, Australia) is viewed cautiously by China.
- **Border Infrastructure:** India has accelerated infrastructure projects along the LAC, including the construction of the *Darbuk-Shyok-DBO road.*
- **Opposition to India's UNSC membership.**

Economic relations with China:

- **Rapid Growth in Bilateral Trade:** USD 3 billion in 2000 to USD 130 billion in 2022, making China one of India's largest trading partners—*MoC&I Trade Data 2022.*
- **India faces significant trade deficit:** as of USD 140 billion in 2022—*MoC&I Trade Data 2022.*
 - **Indian exports to China:** stood at USD 20 billion in 2022.
 - **Indian imports from China:** stood at USD 120 billion in 2022.

Impacts on Indian Economy:

- **Pressure on Domestic Industries:** due to competition from cheap imports Eg. between 2015-20 due to Chinese imports captured 70% of the Indian market—*CAIT report 2021.*
- **Dependence on critical goods:** of total Indian imports from China:
 - **Pharmaceuticals (APIs)** account for 70%, solar components 80%—*MoC&I Trade Data 2022.*
 - **Electronics:** India imports 80% of its mobile phone components from China.
- **Widening of Indian Current Account Deficit (CAD):** due to trade imbalances with China.
- **Supply chain vulnerabilities:** exposed by pandemic Eg. shortage of APIs and price hikes of medical supplies and electronics in 2020-21.
- **Job losses in manufacturing sector:** ~2 million jobs were lost in the textile and toy industries between 2015 and 2020—*FICCI 2021.*

- **India's R&D expenditure is 0.7% of GDP,** compared to China's 2.4%, affecting innovation.

Economic measures taken by India:

- **Atmanirbhar Bharat Abhiyan Rs. 20 lakh crore package:** to reduce dependence on imports by boosting domestic production.
- **Production-Linked Incentive (PLI) Schemes of Rs. 2 lakh crore in 14 sectors:** to encourage domestic manufacturing in electronics, pharmaceuticals, and textiles etc.
- **Imposition of Anti-Dumping Duties:** to protect domestic industries from unfair trade practices.
- **Amendment of FDI Regulations:** requiring prior government approval for investments from neighbouring countries.
- **Banning of Chinese Apps:** India banned nearly 300 Chinese apps, including TikTok and WeChat, citing data security risks.

Areas for mutual cooperation:

- **India's large and fast-expanding market** offers a growth opportunity to China's slowing economy.
- **China with its formidable strengths** in infrastructure modernisation, green energy, electric vehicles and several other breakthrough technologies provided Ed opportunity for India in **realisation of 'Viksit Bharat'.**
- **India and China are Global South countries:** their cooperation can greatly help other developing countries and LDCs, in Asia, Africa and Latin America.
- **Convergence in their foreign policies,** can bring greater stability, predictability and fairness to global governance as follows:
 - Working together to **end Russia-Ukraine war and for peace in west Asia.**
 - **Bangladesh-China-India-Myanmar (BCIM) Corridor:** can bring prosperity to northeastern states.
 - **Strengthening Act East Policy.**

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PYQs

GS II 2017: 'China is using its economic relations and positive trade surplus as tools to develop potential military power status in Asia', In the light of this statement, discuss its impact on India as her neighbour.

P.T.O

TECHNOLOGY

PRE-CONTEXT

QUANTUM TECHNOLOGY

THE HINDU, PG.NO: 14.

News: "What is quantum computing?"

Quantum Computing:

- Advanced type of computing that **uses the principles of quantum mechanics to perform certain calculations** more efficiently than classical computers.
- Classical computers use bits (0 or 1) as the basic unit of data, **quantum computers use quantum bits or qubits.**

Key concepts in quantum computing:

- **Superposition:**
 - Unlike classical bits, qubits can exist in multiple states (**both 0 and 1**) at the same time, allowing quantum computers to perform many calculations at once.
- **Entanglement:**
 - **Two or more qubits become linked** in such a way that state of one particle directly influences the state of other **no matter how far apart they are in space.**
 - This property is key to the power and efficiency.
- **Quantum Tunneling (QT):**
 - Unlike classical physics, QT **allows an electron or atom passes through a potential energy barrier.**
 - This allows quantum computers to explore many possible solutions to a problem simultaneously.
- **Photon-based Communication:**
 - Photons are used as **carriers of quantum information** due to their robustness in long-distance transmission.
- **Quantum Key Distribution (QKD):**
 - Ensures **secure encryption keys** are shared between users. Provides virtually unbreakable security based on quantum mechanics.

National Mission on Quantum Technologies and Applications.

- Budget 2020-21 allocated **Rs.8000 crore** for focus on development of quantum computing and related technologies.
- **Implemented by: Dept. of Science & Technology.**
- **Objectives: Setting up 4 thematic Hubs:**
- **Quantum computing.**
 - Developing intermediate scale quantum computers with 50-1000 physical qubits in 8 years.
- **Quantum communication.**
 - Developing satellite based secure quantum communications between ground stations over range of 2000km.
 - **Quantum Satellites:** They facilitate quantum information transmission (qubits) and secure communication via quantum key distribution (QKD).
- **Quantum sensing & Metrology.**
 - Developing magnetometers with high sensitivity atomic systems and Atomic clocks for precision timing, communication and navigation.
- **Quantum material devices.**
 - Development of quantum materials like superconductors novel semiconductor structures.

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SUPERPOSITION

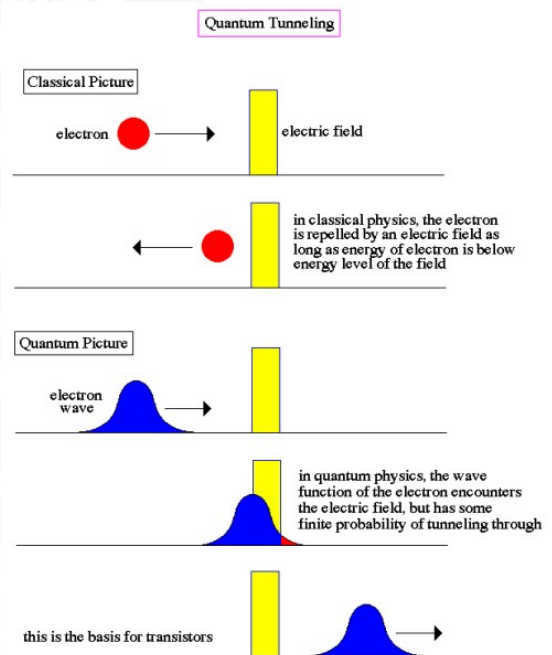
Superposition describes a particle's ability to exist across many possible states at the same time. So the state of a particle is best described as a "superposition" of all those possible states.



ENTANGLEMENT

Quantum entanglement refers to a situation in which two or more particles are linked in such a way that it is impossible for them to be described independently even if separated by a large distance.

Source: Deloitte analysis.



P.T.O



POLITY

PRE-CONTEXT

ELECTIONS

THE HINDU, PG.NO: 12, 14.

News: "Hide and seek."

News: "Why are activists opposing EC's election rule amendment?"

Context: Under new rules, the ECI told it not to share CCTV footage of the booth, citing privacy and security reasons.

About New Rules:

- Ministry of Law and Justice issued a notification:
 - Before Amendment of Rule 93(2)(a) of the 1961 Conduct of Election Rules:**
 - It stated, "all other papers relating to the election shall be open to public inspection"
 - After Amendment:**
 - It reads, "all other papers *as specified* in these rules relating to the election shall be open to public inspection."

Note: Conduct of Election Rules, 1961, is a set of rules which provide for provisions on how to conduct the elections *as per the Representation of People Act*.

Criticism by critics:

- Amendment appears to be aimed at **restricting citizen-voters' right** to access a large number of documents.
- Systematic conspiracy to **destroy the institutional integrity of the Election Commission**.
- Accused the EC for "**undermining multi-party democracy**" by taking "unilateral" decisions without consulting all political parties.

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ECONOMY

PRE-CONTEXT

REMITTANCES

THE HINDU, PG.NO: 13.

News: "India got 14.3% of global remittances in 2024, its highest ever."

About Remittances:

- Remittances refer to the money that individuals working abroad send back to support their families in their home country.
 - In India, remittances formed 3.3% of the GDP in 2024.
- India** received the largest remittances in 2024, followed by **Mexico and China**.
- Remittances *can be made in any freely convertible foreign currency*.
- Remittances are **component of current transfers** which are **part of the Current account**.
- The **RBI has a Liberalised Remittance Scheme (LRS)** that **allows Indian residents to send up to USD 250,000 per financial year** for current or capital account transactions.
- Remittance for any purpose specifically **prohibited under Schedule-I** (like purchase of lottery tickets/sweep stakes, proscribed magazines, etc.) or **any item restricted under Schedule II of FEMA Rules, 2000**.

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Thank you!