



DAILY CURRENT AFFAIRS

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Crossing a line: On Politicization of Bureaucracy

Syllabus: GS2/Governance

In News

- Recently the Union government has asked all departments to deploy officers to showcase its achievements across the country, creating a political row.

About

- The circular is issued by the Department of Revenue, Ministry of Finance to nominate bureaucrats as "**rath prabharis**" for "showcasing achievements of the last nine years of government of India through the Viksit Bharat Sankalp Yatra."

- Joint Secretaries, Directors, and Deputy Secretaries will be appointed as **Rath Prabharis (chariots in-charge)** for the roadshow.
- A similar order had been issued by the Ministry of Defense directing soldiers on annual leave to promote government schemes as “**soldier-ambassadors**”.
- Similarly, the Ministry of Defense is setting up 822 ‘selfie points’ where citizens can click a picture of the current Prime Minister of India.

Impact of Politicization of Bureaucracy

- **Resistance from the opposition:** Opposition has alleged that the ruling dispensation is attempting to politicize the bureaucracy by drafting civil servants into government propaganda ahead of elections.
- **Violation of the Central Civil Services (Conduct) Rules, 1964,** which directs that no government servant shall take part in any political activity.
- **Apprehensions about partisanship:** While both the bureaucracy and the military are strictly under the control of the political executive, they are insulated from partisan politics.
- **Erosion of Neutrality:** The primary role of the bureaucracy is to implement government policies and programs impartially. Politicization can compromise this neutrality, as civil servants may be pressured to favor political objectives over the public interest.
- **Undermining Professionalism:** A professional and competent civil service is essential for effective governance. Politicization can lead to the appointment of individuals based on political connections rather than merit, eroding professionalism and competence.
- **Loss of Public Trust:** When citizens perceive that civil servants are serving political interests rather than the public good.

Reasons for the recent development

- Public service delivery is the government’s duty, and it is the public servants who are responsible in reaching out to the grassroots to ensure schemes’ saturation.
- Civil and military officials are expected to remain loyal to the government elected by the citizens, regardless of their personal ideological inclination.
- Expediting the implementation of schemes, ensuring that policies promised during election campaigns are put into action promptly.
- Enhancing the legitimacy of government actions and policies in the eyes of the public.
- To establish control and Influence over key government departments or agencies in order to ensure that they have a direct say in decision-making and to prevent bureaucratic resistance to their policies.

Way Forward

- The bureaucracy must be neutral and independent, and it is crucial that it be seen to be so, especially in polarized times when traditional notions of neutrality are increasingly strained. There is a greater responsibility to ensure that important lines are not crossed, and the governing principle of non-political domains is given its due respect.

Source: [Indian Express](#)

Sri Lanka Announces Free Visas

Syllabus: GS2/IR

In News

- Sri Lanka has approved a policy to issue **free tourist Visas** to travelers from India and six other countries.

About

- Sri Lanka will issue free visas to **India, China, Russia, Malaysia, Japan, Indonesia and Thailand** with immediate effect as a pilot project **till 31 March, 2024**.
- The move comes as a part of Sri Lanka's efforts to boost tourist arrivals and help **rebuild its economy**.
 - Sri Lanka's tourism sector is struggling to bounce back after the Easter Sunday terror attacks in 2019, the Covid pandemic in 2020 and 2021, and the unprecedented economic crisis in 2022.
 - Prior to the pandemic, **tourism was the third-largest source of foreign exchange** inflows to Sri Lanka, accounting for about **five percent of the country's GDP**.

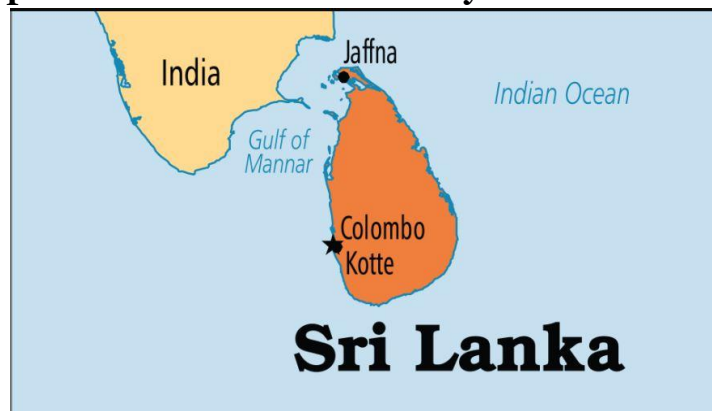
India and Sri Lanka Relations

- **Trade Relations:** India-Sri Lanka Free Trade Agreement (ISFTA) in 2000 contributed significantly towards the expansion of trade between the two countries.
 - India has traditionally been among **Sri Lanka's largest trade partners** and Sri Lanka remains among the largest trade partners of India in the SAARC.
 - India is also one of the **largest contributors to Foreign Direct Investment** in Sri Lanka.
- **Cultural relations:** The Cultural Cooperation Agreement signed in 1977 forms the basis for periodic Cultural Exchange Programmes between the two countries.
- **Tourism:** India has traditionally been Sri Lanka's **top inbound tourism market**, followed by China.
 - As per latest data from the Sri Lanka Tourism Development Authority, **India is the largest source for tourists** so far this year, followed by Russia.
- **Maritime Security and Defence Cooperation:** In 2011, a decision was taken to establish the **Colombo Security Conclave**.
 - India and Sri Lanka conduct a joint Military exercise named '**Mitra Shakti**', Trilateral Maritime Exercise "**Dosti**", and a Naval exercise named **SLINEX**.
- **Connectivity Projects:** Recently, the two sides adopted a **vision document to enhance maritime, energy and people to people connectivity**.
 - With regard to maritime connectivity, the two sides plan to cooperate in the **development of ports and logistics infrastructure** at Colombo, **Trincomalee, and Kankesanthurai** to consolidate regional logistics and shipping.
 - There are plans to develop a **land bridge between the two countries** to provide India with land access to the ports of Trincomalee and Colombo to boost economic growth

- **Multilateral Forum Collaboration:** India and Sri Lanka are member nations of several regional and multilateral organizations such as the **South Asian Association for Regional Cooperation (SAARC)**, South Asia Co-operative Environment Programme, South Asian Economic Union and BIMSTEC, working to enhance cultural and commercial ties.

Areas of Concern

- **The Fishermen Issue:** Sri Lanka's proximity to Indian territorial waters has often blurred the line for fishermen on both sides in pursuit of fish stock.
 - Since 2016, a **Joint Working Group on Fisheries (JWG) mechanism** has been in place to address the immediate concerns of fishermen of both sides and to find a permanent solution to the issue.
- **Indian Ocean Geopolitics:** The region is home to 35% of the world's population and its waters carrying two-thirds of the world's oil shipments, and half the world's container shipments, the Indian Ocean assumed significance in the strategic calculus of major powers.
 - In recent years, subtle geo-political and strategic competition in the IOR between the US, China and India **has been recognised by Sri Lanka as a possible threat to its security interest in the region.**



- **Rise of China:** China's increasing strategic investments in vital maritime ports in the IOR has been an area of concern.
 - Transparency in implementation of projects and possible military use of ports by China are India's main concerns, despite Sri Lanka's continued assurance.
- **The fear of Indian dominance** over the territory of Sri Lanka among the Sri Lankans has been a reality since its independence. The degree of fear may have reduced but the trust deficit remains.

Way Ahead

- In spite of few setbacks, both the countries understand the **importance of enhancing bilateral relations**, and a policy document released by the Sri Lanka Mission in India in 2021, was a positive move.
- The economic crisis and political chaos in Sri Lanka last year prompted **India to step in with help**, as Beijing looked the other way.
- However, the challenge for India is in maintaining a balance between its own interests and the interests of Sri Lanka.

- So far both India and Sri Lanka seem to be able to handle the strategic pulls and pressures in relations, despite respective foreign policy preferences.

Source: [TH](#)

Preventive Detention

Syllabus: GS2/ Indian Polity

In News

- As Telangana gears up for Assembly polls, its stringent preventive detention law is under the spotlight.

What is Preventive Detention?

- **Preventive detention** means to detain a person so that to **prevent that person** from committing on any possible crime.
- It is an action taken by the administration **on the grounds of the suspicion** that some wrong actions may be done by the person concerned which will be prejudicial to the state.
- The grounds for Preventive detention are:
 - Security of state, maintenance of public order,
 - Maintenance of supplies and essential services and defense,
 - Foreign affairs or security of India.

Punitive Detention

- It is to punish a person for an offence committed by him/her after trial and conviction in a court.

Safeguards Provided By The Constitution

- To prevent reckless use of Preventive Detention, certain safeguards are provided in the constitution **under Article 22**:
 - A person may be taken to preventive custody **only for 3 months at the first instance**. If the period of detention is extended beyond 3 months, the case must be **referred to an Advisory Board**.
 - The detainee is **entitled to know the grounds of his detention**. The state, however, may refuse to divulge the grounds of detention if it is in the **public interest to do so**.
 - The detaining authorities must give the **detainee earliest opportunities** for making representation against the detention.

Concerns with Preventive Detention

- **Colonial Law:** Preventive detention was introduced to India during the colonial period and was largely used to target freedom fighters. It would therefore seem surprising that the Constitution allows both the union and state to enact preventive detention laws.
- **Misuse of the Law:** The state may refuse to divulge the grounds of detention if it is in the public interest to do so. Needless to say, this power conferred on the state leaves scope for arbitrary action on the part of the authorities.
- **Against the Fundamental Rights:** Part III of the Constitution, which deals with fundamental rights, also gives the the power to suspend these rights for preventive detention.
 - Article 22 which provides Protection Against Arrest and Detention in Certain Cases expressly excludes preventive detention cases from **direct**

judicial scrutiny and instead creates an administrative review framework.

- **Detention on the Basis of Suspicion:** The law authorizes the executive to arrest any person from whom reasonable suspicion arises that he can commit any cognizable offense and the police can arrest that person without warrant which is arbitrary in nature.
- **Nature of Application of Law:** In countries such as Britain, United States and Canada, preventive detention is a **wartime measure**. India is one of the few countries in the world whose Constitution allows for **preventive detention during peacetime**.

Way Ahead

- For preventive detention, there are very narrow grounds of judicial review because the Constitution emphasises the state's "subjective satisfaction" when ordering a detention.
 - More safeguards should be provided to the detainee so that **there is a narrow scope of misuse**.
- Judges should ensure that the government has followed every procedure of law while flexing preventive detention powers against individuals.

Source: [IE](#)

DNA & face matching systems at police stations across country

Syllabus: GS2/Governance

In News

- More than a year after Parliament passed the [Criminal Procedure Identification Act \(CrPI\)](#), the Centre is preparing to deploy 'DNA and Face Matching' systems at 1,300 police stations across the country.

About

- It will be implemented under the Criminal Procedure Identification Act which was passed in 2022
- The law enables police and Central investigating agencies to collect, store and analyze physical and biological samples, including retina and iris scan of arrested persons.
- The National Crime Records Bureau (NCRB), a Central body tasked with rolling out the Act, was assigned with finalising the Standard Operating Procedure (SOP) to be followed by police officials while recording the measurements.
- The Ministry of Home Affairs (MHA) has formed a Domain Committee comprised of representatives from state police, federal law enforcement agencies, and other key stakeholders to ensure the Act's successful implementation.
- A technical subcommittee has also been formed to prepare the SOPs for capturing DNA as a measurement.
- The states have been asked to identify and prepare sites where the NCRB-recommended Measurement Collection Unit (MCU) can be established.

Do you know?

- Under the **National Automated Fingerprint Identification System (NAFIS)**, another project maintained and managed by NCRB,

workstations and scanners have been put up at around 1,300 police stations.

- It has fingerprint details, a unique 10-digit number of over 1 crore people, accused and convicts, across the country. This database is also being integrated with the Criminal Procedure Identification Act (CrPI Act).
- The CrPI Act replaces the outdated Identification of Prisoners Act, 1920, that only allowed for the collection of fingerprints, footprints, and photographs from convicted prisoners and a specific group of arrested but non-convicted individuals under a magistrate's orders.
- The new Act, although not explicitly mentioning DNA sampling and face matching procedures, includes them as intimated by the NCRB to state police officials in subsequent meetings.

Challenges

- The NCRB has warned against the **misuse of databases** by ensuring the identification and deployment of appropriate safeguards, and that only designated officials must have real-time access.
- Lack of appropriate **training and resources** in far regions like Northeast is a major roadblock.
- **Lack of funds** by state governments to ensure smooth operations and functioning of the systems is an important aspect which needs attention.
- Apprehensions about **privacy concerns** and the potential for personal data misuse.

Way Forward

- The adoption of DNA and face matching systems under the CrPI Act represents a significant step forward in modernizing India's criminal identification procedures which necessitate coordination between different agencies, ensuring training and resource availability, along with maintaining a balance between increasing law enforcement capabilities and protecting individual privacy.

Source: [The Hindu](#)

Bharat National Cyber Security Exercise (NCX) 2023

Syllabus: GS3/Cyber Security

Context:

- Bharat National Cyber Security Exercise (NCX) 2023 has concluded with the focus on elevating cybersecurity preparedness of India to new heights.
 - Bharat NCX was conducted by the National Security Council Secretariat (NSCS), Govt. of India in strategic partnership with Rashtriya Raksha University (RRU).

What is Cybersecurity?

- It is the **practice of protecting systems, networks, and programs from digital attacks from cyberattacks** which are usually aimed at assessing, changing, or destroying sensitive information; extorting money from users via ransomware; or interrupting normal business processes.
 - Implementing effective cybersecurity measures is particularly challenging today because there are more devices than people, and attackers are becoming more innovative.

- Common technology used to protect these entities include next-generation firewalls, DNS filtering, malware protection, antivirus software, and email security solutions.

Types of Cybersecurity Threats

- **Phishing:** It is the practice of sending fraudulent emails that resemble emails from reputable sources. It is the most common type of cyber attack.
- **Social Engineering:** It is a tactic that adversaries use to trick people into revealing sensitive information.
 - It can be combined with any of the threats to make people more likely to click on links, download malware, or trust a malicious source.
- **Ransomware:** It is a type of malicious software, designed to extort money by blocking access to files or the computer system until the ransom is paid.
- **Malware:** It is a type of software designed to gain unauthorised access or to cause damage to a computer.

What Is Cyber Resilience?

- Cyber resilience refers to an organisation's ability to identify, respond, and recover swiftly from an IT security incident.
- Building cyber resilience includes making a risk-focused plan that assumes the business will at some point face a breach or an attack.

Cyber Crimes in India

- According to data available with the CERT-In, there are **1.3 million cybersecurity incidents a year** between 2020 and 2022.
- A US-based cybersecurity company observed that **almost 67% of Indian government and essential service entities** reported a 50% increase in disruptive cyberattacks in 2022-23.

Impacts of cyber crime

- Cybercrime impacts the **economy, business, and society**, with long-reaching effects. With over 60% of the world's population now accessing the internet, it is easy for hackers to find vulnerable people and attack them.
- **Financial loss and theft of intellectual property:** The Official Cybercrime Report by Cybersecurity Ventures projected this cost globally at \$8 trillion for 2023 and \$10.5 trillion by 2025.
 - It affects individuals, businesses, and financial institutions, which includes supply chain disruptions, business continuity and resilience, and downtime and loss of productivity etc.
- **Psychological impact:** feelings of anxiety, depression, and even trauma after cyberbullying and solicitation

Government Response

Role of State Governments: 'Police' and 'Public Order' are State subjects as per the Seventh Schedule of the Constitution of India.

- States/UTs are **primarily responsible for the prevention, detection, investigation and prosecution of crimes including cyber crime** through their Law Enforcement Agencies (LEAs) that take legal action as per provisions of law against the offenders.

Role of Union Government: The **Union Government** supplements the initiatives of the State Governments through advisories and financial assistance under **various schemes** for their capacity building.

- **National Critical Information Infrastructure Protection Centre (NCIIPC):** It is an organisation created under **Sec 70A of the Information Technology Act, 2000** (amended 2008) through a gazette notification.
 - It is designated as the **National Nodal Agency** in respect of Critical Information Infrastructure Protection.
 - It aims to facilitate safe, secure and **resilient Information Infrastructure for Critical Sectors of the Nation**.
- **Indian Cyber Crime Coordination Centre (I4C):** It aims to provide a framework and ecosystem for Law Enforcement Agencies (LEAs) to deal with cyber crimes in a comprehensive and coordinated manner.
 - **‘Joint Cyber Coordination Teams’** are constituted under the **I4C to address the issue of jurisdictional complexity**, based upon cyber crime hotspots/areas, by on-boarding all the States/UTs to provide a robust coordination framework to the LEAs.
- **The National Cyber Crime Reporting Portal (www.cybercrime.gov.in):** It enables the public to report incidents pertaining to all types of cyber crimes, with **a special focus on cyber crimes against women and children**.
 - A **toll-free number 1930** has been operationalised to get assistance in lodging online cyber complaints.
 - **The Citizen Financial Cyber Fraud Reporting and Management System** module has been launched **for immediate reporting of financial frauds** and to stop syphoning off funds by the fraudsters.
- **CERT-In:** It is the **national nodal agency** for responding to computer security incidents as and when they occur. It has been designated to serve as the national agency to perform the following functions in the area of cyber security:
 - Collection, analysis and dissemination of information on cyber incidents;
 - Forecast and alerts of cyber security incidents;
 - Emergency measures for handling cyber security incidents;
 - Coordination of cyber incident response activities;
- **Cyber Jaagrookta Diwas** (on first Wednesday of every month) with special focus on Cyber Crime & Safety; Concept and use of cyber hygiene in daily life; Introduction to Social Networks; Electronics payments and Safeguards; and Putting up awareness/publicity posters/banners in premises.
- **Cyber Swachhta Kendra (Botnet Cleaning and Malware Analysis Centre):** It has been launched for providing detection of malicious programmes and free tools to remove such programmes.
- **Cyber Crime Prevention against Women & Children (CCPWC):** The **Ministry of Home Affairs** has provided financial assistance to all the States & UTs under this scheme to support their efforts **for setting up of cyber forensic-cum-training laboratories, training, and hiring of junior cyber consultants**.
- **CSAI Mission** (Cyber Security, Cyber Forensics, Cyber Education, Ethical Hacking): **India and USA** together reaffirmed their commitment to **an open, secure, inclusive, safe, interoperable and reliable internet**, and to

continuing cooperation on a range of cyber-security issues, including preventing and to responding to cyber-threats, promoting cyber-security education and awareness and measures to build resilient cyber infrastructure.

Way Forward

- Bharat NCX 2023 represents a defining moment in India's unwavering commitment to cybersecurity excellence, underscoring the paramount importance of collaboration and knowledge-sharing among stakeholders from government, public, and private sectors.
- It also had a Strategic Track for leadership level discussions on cyber threat landscape, incident response, crisis management to handle real world cyber challenges.

[Source: PIB](#)

Quantum Chaos

Syllabus: GS3/Developments in Science and Technology

News

- Quantum chaos has gained a significant interest in the past decade for its implications in various fields.

About the Quantum chaos

- The branch of quantum physics that **studies the dynamics of classically chaotic systems** is called quantum chaos.
- It is a recent field of investigation of great **importance for fundamental physics and** research areas such as **atomic physics, condensed matter, nuclear physics and, more recently, quantum computers.**

Deterministic chaos

- The motion of the little ball in a pinball machine is precisely governed by the laws of gravitation and motion, of rolling, elastic collisions, scattering, etc. Yet **it is practically impossible to accurately predict the ball's position at a given moment.**
 - Such systems are said to be **classically chaotic because of their apparently unpredictable behaviour** even though they are governed by deterministic physical laws.
- A more appropriate term for such systems would be **deterministic chaos** which means that **the future can be predicted only if the present is known with a great degree of accuracy.**
 - However, if the present is known only approximately, the future can't be predicted. This is also what the term '**butterfly effect**' stands for: **that some system is highly sensitive to its starting conditions.**
 - Even a **small change in these conditions can produce disproportionately large changes in the way the system evolves.**
- The mathematics of chaos incorporates the study of systems such as the **turbulent flow of fluids, irregularities in the human heartbeat, irregular patterns in the amplitude of sound transmission, trends in population dynamics, voting patterns in an election, and the motion of clusters of stars** among others.

The Lyapunov time

- As noted earlier, the duration for which the system's evolution will be predictable **depends on how accurately and precisely its present state is known, the amount of uncertainty that it can tolerate, and a time factor determined by the dynamics of the system, called the Lyapunov time.**
 - For example, **in a chaotic electrical circuit, the Lyapunov time is about 1 ms.** For weather systems, it is a few days, and for the inner solar system, it can be 4-5 million years.

Chaos in quantum

- Scientists can approach the inherent uncertainty of physical systems **using the tools of quantum theory** but its implications are the most dramatic in the subatomic domain.
- **Quantum mechanics is probabilistic, not chaotic**, because there are **no point-like locations of subatomic particles in space**, so it is meaningless to determine their exact locations at some time and then attempt to determine their locations at a later point. In atoms, electrons exist in a cloud that hovers around the nucleus.
- **An atom by itself can't be chaotic but it can be disturbed by applying an electric or a magnetic field.**
 - Quantum physics takes care of such mild disturbances using **perturbation theory**. Chaos, however, is beyond the scope of perturbation theories and warrants a different approach.

Do you know?

- **Perturbation theory is a general method to analyse complex quantum systems in terms of simpler variants.**
- The method **relies on the expectation values, matrix elements and overlap integrals**, which are used to break down complex quantum processes into simpler parts.

The Rydberg atom

- The hallmark of any quantum system is that **its energy can increase or decrease in discrete steps**. On the other hand, **classical systems can have a continuum of energies**.
- Now, if an electron is excited to a sufficiently high energy even when it is still a part of an atom, **a group of energy levels could get close to each other in a continuous manner**, almost creating a continuous energy level.
- **An atom excited in this way, to have a continuum of energies, is called a Rydberg atom**, and we can apply the principles of classical mechanics to describe it.
- The Rydberg atom is like **a link that connects the classical and the quantum domains**. If such an atom is made to exhibit chaotic behaviour, it could help scientists provide important clues about the uncharted areas of quantum chaos.

Uncharted territory

- The **chaos in a Rydberg atom doesn't manifest in the values of the individual energy levels**. Instead, its signature can be detected in the spectrum, or the distribution, of these energy levels.

- Ironically, **the energy levels in a non-chaotic quantum system are distributed randomly, without any correlation.**
- But **the energy levels in a chaotic quantum system exhibit strong regularities** as if each level is aware of another's presence and is trying to keep a safe distance.

Way Ahead:

- Quantum chaos is a new area of research that's rich in **conceptual, experimental, and computational challenges.**
- It has gained a significant amount of interest in the past decade for its **implications in fields like thermalisation and transport, quantum information, and the quantum mechanics of black holes.**

Source: [TH](#)

Facts In News

South China Sea

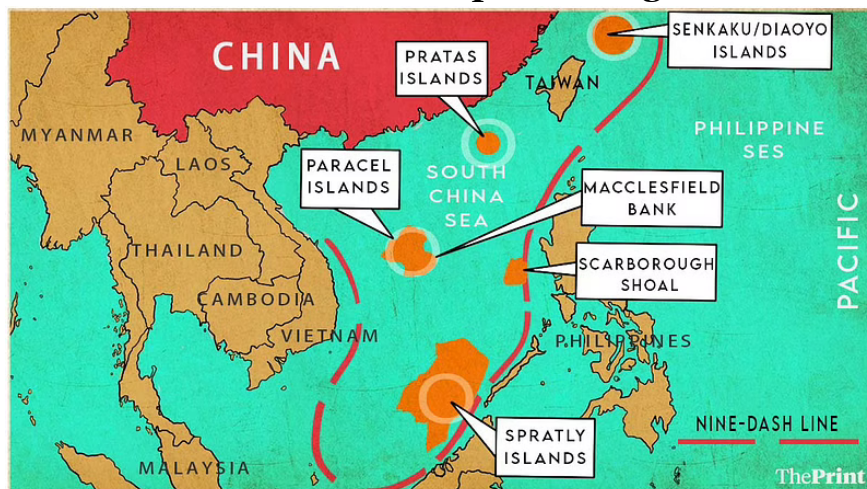
Syllabus: GS2/ International Relations

In News

- Tensions have escalated between China and the Philippines recently over the **South China Sea**.
 - The Philippines has accused Chinese coast guard vessels of “intentionally” colliding with its vessels on a resupply mission in a disputed part of the South China Sea.

South China Sea Dispute

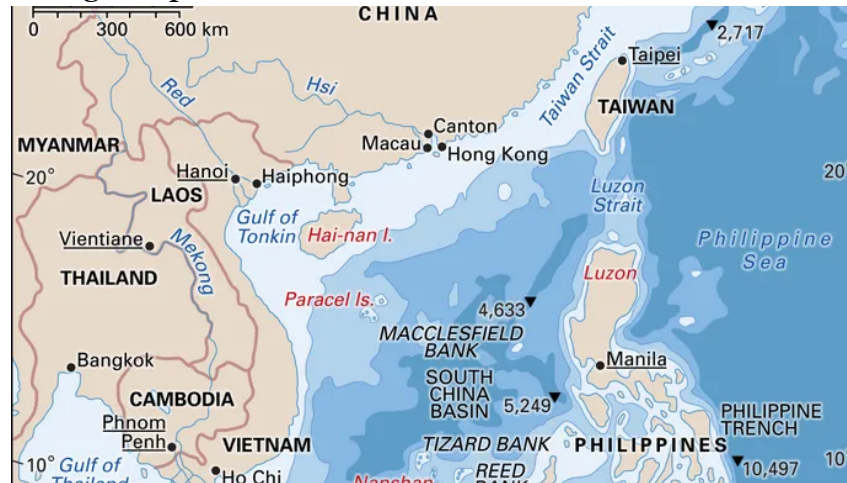
- **“Four Sha” (Four Sands archipelagos)** are the four island groups in the SCS region over which China claims it has “historical rights”, named **Dongsha Qundao, Xisha Qundao, Zhongsha Qundao and Nansha Qundao**.
- Internationally they are known as **Pratas Islands, Paracel Islands, the Macclesfield Bank area and the Spratly Islands**.
- China stakes claim to 90% of the South China Sea, and this claim is based on the **U-shaped nine-dash line** etched on the map in the **1940s by a Chinese geographer**.
 - **The Nine-dash line has a Geopolitical significance.**



South China Sea

- It is an arm of the **western Pacific Ocean** that borders the Southeast Asian mainland.
- It is bounded on the **northeast by the Taiwan Strait** (by which it is connected to the East China Sea); on the **east by Taiwan and the Philippines**; on the **southeast and south by Borneo, the southern limit of the Gulf of Thailand**, and the **east coast of the Malay Peninsula**; and on the west and north by the Asian mainland.
- **Importance:** Connecting link between the Indian Ocean and the Pacific Ocean (Strait of Malacca).

- **One-third of the maritime trade** passes through this, also have strategic importance.



Concerns for India

- **Freedom of Navigation:** India's trade routes pass through the South China Sea, making freedom of navigation a priority.
- **Economic Interests:** India has economic interests in the region's resources and fisheries.
- **Maritime Security:** Escalation could impact regional maritime security.
- **Regional Stability:** Tensions can affect the broader Indo-Pacific region.
- **Strategic Partnerships:** India's alliances with affected nations make it invested in the issue.
- **Rule of Law:** India supports resolving disputes based on international law.
- **Geopolitical Balance:** The dispute is part of global geopolitical competition.
- **Act East Policy:** South China Sea is a part of India's regional engagement strategy.
- **Bilateral Relationships:** India has partnerships with nations involved in the dispute.

Source: [The Hindu](#)

Article 142 of the Constitution

Syllabus: GS2/Indian Constitution- Significant provisions

News

- The Supreme Court has used its extraordinary **power** under **Article 142 of the Constitution to do complete justice for a man** who fought against the postal department's refusal to give him a job despite his name figuring high on the merit list.

About

- The court held that **while no one had any legal right to claim public employment**, once the name of a person is in the merit list, **he has limited right to be accorded fair and non-discriminatory treatment.**

- It held that a **public employer, which is a ‘state’ within the meaning of Article 12 of the Constitution, would have no authority to act in an arbitrary manner.**
 - **Article 12:** State includes the Government and Parliament of India and the Government and the Legislature of each of the States and all local or other authorities within the territory of India or under the control of the Government of India.

Article 142 of the Constitution

- Article 142 provides a **unique power to the Supreme Court**, to do “complete justice” between the parties, where, at times, the law or statute may not provide a remedy.
- In those situations, the Court can extend itself to put an end to a dispute in a manner that would fit the facts of the case.

Source: TH

PM Schools for Rising India (PM SHRI)

Syllabus:GS2/Education

News

- The Union Minister for Education will inaugurate ICT labs for PM Shri schools on 25th October 2023 at Rohtak, Haryana.

PM SHRI scheme

- **Aim:** The scheme aims to **turn existing government schools into model schools**. It will provide high-quality education in an “equitable, inclusive and joyful environment that takes care of the diverse background, multilingual needs and different academic abilities of children”.
- **Funding:** The scheme will be implemented as a **Centrally sponsored scheme** with a total project cost of **27,360 crore** for the period of **five years** from **2022-23 to 2026-27** for transforming nearly **14,500 schools** across the country.
- It will showcase all components of the **National Education Policy 2020**, act as exemplary schools and also offer mentorship to other schools in their vicinity.
- A **‘School Quality Assessment Framework’** is being developed to measure the progress and performance of these schools.

Key features

- **Development of ‘Green schools’:** These will be equipped with solar panels, LED lights, nutrition gardens, and waste management, water conservation and harvesting systems.
- **Modern facilities:** Schools will include ICT (information and communication technologies) facilities, smart classrooms, library, digital library, science labs and vocational labs etc. Schools will also get science and math kits and annual school grants for libraries or sports.
- **Mother tongue and local languages** to be encouraged.

Accreditation of the Schools App and Mobile Application (NIPUN)

- **Simplifying School Accreditation:** At the event, the ministers will introduce the Accreditation of the Schools app. This app will play a crucial role in simplifying the accreditation process for schools, ensuring that they meet the necessary quality standards.

- **Skill Development:** The Mobile Application (NIPUN) will provide students with a handy platform for skill development, helping them acquire new skills and knowledge.

Source: [PIB](#)

Thallium

Syllabus: GS3/S&T

In News

- Recently, **Thallium Poisoning** has been in news due to its use by an agricultural scientist to kill her husband & in-laws.

About Thallium

- Thallium is a chemical element with the **symbol "Tl"** and **atomic number 81**.
- It is a **relatively rare** and **highly toxic metal**.
- Globally known as the '**poisoner's poison**', Thallium is **tasteless & odorless**.
- **Physical State:** It is a soft, silvery-white metal that is solid at room temperature
- **Toxicity:** Thallium and its compounds are highly toxic to humans and other living organisms. Ingestion or inhalation of even small amounts of thallium can be lethal. It leads to the development of nervous and gastrointestinal disorders as well as rapid hair loss.
- **Applications:** Despite its toxicity, thallium has been used in various applications such as a component in low-temperature thermometers, high-temperature superconductors, and as a contrast agent in medical imaging.

Source: [Times of India](#)

Embedded-SIM (eSIM)

Syllabus:GS3/Science and Technology

News

- Manufacturing giants like the Apple iPhones, Google Pixel series and Samsung have enabled the eSIM facility on their devices.

What is a SIM card?

- **SIM stands for** 'subscriber identification module'. It is an integrated circuit, or a microchip, that identifies the subscriber on a given network.
- **SIM cards store information** about its own **ID number** (the integrated circuit card identifier), the **international mobile subscriber identity (IMSI)**, the subscriber's location area identity (i.e. their current location), a list of preferred networks (to whom the subscriber can connect when roaming), emergency numbers, and – depending on the space available – the subscriber's contacts and SMS messages.

How does a SIM card work?

- **Working:** When a subscriber dials a recipient's number, the phone sends data via the network – signed by the key on the SIM card – to a telephone exchange. If the recipient is connected to the same exchange, the network establishes their identity and the call is routed to them. If the recipient is 'located' elsewhere, a computer connected to the network routes the call there according to the most optimum route.

What is an eSIM?

- **An eSIM** is a digital embedded, programmable and rewritable SIM. It can use a cellular plan of your network carrier without requiring the need of a physical nano-SIM.
- In the eSIM paradigm, the SIM software is loaded to a **universal integrated circuit card (UICC)** that is permanently installed in the mobile equipment in the factory itself, i.e. it can't be removed.

Advantages of eSIMs

- **Convenience:** The ability to store multiple SIM profiles in eSIM means a person can switch between profiles easily, without the need of activating a SIM repeatedly or physically switching cards repeatedly.
- **Security:** If a malicious person gains access to someone's phone, they won't be able to separately access the SIM application nor be able to duplicate it.

Disadvantages of eSIMs

- **Emergencies:** If a phone stops working or runs out of battery, the communication is brought to a complete standstill with eSIMs.
- **Data protection:** An eSIM can in theory allow network operators to track subscribers data, including inside apps on the device and especially in the absence of data privacy laws.

Source:[TH](#)

Food labels to have QR code

Syllabus: Prelims/Current Events of national importance

News

- The Food Safety and Standards Authority of India (FSSAI) has **recommended the inclusion of QR code on food products for accessibility by visually impaired individuals.**

About

- FSSAI stated that **this will ensure access to safe food for all including individuals with special needs** such as visually impaired individuals.
 - The authority noted that **ensuring inclusive access to information is a fundamental right of citizens.**
- The **Rights of Persons with Disabilities Act, 2016** recognises the rights and needs of individuals with disabilities, which emphasizes **accessibility and the promotion of health for persons with disabilities.**

What Kind of information is included?

- The FSSAI under its **Food Safety and Standards (Labeling and Display) Regulations, 2020** has comprehensively outlined the information to be included on the labels of food products.
- This information includes,
 - **product name,**
 - **shelf life,**
 - **nutrition facts,**
 - **vegetarian/non-vegetarian logos,**
 - **ingredient lists,**
 - **allergen warnings, and**
 - **other product specific labelling requirements.**

Food Safety and Standards Authority of India (FSSAI)

- Established under Food Safety and Standards, 2006, is an autonomous body under the Ministry of Health and Family Welfare.
- It is responsible for promoting and protecting public health through various regulations and supervisions of food safety.

Major FSSAI Initiatives

- Heart Attack Rewind
- Eat Right India Campaign
- FSSAI-CHIFSS
- Health star rating (HSR) on packed food

Source: TH

Graphite

Syllabus: GS3/ Science & Technology

In News

- China imposes export curbs on graphite against the US-led restrictions on technology sales to Chinese companies.

About

- China is the **world's top graphite producer and exporter**. It refines over 90% of the world's graphite for electric vehicle battery anodes.

Graphite

- Also called **plumbago or black lead**, is a naturally occurring form of crystalline carbon. It is a native element mineral found in **metamorphic and igneous rocks**.
- It is one of the common allotropes of carbon and crystallizes in the hexagonal system.
- It is not elastic and has **high electrical and thermal conductivity**.
- **Types:** Two main types—natural and synthetic.
 - **Natural:** Natural graphite is a mineral composed of graphitic carbon. It can be in crystalline or amorphous form.
 - **Synthetic graphite:** Produced from coke and pitch. Although this graphite is not as crystalline as natural graphite
- **Applications:** Pencils, lubricants, crucibles, foundry facings, polishes, arc lamps, batteries, brushes for electric motors, and cores of nuclear reactors.

Source: [FE](#)

Cognitive Computing

Syllabus :GS 3/Science and Technology

In News

- According to IMARC Group's latest report, The global cognitive computing market size reached US\$ 32.8 Billion in 2022.

About Cognitive Computing

- It is systems that learn at **scale, reason with purpose, and interact with humans naturally**.
- It is a **mixture of computer science and cognitive science** – that is, the understanding of the human brain and how it works.

- It is the **third era of computing** and now cognitive computing has attracted considerable attention in both academia and industry.
- By means of self-teaching algorithms that use **data mining, visual recognition, and natural language processing**, the computer is able to solve problems and thereby optimize human processes.

Objectives

- The goal of cognitive computing is to simulate human thought processes in a computerized model.
 - Some examples of personal assistants that uses cognitive computing are Alexa, Siri, Google assistant, and Cortana

Source:ET

Sea Cucumbers

Syllabus: GS3/ Species in News

In News

- The Indian Coast Guard arrested 12 people for smuggling processed sea cucumbers and turmeric.

Sea Cucumbers

- **Classification:** Sea cucumbers are part of a larger animal group called **echinoderms**, which also contains starfish and sea urchins.
- **Appearance:** Their body shape is **similar to a cucumber**, but they have small tentacle-like tube feet that are used for locomotion and feeding.



- **Habitat:** They are found in all marine environments throughout the world, from shallow to deep-sea environments.
 - They are benthic (found on seafloor), their larvae are **planktonic**, meaning they float in the ocean with the currents.
- **Diet:** They are **scavengers** that feed on small food items in the benthic zone (seafloor), as well as plankton floating in the water column.
- **Significance:** They are crucial to the marine ecosystem as they **consume decomposing organic matter** and convert it into recyclable nutrients for other marine life.
 - In addition, feeding and excretion by sea cucumbers increase seawater's alkalinity, buffering the ocean's acidification.
- **Use:** They have been used as a food source and medicinal ingredient in Asian and Middle Eastern countries for centuries.

- **Threats:** Due to high demand, many species of sea cucumber are overfished, and some are threatened with extinction in the wild.
- **Conservation Status:** They are protected under the Wildlife (Protection) Act, 1972 against collection, trade or any form of utilisation.
 - **Holothuria fuscogilva and H. nobilis** are also listed in Appendix II of the Convention on International Trade in **Endangered Species of Wild Fauna and Flora (CITES) since 2020.**

Source: [TOI](#)

Host city selection for Olympic

Syllabus :Miscellaneous

In News

Prime Minister Narendra Modi publicly declared **India's intention to host the Olympic Games**, preferably in 2036.

- He also mentioned India's ambition to host the **Youth Olympics in 2029** although the quadrennial event is currently scheduled for 2030.

Do you know ?

- Only three Asian countries have ever hosted the Olympics – China, South Korea and Japan, with Japan hosting the games twice in 1964 and 2020.

About the selection

- It is the members of the International Olympic Committee(IOC), meeting at their Session, who choose the host.
 - Electing the host for the Olympic Games is one of the powers of the Session.
 - The host city is elected by a majority of the votes cast by secret ballot.
 - Each active member has one vote.

the process

- The IOC's adoption of Olympic Agenda 2020 in late 2014 brought an entirely new philosophy to the selection of Olympic host cities.
 - It aims to reduce costs and adopt a flexible Games model that adapts to a Candidate City's unique context.
- It placed emphasis on three main aspects – **flexibility, sustainability and cost-effectiveness** – with the motto being 'The Games adapt to the region, the region does not adapt to the Games'.
 - The seven-year rule was done away with and there has been greater flexibility in deciding the hosts
 - The IOC has said that the 2036 edition could be decided even as late as after 2030.
- There is now a two-stage process – a **continuous dialogue** and a **targeted dialogue** – without any fixed deadlines, to assess, discuss and guide potential hosts.
 - The **continuous dialogue** is a non-committal stage not specific to any particular edition.
 - It is basically a discussion between the IOC's Future Hosts Commission (FHC) and interested parties about the hosts' vision for the Games, its purpose and long-term legacy.

- Now the Games can be planned to be held across cities or even in conjunction with another country.
 - **Targeted dialogue** :the interested parties termed ‘preferred host’.
 - However, unlike in the past when a party, once rejected, would be discouraged from bidding again, now the other interested parties can continue continuous dialogue for future events.
 - In a targeted dialogue, the bids become more determined.
 - It explores the proposals to host a specific edition of the Olympic Games and brings the IOC’s executive board into the picture for detailed discussions.
 - The FHC prepares an advisory report for the executive board which has the power to either recommend a single host or shortlist more than one for elections by the IOC members.

Source:[TH](#)

Exercise Harimau Shakti 2023

Syllabus: GS3/Defense Cooperation

Context

- A joint bilateral training exercise of **Indian and Malaysian Armies** has commenced in **Meghalya's Umroi Cantonment** to enhance military capability for conduct of multi-domain operations in a sub-conventional scenario.

About:

- The **5th Royal Battalion of the Malaysian Army** and the a Battalion of the **Rajput Regiment of Indian Army** have participated in the 'Exercise Harimau Shakti 2023'.
 - The **previous edition** of the exercise was conducted in **Pulai, Kluang, Malaysia** in November 2022.
- **Exercise Harimau Shakti 2023** is aimed to enhance the level of defence cooperation between Indian and Malaysian Armies along with fostering bilateral relations between the two nations.

India Malaysia Defence Corporations

- In 1993, India & Malaysia signed an **MoU on Defence Cooperation**, which is the cornerstone of defence relations between the two countries.
- Both sides send naval ships and delegations to the **biannual LIMA, DSA (Malaysia) and MILAN, DEFEXPO, AEROINDIA (India)** regional events.
- India is also participating in the **Cooperative Mechanism on the Straits of Malacca and Singapore (SOMS)** and contributed to two of the six International Maritime Organization (IMO) Projects for enhancement of navigational safety and environmental protection in the Straits

Source: [TH](#)

Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM- AJAY)

Syllabus: GS2/Welfare Schemes

Context:

- Merger of three [Centrally Sponsored Schemes](#) into the **Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM- AJAY)**.

About

- Schemes like *Pradhan Mantri Adarsh Gram Yojana (PMAGY)*, *Special Central Assistance to Scheduled Castes Sub Plan (SCA to SCSP)* and *Babu Jagjivan Ram Chhatrawas Yojana (BJRCY)* are merged into the **Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM- AJAY)**.
- **Objectives:** It aims to *reduce poverty of the Scheduled Caste communities* by generation of additional employment opportunities through *Skill development, income generating schemes* to improve socio-economic developmental indicators by ensuring *adequate infrastructure* and requisite services in the **SC dominated villages**.

Components of the Scheme

1. **Adarsh Gram:** Development of SC dominated villages. These villages would have all such infrastructure facilities and its residents will have access to all such basic services that are necessary for a dignified living, creating thereby an environment in which everyone is enabled to utilise his/her potential to the fullest.
2. **Grants-in-aid: For District/State-level Projects** for those selected under Adarsh Gram component, construction of Hostels/Residential schools, and **Comprehensive Livelihood Projects**. The main objectives of this component are:
 - a. To increase the income of the target population by way of comprehensive livelihood projects.
 - b. Improve socio-economic developmental indicators by ensuring adequate infrastructure in the SC dominated villages.
 - c. Increase literacy and encourage enrolment of SCs in schools by providing residential schools where required.
3. **Construction/Repair of Hostels:** It is one of the means to enable and encourage students belonging to Scheduled Castes (SC) to attain quality education.

Eligibility Criteria:

- The Scheduled Castes persons living below the poverty lines.
- The villages having 50% or more SC population are eligible for grants under the Scheme for infrastructure development.

Scheme Coverage:

- The scheme is implemented throughout the India, **except:**
 - **States:** Arunachal Pradesh, Nagaland, Meghalaya & Mizoram
 - **UTs:** A & N Islands, Dadra Nagar Haveli, Daman & Diu, Ladakh & Lakshadweep.

Special Provisions:

- Up to 15% of the total Grants exclusively on viable income generating economic development schemes/programmes for SC Women.
Up to 30% of the total Grants utilised for infrastructure development.
- At Least 10% of the total funds for skill development.
- Promote SC Women Cooperatives engaged in production and marketing of consumer goods and services.

[Source: PIB](#)