FWD

FORTUNE WEEKLY DIGEST

> NASA Space-Flight Fiasco   > India's International Relations   > Judicial Appointments

FWD
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EDITOR'S NOTE

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

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

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

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

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

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

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

INDEX

FIRST ATTEMPT TOPPERS FROM
OUR **PRELIMS CUM MAINS BATCH**

KASTURI SHA
AIR 68

MANJIMA P
AIR 235

FABI RASHEED
AIR 71

SWATHI S BABU
AIR 522

OORMILA J S
AIR 561

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LAW COMMISSION

> *Syllabus: GS II - Statutory, regulatory and various quasi-judicial bodies*

PYQ MAPPING

Q) *Critically examine the Supreme Court's judgement on 'National Judicial Appointments Commission Act, 2014' with reference to appointment of judges of higher judiciary in India.* **(2017)**

Q) *Which steps are required for constitutionalization of a Commission? Do you think imparting constitutionality to the National Commission for Women would ensure greater gender justice and empowerment in India? Give reasons.* **(2020)**

SHORT TAKES

➤ **Statutory Bodies:** Created by an Act of Parliament or State Legislature, these bodies derive their powers from a specific law. Eg: National Human Rights Commission (NHRC).

➤ **Constitutional Bodies:** Established by the Constitution of India, these bodies operate independently and are permanent unless the Constitution is amended. Eg: Election Commission of India.

➤ **Executive Bodies:** Formed by executive orders or resolutions of the government, these bodies are not permanent and can be reconstituted as needed. Eg: Law Commission

WHY IN NEWS

The Union government has notified the **23rd Law Commission of India**, effective September 1, with a three-year term. This follows the end of the previous commission's tenure on August 31, chaired by former Karnataka High Court Chief Justice Ritu Raj Awasthi. The new commission's formation comes amid renewed discussions on significant legal reforms, including the Uniform Civil Code and simultaneous elections.

INTRODUCTION

The Law Commission of India plays a pivotal role in shaping the nation's legal landscape by reviewing existing laws and recommending reforms to address emerging challenges.It provides crucial insights into legal frameworks, aiming to streamline and modernise legislation in accordance with societal needs. Over the years, its recommendations have significantly influenced major legislative changes, contributing to the dynamic evolution of India's legal system.

OVERVIEW OF THE LAW COMMISSION

➡ **Nature**: The Law Commission of India is a **non-statutory body**, meaning it is not established by a specific act of Parliament.

➡ **Formation**: It is an executive body established through a **gazette notification by the Union Ministry of Law and Justice.**

➡ **Purpose**:

o Designed to **review existing laws**, recommend **repealing outdated legislation,** and provide **advice on legal issues** referred by the government.

o The Law Commission takes up various subjects on **references made by the Department of Legal Affairs, the Supreme Court and the High Courts** and submits reports

➡ **Composition**

o **Chairperson**: Usually a retired judge of the Supreme Court or High Court.

o **Full-Time Members**: Four members including a member-secretary who must be an officer of the Indian Legal Service at the rank of Secretary.

o **Part-Time Members**: Up to five members.

o **Ex Officio Members**: Secretaries of the Legal Affairs and Legislative departments.

➡ **Remuneration**

o **Serving Judges:** If appointed, serve until retirement or the end of the commission's term, with no additional remuneration beyond their usual salary.

o **Other Appointed Chairperson**: Monthly Salary: ₹2.50 lakh.

Other Appointed Members: Monthly Salary: ₹2.25 lakh.

HISTORICAL BACKGROUND

- ➤ **Charter Act of 1833:** Vested legislative power in the **Governor-General in Council** for the first time. In turn, the Governor-General in Council made laws from 1834 to 1920.

  - o The act also enabled the **appointment of a Law Commission** to review and advise on laws in British India

    - **Functions**: To inquire into and advise on the nature and operation of laws, both written and customary and provide recommendations for legislative reforms, consolidation, and codification of laws.

- ➤ **First Law Commission:**

  - o **Date**: Established in 1834.

  - o **Key Members**: Lord Thomas Babington Macaulay as the First Law Member and three other members.

  - o **Major Drafts:**

    - Penal Code (1837)

    - Limitation Law (1842)

    - Scheme of Pleading and Procedure (1848)

- ➤ **Post Independence:** In independent India, the first Law Commission was established in **1955** with its chairman being the then **Attorney General M.C.Setalvad**.

  - o Since Independence, 22 Law Commissions have submitted a total of 289 reports.

DETAILS OF THE 23rd LAW COMMISSION OF INDIA

- ◉ **Notification Date**: September 2, 2024.

- ◉ **Term**: The commission will operate until August 31, 2027.

- ◉ **Current Status**:

  - o The chairperson and members for the 23rd Law Commission are yet to be named.

  - o The Appointments Committee of the Cabinet, chaired by the Prime Minister, will make the final decisions.

- ◉ **Terms of Reference**

  - o **Repeal of Obsolete Laws**:Identify laws that are no longer needed or relevant and recommend their immediate repeal.

  - o **Standard Operating Procedures (SoP)**: Create procedures for the periodic review of existing laws, focusing on simplifying language and processes.

  - o **Economic Harmony of Laws**: Identify laws that do not align with current economic needs and suggest amendments.

  - o **Examine with Directive Principles of State Policy**: Examine existing laws in light of Directive Principles and propose improvements and necessary new legislations to align with these principles and the Preamble of the Constitution

  - o **Laws Affecting the Poor**: Review and suggest improvements for laws impacting the socio-economic conditions of the poor.

  - o **Post-Enactment Audit**: Conduct audits for socio-economic legislation to assess their impact and effectiveness.

  - o **Judicial Administration Review**: Review and propose reforms to make judicial administration more responsive to contemporary needs.

  - o **Secular Civil Code**: The Prime Minister's recent call for a "secular civil code" aligns with the Directive Principle of a uniform civil code. The 22nd Law Commission also examined this issue, but its report remains unpublished.

    - The change in leadership occurred when the chairperson, Justice Ritu Raj Awasthi, was appointed as a member of the Lokpal in March 2024, before the commission could finalise and submit its report.

KEY REPORTS OF THE 22nd LAW COMMISSION

- **Report on Section 124A of the Indian Penal Code (April 2023)**

  o **Recommendation**: Section 124A, which deals with sedition, should be retained.

  o **Rationale**: Cited internal security threats from Maoists, militancy in the Northeast, terrorism in Jammu & Kashmir, and the Khalistan movement.

  o **Suggested Amendments**: Proposals to amend the law for greater clarity on its usage

- **Report on Trade Secrets (March 2024)**: Proposed a new law to protect trade secrets.

- **Report on Simultaneous Elections:** The report was prepared but not presented to the government.

- **Report on Uniform Civil Code:** The report was also prepared but not submitted to the government

- **Leadership Transition**: Justice Ritu Raj Awasthi, chairperson of the 22nd Law Commission, was appointed as a member of the Lokpal in March 2024, leading to the commission's reports, including those on simultaneous elections and the Uniform Civil Code, remaining unpublished.

CONTRIBUTIONS OF THE LAW COMMISSION

- ♣ **Legal Reforms**: The commission has recommended significant changes in various laws, including the introduction of the **fast-track court system** and the expansion of commercial courts.

- ♣ **Electoral and Political Reforms**: Proposed reforms such as the **anti-defection law** and **various electoral reforms** have strengthened the democratic process in India.

- ♣ **Criminal and Civil Law Amendments**: Suggested amendments to criminal and civil legal provisions have modernised the judicial system, making it more efficient.

- ♣ **Expert Leadership**: The commission has been chaired by legal luminaries like M.C. Setalvad, Justice H.R. Khanna, and Nani Palkhivala, whose expertise brought landmark recommendations.

- ♣ **Influential Recommendations:**

  o **Code of Criminal Procedure, 1973 (CrPC)**: Significant overhaul of criminal procedure in India.

  o **Right of Children to Free and Compulsory Education Act, 2009 (RTE Act):** Mandates free and compulsory education for children aged 6 to 14 years.

  o **Review on Arbitration:** The commission's 2014 review of arbitration, an out-of-court dispute resolution mechanism, led to amendments in the Arbitration and Conciliation Act a year later.

CHALLENGES FACED BY THE LAW COMMISSION

- ✄ **Non-Statutory Status**:The commission lacks statutory backing, which reduces its authority and makes its recommendations non-binding on the government.

- ✄ **Implementation Gaps**: A significant portion of the commission's recommendations remains unimplemented, limiting its overall impact on legal reforms.

- ✄ **Allegations of Favouritism**: Appointments to the commission, particularly the **chairmanship**, have sometimes been criticised for alleged favouritism by the government.

- ✄ **Lack of Research Support**: In recent times, the commission has faced challenges due to the absence of a robust research team, affecting the depth and thoroughness of its reports.

WAY FORWARD

✳ **Grant Statutory Status:**

o The Law Commission should be given **statutory status through legislation,** ensuring a permanent structure with clear guidelines on composition, appointment, and functions.

o This will **enhance its authority and credibility**, much like other national commissions such as those for SCs, STs, and women.

✳ **Define Appointment Criteria:**

o A **structured and transparent appointment process** should be established for the chairperson and members.

o Clear eligibility criteria would **prevent allegations of favouritism** and ensure that only the most qualified legal experts are appointed to the Commission.

✳ **Increase Financial Support:**

o The government should significantly increase the financial allocation for the Law Commission to ensure adequate **resources for research, remuneration, and operational expenses.**

o This will **enhance the quality and scope of its work**, allowing for more comprehensive legal reforms.

✳ **Enhance Research Capacity**:

o Establish a **dedicated research wing** within the Law Commission with skilled legal scholars and experts.

o Collaborations with institutions can be formalised to **improve the research depth** of the Commission's reports.

✳ **Focus on Implementation of Recommendations**:

o A **mechanism for follow-up on its proposals**, similar to the practice in the UK, should be created to monitor the adoption of reforms and ensure that valuable recommendations are not ignored.

✳ **Regular Reviews and Accountability:**

o Regular reviews should be conducted to assess the effectiveness of the Commission's recommendations and their impact on the legal system.

o A **feedback loop with stakeholders**, including the judiciary and legal community, will help in refining its processes and increasing efficiency.

✳ **Public Engagement and Awareness:**

o Public consultations and feedback mechanisms can make its work more transparent and encourage citizen participation in legal reforms

CONCLUSION

While the law commission has made significant contributions over the years, challenges such as non-implementation of its recommendations and lack of statutory status hinder its full potential. Strengthening the commission with better resources and a more defined role can ensure it continues to contribute effectively to India's legal landscape.

SAMPLE QUESTION

Q) Discuss the significant reforms initiated by the Law Commission in the past, and analyse their impact on Indian society and legal system. **(10 marks)(150 words)**

INDIA-SINGAPORE RELATIONS

Syllabus: GS II - International Relations

PYQ MAPPING

Q) *Evaluate the economic and strategic dimensions of India's Look East Policy in the context of the post-Cold War international scenario.* **(2016)**

SHORT TAKES

Association of Southeast Asian Nations (ASEAN): A regional intergovernmental organisation founded in 1967, comprising 10 member states: Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar, and Cambodia. Its primary objective is to promote political, economic, and cultural cooperation, as well as regional stability and integration among its members.

INTRODUCTION

India and Singapore share a **dynamic and multifaceted relationship**, driven by strong economic ties and a common vision for **regional peace and prosperity**. As leading partners within **ASEAN**, their cooperation spans across areas like **finance, trade, digital economy**, and **defence**, solidifying Singapore's role as India's key gateway to the **Southeast Asian market**.

WHY IN NEWS

Prime Minister Narendra Modi's visit to Singapore, part of a broader South-East Asia tour, highlights the strengthening of bilateral ties through **key agreements in semiconductors, digital technologies, health, and skill development**. Notably, the PM and Singaporean counterpart Lawrence Wong oversaw the signing of a Memorandum of Understanding on an India-Singapore Semiconductor Ecosystem Partnership.

HISTORY

- **Early Connections**:
  - Singapore, established as a British trading post by **Sir Stamford Raffles** in 1819, was governed from Kolkata until 1867. The shared colonial history fostered institutional similarities, including the use of English and common legal frameworks..
  - The **Indian National Army's presence in Singapore** during the colonial period further cemented historical ties.

- **Post-Independence Developments**:
  - **Recognition of Independence**: India was among the first countries to recognize Singapore's independence in 1965.
  - **Role in India's Look East policy:** In the 1990s, Singapore played a crucial role in India's "Look East" policy, facilitating India's entry as a sectoral dialogue partner and later a full dialogue partner of ASEAN.

- **Modern Era**:
  - **Key Visits**: High-level visits, such as PM Goh Chok Tong's visit to India in 1994 and PM Narasimha Rao's reciprocal visit, played a significant role in strengthening relations. Goh Chok Tong was also awarded the **Jawaharlal Nehru Award** in 2004.
  - **Strategic Frameworks**: Bilateral relations are institutionalised through mechanisms such as the **India-Singapore Ministerial Roundtable (ISMR)**, launched in 2022, and the **India-Singapore Strategic Dialogue**, established in 2007.

AREAS OF COOPERATION

👉 **Trade & Investment:** Singapore is India's largest trade partner in ASEAN, with bilateral trade reaching USD 30.11 billion in 2021-22.

   o Singapore is a significant source of FDI (USD 136.65 billion from 2000-2022), and over 8000 Indian companies operate there

👉 **Key Agreements**: Cooperation has been formalised through agreements like the **Comprehensive Economic Cooperation Agreement (CECA) 2005**, the **Double Taxation Avoidance Agreement (DTAA)**, and the **Defence Cooperation Agreement (2003)**.

👉 **Semiconductor Ecosystem Partnership**: Singapore's established semiconductor companies and manufacturing infrastructure present opportunities for collaboration, including potential investments in India's semiconductor sector.

👉 **Joint Military Exercises**: The two nations conduct **SIMBEX (Singapore-India Maritime Bilateral Exercise)** and **Bold Kurukshetra (Army-to-Army)** exercises to enhance maritime security and defence collaboration.

👉 **Diaspora Engagement:** About **9.1% of Singapore's population (~350,000) is of Indian origin**. Singapore hosts 2.5 lakh Indian expatriates, with a **high concentration of IIT and IIM alumni**, making it a hub for skilled Indian professionals.

   o Tamil is one of Singapore's official languages, further enhancing cultural ties.

👉 **Port Operations**: Collaboration in maritime connectivity is ongoing, with major Indian companies like Tata and Tolani having shipping operations in Singapore, while Singaporean firms also have a presence in India.

👉 **ISRO Collaboration:** ISRO has launched several Singaporean satellites, with the latest being PSLV-C56 in 2023, which carried **DS-SAR and six other satellites.**

👉 **AI & Big Data:** Partnerships between Indian institutes like IITs, IISc Bengaluru, and Singapore's NTU focus on AI, machine learning, cybersecurity, and healthcare automation.

👉 **UPI-PayNow Linkage (2023)**: Facilitated cross-border payments between India and Singapore, marking a milestone in digital cooperation.

👉 **Tourism:** Singapore is a popular destination for Indian tourists, further strengthening people-to-people ties.

CONCERNS

▼ **Regulatory Shortcomings:** India's regulatory inefficiencies in cities like Mumbai, Kolkata, and Chennai hinder stronger trade and financial cooperation.

▼ **Myanmar's Crisis:** The erosion of central authority in Myanmar poses challenges for India-Singapore relations, given their regional connections through ASEAN.

▼ **New Global Architectures:** The emergence of frameworks like QUAD and China's political-military assertiveness pose challenges for traditional ASEAN centrality, affecting the India-Singapore dynamic.

▼ **Regulatory Challenges**: Aligning regulatory frameworks, especially in trade, finance, and technology sectors, requires continuous negotiation and review, including periodic updates to the **Comprehensive Economic Cooperation Agreement (CECA)**.

▼ **Geopolitical Shifts**: The evolving dynamics of **China's influence** in Southeast Asia may impact Singapore's strategic position and influence in the region, which could affect its relations with India.

WAY FORWARD

- **Strengthening Complementarities:** India needs to address its regulatory and structural inefficiencies to maximise the benefits of its partnership with Singapore.

- **Expanding Cooperation:** Both countries should continue expanding cooperation in sectors like digitalisation, sustainability, and advanced manufacturing.

  o Enhance cooperation in semiconductor research, talent development, and leverage India's land and labour advantages to attract semiconductor companies from Singapore

- **Regional Stability:** India and Singapore need to coordinate closely on regional security, especially concerning Myanmar and broader Indo-Pacific challenges.

- **Strategic Partnerships:** Strengthen defence and maritime cooperation to address new geopolitical realities in the Indo-Pacific region.

- **FDI Opportunities**: Singapore can be a key partner in **India's infrastructure development** and **FDI-driven growth**, particularly in sectors like **aviation, logistics, and technology**.

- **Harnessing ASEAN:** Deepen India's engagement with ASEAN, using Singapore as a key partner to navigate regional and global challenges.

CONCLUSION

India and Singapore have cultivated a robust partnership, underpinned by strong **economic, technological,** and **defence ties**. As **strategic partners** in the ASEAN region, the two nations continue to collaborate on **trade, finance, and digital innovation** and their relationship remains a model of **mutual growth and cooperation.**

SAMPLE QUESTION

Q) Analyze how the economic partnership between India and Singapore contributes to regional trade integration, investment flows, and financial collaboration in Asia **(10 marks)(150 words)**

INDIA-BRUNEI RELATIONS

Syllabus: GS II - International Relations

PYQ MAPPING

Q) *Indian Diaspora has an important role to play in South-East Asian countries' economy and society. Appraise the role of Indian Diaspora in South- East Asia in this context* **(2017)**

SHORT TAKES

Indian Council for Cultural Relations (ICCR): An autonomous organisation established in 1950 by the Government of India to promote cultural exchange and foster mutual understanding between India and other countries. Its activities include organising cultural festivals, academic exchanges, and scholarships to enhance India's soft power and global cultural outreach.

INTRODUCTION

India and Brunei enjoy a warm and friendly relationship, marked by **historical connections and deep-rooted cultural exchanges**. Since the establishment of diplomatic ties in 1984, both nations have collaborated across **various sectors** including **defence, space technology**, and **energy**, contributing to regional stability. Brunei plays a key role in India's **Act East Policy** enhancing their strategic partnership.

WHY IN NEWS

Prime Minister Narendra Modi's first bilateral visit to Brunei in September, marking 40 years of diplomatic ties, comes amid rising tensions in the Indo-Pacific due to China's actions. His discussions with Sultan Hassanal Bolkiah focus on boosting commercial, cultural, and defence ties, including exploring a defence working group.

HISTORY

- ➤ **Diplomatic Relations:** India and Brunei established diplomatic relations on 10 May 1984. India's mission was set up in Brunei on 18 May 1993, after being previously accredited through the Indian Mission in Kuala Lumpur.

  - o **High Commissions:** Brunei set up its High Commission in India on 12 August 1992.

- ➤ **Previous Engagements**: Sultan Haji Hassanal Bolkiah has visited India four times, including **State visits in 1992 and 2008**, and participation in ASEAN-India commemorative summits in **2012 and 2018**.

  - o He was the **Chief Guest** at India's **Republic Day parade** in 2018.

- ➤ **First Bilateral Visit by Indian PM**: Prime Minister Narendra Modi's official visit to Brunei Darussalam on **3-4 September 2024** marked the first bilateral visit by an Indian Prime Minister to Brunei and the celebration of **40 years of diplomatic ties** between the two countries.

AREAS OF COOPERATION

☞ **Defence Cooperation**: Defence ties began with naval ship visits in **2006** and have expanded since. A renewed MoU for Defence Cooperation was signed for five years in **2021**.

- o Regular exchanges include ship visits, joint exercises, and participation in each other's defence exhibitions (DEFEXPO and AERO INDIA)

☞ **Trade**: **India's exports** to Brunei primarily consist of **automobiles**, **rice**, **transport equipment**, and **spices**. Brunei is one of the largest suppliers of **crude oil** to India, with India importing crude worth **USD 500-600 million annually**.

☞ **Investment**: Brunei plays an important role in India's **Act East Policy** and **Indo-Pacific Vision**, offering potential in sectors like **energy, technology**, and **infrastructure**.

☞ **Space Cooperation**: An MoU was signed in **August 1997** for the setup of **ISRO's Telemetry Tracking and Telecommand (TTC) station** in Brunei, operational since **2000**, to track satellite launches.

- o ISRO has supported over **35 satellite missions** through its TTC station in Brunei.

☞ **Cultural Exchange**: Regular cultural performances

by **ICCR-sponsored groups**, such as the Punjabi Sabhyachar Kender troupe in 2019.

- o The **Brunei-India Friendship Association** (BIFA) was founded in **2009** to promote people-to-people connections.

☞ **Diaspora**: **14,000 Indian nationals** live in Brunei, with the majority hailing from **Tamil Nadu**, **Uttar Pradesh**, and **Kerala**.

☞ **Education and Capacity Building**: India offers scholarships and training under the **Indian Technical and Economic Cooperation (ITEC)** and **e-ITEC programs**.

☞ **Health Cooperation**:The first **Joint Working Group on Health** met in **2021**, focusing on pharmaceuticals, capacity building, and renewing health MoUs

CONCERNS

▼ **Indo-Pacific Security:** Brunei's maritime claim in the South China Sea and China's increasing assertiveness in the region are significant concerns for both Brunei and India, impacting the broader Indo-Pacific security architecture.

▼ **Limited Economic Engagement:** Although trade exists, participation by Indian companies in Bruneian trade fairs has been sporadic. Indian investments in Brunei are concentrated in small-scale sectors like retail and textiles, with limited industrial ventures.

▼ **Dependency on Oil Trade:** India's imports from Brunei rely heavily on crude oil, exposing trade ties to volatility in the global energy market.

▼ **Limited Defence Depth**: Defence cooperation, while present, is mostly limited to training, ship visits, and exercises. There's untapped potential in areas like **technology transfer** and **cyber defence**.

▼ **Cultural Engagement**: Despite strong historical ties, cultural and educational exchanges remain underutilised.

WAY FORWARD

✳ **Diversify Trade:** India could encourage greater diversification in trade by promoting sectors like IT, healthcare, and textiles, which have seen limited engagement from Brunei.

✳ **Enhance Defence Ties:** Expanding defence collaboration beyond training and ship visits could include joint research in defence technologies, cybersecurity, and intelligence sharing.

✳ **Increase People-to-People Exchange:** Strengthen cultural and educational exchanges by encouraging participation in programs like the ASEAN-India Network and scholarships for Bruneian students in Indian institutions.

✳ **Energy Collaboration:** With Brunei being a major oil exporter, India could explore collaboration in renewable energy and green technologies, diversifying the relationship beyond hydrocarbons.

✳ **Counter-Terrorism Collaboration**: Work together at the **UN** and other multilateral fora to address terrorism and **transnational crime** linkages.

✳ **Maritime Security**: Strengthening **maritime security** cooperation to safeguard **Indo-Pacific stability** in light of the South China Sea tensions, with a focus on ensuring **freedom of navigation** and **peaceful dispute resolution**.

CONCLUSION

India and Brunei share a longstanding partnership rooted in historical, cultural, and trade linkages. As both countries look to the future, the strategic alignment through India's Act East Policy and Brunei's role in the Indo-Pacific region will strengthen ties further. This cooperation reflects mutual respect for peace, stability, and shared development.

SAMPLE QUESTION

Q) Discuss the strategic relevance of India-Brunei relations in the evolving Indo-Pacific framework and its impact on regional security and cooperation. **(10 marks)(150 words)**

INDIA-AFRICA RELATIONS

Syllabus: GS II - International Relations

PYQ MAPPING

Q) *Increasing interest of India in Africa has its pros and cons. Critically examine* **(2015)**

Q) *"If the last few decades were of Asia's growth story, the next few are expected to be of Africa's." In the light of this statement, examine India's influence in Africa in recent years.***(2021)**

SHORT TAKES

Forum on China-Africa Cooperation (FOCAC):

o   FOCAC is a multilateral platform established in 2000 to promote and strengthen economic, political, and diplomatic relations between China and African countries.

o   It has **53 African nations as its members – the entire continent except Eswatini**, which has diplomatic ties with Taiwan against Beijing's "One China" Policy.

o   It serves as a forum for discussing key areas of cooperation and meets every three years at a ministerial level.

INTRODUCTION

India-Africa relations are built on a foundation of shared history, political solidarity, strong economic ties and a vibrant Indian diaspora. Strategically, Africa's vast reserves of critical minerals are of immense importance to India's growing energy and industrial needs. However, competition with China's established dominance in the region and Africa's evolving policies pose challenges to fully harnessing this potential for mutual benefit.

WHY IN NEWS

The ninth edition of the **Forum on China-Africa Cooperation (FOCAC)** is set to take place in Beijing from September 4-6, 2024. The summit is occurring amid significant challenges facing African nations, including economic instability, military takeovers, and geopolitical tensions, along with "summit fatigue" from recent Africa+1 summits.

HISTORY

➤   India and Africa share historical ties rooted in anti-colonial struggles and shared values of self-determination.

➤   Diplomatic relations have been reinforced through initiatives like the India-Africa Forum Summits (IAFS), which began in 2008.

➤   Today, India's diplomatic presence in Africa is robust, with 45 missions across the continent.

AREAS OF COOPERATION

👉 **Economic**: India's $75 billion investments in Africa span various sectors such as infrastructure, energy, ICT, and pharmaceuticals.

o   India is Africa's 4th largest trading partner, with bilateral trade valued at around $89.5 billion in 2021-22.

o   Key Indian imports include crude oil, gold, and raw minerals, while India exports refined petroleum, pharmaceuticals, and consumer goods.

👉 **Education & Capacity Building:** India has been instrumental in providing scholarships and technical training to over 40,000 Africans under the Indian Technical and Economic Cooperation (ITEC) programme.

o   The establishment of institutions like the **IIT in Zanzibar and the National Forensic Science University in Uganda** reflects India's commitment to advancing education in Africa.

👉 **Agriculture**: India shares expertise in agriculture, irrigation, and farming mechanisation, crucial for Africa's food security.

👉 **Healthcare**: India supplies nearly 50% of generic medicines to Africa, and during the COVID-19 pandemic, it provided 150 tonnes of medical aid and vaccines under its **Vaccine Maitri initiative.**

👉 **Defence**: India offers military training and scholarships to African soldiers. Joint military exercises, such as India-Africa Field Training Exercises (AFINDEX), strengthen defence cooperation.

👉 **Infrastructure Development**: India has completed 206 infrastructure projects in 43 African countries, with a total outlay of $12.37 billion, covering critical sectors like drinking water, power plants, railways, and technology parks.

👉 **Human Resource Development:** India's initiatives like the Pan-African E-network and capacity-building programs have enhanced education and skill development.

ISSUES

🔻 **Debt**: African countries are wary of taking new loans post-COVID-19, and India must find innovative financing methods.

🔻 **Competition from China**: China's stronghold in Africa, especially in infrastructure and the critical minerals sector, poses a challenge for India's economic engagement.

🔻 **Infrastructure:** Many African countries face challenges in areas like power generation, cold storage, and food processing, impeding development.

🔻 **Sustainability**: Chronic electricity shortages and environmental challenges hinder sustainable growth in Africa's industrialisation.

🔻 **Diplomatic Engagement**: Since the last IAFS was held in 2015, India needs to renew its diplomatic momentum in the region.

WAY FORWARD

✳ **IAFS-IV**: India should organise the fourth edition of the India-Africa Forum Summit (IAFS-IV) to re-establish high-level dialogue and further collaborations.

✳ **Higher Value-Added Investments**: Indian firms should focus on agriculture mechanisation, food processing, and manufacturing, creating jobs and boosting Africa's economic growth.

✳ **Innovative Financing**: India should explore **public-private partnerships, blended finance, and rupee-based credit lines** to strengthen trade and investment.

✳ **Digital Connectivity**: Indian digital platforms like UPI and RuPay should expand to more African nations, enhancing digital and financial inclusion

CHINA FACTOR

💫 **Debt and Influence**: China's $170 billion in loans to African countries since 2000 have increased its influence, but also raised concerns about Africa's rising debt burden, with Chinese lenders accounting for 12% of the continent's total debt.

💫 **Trade Dominance**: China-Africa trade largely focuses on raw materials, while African nations seek to move beyond the 'pit-to-port' model, aiming for value addition.

   o   China-Africa trade amounted to $167 billion in the first seven months of 2024, primarily in raw materials.

💫 **Infrastructure**: China has heavily invested in African infrastructure, completing projects such as the Mombasa-Nairobi railway and Angola's Benguela railway, but these have also raised concerns about the 'debt trap' phenomenon.

💫 **Critical Minerals:** China's control over African critical mineral value chains, including lithium refining, poses a challenge to India's strategic interests in securing these resources

INDIA-AFRICA RELATIONS: CRITICAL MINERAL FOCUS

- 🇮🇳 **Critical Mineral Mission (Union Budget 2024-25):**

  o **Objective**: The Indian government announced the establishment of a Critical Mineral Mission to expand domestic production, prioritise recycling, and incentivize overseas acquisition of assets.

  o **Measures taken:**

    ▪ **Legislative Change:** The Mines and Minerals (Development and Regulation) Amendment Bill, 2023, removes six minerals from the atomic list, facilitating private sector exploration in India.

    ▪ **Khanij Bidesh India Limited (KABIL)**: Founded in 2019, KABIL is a joint venture aimed at securing critical mineral assets abroad.

- 🇮🇳 **African Context:**

  o **Resource Availability**: Africa holds 30% of the world's known critical mineral reserves, making it crucial for India's supply chain.

  o **Trade Dynamics**: Of the $98 billion bilateral trade in 2022-23, $43 billion was from the mining and mineral sectors. India also invests heavily in energy assets in Africa.

- 🇮🇳 **China Factor:**

  o **Dominance**: China's early investments and development in mining, processing, and manufacturing provide it with significant influence, particularly in cobalt mining and a $7 billion 'minerals-for-infrastructure' deal in Africa.

  o **Geopolitical Risks**: China's control over the mineral value chain poses economic and security risks for India.

- 🇮🇳 **Opportunities for Collaboration:**

  o **Infrastructure Development**: Indian construction firms have completed 206 projects in 43 African countries, including power plants, technology parks, and railway infrastructure.

    ▪ Leveraging this experience can benefit mineral-rich regions.

  o **Strategic Agreements**: India has signed MOUs with Zambia and Zimbabwe for cooperation in geological mapping and capacity building, fostering better ties and technical expertise.

  o **Technology and Innovation**: Indian technology start-ups are innovating in mining exploration, extraction, and beneficiation. Their expertise could help enhance value addition and support African countries in optimising their mineral resources.

- 🇮🇳 **African Policy Changes:**

  o **Policy Shifts**: African countries are transitioning from a 'pit-to-port' model to enhancing in-country mineral processing and value addition.

    ▪ **Example**: Tanzania is developing a multi-metal processing facility, Zimbabwe and Namibia have banned the export of raw minerals, and Ghana is implementing new policies for green minerals.

CONCLUSION

India and Africa's shared history, robust cooperation, and mutual interests in development offer a foundation for a prosperous partnership. By focusing on value addition, innovative financing, and technological collaboration, India can enhance its strategic and economic ties with Africa, leveraging its strengths to address shared challenges and achieve sustainable growth.

SAMPLE QUESTION

Q) How can India strategically position itself to secure critical minerals from Africa, utilising its historical connection and diplomacy to foster deeper collaborations? **(10 marks)(150 words)**

JUDICIAL APPOINTMENTS

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Syllabus: GS II - Judiciary

</div>

PYQ MAPPING

Q) *"Critically examine the Supreme Court's judgement on 'National Judicial Appointments Commission Act, 2014' with reference to appointment of judges of higher judiciary in India.* **(2017)**

Q) *Discuss the desirability of greater representation to women in the higher judiciary to ensure diversity, equity and inclusiveness.* **(2021)**

INTRODUCTION

The persistent issue of vacancies in judicial appointments in India has significantly impacted the efficiency of the judiciary, contributing to delays in justice and a growing backlog of cases across various courts.

WHY IN NEWS

» In April, with 6 million cases pending across various High Courts and 30% of judicial positions unfilled, the issue of judicial appointments became a pressing concern.

» According to data published by the **National Judicial Data Grid (NJDG)**—that compiles data from various judicial bodies of the country—over 60 lakh cases remain pending across the High Courts.

» Close to 50 percent of these cases are pending for more than five years at the High Courts.

» **Vacancy:**

o According to the recent report published by the **Department of Justice on 1 April 2024**, High Courts around the country have **327 vacancies against their collective sanctioned strength of 1114 judges (30%).**

◦ These vacancies include 161 permanent posts and 166 temporary posts for additional judges.

o **Vacancies at the High Courts** have remained the same in recent years with **324 vacancies in 2023 and 330 in 2022.**

SHORT TAKES

➢ **The National Judicial Data Grid (NJDG)**

o It is a comprehensive digital initiative aimed at improving the efficiency and transparency of the Indian judiciary.

o The NJDG is designed to provide a centralised database of case information across all levels of the judiciary in India. It aims to enhance the management of court cases and facilitate better case monitoring.

➢ **National Judicial Appointment Commission**

o The 99th Amendment Constitutional Amendment Act, 2014 which established the National Judicial Appointment Commission (NJAC) and the NJAC Act, was passed by Parliament in 2014.

o **The NJAC Act, 2014:**

• This Act establishes a transparent and broad-based process for the selection of Judges to the Supreme Court and High Courts, replacing the collegium system.

• It introduces Articles 124A, 124B, and 124C into the Constitution of India, 1950.

o **Article 124A**

◦ This Article outlines the composition of the NJAC. It specifies that —

• There shall be a Commission to be known as the National Judicial Appointments Commission consisting of the following, namely: —

a. The Chief Justice of India as the ex officio chairperson.

b. Two other senior Judges of the Supreme Court next to the Chief Justice of India as the ex officio members.

c. The Union Minister in charge of Law and Justice as the ex-officio member.

d. Two eminent persons to be nominated by the committee consisting of the Prime Minister, the Chief Justice of India and the

Leader of Opposition in the House of the People or where there is no such Leader of Opposition, then, the Leader of the single largest Opposition Party in the House of the People as members.

- Provided that one of the eminent persons shall be nominated from amongst the persons belonging to the Scheduled Castes, the Scheduled Tribes, Other Backward Classes, Minorities or Women.

  - Provided further that an eminent person shall be nominated for a period of three years and shall not be eligible for renomination.

  ○ No act or proceedings of the National Judicial Appointments Commission shall be questioned or be invalidated merely on the ground of the existence of any vacancy or defect in the constitution of the Commission.

- o **Article 124B** deals with the **functions of NJAC.**

- o **Article 124C** deals with the **power of parliament to make law.**

- o **Constitutionality of NJAC:**

  ○ In 2015, the Supreme Court in the case of Supreme Court *Advocates on-Record Association and Anr. v. Union of India* declared both the 99th Constitutional Amendment Act 2014 and the NJAC Act, 2014 as **unconstitutional and null and void.**

APPOINTMENTS OF JUDGES

Appointment of Judges in Supreme Court

- o **Article 124** says: "Every Judge of the Supreme Court shall be appointed by the President by warrant under his hand and seal after consultation with such Judges of the Supreme Court and of the High Courts in the States as he may deem necessary.

- o The chief justice is appointed by the president after consultation with such judges of the Supreme Court and high courts as he deems necessary.

- o The other judges are appointed by the president after consultation with the chief justice and such other judges of the Supreme Court and the high courts as he deems necessary.

  - The consultation with the chief justice is obligatory in the case of appointment of a judge other than Chief justice

- o **Qualifications of Judges**

  - A person to be appointed as a judge of the Supreme Court should have the following qualifications:

  1. He should be a citizen of India.

  2. (a) He should have been a judge of a High Court (or high courts in succession) for five years; or (b) He should have been an advocate of a High Court (or High Courts in succession) for ten years; or (c) He should be a distinguished jurist in the opinion of the president.

Outline of the Appointment Procedure

- o **Collegium System:**

  1. The **Collegium** consists of the Chief Justice of India (CJI) and the four senior-most judges of the Supreme Court.

  2. The **Collegium recommends** names for appointment to the Supreme Court.

  3. For **appointment of High court judges**, there is a separate **High Court collegium** that includes Chief Justice of the High Court and 2 senior most judges of that High Court.

- o **Initiation of Recommendation:**

  1. The CJI, in consultation with other Collegium members, selects judges for the Supreme Court.

  2. For the CJI's appointment, the senior-most Supreme Court judge is traditionally appointed, unless they are deemed unfit.

  3. For High Court appointments, the initiative is from the High Court collegium.

- o **Executive Role:**

  1. The recommendation is sent to the **Ministry of Law and Justice**.

  2. The Law Ministry processes the recommendation and forwards it to the **President of India** for approval.

- o **President's Approval:**

  1. The President formally appoints the judges after receiving the recommendation from the Collegium through the government.

  2. The government can return the recommendation once for reconsideration, but if the Collegium reiterates it, the government is bound to accept it.

Evolution of Collegium System and NJAC

➤ **First Judges Case (1982):**

o The Supreme Court ruled that **consultation** with the Chief Justice of India (CJI) does not mean **concurrence**. It implied that the President is not bound by the CJI's advice and that the consultation only involves an exchange of views.

➤ **Second Judges Case (1993):**

o The Court overturned its earlier ruling, stating that **consultation** now means **concurrence**.

o The **President is bound by the CJI's advice** regarding judicial appointments.

o The CJI's advice, however, must be based on consultation with **two senior-most judges**.

➤ **Third Judges Case (1998):**

o The Court expanded the consultation process, requiring the CJI to consult a **Collegium of four senior-most judges** of the Supreme Court.

o If **two judges disagree** with the recommendation, the CJI should not forward it to the government.

o The recommendation made by the CJI without following this **plurality consultation** is not binding on the government.

o However, the appointment to High Court will be by a collegium that includes CJI and 2 senior-most judges.

➤ **NJAC and the Fourth Judges Case (2015):**

o The **99th Constitutional Amendment Act, 2014** and the **National Judicial Appointments Commission (NJAC) Act, 2014** sought to replace the Collegium system with the NJAC for judicial appointments.

o In the **Fourth Judges Case (2015)**, the Supreme Court declared both the 99th Amendment and the NJAC Act **unconstitutional and void**, arguing that the NJAC would compromise the **independence of the judiciary**.

Consequently, the **Collegium system** was reinstated and continues to be operative.

Appointment of Judges in High Court

o **Article 217:** "Every Judge of a High Court shall be appointed by the President by warrant under his hand and seal after consultation with the Chief Justice of India, the Governor of the State, and, in the case of appointment of a Judge other than the Chief Justice, the Chief Justice of the High Court."

o The judges of a high court are appointed by the **President and the chief justice is appointed by the President after consultation with the chief justice of India and the governor of the state concerned.**

o For appointment of other judges, the chief justice of the concerned high court is also consulted. In case of a common high court for two or more states, the governors of all the states concerned are consulted by the president.

o **Qualifications of Judges**

• He should be a citizen of India.

• (a) He should have held a judicial office in the territory of India for ten years; or (b) He should have been an advocate of a high court (or high courts in succession) for ten years.

o **Collegium System:**

• **Second Judges Case (1993):**

1. No High Court judge can be appointed without the concurrence of the Chief Justice of India (CJI).

2. The CJI's opinion is binding on the government in the matter of judicial appointments.

• **Third Judges Case (1998):**

1. For the appointment of High Court judges, the CJI must consult a Collegium of the two senior-most judges of the Supreme Court.

2. The CJI's sole opinion does not fulfill the consultation process.

3. The plurality of opinions from the Collegium is essential for the validity of the recommendation.

Outline of Appointment Procedure

o **Initiation of the Process:**

- The **Chief Justice of the respective High Court** initiates the process by identifying suitable candidates.

- The **High Court collegium**, consisting of the **Chief Justice of the High Court and the two senior-most judges of that court**, recommends names for appointment.

o **Consultation with the Chief Minister and Governor:**

- The recommendations of the High Court collegium are sent to the **Chief Minister of the state**, who advises the **Governor**.

- The **Governor** forwards these recommendations to the **Union Ministry of Law and Justice** after consultation with the Chief Minister.

o **Supreme Court Collegium's Role:**

- The recommendations are then sent to the **Supreme Court collegium**, which consists of the Chief Justice of India (CJI) and the two senior-most judges of the Supreme Court.

- The Supreme Court collegium scrutinises the proposed candidates, taking into account factors like merit, integrity, and performance.

o **Central Government's Role:**

- Once the Supreme Court collegium approves the recommendations, they are forwarded to the **Union Government** for further processing.

- The **Law Ministry** conducts background checks on the recommended candidates through intelligence agencies to ensure their suitability.

o **Appointment by the President:**

- After completing the background checks, the government sends the file to the **President of India**.

- The **President appoints** the judges based on the recommendations of the Supreme Court collegium, marking the official appointment.

Procedure for Transfer of Judges of High Court

o The **Constitution of India** provides the power to transfer judges of the High Court under **Article 222**.

o Only the President of India, acting on the advice of the Chief Justice of India (CJI), can order the transfer of a judge from one High Court to another.

o **Initiation of Process**: The Chief Justice of India (CJI), along with the collegium, initiates the transfer proposal.

o The **CJI consults with the Chief Justices** of **both the current and receiving High Courts** before making a decision.

o The **collegium's recommendation is sent to the Union Government,** which may raise concerns but must accept the decision if the collegium reaffirms it.

- The government can conduct background checks and raise concerns if necessary, but it is bound to accept the transfer once the collegium reaffirms its decision.

o After the government's approval, the **President of India issues a formal notification of the judge's transfer, making it official**.

o The judge is then expected to join the new High Court within a stipulated period.

o **Objectives of Transfer:**

- **Administrative reasons**, such as balancing the workload across High Courts.

- **Ensuring judicial independence** by preventing a judge from developing any vested interest in the jurisdiction they serve for too long.

- **Personal reasons** if a judge requests a transfer due to family or personal circumstances, though such requests are considered but not guaranteed.

- **Disciplinary purposes** to avoid situations where local influences might affect a judge's functioning.

COLLEGIUM SYSTEM VS NJAC

ASPECTS	COLLEGIUM SYSTEM	NJAC
Constitutionality	Established by judicial interpretations (Second and Third Judges Cases).	Established by 99th constitutional amendment act of 2014 and declared void by the landmark judgement of Fourth Judge case
Key Members	Chief Justice of India (CJI) and four senior-most judges of the Supreme Court.	Chaired by CJI; includes Law Minister, two eminent persons, and two senior SC judges.
Decision-making Process	Judges appoint judges; recommendations made by the Collegium.	Mix of judiciary and executive; politicians and civil society have a say in the appointment process.
Judicial Independence	Defended as a system that protects the independence of the judiciary from executive influence.	The Supreme Court struck it down fearing excessive government control, potentially compromising judicial independence.
Transparency	Often criticised for being opaque, lacking accountability, and allegedly fostering nepotism	Argued to bring more transparency and accountability, but concerns about political interference
Speed of Appointments	Delays often occur due to disagreements between the judiciary and the executive on appointments.	Expected to speed up the appointment process by involving more stakeholders, though struck down.
Criticisms	Lack of transparency, accountability, and claims of nepotism.	Fears of undermining judicial independence by giving politicians a role in judge selection.
Supporters	The judiciary solely decides on the appointments; the executive's role is minimal.	A broader body including the judiciary, executive, and civil society; more inclusive in decision-making.
Final Authority	The Collegium's recommendation is binding, with limited government interference.	Government plays a significant role in the final decision through the presence of the Law Minister.

WAY FORWARD

* **Improving the Collegium System:**

  o **Transparency**: The Collegium should establish **clear criteria** for appointments and make the process more transparent. This can include publishing reasons for selecting or rejecting candidates.

  o **Accountability**: There should be a mechanism to ensure **greater accountability** of the Collegium's decisions, without compromising judicial independence.

  o **Merit-Based Selection**: Focus on appointing judges based on **merit, integrity, and competence**, while minimising favouritism and nepotism.

* **Revisiting NJAC or a Similar Body:**

  o A reformed **National Judicial Appointments Commission (NJAC)** could be reconsidered, ensuring it **maintains judicial independence** while involving the executive and civil society in a limited, non-interfering role.

  o Such a system could include **checks and balances** to prevent political interference but allow a broader consultation process to make appointments more inclusive.

* **Fixed Timelines for Appointments:**

  o Introduce **time-bound procedures** for the entire appointment process, ensuring that vacancies are filled promptly to reduce the backlog of cases.

  o The judiciary and executive should work within **defined timelines** for each stage of the process

to avoid delays.

✳ **Establishment of an Independent Secretariat:**

o Setting up an **independent secretariat** or **body** to assist with the administrative aspects of appointments could streamline the process.

o This body could handle the **scrutiny** of candidates, verify their qualifications, and ensure **uniform standards** are applied.

✳ **Diversity in Judicial Appointments:**

o There should be a focus on improving **diversity** in judicial appointments, including gender representation and representation of marginalised communities.

o A diverse judiciary is essential for **public trust** and more inclusive decision-making.

✳ **Judicial Service Examination:**

o Consider introducing a **National Judicial Service Examination** to recruit judges for lower courts, providing a **merit-based, transparent entry system**.

o This could serve as a potential feeder for higher judicial offices, ensuring consistent standards of selection.

LESSONS FROM OTHER COUNTRIES

☀ **United Kingdom:**

o The **Constitutional Reform Act, 2005 (UK)**, established two Commissions for the purpose of choosing candidates: one for the courts in England and Wales, and the other for the Supreme Court.

o A 15-member commission, called the **Judicial Appointments Commission,** is designated to oversee the nomination of judges to the courts of England and Wales.

o **Comprises:**

• The chairman, who is always a lay member;

• six judicial members, including two tribunal judges; two professional members — they must be a Barrister in England and Wales, Solicitor of the Senior Courts of England and Wales, or Fellow of the Chartered Institute of Legal Executives, but both cannot hold the same qualification;

• five lay members; and one non-legally qualified judicial member.

☀ **South Africa Judicial Appointments:**

o Uses a Judicial Service Commission (JSC) to advise the President on the appointment of judges.

o **Comprises:**

• The Chief Justice of South Africa, the President of the Supreme Court of Appeal, a Judge President, the Minister of Justice, two practising advocates, two practising attorneys, a professor of law, six persons designated by the National Assembly, four persons designated by the President, and four permanent delegates to the National Council of Provinces.

☀ **France Judicial Appointments:**

o The President of the Republic safeguards the independence of the judiciary but does not directly select judges.

o **Judges are chosen through:**

• The High Council of the Judiciary (Conseil Supérieur de la Magistrature).

• For lower courts, judges may be appointed by the Minister of Justice, who consults or receives advice from the High Council.

CONCLUSION

A reformed NJAC can offer a more efficient approach to judicial appointments by fostering communication between state bodies and addressing issues in the collegium system. A balanced strategy is essential to enhance efficiency while safeguarding judicial integrity, which is crucial for upholding the rule of law and restoring public confidence in India's judiciary amidst widespread delays in justice.

SAMPLE QUESTION

Q) How can the NJAC be reformed to provide a more efficient judicial appointment process. Additionally, what are some global best practices for judicial appointments that could be considered? **(10 marks)(150 words)**

NASA SPACE-FLIGHT FIASCO

Syllabus: GS III - Science & Technology

PYQ MAPPING

Q) *Discuss India's achievements in the field of Space Science and Technology. How the application of this technology helped India in its socio-economic development?* *(2016)*

Q) *India has achieved remarkable successes in unmanned space missions including the Chandrayaan and Mars Orbiter Mission, but has not ventured into manned space missions, both in terms of technology and logistics? Explain critically.* *(2017)*

Q) *What is India's plan to have its own space station and how will it benefit our space programme?* *(2019)*

WHY IN NEWS

On August 24, NASA said Boeing's Starliner crew capsule that took astronauts to the International Space Station (ISS), wasn't safe enough to transport them back.

INTRODUCTION

NASA announced that Boeing's Starliner capsule, which transported astronauts Sunita Williams and Barry Wilmore to the ISS for its first crewed test flight, was deemed unsafe for their return. Consequently, their stay on the ISS has been extended until February 2025, with plans for their return in a SpaceX capsule, while the Starliner will return uncrewed

SHORT TAKES

➢ **International Space Station**
- o The International Space Station (ISS) is the largest man-made object in space launched on November 20, 1998. It serves as a habitat for astronauts in space. Since 2011, the ISS has been continuously inhabited.
  - **Participating States:** ISS is a collaborative project of the United States (NASA), Russia's (Roscosmos), Europe's (ESA), Japan's (JAXA), and Canada's (CSA) space agencies.
  - **Orbit**: The International Space Station is in orbit about 400 kilometres above Earth.
  - **Speed**: It travels around Earth at a speed of about 28,000 kilometres per hour. This means that it orbits Earth about every 90 minutes.
  - **Objectives**: To expand our knowledge about space and microgravity and promote new scientific research. It also serves as an example of international cooperation.
  - **Capacity:** The space station has the volume of a five-bedroom house or two Boeing 747 jetliners. It is able to support a crew of six people, plus visitors. On Earth, the space station would weigh almost a million pounds.

NASA STARLINER MISSION

The **Starliner Crew Flight Test mission** (**CST-100 Starliner)** mission, developed by Boeing in collaboration with NASA's **Commercial Crew Program**, is designed to carry astronauts and cargo to and from **low-Earth orbit (LEO)**.

➡ **Mission Overview:**

- o The Starliner is a **reusable space capsule** designed to transport up to **seven passengers** or a combination of crew and cargo to LEO, including the **International Space Station (ISS)**.
- o It was developed to fill the gap left by the

retirement of NASA's **Space Shuttle Program** in 2011, as NASA turned to private companies like Boeing and **SpaceX** for crew transportation.

➡ **Mission Plan:**

o The original plan was for Starliner to **launch, reach the ISS**, and stay docked for **eight days**. This would allow the astronauts to conduct scientific experiments and other research aboard the space station.

o After completing its stay, Starliner would undock from the ISS and **return the astronauts to Earth**.

➡ **Significance of the Mission:**

o Starliner's mission is crucial for proving its capability to safely **transport astronauts** to and from the ISS, like **SpaceX's Dragon spacecraft** did in 2020.

o Success would solidify Boeing's role in supporting NASA's **human space exploration** goals and expand commercial spaceflight options.

WHAT CAUSES THE DELAY?

The **CST-100 Starliner mission** faced several significant technical challenges, particularly related to key mechanisms vital for a **safe flight**.

🌀 **Oxidizer Valve Issue:**

o **Oxidizers** are critical in spacecraft, helping rockets during lift-off and when adjusting their trajectory by aiding in combustion.

o A malfunction was detected in a valve responsible for **regulating the flow of oxidizers**, which is crucial for generating the necessary thrust.

o According to a report from *The Telegraph*, this valve created an **audible buzzing sound**, signalling a problem that contributed to delaying the launch.

🌀 **Helium Leak:**

o **Helium** is essential in spacecraft as it pressurised fuel tanks, maintaining structural integrity and aiding in manoeuvres.

o Before launch, NASA discovered a **small helium leak** in the Starliner's service module, linked to a flange on a **reaction control system thruster**. This system is used for controlling spacecraft orientation and movement.

o NASA delayed the mission to allow teams to assess and address the **helium leak**.

🌀 **Post-Liftoff Problems:**

o Following the **June 5 liftoff**, several additional issues emerged:

  ▪ **Five helium leaks** were detected, affecting the capsule's performance.

  ▪ **Five manoeuvring thrusters** failed during the mission, reducing Starliner's ability to adjust its orientation.

  ▪ A **propellant valve** failed to close completely, requiring the crew aboard the ISS and mission managers in Houston to spend more time fixing these issues mid-mission.

CURRENT SITUATIONS

☀ **Safe on the ISS:**

o **Wilmore and Williams** are safely aboard the ISS, which is a permanent, well-stocked space laboratory designed for long-term human habitation. The situation is not critical, like the Apollo 13 incident, where astronauts were in immediate danger in a damaged spacecraft.

☀ **Upcoming SpaceX Dragon Return:**

o The SpaceX **Crew Dragon spacecraft** will bring them back as part of its return mission after the launch of the **Crew-9 mission**, scheduled for later this month (September 24).

o Though the **Crew Dragon** can carry up to **seven astronauts**, it usually transports four astronauts

per trip. Wilmore and Williams will be part of the return flight along with two other astronauts currently on the ISS. However, the Dragon will only return after the astronauts complete their typical six-month stay on the ISS.

☼ **Current Spacecraft Docked at the ISS:**

o There are **five spaceships** currently docked at the ISS, including SpaceX Dragon, Soyuz MS-25, and resupply ships **Progress 88** and **Progress 89**. These vehicles provide escape options, known as **lifeboats**, in case of emergencies like fire or depressurization on the ISS.

o Until recently, the **Starliner** was docked at the ISS and could have served as a lifeboat for Williams and Wilmore. However, it has since returned to Earth, and the **Crew Dragon** will likely serve as

their emergency escape vehicle now.

☼ **Ongoing Space Missions:**

o Besides the current crew of **nine astronauts** aboard the ISS, three Chinese astronauts aboard the **Tiangong space station** (part of the **Shenzhou-18 mission**) are also in orbit, though operating independently of the ISS.

☼ **Emergency Preparedness:**

o NASA and the crew aboard the ISS are always prepared for emergencies. The ISS has contingency plans in place for events like fire or collision with space debris, as demonstrated in 2021, when astronauts took refuge in docked spacecraft due to space debris from a Russian anti-satellite missile test.

RISK ASSOCIATED WITH PROLONGED SPACE MISSION

🔴 **Microgravity-Related Health Issues:**

o **Muscle Atrophy**: In a microgravity environment, muscles are not used as much, leading to muscle loss and weakness. Exercise is critical for maintaining strength.

o **Bone Density Loss**: Astronauts lose bone mass increasing the risk of fractures and osteoporosis.

o **Fluid Redistribution**: Microgravity causes bodily fluids to shift towards the upper body, leading to puffiness in the face and potential issues like **vision impairment** due to pressure on the eyes.

🔴 **Radiation Exposure:**

o **Space radiation** is much higher outside Earth's atmosphere, especially on long-term missions like those to the ISS or deep space (e.g., Mars missions). Prolonged exposure can increase the risk of **cancer, radiation sickness**, and other long-term health problems.

🔴 **Immune System Suppression:**

o Astronauts' immune systems can become weaker during extended stays in space, making them more vulnerable to infections or illnesses.

🔴 **Psychological Challenges:**

o **Isolation and Confinement**: Living in confined spaces, separated from friends and family, can lead to **stress, anxiety, and depression**.

o **Team Dynamics**: Close quarters can create tension between crew members, impacting mental well-being and performance.

o **Sleep Disorders**: The lack of a natural day-night cycle in space can disrupt circadian rhythms, leading to **insomnia** or other sleep disorders.

🔴 **Vision Impairment:**

o A common issue in long-duration missions is **Spaceflight-Associated Neuro-Ocular Syndrome (SANS)**, where fluid buildup in the head during prolonged exposure to microgravity causes changes in the shape of the eye and may lead to long-term vision problems.

EFFORTS TO COUNTER THESE EFFECTS

➡ Research and Innovations

o **Nutrient and Drug Metabolism**:

▪ Researchers are examining how nutrients and medications are metabolised differently in space.

o **Spaceflight-Associated Neuro-Ocular Syndrome (SANS)**:

▪ A portable optical coherence tomography machine is being considered for on-board use

to detect SANS.

▪ Researchers are also exploring solutions like lower body negative pressure, artificial gravity through centrifugation, and medications to reduce intracranial pressure.

➡ **Space Omics**:

o Space omics studies the body's response to the space environment, including genetic and biochemical changes.

o **Examples**: NASA's Twins Study revealed differences in gene expression between identical twins, one of whom spent a year in space. This research could lead to better therapeutic supplements and health recommendations for space.

➡️ **Global Research Efforts**:

o **Japan's KAKENHI Program**: Investigates biological responses to space conditions.

o **U.S. Projects**: The Complement of Integrated Protocols for Human Exploration Research standardised health studies in space.

o **International Collaboration**: The International Standards for Space Omics Processing aims to establish research and ethics guidelines with contributions from global scientists, including those from India.

LESSONS FOR INDIA AND GLOBAL SPACE COMMUNITY

🇮🇳 **Rigorous Testing and Quality Assurance:**

o Ensure comprehensive testing of all spacecraft systems, including valves, thrusters, and pressurisation components, to identify and resolve potential issues before launch.

o Implement rigorous quality assurance and failure mode analysis to prevent critical failures.

🇮🇳 **Robust Engineering and Redundancy:**

o Design spacecraft with redundant systems and fail-safes to handle unexpected malfunctions and maintain mission integrity.

o Incorporate backup mechanisms and ensure they are tested under realistic conditions.

🇮🇳 **Efficient Troubleshooting:**

o Develop and practise efficient troubleshooting procedures to address issues that arise during the mission.

o Train crews and mission control teams extensively on emergency protocols and problem-solving techniques.

🇮🇳 **Comprehensive Risk Management:**

o Identify and assess all potential risks during the design and testing phases to minimise the likelihood of mid-mission problems.

o Implement a thorough risk management strategy that includes contingency plans for various scenarios.

🇮🇳 **Collaboration and Communication:**

o Foster strong collaboration and communication between teams involved in spacecraft development, testing, and mission operations.

🇮🇳 **Preparedness for Space Environment Challenges:**

o Anticipate and prepare for the unique challenges of space environments, such as microgravity and space radiation, which can impact spacecraft performance.

o Develop specialised solutions and technologies to address these environmental challenges effectively.

CONCLUSION

The CST-100 Starliner mission highlights the need for rigorous testing, robust engineering, and effective troubleshooting. For future missions, India and the global space community must focus on risk management, continuous improvement, and strong collaboration to ensure safety and success in space exploration.

SAMPLE QUESTION

Q) Discuss the challenges encountered during the Starliner mission and explore how India and the global space community can enhance spacecraft reliability and mission success by applying the lessons learned from these issues. **(10 marks) (150 words)**

ETHICS - CASE STUDY

Q) You are working as DM of a district where illegal mining of sand is rampant. Recently there was an accident between a truck illegally carrying sand and a government passenger bus. Many passengers died on the spot because of the accident.Despite your efforts to curb illegal sand mining, local negligence and police complicity have persisted. Media and political protests accuse you of colluding with the sand mafia and suggest a personal feud with the Superintendent of Police. Local media also portrays you as intentionally allowing illegal mining in the district.

a. What will be your course of action to resolve the issue?

b. What steps will be taken to prevent the issue of illegal sand mining?

ETHICS - EXAMPLES

1. **Governance**: In Nanded district, Maharashtra, the 'Balika Panchayat' initiative empowers girls aged 11-18 to tackle social issues like alcoholism and child marriage by mimicking traditional gram panchayats. Launched in February 2024 by IAS officer Minal Karanwal, the project fosters leadership and governance skills among rural girls.

2. **Inclusive Governance:** Kerala's Balaramapuram block resource centre has launched a virtual reality (VR) therapy room to support differently abled children in developing social, emotional, and cognitive skills. Financed by QBurst Technologies, the project utilises AI-based assistive technology, offering immersive experiences through the Auticare XR-VR/AR platform from Embright Infotech.

3. **Emotional Intelligence**: The series IC 814: The Kandahar Hijack revisits the gripping 1999 hijacking of an Indian Airlines flight, highlighting Captain Devi Sharan's leadership during the crisis. Despite the tension, Sharan used humour, even sharing jokes with the hijackers, to maintain a sense of calm among the hostages.

4. **Animal Ethics:** Namibia's worst drought in a century has led the country to cull hundreds of wild animals, including elephants and hippopotamuses, to provide meat for its population amid severe food shortages. The drought is worsened by Namibia's frequent exposure to such conditions in drought-prone southern Africa.

5. **Resilience**: Born with significant physical challenges, Preethi Pal faced a difficult childhood marked by weak legs and irregular posture, requiring extensive treatments and the use of callipers. Despite these struggles, she won bronze medals in the 100m and 200m T35 events at her debut Paralympics.

6. **Human Rights**: The National Medical Commission(NMC) has withdrawn Competency-Based Medical Education (CBME) curriculum for MBBS students categorising sodomy and lesbianism as unnatural sexual offences. This sparked criticism from transgender and disability rights advocates, who argued that these topics were discriminatory.

7. **Gender Justice:** Ugandan marathoner Rebecca Cheptegei was tragically killed by her boyfriend in Kenya, marking the fourth murder of a female athlete in the country in the past three years, highlighting the growing issue of gender-based violence in sports. Experts and organisations emphasise the need for stronger protections and financial independence for women athletes to prevent such abuse.

8. **Queer Rights:** The Centre now recognizes LGBTQIA+ couples as part of the same household for ration cards and has directed states to prevent discrimination. The Health Ministry is also working on guidelines for medical interventions for intersex children and mental health support for the Queer community, following the Supreme Court's marriage equality ruling.

9. **Inclusive Governance**: The Commission for Scientific and Technical Terminology (CSTT) has launched the website shabd.education.gov.in, offering technical terms in all 22 official Indian languages. The portal provides access to over 22 lakh words across 322 glossaries, supports technical education in Indian languages, and allows users to search terms and provide feedback.

MODEL ESSAY

"The discovery of agriculture was the first big step towards a civilised life"

Introduction

- Quote by British anthropologist Arthur Keith
- **Meaning**: The discovery of agriculture marked a significant turning point in human history, laying the foundation for the development of civilizations.
- Importance of food security and stability in human development

Historical Context

- Shift from hunting and gathering to cultivating crops
- The domestication of animals- development of permanent settlements
- Formation of communities and villages- emergence of division of labour
- The invention of tools and technologies for agriculture- accumulation of wealth and resources through agriculture - creation of complex societies

Significance of Agriculture

- **Food Security:** Provides a stable and reliable source of food, ensuring the survival and well-being of populations **Eg**: India's Green Revolution (1960s-70s) -increased wheat and rice production- ensuring food security
- **Economic Growth:** A vital economic sector, contributing to GDP, employment, and trade.
- **Resource Management:** Plays a crucial role in managing natural resources like land, water, and biodiversity **Eg**: crop rotation and agroforestry
- **Technological Advancement**: Agricultural practices have driven technological innovation and development throughout history.

Opportunities of agriculture

- **Global Markets:** Agriculture is a global industry with opportunities for trade and export, expanding markets and economic growth.
- **Value-Added Products**: Processing and marketing agricultural products into higher-value products can increase profitability and create new markets.
- **Sustainable Agriculture:** There is a growing demand for sustainable agricultural practices that minimise environmental impact and promote biodiversity.
- **Agritourism**: Agriculture can be integrated with tourism to create recreational experiences and generate additional income.

Challenges of agriculture

- **Climate Change**: Climate change poses significant challenges to agriculture, including extreme weather events, rising temperatures, and changes in precipitation patterns.
- **Pest and Disease Pressure**: Increasing pest and disease pressure can reduce crop yields and quality, requiring effective pest management strategies **Eg**: Fall Armyworm in Africa severely damaged maize crops
- **Water Scarcity**: In many regions, water scarcity is a major constraint to agricultural production, requiring efficient water management practices.
- **Market Fluctuations:** Global market fluctuations, trade barriers, and price volatility can impact farmers' incomes and livelihoods

Conclusion

- Highlight the enduring significance of agriculture in shaping human civilization
- The need for sustainable innovation will grow, making agriculture vital for global food security and environmental balance.

Sample Quotes

- If agriculture goes wrong, nothing else will have a chance to go right in the country- M S Swaminathan
- A nation that destroys its soil destroys itself - Franklin D Roosevelt
- When tillage begins other arts follow- Daniel Webster

GS- III - *CYBER CRIME*

➡ Union Home Minister launched 4 new initiatives under **Indian Cyber Crime Coordination Centre (I4C)** on its foundation day celebrations to make the fight against cybercrime more robust, effective and successful.

➡ **Cyber Fraud Mitigation Centre (CFMC):** For immediate action and seamless cooperation to tackle online financial crimes. CFMC will serve as an example of "Cooperative Federalism" in law enforcement.

➡ **'Cyber Commandos' Program:** To establish a Special wing of trained 'Cyber Commandos' in States/UTs and Central Police Organizations (CPOs) to counter threats of cyber security landscape in the country.

➡ **Samanvay platform (Joint Cybercrime Investigation Facilitation System):** Web-based module to act as a one stop portal for data repository of cybercrime, data sharing, crime mapping, data analytics, cooperation and coordination platform for Law Enforcement Agencies across the country.

➡ **Cyber Suspect Registry:** To be created based on the National Cybercrime Reporting Portal (NCRP), in collaboration with banks and financial intermediaries for strengthening fraud risk management capabilities of the financial ecosystem.

GS- II - *HEALTH*

➡ **VISHANU YUDDH ABHYAS**": A Mock Drill on Pandemic Preparedness conducted under **National One Health Mission**

- Exercise aimed to evaluate the readiness and response of the National Joint Outbreak Response Team composed of experts from human health, animal husbandry and wildlife sectors

- Vishanu Yuddh Abhyas provided valuable insights to inform future strategies to enhance India's preparedness and response to zoonotic disease outbreaks.

GS- II - *GOVERNMENT POLICIES AND INTERVENTIONS*

➡ The Ministry of Labor and Employment approved the **Centralised Pension Payment System (CPPS)** for the Employees' Pension Scheme.

- It establishes a national-level centralised system enabling pensioners to receive their pensions from any bank, any branch, anywhere in the country.

- Existing pension disbursement system is decentralised, with each zonal/regional office of EPFO maintaining separate agreements with only 3-4 banks.

- It will be launched as part of EPFO's Centralised IT Enabled System (CITES 2.01) from 1st January 2025.
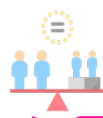
GS- II - *ISSUES RELATED TO POVERTY AND HUNGER*

➡ More than 100 cases of malnourished children among the Sahariya tribe have been reported from Baran district of Rajasthan.

➡ A recent survey identified 172 cases of malnutrition, prompting the admission of affected children to government-run **Malnourishment Treatment Centres (MTCs).**

➡ **Sahariya Tribe:**

- Sahariyas are **one of the PVTGs** that are **mostly inhabited in Madhya Pradesh, Uttar Pradesh, and Rajasthan**.

- PVTGs are tribal communities that show either a **declining or stagnant population**, use of **pre-agrarian technology**, **economic backwardness**, and **low literacy**.

- Generally reside in **separate basti in the village**, called **Saharana.**

- **Economic activities:** Agriculture (primarily rainfed), collection of minor forest produce, etc.

GS- III - *DISASTER MANAGEMENT*

➔ Centre recently initiated an **Early warning system** for **188 critical lakes** in the Indian Himalayan Region prone to **Glacial lake outbursts** following the 2023 Sikkim disaster.

- A delegation from NDMA, ISRO, and the State Disaster Management Authority visited Tenchungkha Lake in Sikkim under the **Glacial lake outbursts** EWS Mission to assess and plan mitigation measures.

- Critical lakes for the mission are in Uttarakhand, Arunachal Pradesh, Sikkim, Himachal Pradesh, Ladakh, Jammu and Kashmir, Meghalaya, Manipur, and Nagaland.

GS- III - *AGRICULTURE*

➔ The Union Cabinet Committee chaired by the Prime Minister approved the **Digital Agriculture Mission** with an outlay of Rs. 2817 Crore, including the central share of Rs. 1940 Crore.

➔ **Digital Agriculture Mission**:

- It is conceived as an umbrella scheme to support digital agriculture initiatives, such as creating Digital Public Infrastructure (DPI), implementing the Digital General Crop Estimation Survey (DGCES) etc.

- DPI is a set of digital systems that enables countries to safely and efficiently provide economic opportunities and deliver social services.

GS- III - *INDIAN ECONOMY*

➔ According to recent updates, the eShram portal has successfully registered over 30 crore unorganised workers within a period of just three years.

➔ Launched by the **Ministry of Labour & Employment** and envisaged as **"One-Stop-Solution"** for Country's unorganised workers Seeks to create a **National Database of Unorganized Workers (NDUW),** including migrant workers, construction workers, gig and platform workers, etc.

GS- III - *SCIENCE & TECHNOLOGY*

➔ Ministry of Electronics and Information Technology (MeitY) launches **Vishvasya-Blockchain Technology Stack.**

➔ It has been launched to offer **Blockchain-as-a-Service (BaaS)** with a geographically distributed infrastructure designed to support various permissioned Blockchain based applications.

- **BaaS** refers to third-party cloud-based infrastructure and management for companies building and operating blockchain apps.

➔ It is a part of the broader National Blockchain Framework provided under National Strategy on Blockchain.

- NBF is meant for effectively utilising the Blockchain technology in different domains such as health,agriculture, education, finance, etc.

➔ It seeks to address the challenges of Blockchain adoption across various stakeholders including Infrastructure Providers, Smart Contract Developers, etc.

➔ Union Minister of Science & Technology inaugurates 8 new NIDHI in-TBIs across India along with a new DST-NIDHI Website.

➔ **About National Initiative For Developing And Harnessing Innovations:**

- Umbrella programme developed by Department of Science & Technology (DST) in 2016.

- **Objective**: To nurture ideas and innovations (knowledge-based and technology-driven) into successful startups.

- **Implementation**: National Science & Technology Entrepreneurship Development Board (NSTEDB) under DST is a funding agency.

- All NIDHI-Startup funds and offerings are disbursed to eligible startups only through eligible NSTEDB associated incubators across India.

- NIDHI Programmes are implemented through Technology Business Incubators (TBIs).

➔ **NIDHI - iTBI (Inclusive-TBI)**, designed to transform innovations into startups, is a central element of the NIDHI program.
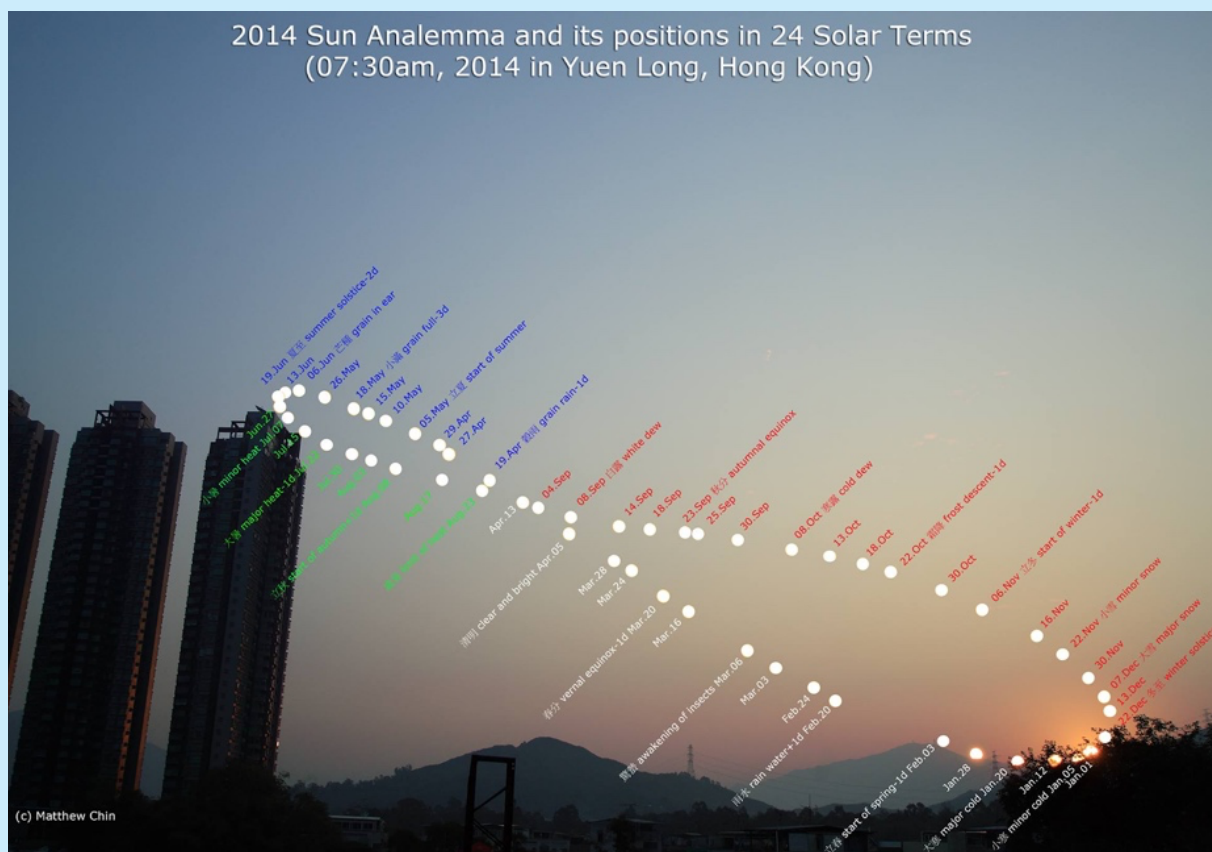
o   India's first **'teal carbon'** study, undertaken at **Keoladeo National Park (KNP),** depicted the potential of teal carbon as a tool to mitigate climate change, if the anthropogenic pollution in the wetlands can be controlled.

o   **Teal Carbon**

•   It refers to carbon stored in non-tidal freshwater wetlands, encompassing carbon sequestered in vegetation, microbial biomass, and dissolved and particulate organic matter.

•   Teal carbon, being a colour-based terminology (refer infographics), reflects the classification of the organic carbon based on its functions and location rather than its physical properties.

»   In contrast, black and brown carbon are produced by incomplete combustion of organic matter and contribute to global warming.

•   **Significance:** It contributes to an increase in the ground water level, flood mitigation and heat island reduction, supporting a sustainable urban adaptation.

CHERRYPICKS OF THE WEEK

SOLAR ANELEMMA:

•   The analemma of the Sun is the pattern that the Sun makes as it appears to move through the sky because it's not in exactly the same place in the sky at the same time on every day of the year.

•   The analemma is caused by the tilt of the Earth's axis as it rotates and the elliptical shape of Earth's orbit around the Sun.

2014 Sun Analemma and its positions in 24 Solar Terms
(07:30am, 2014 in Yuen Long, Hong Kong)

(c) Matthew Chin

WOOD WIDE WEB:

- The "Wood Wide Web" is a network of fungi and bacteria that connects trees and other plants underground, allowing them to share nutrients and communicate with each other.
- The term was coined by German forester Peter Wohlleben and is based on the idea that trees communicate through the network, similar to how people use the internet

GYROCHRONOLOGY:

- It is a method for determining the age of stars by using their rotation period and mass.
- This method is based on the idea that stars slow down their rotation as they age, similar to our sun.

DIGITAL PUBLIC GOODS

- DPGs are open-source technologies, including open data, open AI models, open standards and open content, used in a country to operationalize digital public infrastructure.
- E.g., Aadhaar, UPI, Digilocker, etc. DPGs can limit economic monopolies over digital solutions and knowledge.
- It provides inclusivity and accessibility, catalyst for innovation, enhanced transparency in public service delivery, etc.

PRESBYOPIA:

- It is a refractive error in which the eyes gradually lose the ability to focus on nearby objects.
- It happens as the lens stops focusing light correctly on the retina (a light-sensitive layer of tissue at the back of the eye).
- With age, the lens in the eye gets harder and less flexible.
- It is an age-related condition and people usually develop it at around the age of 40.

The lens ages and stiffens, bringing the focal point behind the retina and causing blurry vision