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WITH PRACTICE QUESTIONS

उड़े देश का आम नागरिक
UDAN

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Adda247

Preface

The UPSC Civil Services (Mains) 2022 Examination is scheduled to start from 16th September 2022 and according to the recently released UPSC Calendar 2023, the Civil Services (Prelims) Examination 2023, will be held on May 28, 2023. For the aspirants, who are preparing for UPSC CSE 2022 & 2023, needless to say, a thorough study, understanding, and revision of Current Affairs is a must!

To ease the preparation, we are providing monthly current affairs compilation for the aspirants. The magazine contains subject-wise distribution of comprehensive news articles, which have been derived from the sources like PIB, The Hindu, The Indian Express, etc.

A separate section – 'The Editorials Corner' has been added to discuss the important Editorial articles published in The Hindu and Indian Express Newspaper. We have also added MCQ Current Affairs questions with solutions. Aspirants should attempt these questions after reading the magazine, in order to evaluate their knowledge of Current Affairs.

""Concentrate all your thoughts upon the work in hand. The sun's rays do not burn until brought to a focus."
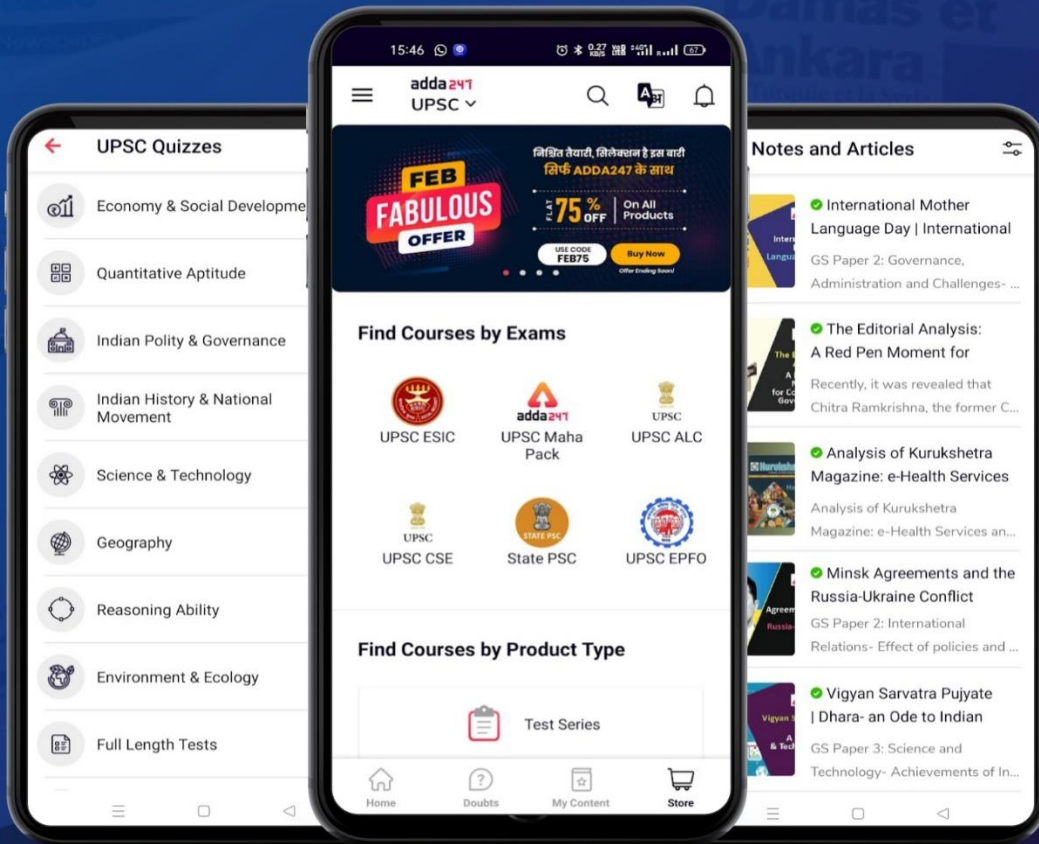
— Alexander Graham Bell

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POLITY & GOVERNANCE

UDAN Scheme

Recently, Ministry of Civil Aviation's flagship program Regional Connectivity Scheme UDAN (Ude Desh ka Aam Nagrik) has completed 5 years of success since the launch of it first flight by Prime Minister on 27th April 2017.

UDAN Scheme Performance

- In the last five years, UDAN has significantly increased the regional air-connectivity in the country.
- **Increased Airports:** There were 74 operational airports in 2014. Because of the UDAN scheme this number has increased to 141 by now.
- **Enhanced Connectivity:** 68 underserved/unserved destinations which include 58 Airports, 8 Heliports & 2 Water Aerodromes have been connected under UDAN scheme.
  - With 425 new routes initiated under the scheme, UDAN has provided air connectivity to more than 29 States/ UTs across the length and breadth of the country.
- **Beneficiaries:** More than one crore passengers have availed the benefits of Regional Connectivity Scheme UDAN (Ude Desh ka Aam Nagrik) scheme as on 4th August 2022.
- **Benefits to Stakeholders:** UDAN Scheme has benefitted a diverse set of stakeholders.
  - Passengers have got the benefits of air connectivity,
  - Airlines have received concessions for operating regional routes,
  - Unserved regions have received the direct and indirect benefits of air connectivity for their economic development.
- **Recognition:** RCS-UDAN was awarded Prime Minister's Award for Excellence in Public Administration under Innovation Category for the year 2020.
  - Republic Day Tableau for 26th January 2022 on UDAN was adjudged as the Best Tableau by the Ministry of Defence.

UDAN Scheme: Future Targets

- 220 destinations (airports/heliports/water aerodromes) under UDAN are targeted to be completed by 2026 with 1000 routes to provide air connectivity to unconnected destinations in the country.
  - Under UDAN, 954 routes have already been awarded to connect 156 airports.
- By 2026, RCS-UDAN scheme is expected to help 40 crore Indians to travel through Civil Aviation in India.

UDAN Scheme: Key points

About UDAN
UDAN scheme full form: **Ude Desh Ka Aam Naagrik** is a Regional Connectivity Scheme (RCS) to ensure affordability, connectivity, growth and development.
It provides a **win-win situation** for all stakeholders – citizens would get the benefit of affordability, connectivity and more jobs.
The scheme was **launched in 2016**, and would be in **operation for a period of 10 years**.

UDAN Scheme: Benefits

- Central Government would **provide concessions** in the form of reduced excise duty, service tax, and flexibility of code sharing at the RCS (UDAN) airports.
- State governments will have to **lower the GST on ATF to 1%** or less, besides providing security and fire services free of cost and electricity, water and other utilities at substantially concessional rates.
- A **Regional Connectivity Fund** would be created to meet the viability gap funding requirements under the scheme. The RCF levy per departure will be applied to certain domestic flights.
- The partner State Governments (other than North Eastern States and Union Territories where contribution will be 10 %) would contribute a **20% share to this fund.**

UDAN Scheme- Various Formulations

- **Krishi UDAN:** launched for enhancing value realization of agriculture products especially in North-eastern Region {NER} and tribal districts.
- **International UDAN** routes for NER to explore International Connectivity from / to Guwahati and Imphal.
- **Lifeline UDAN**: Lifeline UDAN initiative commenced in March 2020 during COVID-19 period.
  - o It helped to operate 588 flights transporting almost 1000 Tonnes of voluminous cargo and essential medical services to various parts of the country.

School Innovation Council (SIC)

Recently, key details of **School Innovation Council (SIC)** was provided by the Minister of State for Education, Smt. Annpurna Devi in a written reply in the Lok Sabha.

About School Innovation Council (SIC)

- **About:** School Innovation Council (SIC) is an initiative taken by the Ministry of Education's Innovation Cell (MIC).
  - o School Innovation Council (SIC) was launched on 1 July 2022.

- **Mandate:** School Innovation Council (SIC) is a council of teachers, students, and experts from industry and academia to-
  - o Conduct round the year activities for students and teachers on Innovation and Entrepreneurship,
  - o Monitor through the SIC portal of the MIC,
  - o Record the influence at the ground level.
- **Implementation:** School Innovation Council (SIC) has been introduced to all schools of all the states including Rajasthan.
- **SIC Portal:** It has been developed to implement the SIC council in all schools across the nation. schools can register themselves on the SIC Portal.
- **Role of Schools:** All registered schools are encouraged to perform innovation-related activities as per the SIC Calendar Activities that includes-
  - o Leadership talk,
  - o Motivation sessions,
  - o Webinars,
  - o Sessions,
  - o Awareness,
  - o Boot camps inviting innovative ideas from the student,
  - o Developing the prototype, and
  - o National level exhibition of the best prototypes etc.
- **Significance:** SIC will enable mindset change, awareness, and training on Ideation, Innovation and Entrepreneurship, design thinking, Intellectual Property Rights, start-up finance, and HR among teachers and students.
  - o School Innovation Council (SIC) will also enable the ranking system for schools on the level of innovation-oriented activities.

School Innovation Ambassador Training program (SIATP)
- **About:** School Innovation Ambassador Training program (SIATP) was launched through online Mode to strengthen the mentoring capacity of teachers for cultivating and handholding innovative and ingenious ideas from students.

- **Teacher Training Modules:** Under SIATP, teachers will be trained under following five modules-

  o Design Thinking & Innovation;
  o Idea generation & Idea hand-holding;
  o Finance/Sales/HR;
  o Intellectual Property Rights(IPR);
  o Entrepreneurship and Prototype/ Product Development;

Revamped Distribution Sector Scheme

During 'Ujjwal Bharat Ujjwal Bhavishya – Power @2047' Program, Indian Prime Minister launched the Power Sector's Revamped Distribution Sector Scheme.
He also dedicated and laid the foundation stone of various green energy projects of NTPC.

About Revamped Distribution Sector Scheme

- **About:** The flagship Revamped Distribution Sector Scheme is aimed at improving the operational efficiencies and financial sustainability of the DISCOMs and Power Department.
- **Implementing Ministry:** Revamped Distribution Sector Scheme is being implemented under administrative control of Ministry of Power.
- **Funding:** Revamped Distribution Sector Scheme will be implemented with an outlay of over Rs. 3 lakh crore over a period of five years from FY 2021-22.

Revamped Distribution Sector Scheme- Key Objectives

- The scheme aims to provide financial assistance to DISCOMs for-
  o Modernization and strengthening of distribution infrastructure,
  o Focussing on the improvement of the reliability and quality of supply to end consumers.
- It also aims to improve the operational efficiencies and financial sustainability of all state-sector DISCOMs and Power Departments by reducing-
  o The AT&C (Aggregate Technical and Commercial) losses to Pan-India levels of 12-15% and
  o The ACS-ARR (Average Cost of Supply-Average Revenue Realized) gap to zero by 2024-25.

Regional Conference on Administrative Reforms

Union Minister Dr Jitendra Singh and Chief Minister of Arunachal Pradesh will inaugurate the two-day Regional Conference on Administrative Reforms 2022.

About Regional Conference on Administrative Reforms

- **About:** Regional Conference on Administrative Reforms is an effort to bring the Government and Citizens closer through various administrative reforms at the centre, state and district level.
- **Location:** Regional Conference on Administrative Reforms is being held at Itanagar, Arunachal Pradesh.
  o The Regional Conference on Administrative Reforms is being held in a semi-virtual mode.
- **Mandate:** It is being factored by use of digital technology pursuing next generation reforms and innovations with policy objective of "Maximum Governance, Minimum Government" by entailing-
  o Government process Re-engineering,
  o Universal access to e-services,
  o Excellence in digital initiatives at district level and
  o Excellence in adopting emerging technologies and use of ICT Management.
- **Theme:** Regional Conference on Administrative Reforms 2022 is being organized on the theme "Bringing Citizens and Government Closer through Administrative Reforms".
- **Organizing Body:** The Regional Conference is being organized by the Department of Administrative Reforms and Public Grievances in collaboration with Government of Arunachal Pradesh.

- **Significance**: Regional Administrative Conference is dedicated to the region of North Eastern States and Eastern States of India.
  - More than 300 delegates from PAN-India are expected to participate in the Conference.
- **Key Activities:** The National Centre for Good Governance (NCGG), Department of Administrative Reforms & Public Grievances (DARPG).
  - NCGG shall enter into an MOU with Government of Arunachal Pradesh for conducting Mid-Career Building Programs in Governance for 500 officers of Government of Arunachal Pradesh Administrative Services over the next 5 years.

Regional Conference on Administrative Reforms 2022

During the 2-day event, presentations will be made in the following sessions:

- Reforms in Governance;
- Public Grievance Redressal and e-Office in N. E. States;
- Good Governance Practices in North Eastern States;
- District Good Governance Index and
- Good Governance Practices.

Rashtriya Puruskar Portal

Recently, a common Rashtriya Puruskar Portal was launched by the government so as to bring together all the Awards of the various Ministries/Departments/Agencies of the Government of India under one platform.

About Rashtriya Puruskar Portal

- **About**: It is an initiative to bring together all National Awards of the various Ministries/Departments/Agencies of the Government of India under one digital platform reflecting transparency, accountability, and public partnership (Jan Bhagidari).
- **Objective**: Rashtriya Puruskar portal aims to facilitate citizens to nominate

individuals/organizations for various awards instituted by the Government of India to recognize and award them for their exceptional contributions in their respective fields.

- **Significance**: With this portal, for the first time in the history of India, information regarding all national awards would be available to the public on a single digital platform including their eligibility criteria, selection procedure, and details of past awardees.
  - Also, people will be able to make nominations for various awards on a single platform, which is simple and user-friendly.

Rashtriya Puruskar Portal- Currently Open Nominations/Recommendations

Currently, nominations/recommendations for the following Awards are open:

- **Padma Awards-** Last date is 15/09/2022
- **National Award for Excellence in Forestry 2022-** Last date is 30/09/2022
- **National Gopal Ratna Award 2022-** Last date is 15/09/2022
- **National Water Awards 2022-**Last date is 15/09/2022
- **National Award for Senior Citizens - Vayoshreshtha Samman 2022-** Last date is 29/08/2022
- **National Award for Individual Excellence 2021-** Last date is 28/08/2022
- **National Award for Individual Excellence 2022-** Last date is 28/08/2022
- **National Awards for Institutions Engaged in Empowering Persons with Disabilities 2021-** Last date is 28/08/2022
- **National Awards for Institutions Engaged in Empowering Persons with Disabilities 2022-** Last date is 28/08/2022
- **National CSR Awards 2022-** Last date is 31/08/2022
- **Nari Shakti Puraskar 2023-** Last date is 31/10/2022
- **Subhash Chandra Bose Aapda Prabandhan Puraskar 2023-** Last date is 31/08/2022
- **National Awards for Outstanding Services in the Field of Prevention of Alcoholism and Substance Abuse 2022-** Last date is 29/08/2022
- **Jeevan Raksha Padak -** Last date is 30/09/2022

PM Adi Adarsh Gram Yojna (PMAAGY)

Government has modified the earlier scheme of 'Special Central Assistance to Tribal Sub-Scheme (SCA to TSS) with nomenclature 'Pradhan Mantri Adi Adarsh Gram Yojna (PMAAGY)'.

About PM Adi Adarsh Gram Yojna (PMAAGY)

- **About:** PMAAGY aims at mitigating gaps and providing basic infrastructure in villages with significant tribal population in convergence with funds available under different schemes in Central Scheduled Tribe Component.
- **Implementation Period:** 'Pradhan Mantri Adi Adarsh Gram Yojna (PMAAGY)' will be implemented during 2021-22 to 2025-26
- **Parent Ministry:** 'Pradhan Mantri Adi Adarsh Gram Yojna (PMAAGY)' is being implemented by Ministry of Tribal Affairs.
- **Coverage:** PMAAGY is envisaged to cover 36,428 villages having at least 50% ST population and 500 STs across States / UTs with notified STs during the period.
- **Funding:** A sum of ₹20.38 lakh per village as 'gap-filling' has been provisioned for approved activities including administrative expenses under PMAAGY.
  - An amount of Rs. 7,276 cr has been approved by the Cabinet for the scheme in next 5 years.
- **Role of States/UTs:** States/UTs are encouraged for convergence of resources as Central/State Scheduled Tribe Component (STC) funds and other financial resources available with them for saturation of infrastructure and services in the villages identified under PMAAGY.

Key Objectives of the Scheme

- **Integrated Socio-Economic Development:** The main objective of **PMAAGY** scheme is to achieve integrated socio-economic development of selected villages through convergence approach. It includes the following components-

  - Preparing Village Development Plan based on the needs, potential, and aspirations;
  - Maximizing the coverage of individual / family benefit schemes of the Central / State Governments;
  - Improving the infrastructure in vital sectors like health, education, connectivity and livelihood;
- **Mitigating Gaps:** PM Adi Adarsh Gram Yojna (PMAAGY) envisions to mitigate gaps in prominent 8 sectors of development viz.
  - Road connectivity (Internal and Inter village /block),
  - Telecom connectivity (Mobile /internet),
  - School,
  - Anganwadi Centres,
  - Health Sub-Centre,
  - Drinking water facility,
  - Drainage and
  - Solid waste management.

Pharmacopoeia Commission for Indian Medicine

Recently, the Government of India has established Pharmacopoeia Commission for Indian Medicine & Homoeopathy (PCIM&H), as a subordinate office under Ministry of Ayush.

Pharmacopoeia Commission for Indian Medicine & Homoeopathy (PCIM&H)

- **About:** The Commission was initially established as Pharmacopoeia Commission for Indian Medicine (PCIM) in 2010 and was registered under Societies Registration Act, 1860 later in the same year.
- **Parent Ministry:** Pharmacopoeia Commission for Indian Medicine & Homoeopathy (PCIM&H) functions as a sub-ordinate office under Ministry of AYUSH.
- **Formation of PCIM&H:** It is created by merging Pharmacopoeia Commission of Indian Medicine & Homoeopathy (PCIM&H) and the two central laboratories namely-
  - Pharmacopoeia Laboratory for Indian Medicine (PLIM), Ghaziabad and
  - Homoeopathic Pharmacopoeia Laboratory (HPL)

Key Functions:
- o The Commission is engaged in development of Pharmacopoial Standards for Ayurvedic, Unani, Siddha & Homoeopathic drugs.
- o PCIM&H is also acting as Central Drug Testing cum Appellate Laboratory for Indian systems of Medicine & Homoeopathy.

Key Objectives of the Commission
- **Quality standards**
  - o To develop Pharmacopoeias for drugs/formulations of 'Indian Medicine' and 'Homoeopathy'
  - o To develop Formularies of 'Indian Medicine'
  - o To revise/update/amend the published Pharmacopoeias and Formularies as may be deemed necessary
  - o To publish compendia supplementary to Pharmacopoeias/Formularies of 'Indian Medicine' and 'Homoeopathy' and other related scientific/regulatory information pertaining to functional area of PCIM&H
- **Apex Laboratory**
  - o To act as Central Drug Testing cum Appellate Laboratory for 'Indian Medicine' and 'Homoeopathy'
  - o To impart Capacity Building Training to Drug Regulatory Authorities and personnel engaged in Quality Control pertaining to 'Indian Medicine' and 'Homoeopathy'
  - o To nurture and promote awareness on Quality assurance of drugs/formulations of 'Indian Medicine' and 'Homoeopathy' and drug research
- **Repositories of authentic reference materials**
  - o To maintain an authentic Reference Raw Materials (RRM) Repository of raw materials used in 'Indian Medicine' and 'Homoeopathy'
  - o To maintain an authentic Reference Chemical Markers (RCM) Repository of chemical moieties with established therapeutic significance for drugs/formulations of 'Indian Medicine' and 'Homoeopathy'
- **Miscellaneous**
  - o To exercise any activity so as to propagate/promote/improvise

implementation/ enforcement of provisions of Drugs and Cosmetics Act, 1940 and Rules thereunder as well as other laws/schemes/programmes of 'Government', relevant to functional area of PCIM&H

National AYUSH Mission (NAM)- Key Points
• **About:** National AYUSH Mission (NAM) is a flagship scheme of the Ministry of AYUSH, launched in 2014.
o National AYUSH Mission is a Centrally Sponsored Scheme of the Union Government.
• **Implementation:** National AYUSH Mission (NAM) launched during 12th Plan for implementing through States/UTs.
• **Mandate:** NAM aims to promote AYUSH medical systems through-
o Cost effective AYUSH services,
o Strengthening of educational systems,
o Facilitate the enforcement of quality control of Ayurveda, Siddha and Unani & Homoeopathy (ASU &H) drugs and
o Sustainable availability of ASU & H raw materials.

National Fisheries Development Board (NFDB)

Recently, National Fisheries Development Board (NFDB) conducted its 9th Governing Body meeting at Lecture Hall, NASC Complex, New Delhi.

9th NFDB Governing Body Meeting- Key Events
- **Best Practice Book:** "Super Success Stories from Indian Fisheries" published by NFDB commemorating 75th Independence Day- Azadi Ka Amrit Mahotsav celebrations was released. It aims to-
  - o Disseminate the technologies, innovative ideas practiced by the small-scale farming sector and
  - o Expand the promotion of initiatives to larger population, successful fisheries and aquaculture practices across the country.
- **"Aqua Bazar" App:** It has been developed by ICAR-CIFA with the funding support of NFDB under PMMSY.

o The app will help the fish farmers and stakeholders to source the inputs such as fish seed, feed, medicines etc. and services required for fish culture as well as farmers can list the table size fish for sale.

o It is a market place which connects various stakeholders involved in aquaculture sector.

About National Fisheries Development Board (NFDB)

- **About:** NFDB was established in 2006 to enhance fish production and productivity in the country and to coordinate fishery development in an integrated and holistic manner.
- **Parent Ministry:** NFDB was established as an autonomous organization under the administrative control of the Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India.
- **Mission**: National Fisheries Development Board (NFDB) works with the following Missions-
  o Holistic development of the fisheries sector through enhancement of fish production and productivity;
  o To supplement nutritious protein for the growing population;
  o To accelerate the overall economy of the country, besides improving health, economy, exports, employment and tourism in the country.
- **Key Functions:** National Fisheries Development Board (NFDB) has following key functions-

o Providing focused attention to fisheries and aquaculture (Production. Processing, Storage, Transport and Marketing)
o Achieving sustainable management and conservation of natural aquatic resources
o Applying modern tools of research and development for optimizing production and productivity from fisheries.
o Providing modern infrastructure mechanisms for effective fisheries management and optimum utilization
o Training and empower women in the fisheries sector and also generate substantial employment
o Enhancing the contribution of the fish toward food and nutritional security

Objectives of National Fisheries Development Board (NFDB)

- To bring activities relating to fisheries and aquaculture for focused attention and professional management.
- To coordinate activities pertaining to fisheries undertaken by different Ministries/Departments in the Central Government and also coordinate with the State/Union Territory Governments.
- To improve production, processing, storage, transport and marketing of the products of capture and culture fisheries.
- To achieve sustainable management and conservation of natural aquatic resources including the fish stocks.
- To Apply modern tools of research and development including biotechnology for optimizing production and productivity from fisheries.
- To provide modern infrastructure mechanisms for fisheries and ensure their effective management and optimum utilization.
- To generate substantial employment.
- To train and empower women in the fisheries sector.
- To enhance contribute of fish towards food and nutritional security.

Manthan Platform

Recently, the Office of the Principal Scientific Adviser (PSA) to the Government of India (GoI) announced the launch of the Manthan platform.

- The Office of the Principal Scientific Adviser (PSA) is entrusted with the vision to enable and empower all spheres of science and technology within the country.
- **Manthan Platform** commemorates India's 75 years of independence – Azadi ka Amrit Mahotsav and presents an opportunity to bring national and global communities closer to India's technology revolution.

About Manthan Platform

• **About:** The Manthan Platform is unique and will provide the necessary fulcrum for transforming our nation through innovative ideas, inventive minds, and public-private-academia collaboration to achieve our sustainability goals.
• **Mandate:** Manthan Platform aims to promote collaboration at scale between industry and the scientific research and development ecosystem in India.
o It will help meet India's sustainability goals in alignment with the UN defined Sustainable Development Goals (SDG) charter.
• **Implementation:** The Office of the Principal Scientific Adviser (PSA) to the Government of India (GoI) is implementing Manthan Platform.
o Manthan Platform is powered by NSEIT Limited which is its trusted knowledge and technology partner.

Manthan Platform Significance

- The Manthan Platform provides the necessary impetus to promote collaboration at scale between the demand side and supply side users.
  o This will help ideas to thrive, technology to enhance communities, and deliver results that can catapult the nation towards many more glorious chapters.
- Manthan will help new concepts, science-led ideas, and new technology outcomes find swifter adoption across the country.
- The Manthan platform will facilitate knowledge transfers and interactions through Information Exchange Sessions, Exhibitions, and Events to develop a framework for future science, innovation, and technology-led growth.
- Manthan will empower to scale up the interactions among stakeholders, facilitate research and innovation, and share challenges in various emerging technologies and scientific interventions, including those that make a Social Impact.

Key Facts about Azadi ka Amrit Mahotsav (AKAM)

- **About:** Azadi Ka Amrit Mahotsav is an initiative to celebrate and commemorate 75 years of progressive India and the glorious history of its people, culture and achievements.
  o Azadi ka Amrit Mahotsav is an embodiment of all that is progressive about India's socio-cultural, political, and economic identity.
- **Celebrating People of India:** Azadi Ka Amrit Mahotsav is dedicated to the people of India who have been instrumental in bringing India thus far in its evolutionary journey.
  o People of India also hold within them the power and potential to enable the Prime Minister's vision of activating India 2.0, fuelled by the spirit of Atmanirbhar Bharat.
- **Beginning of Azadi Ka Amrit Mahotsav:** The official journey of "Azadi ka Amrit Mahotsav" commenced on 12th March 2021 which starts a 75-week countdown to our 75th anniversary of Independence.
- **Categorize:** Azadi Ka Amrit Mahotsav is envisioned to be celebrated in five categories –
  o Freedom Struggle,
  o Idea @75,
  o Achievements @75,
  o Action @75 and
  o Resolve @75

Internationalisation of Higher Education

Recently, the Minister of State for Education informed Lok Sabha about various initiatives taken by the government to promote Internationalisation of Higher Education as per mandate of National Education Policy (NEP)-2020.

NEP 2020 on Internationalisation of Higher Education

NEP 2020 stipulates various measure to promote India as global study destination and Internationalisation. For example-

- Facilitating research / teaching collaborations and faculty /student exchange with high-quality foreign HEI and signing of relevant mutually beneficial MOUs with foreign countries;
- Encouraging high performing Indian universities to set up campuses in other countries;

- Selected universities e.g., those from among the top 100 universities in the world will be facilitated to operate in India;
- Setting up of International Student Office at each HEI for welcoming and supporting students arriving from abroad;
- Counting credits acquired in foreign universities, wherever appropriate as per requirement for each HEI; and
- Courses and programmes in subjects, such as Indology, Indian Languages, AYUSH systems of medicines, yoga, arts etc.

Government Initiatives to Promote Internationalisation of Higher Education

In line with the recommendations of National Education Policy (NEP), 2020, several measures have been initiated to strengthen Internationalization of the Higher Education, such as:

- **Guidelines on Internationalization of Higher Education** were notified by UGC in July, 2021.
  - It includes provisions like setting up of Office for International Affairs and Alumni Connect Cell in the campus of Universities hosting foreign students.
- 179 Universities have established Office for International Affairs and 158 Universities have set up Alumni Connect Cells.
- **Academic Collaboration:** In order to foster academic collaboration between Indian HEIs and foreign HEIs, "University Grants Commission Regulations, 2022" have been notified in 2022.
- **World-class foreign universities and institutions will be allowed in the GIFT City,** Gujarat to offer courses in Financial Management, FinTech, Science, Technology, Engineering and Mathematics.
  - These will be free from domestic regulations, except those by International Financial Services Centres Authority (IFSCA).
  - It aims to facilitate availability of high-end human resources for financial services and technology.
- **Offshore Campuses:** UGC Institutions of Eminence Deemed to be Universities Regulations

have been amended to allow Institutions of Eminence to set up Off-Shore campuses.

Key points About NEP-2020
• It is the **third education policy** of our country. The earlier two was launched **in 1968 and 1986.**
○ This national policy came after a gap of 34 years.
• It is based on the recommendations of **Kasturirangan committee**.
• It renames the Ministry of Human Resource Development to **Ministry of Education**.
• It proposes a **5+3+3+4** curricular and pedagogical structure.

Stages	Years	Class	Features
Foundational	3-8	3 years of pre-primary and 1-2	Flexible, multi-level, activity-based learning
Preparatory	9-11	3-5	Light textbooks, more formal but interactive classroom learning
Middle	12-14	6-8	Introduction of subject teachers for learning of more abstract concepts, experimental learning
Secondary	15-18	9-12	Reading in-depth, critical thinking, greater attention to life aspirations

Implementation of NEP-2020

- There will be an apex body called **Higher Education Commission of India** (HECI), which will resolve disputes among the following bodies.

Bodies	Features
NHERA (National Higher Education Regulatory Authority)	Light but tight regulation

NAC (National Accreditation Commission)	Meta-accrediting agency
HEGC (Higher Education Grants Council)	Responsible for funding
GEC (General Education Council)	frame expected learning outcomes for higher education programmes.

Indian Knowledge Systems Mela

Recently, Minister of State for Education Shri Subhas Sarkar addressed the valedictory session of Indian Knowledge Systems Mela in New Delhi.

About Indian Knowledge Systems Mela

- **About:** Indian Knowledge Systems Mela is being organized to commemorate the successful completion of two eventful years of National Educational Policy- 2020 (NEP 2020).
- **Organizing Agency:** Indian Knowledge Systems Mela is being organized by the IKS (Indian Knowledge Systems) Division and AICTE in collaboration with the Ministry of Culture.
- **Mandate:** Indian Knowledge Systems Mela aims to engage deeply with experts on NEP2020 and learn about the different initiatives, policies, and best practices.
- **Key Initiatives Launched:** IKS Division announced major initiatives such as-
  - IKS-MIC programe for technology demonstration,
  - Launch of Kalashala initiative in 750+ schools to promote and support local arts and
  - Introduction of 75 Bharteeyea games in schools.

Indian Knowledge Systems Mela- Key Objectives

- To present the achievements of NEP2020 after two years of its acceptance highlighting the role of IKS.
- To make NEP2020 into a movement called BhaSVAn - Bharata Svadhyaya Andolanam for national introspection and self-discovery through the indigenization of education.

- To make NEP2020 the basis for forging a common Bharatiya identity.
  - This will promote excellence, integral growth and the celebration of unity in diversity through the presentation of the skills, arts, sciences and technologies of different regions upholding common values.
- To serve as a platform that will bring together different Ministries to co-evolve the Bharatiya identity across converging initiatives on the basis of IKS in NEP2020.

Indian Knowledge Systems (IKS) Division

- **About:** Indian Knowledge System (IKS) is an innovative cell under Ministry of Education (MoE) at AICTE, New Delhi.
  - IKS division was established in 2020.
- **Key Functions:** Indian Knowledge Systems (IKS) Division seeks to-
  - Promote interdisciplinary research on all aspects of IKS,
  - Preserve and disseminate IKS for further research and societal applications,
  - Actively engage for spreading the rich heritage of our country and traditional knowledge in the field of Arts and literature, Agriculture, Basic Sciences, Engineering & Technology, Architecture, Management, Economics, etc.
- **Parent Ministry:** Indian Knowledge Systems (IKS) Division functions under administrative control of Ministry of Education (MoE).
- **Key Functions:**
  - Facilitate and coordinate IKS based/related inter and transdisciplinary work done by various institutions in India and abroad including universities, institutions of national importance, R&D laboratories and different ministries and inspire private sector organizations to engage with it.
  - Establish, guide and monitor subject-wise interdisciplinary research groups comprising of researchers from institutes, centers and individuals.
  - Create and promote popularization schemes.
  - Facilitate funding of various projects and develop mechanisms to undertake research.
  - Make Policy recommendations wherever required for the promotion of IKS.

Har Ghar Tiranga Campaign

Recently, Government announced that all Post Offices will function on holidays, falling before Independence Day 2022 to facilitate the sales and distribution of National Flags under Har Ghar Tiranga Campaign.

- Special arrangements were made for the sale of National Flags on public holidays i.e. on 7th, 9th and 14th August 2022 through at least one counter at Post Offices.
- Special arrangements were made for the delivery of the National Flags in all

About Har Ghar Tiranga Campaign

- **About:** 'Har Ghar Tiranga' is a campaign under the aegis of Azadi Ka Amrit Mahotsav to encourage people to bring the Tiranga home and to hoist it to mark the 75th year of India's independence.
  - o Under the Har Ghar Tiranga Campaign, government urged citizens to display or hoist the national flag at their homes between August 13 and 15.
- **Objective:** The idea behind the initiative is to invoke the feeling of patriotism in the hearts of the people and to promote awareness about the Indian National Flag.
- **Organizing Ministry:** Har Ghar Tiranga Campaign was organized under overall supervision and guidance of Ministry of Culture.
- **Significance:** Bringing the flag home collectively as a nation in the 75th year of independence thus becomes symbolic of not only an act of personal connection to the Tiranga but also an embodiment of our commitment to nation-building.

How to fold the national flag?

Through a tweet, the Ministry of Culture also laid down four steps to fold the national flag correctly.

- **Step 1:** The Indian national flag must be placed horizontally.
- **Step 2:** The saffron and green bands need to be folded beneath the white band.
- **Step 3:** The white band needs to be then folded in such a manner that only the Ashoka Chakra is visible with parts of the saffron and green bands.
- **Step 4:** The folded Indian national flag needs to be carried in arms or palms to store it in a safe place.

Rules and Regulations Governing National Flag

- The 'Flag Code of India 2002' and the Prevention of Insults to National Honour Act, 1971 governs the use, display and hoisting of the National Flag in India.

Which material can be used to produce the National Flag?

- The Flag Code of India, 2002 was amended vide Order dated 30th December, 2021 and National Flag made of polyester or machine made Flag have been allowed.
- Now, the National Flag shall be made of handspun and handwoven or machine-made, cotton/polyester/wool/silk/khadi bunting.

Where and When can be National Fag can be hoisted?
- As per paragraph 2.2 of the Flag Code of India, a member of the public, a private organization, or an educational institution may hoist/display the National Flag on all days or occasions in accordance with the dignity and honour of the National Flag.
- An amendment through an order on July 20, 2022, allowed the national flag to be hoisted or displayed in the open at the house of the public day and night. o Before this amendment, tricolour was allowed to be flown only from sunrise to sunset.

Grand Onion Challenge

Recently, the Department of Consumer Affairs conducted a Video Conference regarding "Grand Onion Challenge"

About Grand Onion Challenge

- **About:** Grand Onion Challenge seeks ideas from young professionals, professors, scientists in product designs and prototypes for improving pre-harvesting techniques, primary processing, storage, and transportation of post harvested onions in the country.
  - The challenge also seeks ideas for modernization of technology in dehydration, valorization of onions and onion food processing domain.
- **Objective**: development of low cost and easily replicable technology solutions to reduce post harvested onion losses in the country.
- **Concerned Department:** The Grand Onion Challenge instituted by Department of Consumer Affairs.
- **Time period for Application:** the challenge has been thrown open from 20.7.2022-15.10.2022 seeking ideas in all the above domains from the best brains in the country.
- **Selection process:** The Department will select 40 good ideas in the four verticals wherein improvements and technology innovations are sought.
  - Departments and organizations concerned in the country are urged to submit ideas so that cost effective solutions in saving losses in pre-harvesting, primary processing, storage and transportation of onions can be developed.
  - Atma Nirbhar Bharat programme is also supported in the process.
- **Significance:** It is expected that post the Grand Onion challenge, the losses in onion storage can be reduced by 5-10% due to innovative ideas.

Global Engagement Scheme

Recently, Union minister for Culture, Tourism provided various details about Global Engagement Scheme in Lok Sabha.

About Global Engagement Scheme

- **About:** Under Global Engagement Scheme, Festivals of India are organized in other countries

showcasing folk art and other cultural events as exhibitions, dance, music, theatre, food fest, literary fest, film fest, yoga etc.
- **Parent Ministry:** Global Engagement Scheme is being implemented by the ministry of Culture.
- **Grants Under the Scheme:** Under the scheme, Ministry of Culture also gives Grant-in-aid to Indo-Foreign Friendship Cultural Societies for organizing programmes and activities including folk art and other cultural activities for their promotion abroad.
- **Components of the Scheme:** Global Engagement Scheme has following three components-
  - Festival of India
  - Grant-in-Aid Indian Foreign Cultural Societies Scheme
  - Contribution Grants (Contribution to Indian Organizations and Delegations under CEP). This component is meant for-
  - Indian Contribution towards membership of International Organizations like ICROM, UNESCO, World Heritage Fund and facilitate Indian Participation and Hosting of International Meetings.

Promotion of Indian Culture in the Country- Zonal Cultural Centres (ZCCs)

- **Zonal Cultural Centres (ZCCs):** Seven Zonal Cultural Centres (ZCCs) have been set up by the government to protect, preserve and promote various forms of folk art and culture throughout the country.
  - Headquarters of these Zonal Cultural Centres (ZCCs) are located at Patiala, Nagpur, Udaipur, Prayagraj, Kolkata, Dimapur and Thanjavur.
- **Key Role:** The folk artists from all over India are engaged to perform in the festivals and Programmes organized by these ZCCs regularly in all States/Union Territories of India.
  - Besides, the folk artists are also sent abroad to perform in Festivals of India.
  - Incentives like Dearness allowance, honorarium, board & lodging, local & international travel are provided to these artists by the respective ZCCs and Ministry of Culture.

Draft Indian Ports Bill, 2022

Recently, the government has issued Draft Indian Ports Bill, 2022 for stakeholder consultation as part of its plan to revamp the British era legislation for the port sector.

- The draft IP Bill 2022 seeks to repeal and replace the existing 1908 India Ports Act.

Draft Indian Ports Bill, 2022

- **About:** It has been prepared to consolidate and amend the laws relating to ports, for the prevention and containment of pollution at ports.
  - It also aims to ensure compliance with the country's obligation under the maritime treaties and international instruments to which India is a party.
- **Key Objectives:** The draft IP Bill 2022 seeks to repeal and replace the existing 1908 Act. The primary objectives of the proposed bill are four-fold:
  - Promote integrated planning between States inter-se and Centre-States through a purely consultative and recommendatory framework;
  - Ensure prevention of pollution measures for all ports in India while incorporating India's obligations under international treaties;
  - Address lacunae in the dispute resolution framework required for burgeoning ports sector;
  - Usher-in transparency and cooperation in development and other aspects through use of data.

Need for Draft Indian Ports Bill, 2022

IP Bill 2022 has been prepared in order to-

- Ensure compliance with the country's obligation under the maritime treaties and international instruments to which India is a party;
- Take measures for conservation of ports;
- Empower and establish State Maritime Boards for effective administration, control and management of non-major ports in India;
- Provide for adjudicatory mechanisms for redressal of port related disputes and to establish a national council for fostering structured growth and development of the port sector, and

- Ensure optimum utilization of the coastline of India, as may be necessary, and
- Provide for matters ancillary and incidental thereto, or connected therewith.

MAJOR PORTS OF INDIA

Draft Indian Ports Bill, 2022- Key Features

- The proposed bill will homogenize and streamline the development of the maritime sector, along with, promoting ease of doing business by eliminating unnecessary delays, disagreements and defining responsibilities.
- It will incorporate State Maritime Boards in the national framework.
- Additionally, Maritime State Development Council will ensure cooperative federalism where Centre and State/UT Governments will work together towards preparing progressive road map for the country.
- The redundant provisions of the Act have been deleted or replaced with contemporaneous provisions.
- Further, existing penalties in the Act which are outdated have been updated with respect to amounts and offences relevant to present day scenario.

Bal Aadhaar Initiative

Recently, Ministry of Electronics and IT informed that Unique Identification Authority (UIDAI) has enrolled more than 79 lakh children in the 0 - 5 age group during the first four months (April – July) of the current financial year.

- While 2.64 crore children in the 0-5 age group had Bal Aadhaar by the end of March 31, 2022, this number has increased to 3.43 crore by the end of July 2022.

About Bal Aadhaar Initiative

- **About:** Children in the age group of 0-5 years are issued Bal Aadhaar by UIDAI.
  - o Collection of biometrics (fingerprints and iris) is a key feature in issuing Aadhaar as the same is required to establish uniqueness based on de-duplication of these biometrics.
  - o However, for Aadhaar enrolment of children in the age group of 0-5 years, these biometrics are not collected.
- **Issuing Authority:** Bal Aadhaar is issued by the Unique Identification Authority of India (UIDAI).
- **Key Data Collected:** Aadhaar enrolment of children in the age group of 0-5 years are carried out based on a facial image of the child, and biometric authentication of the parent/guardian (having a valid Aadhaar).
  - o A proof of relationship document (preferably birth certificate) is collected at the time of enrolment for Bal Aadhaar.
- **Colour of Bal Aadhar:** To differentiate the Bal Aadhaar from normal Aadhaar, it is issued in blue colour.
- **Validity:** Bal Aadhaar is issued with a remark that this is valid till the child attains the age of 5 years.
- **Mandatory Biometric Update (MBU):** On attaining the age of 5, the child is required to furnish his or her biometrics at an Aadhaar Seva Kendra to complete a process called mandatory biometric update (MBU).

- o The MBU process goes through a de-duplication process.
- o After completion of this process, the child is issued a normal Aadhaar without any change in the Aadhaar number.
- **Significance:** Bal Aadhaar works as a facilitator in availing several welfare benefits, and also works as a digital photo identity for children right from birth.

79 LAKH CHILDREN

UIDAI Records Massive Enrollments Under *Bal Aadhaar* During April – July

A total of **3.43 Crore** children aged below 5 years issued Bal Aadhaar by the end of July 2022

Till 31 March 2022, **2.64 Crore** children had Bal Aadhaar

Unique Identification Authority of India- Key Points
• **About:** UIDAI is a statutory authority established under the provisions of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 by the Government of India.
o Earlier, UIDAI was created through a government notification in 2009 and was functioning as an attached office of the then Planning Commission (now NITI Aayog).
• **Parent Ministry of UIDAI:** It functions under the Department of Electronics & Information Technology (DeitY) of the then Ministry of Communications and Information Technology.
• **Objective of UIDAI:** To issue Unique Identification numbers (UID), named as "Aadhaar", to all residents of India

Mandate of UIDAI

- **Under Aadhaar Act 2016, UIDAI is responsible for**
  - Aadhaar enrolment and authentication, including operation and management of all stages of Aadhaar life cycle
  - Developing the policy, procedure, and system for issuing Aadhaar numbers to individuals and
  - Perform authentication and the security of identity information and authentication records of individuals.

Har Ghar Jal

Recently, Goa and Dadra & Nagar Haveli and Daman & Diu (D&NH and D&D) become the first 'Har Ghar Jal' certified State and UT in the country respectively.

First 'Har Ghar Jal' Certified State & UT

- In Goa and Dadra & Nagar Haveli and Daman & Diu (D&NH and D&D), people from all the villages have declared their village as 'Har Ghar Jal' through a resolution passed by Gram Sabha.
- Through these resolutions, Gram Sabhas certified that all households in the villages have access to safe drinking water through taps, ensuring that 'No One is Left Out'.
- All 2.63 lakh rural households of Goa & 85,156 of Dadra & Nagar Haveli and Daman & Diu have access to potable water through tap connection.
- All schools, anganwadi centres, public institutions including Gram Panchayat buildings, healthcare centres, community centres, ashramshalas, and other government offices have now access to potable water through tap connection.

'Har Ghar Jal' Certification Process

- **Certification Process:** The process of certification has been detailed out in the Margdarshika of Jal Jeevan Mission.
  - According to Margdarshika, first of all, the field engineer submits a completion certificate regarding water supply scheme to the Panchayat during Gram Sabha meeting.
  - The villages confirm through a resolution of the Gram Sabha, that every household is

getting regular supply of water of prescribed quality and not a single household is left out.
  - They also confirm that all schools, anganwadi centers and other public institutions also getting tap water.
- **Village Water and Sanitation Committee (VWSC) or paani samiti:** It has been constituted in all the 378 villages of Goa and 96 villages of D&NH and D&D.
  - VWSC is responsible for operation, maintenance and repair of water supply infrastructure developed under 'Har Ghar Jal' programme.
  - This sub-committee of Gram Panchayat also has the responsibility to collect user charge which will be deposited in the bank account.
  - These user charges shall be used to pay honorarium of the pump operator and carry out minor repair work from time-to-time.
- **Water Quality:** it is an important aspect of the mission and to ensure the same, at least five women in every village are trained to carry out water testing.
  - Today more than 10 lakh women in the country have been trained to use Field Test Kits (FTKs) for testing the quality of water supplied in rural households.
  - More than 57 lakh water samples have been tested by these women using Field Testing Kits (FTKs).

Jal Jeevan Mission — Har Ghar Jal

15th August, 2019 — Tap water supply in 3.23 Crore rural households

16th February, 2022 — Tap water supply in 9.00 Crore rural households

0%-10% 11%-25% 26%-50% 51%-75% 76%-100% 100%
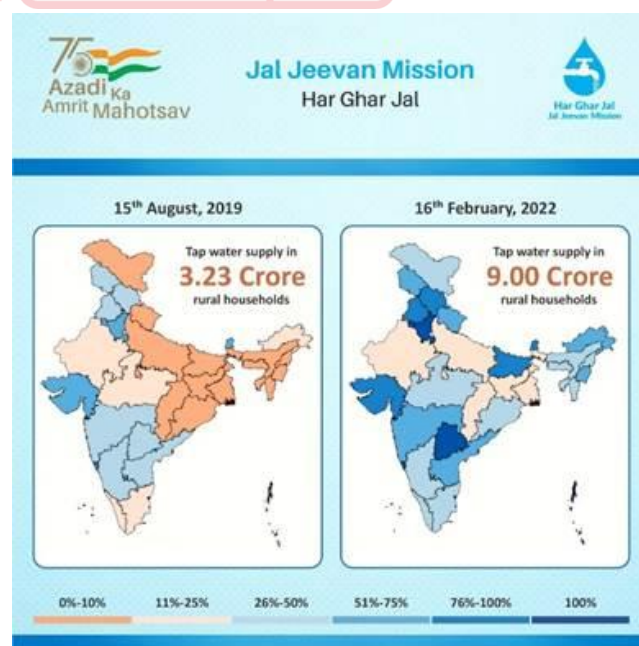
Jal Jeevan Mission
• **About**: Jal Jeevan Mission is a flagship programme of Government of India which was announced from the ramparts of Red Fort by Prime Minister on August 15, 2019.
• **Mandate**: The Jal Jeevan mission aims to make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to every rural household of the country by 2024.
• **Implementation**: The program is implemented by Government of India in partnership with States/UTs.
• **Performance:** more than 52% rural households in the country are now connected with tap water which was only 17% at the time of launch of Jal Jeevan mission on August 15, 2019.
• **Funding:** Rs 60,000 Crore has been allocated in the current financial year under the Union Budget 2022 for the 'Har Ghar Jal' under Jal Jeevan Mission.

Smart India Hackathon 2022

Prime Minister Shri Narendra Modi addressed the Grand Finale of Smart India Hackathon 2022 via video conferencing.

Smart India Hackathon 2022

- **About:** Smart India Hackathon 2022 (SIH) is a nationwide initiative to provide students a platform to solve the pressing problems of society, organizations, and government.
  - Smart India Hackathon (SIH) was started in the year 2017.
- **Aim:** Smart India Hackathon 2022 (SIH) aims to inculcate the culture of product innovation, problem-solving and out-of-the-box thinking among students.
- **Significance:** Smart India Hackathon has been the constant endeavour of the Prime Minister to promote a spirit of innovation in the country, especially among the youth.

- **SIH Registration:** The growing popularity of SIH can be gauged from the fact that the number of teams registered for SIH has seen a four-fold growth from around 7500 in the first edition to about 29,600 in the ongoing fifth edition.
- **Participation:** This year more than 15,000 students and mentors are travelling to the 75 nodal centres to take part in the SIH 2022 grand finale.
  - This year, Smart India Hackathon - Junior has also been introduced as a pilot for school students to build a culture of innovation and develop problem-solving attitude at the school level.

Problem Statements under Smart India Hackathon 2022

- Students from over 2900 schools and 2200 Higher Education Institutions will tackle 476 problem statements from across 53 Union Ministries in the finale, including-
  - **Optical Character Recognition (OCR) of Temple inscriptions and translations in Devanagari Scripts,**
  - **IoT-enabled risk monitoring system** in Cold Supply Chain for perishable food items,
  - **High-resolution 3D model of terrain, infrastructure and roads conditions** in disaster struck areas, etc.

Smart Cities Mission (SCM)

- **About:** Smart Cities Mission (SCM) is a transformational Mission aimed to bring about a paradigm shift in the practice of urban development in the country.
  - Smart Cities Mission (SCM) was launched on 25thJune, 2015 by the Prime Minister of India.
  - Projects developed under the Smart Cities Mission are multi-sectoral and mirror the aspirations of the local population.
- **Project Completion:** Of the total proposed projects under SCM-
  - 7,905 projects worth ₹1,93,143 crore (94% by value) have been tendered so far,
  - work orders have been issued for 7,692 projects worth around ₹1,80,508 crore (88% by value).

o 3,830 projects worth ₹60,919 crore (33% by value) have also been fully completed and are operational (10 April 2022).

- **Fund Allocation and Usage:** Of the total investment of ₹2,05,018 crore under the Smart Cities Mission, projects worth ₹93,552 crore was proposed to be developed by Centre and State funds.
  - o As on date, almost 100% of these projects worth ₹92,300 crore have been work ordered.
  - o From 2018 when the total expenditure in mission was ₹1,000 crore, it has increased to ₹45,000 crore.
  - o The utilization percentage of the total GoI funds released to cities is at 91%.
- **Integrated Command and Control Centres (ICCCs):** As on date, 80 Smart cities have developed and operationalized their Integrated Command and Control Centres (ICCCs) in the country.
  - o These operational ICCCs functioned as war rooms for COVID management.
  - o Along with other smart infrastructure developed under the mission, ICCCs helped cities in fighting the pandemic through information dissemination, improving communication, predictive analysis and supporting effective management.

Right to Privacy

Judgment in the Puttaswamy case five years ago by Supreme court asserted that Indians have a constitutionally protected fundamental right to privacy.

Right to Privacy can be defined as
• A right to be let alone.
• The right of a person to be free from any unwarranted publicity.
• The right to live without any unwarranted interference by the public in matters with which the public is not necessarily concerned.

What is Data?

- Data is a collection of discrete values that convey information, describing quantity, quality, fact, statistics, other basic units of meaning, or simply sequences of symbols that may be further interpreted.

Difference between Data Protection and Data Privacy

- **Data protection** refers to policies and procedures seeking to minimize intrusion into the privacy of an individual caused by collection and usage of their personal data while data privacy refers to controlling access to the data.
- Organizations must determine who has access to data as a privacy breach can lead to data security concerns.
- **Data security** refers specifically to measures taken to protect the integrity of the data itself against manipulation and malware and provides protection from internal and external threats.

Need of data protection

- **Increasing internet use**: India currently has over 750 million Internet users, with the number only expected to increase in the future.
- **Data breaches**: At the same time, India has among the highest data breaches in the world. Without a data protection law in place, the data of millions of Indians continues to be at risk of being exploited, sold, and misused without their consent.
- **Individual privacy**: Data monetization may happen at cost of individual privacy. The most sought-after datasets are those that contain sensitive personal data of individuals, ex. medical history, financial data.

Data protection in India

- Data privacy breaches which result in the loss and theft of personal, sensitive data have not reduced in terms of measurable frequency or their impact.
- The right to privacy was recognized as a fundamental right, included under the right to life and liberty by the Supreme Court of India in 2017.

- Without a law in place to regulate data collection and to act as an oversight mechanism, valid concerns about privacy and other rights violations continue to arise.
- Technologies like Artificial Intelligence and Big Data are costly to implement.
- It is important to put appropriate safeguards in place in order to ensure the integrity of the repository/database, so that it does not leak out the information and is not privatized or monetized.
- As the data collected may be used in the court of law during the course of a criminal trial, the reliability and the admissibility of the data along with standards and procedures followed would be taken into consideration. Hence, the authenticity of the data is crucial.

Need of the hour

- There urgent need for robust data protection law as digitization relies on gathering personal data which involves the risk of theft of sensitive data that can be dangerous for an individual as well as for a country.

Arth Ganga Model

The Director General of the National Mission for Clean Ganga, spoke about the Arth Ganga Model during his virtual keynote address to the Stockholm World Water Week 2022.

About Arth Ganga Model

- PM Modi first introduced the concept during the first National Ganga Council meeting in Kanpur in 2019.
- He urged for a shift from Namami Gange, the Union Government's flagship project to clean the Ganga, to the model of Arth Ganga.
- The latter focuses on the sustainable development of the Ganga and its surrounding areas, by focusing on economic activities related to the river.

- At its core, the Arth Ganga model seeks to use economics to bridge people with the river.
- It strives to contribute at least 3% of the GDP from the Ganga Basin itself.
- The Arth Ganga project's interventions are in accordance with India's commitments towards the UN sustainable development goals.

Features of Arth Ganga Model

Under Arth Ganga, the government is working on six verticals:

- Zero Budget Natural Farming that includes chemical-free farming for 10 kms on either side of the river, generating "more income, per drop", 'Gobar Dhan' for farmers.
- Monetization and Reuse of Sludge &Wastewater that envisages reuse of treated water for irrigation; industrial purposes and revenue generation for ULBs.
- Livelihood Opportunities Generation such as 'Ghat Mein Haat', promotion of local products, Ayurveda, medicinal plants, capacity building of volunteers like Ganga Praharis.
- Public Participation to ensure increased synergies between stakeholders.
- Cultural Heritage &Tourism that looks to introduce boat tourism through community jettis, promotion of yoga, adventure tourism etc. and Ganga Artis.
- Institutional Building by enhancing the local capacities for better decentralized water governance.

Pradhan Mantri Jan Dhan Yojana (PMJDY)

Recently, Pradhan Mantri Jan Dhan Yojana (PMJDY) - National Mission for Financial Inclusion, completed eight years of successful implementation.

Pradhan Mantri Jan Dhan Yojana (PMJDY) Performance

PMJDY Accounts

- **As on 10th August '22 number of total PMJDY Accounts:** 46.25 crore; 55.59% (25.71 crore) Jan-

Dhan account holders are women and 66.79% (30.89 crore) Jan Dhan accounts are in rural and semi-urban areas

o During first year of scheme 17.90 crore PMJDY accounts were opened

- **Continuous increase in no of accounts under PMJDY:** PMJDY Accounts have grown three-fold from 14.72 crore in Mar'15 to 46.25 crore as on 10-08-2022.

Operative PMJDY Accounts

- As per extant RBI guidelines, a PMJDY account is treated as inoperative if there are no customer induced transactions in the account for over a period of two years
- In August'22, out of total 46.25 crore PMJDY accounts, 37.57 crore (81.2%) are operative
- Only 8.2% PMJDY accounts are zero balance accounts

Deposits under PMJDY accounts

- Total deposit balances under PMJDY Accounts stand at Rs. 1,73,954 crore
- Deposits have increased about 7.60 times with increase in accounts 2.58 times

Average Deposit per PMJDY Account

- Average deposit per account is Rs. 3,761
- Avg. Deposit per account has increased over 2.9 times over Aug'15

Rupay Card issued to PMJDY account holders

- Total RuPay cards issued to PMJDY accountholders: 31.94 crore
- Number of RuPay cards & their usage has increased over time
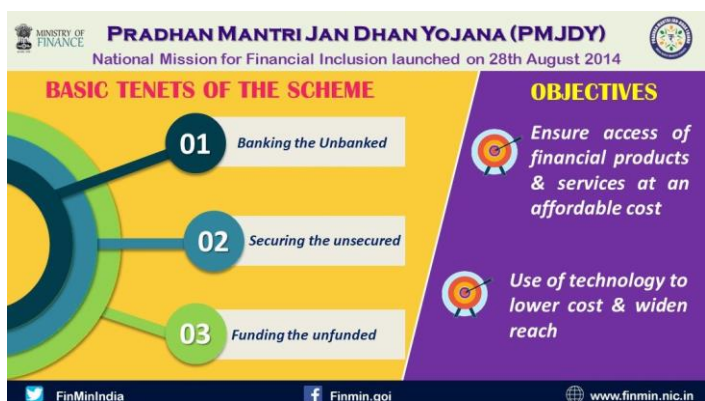
About PMJDY
• Pradhan Mantri Jan Dhan Yojana (PMJDY) is **National Mission for Financial Inclusion** (Read about **Financial Inclusion Index** from <u>here</u>) to ensure access to financial services, namely, Banking/ Savings & Deposit Accounts, Remittance, Credit, Insurance, Pension in an affordable manner.

Objectives of PM Jan Dhan Yojana (PMJDY)

- To ensure **access of financial products** & services at an affordable cost.
- To **lower cost & widen reach** in the country through use of technology.

Benefits of Pradhan Mantri Jan Dhan Yojana

- **Banking the unbanked** - Opening of basic savings bank deposit (BSBD) account with minimal paperwork, relaxed KYC, e-KYC, account opening in camp mode, zero balance & zero charges
- **Securing the unsecured** - Issuance of Indigenous Debit cards for cash withdrawals & payments at merchant locations, with free accident insurance coverage of Rs. 2 lakhs.
- **Funding the unfunded** - Other financial products like micro-insurance, overdraft for consumption, micro-pension & micro-credit.

Pillars of PM Jan Dhan Yojana (PMJDY)

The PM Jan Dhan Yojana (PMJDY) scheme was launched based upon the following 6 pillars:

- **Universal access to banking services** through Branch and Banking Correspondents (BC).
- **Basic savings bank accounts** with overdraft facility of Rs. 10,000/- to every eligible adult
- **Financial Literacy Program**– Promoting savings, use of ATMs, getting ready for credit, availing insurance and pensions, using basic mobile phones for banking
- **Creation of Credit Guarantee Fund** – To provide banks some guarantee against defaults
- **Insurance** – Accident cover-up to Rs. 1,00,000 and life cover of 30,000 on account opened between 15 Aug 2014 to 31 January 2015.
- **Pension scheme** for Unorganized sector.

Extension of PM Jan Dhan Yojana (PMJDY) with new features

- The Government decided to **extend the comprehensive PMJDY** program beyond 28.8.2018 with some modifications
- Focus shifted from 'Every Household' to **Every Unbanked Adult'**
- **RuPay Card Insurance** - Free accidental insurance cover on RuPay cards increased from Rs. 1 lakh to Rs. 2 lakhs for PMJDY accounts opened after 28.8.2018.
- Enhancement in overdraft (OD) facilities -
  - **OD limit doubled from Rs 5,000/- to Rs 10,000/**
  - OD upto **Rs 2,000/- (without conditions).**
- Increase in upper age limit for OD from 60 **to 65 years.**

DESH Bill

Recently, a Workshop on Development of Enterprises and Services Hub (DESH) Bill, 2022 was organized by Department of Commerce in Vanijya Bhawan, New Delhi to have discussion on the DESH Bill with stakeholders from various segments.

DESH Bill 2022- Key Features

- The new **DESH Bill 2022** will replace the existing law governing Special Economic Zones (SEZs).
  - The announcement of a new law was made by Finance Minister Nirmala Sitharaman in the Union Budget in February 2022.
- **Development Hubs:** Such hubs will also include existing SEZs. Draft DESH Bill seeks to set up "development hubs" for-
  - Promoting economic activity,
  - Generating employment,
  - Integrating with global supply and value chains and maintaining manufacturing and export competitiveness,
  - Developing infrastructure facilities,
  - Promoting investments, including in research and development (R&D).

- **Enterprise and Service Hubs**: Development hubs will be further classified into enterprise and service hubs.
  - While enterprise hubs will permit both manufacturing and services activities, services hubs will permit only services activities.
- **Infrastructure Status:** Government plans to give these hubs infrastructure status, at par with sectors such as road, rail waterways, airports to improve access to finance and enable long-term borrowing from lenders at easier terms.
- **Single-Window Portal:** An online single-window portal has also been provided under the draft DESH Bill for the grant of time-bound approvals for establishing and operating the hubs.
- **Simplifying rules**: Development of Enterprise and Service Hubs (DESH) will be freed from many of the rules that burden SEZs: for instance-
  - They will no longer be required to benet foreign exchange positive and
  - They will be allowed to sell in the domestic market much more easily.
- **WTO Compliant DESH:** The units operating within the new hubs will no longer benefit from direct tax incentives, which will be scrapped — a move that will make the hubs compliant with World Trade Organization rules.
- **Promoting Domestic Manufacturing**: development hubs will be allowed to sell outside the demarcated area or in the domestic market with duties only to be paid on the imported inputs and raw materials instead of the final product.

Special Economic Zones- Key Points
• **About Special Economic Zone (SEZ):** It is an area within a country's national borders in which the business and trade laws are different from the rest of the country.
• **Key Purpose:** SEZs are established for different purposes like increasing trade balance (by promoting export), employment, increased investment, job creation and effective administration.
o The SEZs are expected to be engines for

economic growth.
• **Relaxation offered by the government in SEZs:** government formulates various financial policies to encourage businesses to set up in the SEZs. These policies are typically related to investing, taxation, trading, quotas, customs, and labour regulations.
o In the initial period, the government often offers tax holidays (a period of lower taxation).
o The government also ensures the ease of doing business in these areas.

Special Economic Zones in India
- **Origin:**
- Asia's first EPZ (Export Processing Zones) was established in 1965 at Kandla, Gujarat.
- SEZs are similar in structure to EPZs.
- Indian SEZs are modeled on the success of Chines SEZs.
- The government began to establish SEZs in 2000 under the Foreign Trade Policy to redress the infrastructural and bureaucratic challenges that were seen to have limited the success of EPZs.

- **Legislative backing:** The Special Economic Zones Act was passed in 2005 to provide legislative support to SEZs. The Act came into force along with the SEZ Rules in 2006.
  - o **SEZs Act 2005:** "It is defined as an Act to provide for the establishment, development and management of the Special Economic Zones for the promotion of exports and for matters connected therewith or incidental thereto."
  - o Between 2000-2006, SEZs were operational under the Foreign Trade Policy.
- **Present status:** 379 SEZs are notified by the government, out of which 265 are operational.
  - o **Regional Distribution of SEZs in India:** about 64% of the SEZs are located in five states- Tamil Nadu, Telangana, Karnataka, Andhra Pradesh and Maharashtra.
- **Baba Kalyani Committee:** It was constituted by the Ministry of Commerce and Industry to study the existing SEZ policy of India and had submitted its recommendations in November 2018.

International Relations

Conflict between China-Taiwan

China warns of consequences if **US House speaker, Nancy Pelosi** visits Taiwan.

Historical Background

- Taiwan is an island territory across the Taiwan Strait, located off the coast of mainland China.
- **Separated in 1949, amid civil war China considers Taiwan a part of its territory.**
- **United Nations membership was continued by the ROC maintaining its permanent seat at the UN Security Council (UNSC).**
- PRC allied itself with the Union of Soviet Socialist Republics (USSR) and ROC with the US in the cold war that further strained the China-Taiwan relations.
- **The US and China reconciliation in the 1970s** was followed by the **visit of the then US President to the PRC in 1972.**
- ROC was displaced by the PRC as the official representative at the UN and the **"One-China Principle"** came into picture.
- It further clarifies its stand to use military to control Taiwan if it becomes necessary.
- In 1980s, **China put forward a formula, known as "one country, two systems",** under which Taiwan would be given significant autonomy if it accepted Chinese reunification to improve the relations between the two sides.
- Though Taiwan rejected the formula but relaxed rules related to visits and investment in China.
- Amid Beijing's rejection to recognize **Taiwan's Republic of China (ROC) government as legitimate** which prevented government-to-government contact, unofficial talks between the officials took place but that was limited as well.
- As China implemented the National Security Law in Hong Kong, the world leaders took this as a Chinese attempt to become more assertive in the region.

US-China-Taiwan- Changing scenarios

- The Shanghai Communique (1972), the Normalization Communique (1979) and the 1982 Communique speaks about the US-China mutual understanding on the Taiwan.
- The US accepted the 'one China policy' considering Taiwan, a part of China in 1979 though US started maintaining unofficial relations with Taiwan.
- In the 1982, China expressed its concerns over the continuous supply of arms by the US to Taiwan as per the provisions of Taiwan Relations Act (TRA),1979.

Impact on Taiwan

- The Democratic People's Party wants to expand its economic relations away from China.
- Taiwan is centrally located in the First Island Chain between Japan and the South China Sea and has a high geopolitical significance.
- Scattered military outposts of the US in this region makes a significant breakthrough for China if it takes Taiwan's control which makes the chances of a peaceful reunification are very grim.

Taiwan and the World

- The Republic of China (ROC), Taiwan has diplomatic relationship with 15 countries and has influential ties with countries such as Australia, Canada, EU Nations, Japan, New Zealand etc.
- Taiwan has full membership in 38 intergovernmental organizations and their subsidary bodies, which includes **World Trade Organization, Asia-Pacific Economic Cooperation, Asian Development Bank and Central American Bank for Economic Integration.**
- **According to One China Policy, to seek diplomatic relationship with mainland China they must break official relationship with Taiwan and the diplomatic relationship of Taiwan has seriously challenged this policy.**

Countering China

- A new trilateral security partnership for the Indo-Pacific, between **Australia, the UK and the US (AUKUS)**
- **Malabar Exercise** (US, Japan, India and Australia) is also a major step towards countering the massive strategic imbalance generated by an economically and militarily powerful China.
- Warship Theodore Roosevelt has entered the South China Sea to ensure freedom of the seas, and build partnerships that foster maritime security.

India's Stand on Taiwan

- India recognizes One China Policy and accepts Taiwan and Tibet as a part of China.
- Diplomatically India expects China to believe **One India policy.**
- India and Taiwan do not have formal diplomatic relations but since 1995, both sides have maintained representative offices in each other's capitals that function as de facto embassies.

What can be done?

- World powers must ensure that Chinese effort to take Taiwan by force must be tackled efficiently.
- India should continue growing economic relations and building on popular support for Taiwan in the wake of India's troubles with China.

Russia- Turkey Economic Cooperation

Recently, Russia and Turkey agreed to enhance economic cooperation at a meeting held in the city of Sochi, Russia.

- The US sanctioned Turkey in 2020 under its Countering American Adversaries Through Sanctions Act (CAATSA), for purchasing the S-400 air defence missile system from Moscow.
- India has also purchased this system but got an exception from the imposition of CAATSA by the US government.

Russia- Turkey Economic Cooperation Agreement
• Russia-Turkey had touched upon gas exports to Turkey. Turkey also agreed to partially pay for them in Russian currency, the ruble.
• According to a Bloomberg report, five Turkish banks have adopted Russia's Mir payments system for payment in rubles.
• They also agreed to "meet one another's expectations on the economy and energy".
• Other areas of cooperation mentioned in a Joint Press Statement released afterwards were transportation, commerce, agriculture, industry, finance, tourism and construction.

Russia-Turkey gas pipeline plans
Moscow and Ankara seek to develop Turkey as a transit route for Russian gas to Europe, avoiding Ukraine

Associated Concerns of the European Countries

- **Russia-Ukraine War:** It is concerning for Europe, especially at a time when the West has sought to reduce the scope of its economic relations with Russia over the ongoing war in Ukraine.

- **Financial System:** Another source of concern could be Russia's Mir payment system which has been adopted by 5 Turkish banks.
  - With Visa and Mastercard suspending their operations in Russia since the invasion of Ukraine, Russian tourists in Turkey can now use their Mir card, effectively circumventing some Western sanctions.
- **Member of NATO:** Closeness between Russia and Turkey raises concerns for NATO countries of which Turkey is a member.
  - This is a serious concern, especially when Russia's relationship with the Western and European countries is going through its low due to Russia-Ukraine war.
  - It also holds the key to allowing Sweden and Finland admission into NATO, which the alliance might be eager to do given the events in Ukraine.
- **Turkey's Importance for Europe:** On the whole, Turkey is an important partner with the West and taking action against it could lead to a new range of issues cropping up for the West. For Example-
  - Turkey's instrumental role in dealing with the Syrian refugee crisis.
  - Turkey hosted around 3.7 million Syrians as part of a deal with the EU, and "helped to stem the flow of migrants to Europe."

Nepal Citizenship Law

Nepal President Bidhya Devi Bhandari sent back the Citizenship Amendment Act, 2006 to the Pratinidhi Sabha (House of Representatives), the lower house of the Nepal Parliament, urging the members to reconsider the Act.

About the issue of citizenship in Nepal

- Nepal transitioned into a democracy beginning with the fall of the monarchy in 2006 and the subsequent election of the Maoist government in 2008.
- The emergence of the multiparty system was followed by the adoption of a constitution on September 20, 2015.

- All Nepalese citizens born before this date got naturalized citizenship but their children remained without citizenship as that was to be guided by a federal law which has not yet been framed.
- This amendment Act is expected to pave the way to citizenship for many such stateless youth as well as their parents.

Issues with the Act

- The main criticism against the Citizenship Amendment Act, 2006 is that it goes against established parameters of gender justice.
- A cursory reading also reveals contradictions among various sections of the law.
- According to Article 11(2b), a person born to a father or a mother with Nepalese citizenship can get citizenship by descent.
- Article 11(5) of the constitution says a person who is born to a Nepalese mother (who has lived in the country) and an unidentified father will also get citizenship by descent but this section appears humiliating for a mother as she has to declare that her husband is unidentified for the child to be eligible for citizenship.
- In case of a Nepalese father, such declarations are not required.
- Article 11(7) which says that a child born to a Nepalese mother and a father holding a foreign citizenship can get "naturalized citizenship" in accordance with the laws of Nepal appears to contradict Article 11(2b).
- It places a condition of permanent residency on the mother (and the child) which will determine the grant of citizenship for the child.

Need for amendment

- There is an unarticulated concern in the orthodox sections of the country that as Nepalese men, particularly from the Terai region, continue to marry women from northern India, Nepalese identity would be undermined because of this "Beti-Roti" (Nepalese men marrying Indian women) issue, many women could not become citizens of Nepal as they were subjected to the infamous seven-year cooling off period before they could apply for citizenship in Nepal.

- As such women were stateless, children of such families were also often found to be without Nepalese citizenship.
- The new amendments have done away with the cooling off period for these stateless women.
- This will benefit the children of such families where the mother and children remained stateless for years.

What is the road ahead for the Act?

- Nepal Citizenship Struggle Committee held a protest in Kathmandu demanding that President Bhandari should ratify the Act that was passed again by the Pratinidhi Sabha for the second time. They argue that women of Indian origin, who were deprived of rights because of the cooling off period and bureaucratic procrastination, and their children will be stuck in a stateless condition if the Act is not recognised by the President's office.

International Transport Forum (ITF)

> Recently, the Union Cabinet was apprised of the signing of Contract between the OECD, France on behalf of the International Transport Forum (ITF) and the Technology Information, Forecasting and Assessment Council (TIFAC), India.

About India- ITF Transport Contract

- **About:** Contract was signed on 6th July 2022 to support the International Transport Forum (ITF) activities on the Indian Transport Sector.
- **Significance:** The activities to be carried out under this Contract will lead to:
  - New scientific results;
  - New policy insights;
  - Capacity building through increase scientific interaction
  - Identification of technology options for decarbonization of transport sector in India.

About International Transport Forum (ITF)

- **About:** The International Transport Forum at the OECD is an intergovernmental organisation which acts as a think tank for transport policy and organises the Annual Summit of transport ministers.
○ ITF is the only global body that covers all transport modes. The ITF is administratively integrated with the OECD, yet politically autonomous.
- **Secretariat**: The International Transport Forum's secretariat is based at the OECD in Paris (France).
- **Members:** The International Transport Forum (ITF) at the OECD is an intergovernmental organisation with 64 member countries.
- **Mandate**: International Transport Forum (ITF) aims to foster a deeper understanding of the role of transport in economic growth, environmental sustainability and social inclusion and to raise the public profile of transport policy.
- **Administrative Structure**: The Forum is administratively integrated into the Organisation for Economic Co-operation and Development (OECD), but it is politically independent, and many of its member countries are not OECD members.

International Transport Forum (ITF)- Key Role

- The International Transport Forum (ITF) organises global dialogue for better transport.
- International Transport Forum (ITF) acts as a platform for discussion and pre-negotiation of policy issues across all transport modes.
- International Transport Forum (ITF) analyse trends, share knowledge and promote exchange among transport decision-makers and civil society.
- The ITF's Annual Summit is the world's largest gathering of transport ministers and the leading global platform for dialogue on transport policy.

Other India-ITF collaboration- DTEE Project

- **About:** Decarbonizing Transport in Emerging Economies' (DTEE) project was jointly launched

in India in 2020 by NITI Aayog and the International Transport Forum (ITF) of OECD.

- **Significance:** The ambitious five-year project will help India develop a pathway towards a low-carbon transport system through the development of modelling tools and policy scenarios.
  - o Decarbonization of the transport sector would create a cleaner, healthier and more affordable future for everyone.
  - o The DTEE project would help India translate its climate ambitions into actions.

Indo-Israel Centre of Excellence for Vegetables

> Recently, the Union Minister of Agriculture and Farmers Welfare laid the foundation stone of the Indo-Israel Centre of Excellence for Vegetables in Chandauli (Uttar Pradesh).

Indo-Israel Centre of Excellence for Vegetables

- **About**: Indo-Israel Centre of Excellence for Vegetables will act as a place where seeds and plants of improved vegetables will be cultivated and distributed to the farmers.
  - o Farmers can also sponsor the development of plants for themselves.
- **Role of Israel:** The technology for the Centre is provided by Israeli experts under the India-Israel Action Plan (IIAP) with funds for building infrastructure for demonstration purposes from Mission for Integrated Development of Horticulture (MIDH).
- **Locations:** Centres of Excellence (CoEs) are being set up in the States based on Israeli technologies.
- **Significance:** These Centres of Excellence act as demonstration and training centres for the latest technologies in the field of Horticulture.
  - o They also serve as a source of planting material for fruits and vegetables in protected cultivation.
- **Why Chandauli (U.P):** The climate of Chandauli district, which is known as the rice bowl of UP, is

suitable for setting up the Centre of Excellence for Vegetables.
  - o There are 9 agro-climatic zones in the State which are favourable for the cultivation of various horticultural crops throughout the year.

- **Key Activities:**
  - o Seedling production of tomato, pepper, brinjal, chilli, cucumber, tomato, pepper, brinjal, chilli and exotic vegetables is proposed to be done in the hi-tech climate controlled greenhouse to be set up in the Centre of Excellence for Vegetables.
  - o Cultivation of cucumber, cauliflowers, baby corn, sweet corn and exotic vegetables is proposed in the open field.
  - o Along with micro-irrigation in the open, a trial demonstration of farming with fertigation and chemigation systems will be done.
  - o There will also be a demonstration of installation of seepage, sprinkler irrigation and other plastic culture applications

Indo-Israel Centre of Excellence for Vegetables-Benefits to Farmers
• Farmers will get a lot of benefit in increasing the production of vegetables.
o By using the latest methods of farming, farmers will be able to get better yield and also export vegetables.
• Nursery of other agricultural produce including vegetables will be prepared at this Centre of excellence to promote the Agriculture sector globally.
o This will not only benefit the farmers here, but will help the district be known globally in the field of vegetables and agriculture.

India-Israel Cooperation in Agriculture Sector- Key Points

- **Indo-Israeli Agriculture Project:** It is based on the concept of establishing Centres of Excellence which provide a platform for a rapid transfer of technology to the farmers with the aim of

increasing productivity and improving the quality of produce.

- o The first stage of the Indo-Israeli Agricultural Cooperation Project started in 2008 following the signing of a three-year Action Plan.
- o The plan was later on extended to include the 2012-2015 period.
- o Within this framework, the State of Israel was requested to share best practices and knowhow, and provide capacity building through professional training programs to be conducted both in Israel and in India.

- **INDO-ISRAEL Centres of Excellence:** They are established under Indo-Israeli Agriculture Project with collaboration between Indian Agriculture Ministry and MASHAV - Israel's Agency for International Development Cooperation.
  - o **About:** Indo-Israel Centres of Excellence provide a platform for a rapid transfer of technology to the farmers with the aim of increasing productivity and improving the quality of produce.
  - o **Significance:** The Centres of Excellence generate knowledge, demonstrate best practices, and train farmers.
  - o **Performance:** Agriculture Minister informed that 29 Centres of Excellence are functioning in 12 States. These Centres of Excellence are-
- Producing more than 25 million vegetable plants, and over 387 thousand quality fruit plants and
- Can train more than 1.2 lakh farmers per year.
  - o **INDO-ISRAEL Villages of Excellence:** this is a new concept aimed at creating a model ecosystem in agriculture across eight states, alongside 13 Centres of Excellence within 75 villages.
- INDO-ISRAEL Villages of Excellence program will promote the increase of net income and better the livelihood of the individual farmer, transforming traditional farms into modern-intensive farms based on IIAP standards.
- A large-scale and complete value chain approach with economic sustainability, embedded with Israeli novel technologies and methodologies will be tailored to local conditions.
- **Focus Areas:** The INDO-ISRAEL Villages of Excellence program will focus on-

- Modern Agriculture infrastructure,
- Capacity Building,
- Market linkage.

India – Myanmar Relation

August 1 marked 18 months of the military coup in Myanmar

- **'Coup'** is generally described as a sudden, violent, and illegal seizure of power from a government.

Historical Background

- In February, 2021, **military seized control of Myanmar in a coup** and detained **Aung San Suu Kyi** and other leaders of her National League for Democracy (NLD).
- This was the third time **in the nation's history** since its independence from British rule in 1948 that military has taken over the control.
- According to the 2008 military-drafted constitution, the military holds 25% of the total seats in Myanmar's parliament.
- After securing majority in November 2020 parliamentary election, Suu Kyi's party **National League for Democracy (NLD)** was about to hold the first session of the parliament when the military imposed a state of emergency for one-year **illegal voting** in the parliamentary elections.

Significance for India

- Being **at the center of the India-Southeast Asia** geography, Myanmar is geopolitically significant for India and also plays an important role in **India's "Neighborhood First" policy and its "Act East" policy.**
- As part of India's **SAGAR Vision**, India **developed the Sittwe port** in Myanmar's Rakhine state which **seems to be India's answer to the Chinese-fronted Kyaukpyu port,** which is intended to cement China's geostrategic footprint in Rakhine.

Interest-Gateway to the East

- India considers Myanmar as Gateway to the east and ASEAN countries.
- India committed itself to **Operationalisation of the crucial Sittwe** port in Myanmar's Rakhine.
- India assists infrastructure projects such as the **India-Myanmar-Thailand trilateral highway** and the **Kaladan Multi-Modal Transit Transport Project.**
- Linkage of **Kolkata to Sittwe** in Myanmar and then from Myanmar's Kaladan river to India's north-east is on cards as well.
- According to the **Land Border Crossing Agreement in 2018 signed between the two countries,** the bona fide travellers with valid documents are allowed to cross the border at two international points of entry/exit- Moreh-Tamu and Zokhawthar-Rih.
- Security: Indian seeks support and coordination from Myanmar for the maintenance of security and stability along its North East border areas which has seen a rise in the activities of some militant groups like the United National Liberation Front (UNLF) and National Democratic Front of Bodoland (NDFB) from the North-East region which have taken shelter in Myanmar.
- With Indian investments of over USD 1.2 billion, Myanmar holds considerable importance than any other country in South Asia.
- The two countries are also expanding partnership in the area of energy cooperation which can be seen from India approval for an investment of over USD 120 million in the **Shwe Oil and Gas project.**

Challenges for India

- China's Influence on Northeast Insurgency has increased and China's grip over Myanmar has become stronger with a special focus on projects that are in the interest of China.
- China is trying create trouble in the Northeast as can be seen from the deadly attack on an Assam Rifles convoy near the Myanmar border.
- Rohingya Issue: Aung San Suu Kyi's silence on the Rohingya crisis in Myanmar has increased plight of the hapless Rohingya which is not in India's national security interest in the north-east.
- The 1643-km-long Indo-Myanmar border, facilitating the cross-border movement of militants, illegal arms and drugs, is extremely open.
- The border runs along hilly and inhospitable terrain and provides cover to the activities of various Indian Insurgent Groups (IIGs).

What can be done?

- India should continue to work closely with the present regime in Myanmar towards mutual development of people of both the countries.
- India should help Myanmar towards achieving the goals in constitutionalism and federalism so that the prevailing stalemate can be resolved.

India-Mauritius CECPA

India and Mauritius held the 1st session of India-Mauritius High-Powered Joint Trade Committee in New Delhi.

- India-Mauritius High-Powered Joint Trade Committee had been constituted as per the mandate of the India-Mauritius Comprehensive Economic Cooperation and Partnership agreement (CECPA).
- India-Mauritius High Powered JTC was set up to review the general functioning and implementation of the India-Mauritius CECPA.
- Both sides agreed to hold the next session of India- Mauritius High Powered JTC meeting in 2023.

India-Mauritius CECPA

- **About:** The India-Mauritius CECPA provides for an institutional mechanism to encourage and improve trade between the two countries.
  - India-Mauritius CECPA entered into force on 1st April, 2021.
  - CECPA is the first trade Agreement signed by India with a country in Africa.
- **Scope of Agreement:** The India-Mauritius CECPA Agreement is a limited agreement, which will cover-
  - Trade in Goods,
  - Rules of Origin,
  - Trade in Services,
  - Technical Barriers to Trade (TBT),
  - Sanitary and Phytosanitary (SPS) measures,
  - Dispute Settlement,
  - Movement of Natural Persons,
  - Telecom,
  - Financial services,
  - Customs Procedures and
  - Cooperation in other Areas.
- **Certificate of Origin (CoO):** Indian exporters have to obtain a Certificate of Origin (CoO) from the authorised Indian agencies to avail the preferential benefits under the CECPA.
  - The online application for CoO for the India-Mauritius CECPA can be made from 01 April 2021 through the common digital platform for issuance of certificate of origin of the Directorate General of Foreign Trade (DGFT).

India-Mauritius CECPA- Trade in Goods

- **From India:** The CECPA between India and Mauritius covers 310 export items for India, including-
  - Food stuff and beverages (80 lines),
  - Agricultural products (25 lines),
  - Textile and textile articles (27 lines),
  - Base metals and articles thereof (32lines),
  - Electricals and electronic item (13 lines),
  - Plastics and chemicals (20 lines),
  - Wood and articles thereof (15 lines), and others.
- **From Mauritius:** Mauritius will benefit from preferential market access into India for its 615 products, including-
  - Frozen fish,
  - Speciality sugar,
  - Biscuits,
  - Fresh fruits,
  - Juices,
  - Mineral water,
  - Beer,
  - Alcoholic drinks,
  - Soaps,
  - Bags,
  - Medical and surgical equipment, and
  - Apparel.

India-Mauritius CECPA- Trade in Services

- **Export from India:** As regards trade in services, Indian service providers will have access to around 115 subsectors from the 11 broad service sectors such as-
  - Professional services,
  - Computer related services,
  - Research & development,
  - Other business services,
  - Telecommunication,
  - Construction,
  - Distribution,
  - Education,
  - Environmental,
  - Financial,
  - Tourism & travel related,
  - Recreational,
  - Yoga,
  - Audio-visual services, and
  - Transport services.

- **Exports from Mauritius:** India has offered around 95 sub-sectors from the 11 broad services sectors, including-
  o Professional services,
  o R&D,
  o Other business services,
  o Telecommunication,
  o Financial,
  o Distribution,
  o Higher education,
  o Environmental,
  o Health,
  o Tourism and travel related services,
  o Recreational services and
  o Transport services.

Chabahar Port

India pushed for Chabahar port to be a conduit for trade to central Asia during SCO meet in Tashkent.

Shanghai Cooperation Organisation (SCO)
• **The Shanghai Cooperation Organisation (SCO)** is a permanent intergovernmental international organization.
• The creation of SCO was announced on 15 June 2001 in Shanghai (China).
• The Shanghai Cooperation Organisation Charter was signed during the St. Petersburg SCO Heads of State meeting in June 2002, and entered into force on 19 September 2003.
• It was preceded by the Shanghai Five mechanism.
• The SCO's official languages are Russian and Chinese.

Historical Background
- To ensure stability along the borders, the four former Soviet republics held talks with China which led to the creatin of Shanghai Five in 1996.
- With Uzbekistan joining the organization in 2001, it was renamed as Shanghai Cooperation Organisation.
- India and Pakistan became members in 2017.

Member Countries
1. Kazakhstan
2. China
3. Kyrgyzstan
4. Russia
5. Tajikistan
6. Uzbekistan
7. India
8. Pakistan

Iran has been accepted as the ninth full member of the organisation.

Objectives of SCO
- Increasing mutual trust among the member states.
- Promoting effective cooperation in politics, trade, the economy, research, technology and culture, as well as in education, energy, transport, tourism, environmental protection, and other areas.
- Ensure peace, security and stability in the region.
- Moving towards the establishment of a democratic, fair and rational new international political and economic order.

BEING DIRECT: INDIA TO CHABAHAR
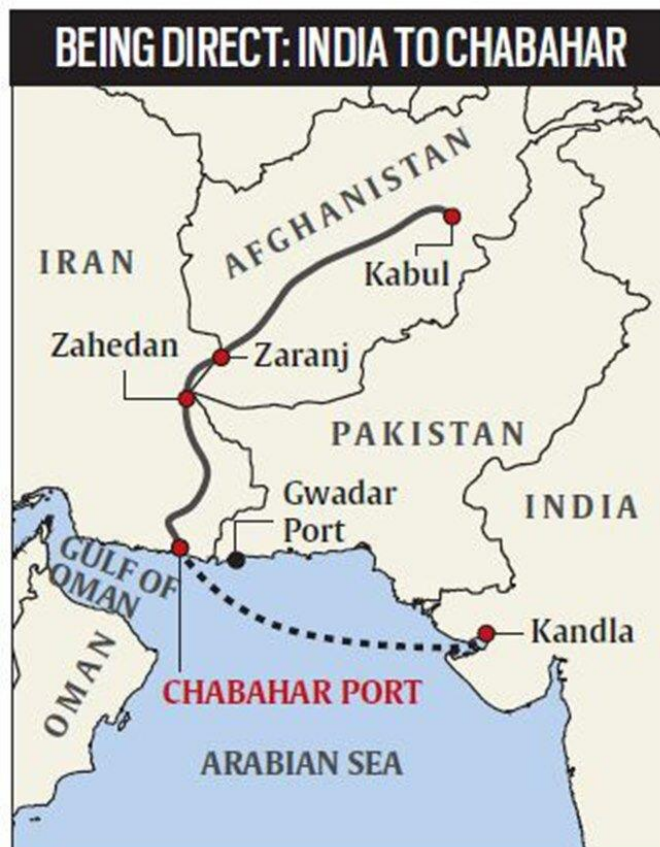
About Chabahar Port
• It is located on the Gulf of Oman and is only 72 km away from the Gwadar port in Pakistan which has been developed by China.
• The port serves as the only oceanic port of Iran and consists of two separate ports named Shahid Beheshti and Shahid Kalantari.

India and the Chabahar-Background

- A trilateral agreement between India, Iran and Afghanistan sighted the establishment of Transit and Transport Corridor among them using Chabahar port in Iran as one of the regional hubs for sea transportation.
- As an alternate trade route to Afghanistan and Central Asia, construction of a rail line from Chabahar port to Zahedan, along the border with Afghanistan was proposed.
- **Indian Railways Construction Ltd.** (IRCON) **signed a Memorandum of Understanding (MOU) with the Iranian Rail Ministry** to provide all services, superstructure work and financing (around USD 1.6 billion).

Significance for India

- **Connectivity**: In future, the Chabahar port and the International North South Transport Corridor (INSTC) will play an important role in Indian connectivity with Russia and Eurasia.
- **Security**: With China aggressively pursuing its Belt-Road Initiative (BRI) under the One Belt One Road (OBOR) project. The port can help in countering the Pakistan's Gwadar Port, which is being developed with Chinese investment
- **Trade**: It is a gateway for trade Central Asian countries in the wake of Pakistan denying transit access to India.

Issues

- In July 2020, citing delays from the Indian side in beginning and funding the project Iran decided to proceed with the rail line construction on its own.
- India on the other side said that IRCON after completing the inspection was waiting for Iranian side to appoint a nodal authority.

Way Forward

- India needs to play a balancing act between the USA and Iran and proactively protect its interest in the region.
- A peaceful extended neighbourhood (Iran-Afghanistan) is not only good for trade and energy security but also plays an important role in India's aspirations of becoming a superpower and hence India cannot remain confined to South Asia.

Asian Regional Forum Meet

Recently, the Election Commission of India (ECI) hosted a virtual meet of the 'Asian Regional Forum' 2022.
- Regional Forum meet was a precursor to the "Summit for Electoral Democracy" to be hosted by the National Electoral Institute of Mexico in the coming month.

Asian Regional Forum Meet 2022

- **About:** India hosted the Asian Regional Forum meet of the Election Management Bodies (EMBs) to reflect upon the changing geo-politics, emerging technologies and their use in election management in view of the challenges presented by COVID-19 pandemic.
  - As part of this 'Global Summit for Democracy', five Regional Forums namely Africa, America, Asia, Europe, and countries of the Arab States have been created.
- **Theme**: Asian Regional Forum Meet 2022 was organized on the theme "Making our Elections Inclusive, Accessible and Participative" at Nirvachan Sadan.
- **Participation:** Representatives from EMBs of Mexico, Mauritius, Philippines, Nepal, Uzbekistan, Maldives, International IDEA, Association of World Election Bodies (A-WEB) and International Foundation for Electoral Systems (IFES) participated in the meet.
  - Senior officials from Election Commission of India were also present during the meet.

Asian Regional Forum Meet- Key Activities

Asian Regional Forum Meet had two following sessions-

- **First Session:** on 'Inclusive Elections: Enhancing Participation of Youth, Gender and Citizens in Remote Areas'.
  o It was co-chaired by the Chief Election Commissioner from Mauritius and Nepal.
- **Second Session:** on 'Accessible Elections: Enhancing Participation of Persons with Disabilities & Senior Citizens'.
  o It was co-chaired by the Commissioner, COMELEC, Philippines and CEC of Uzbekistan.

Summit for Electoral Democracy

- **About:** Summit for Electoral Democracy is organized to strengthen electoral processes within democratic processes.
- **Key Objective:** to create a synergy among international organizations, and electoral authorities and bodies from around the world to promote an intellectual and institutional mobilization to strengthen electoral democracy in the world.
- **Implementation:** the main goal of the Summit for Electoral Democracy is to be achieved through the conduction of regional Forums: Africa, America, Asia, Europe, and countries of the Arab States.
  o These will take place within June through August, culminating with the Global Forum, which will take place in September.

About ECI
• The ECI is an autonomous constitutional authority responsible for administering Union and State election processes in India.
• The body administers elections to the Lok Sabha, Rajya Sabha, and State Legislative Assemblies in India, and the offices of the President and Vice President in the country.

Organizational structure of ECI

- ECI consists of one Chief Election Commissioner and two Election Commissioners.
- **Secretariat:** It has a dedicated secretariat located in New Delhi.
- At the state level, ECI is assisted by the Chief Electoral Officer (CEO) who is generally an IAS rank officer.
- At the constituency level, ECI appoints a Returning Officer and Assistant Returning Officer in consultation with the government of State or Union Territory as the case may be.

ASEAN and India

External Affairs Minister S Jaishankar met US Secretary of State Antony Blinken and discussed about Lanka and ASEAN.

About ASEAN
• The Association of Southeast Asian Nations is a regional organization which was established in 1967 with the signing of the ASEAN Declaration (Bangkok Declaration) to promote political and social stability amid rising tensions among the Asia-Pacific's post-colonial states.
• 8th August is observed as ASEAN Day.
• The motto of ASEAN is **"One Vision, One Identity, One Community".**
• ASEAN Secretariat – **Indonesia, Jakarta.**
• Founding countries of ASEAN are: Indonesia, Malaysia, Philippines, Singapore and Thailand.

Member Nations

- Indonesia
- Malaysia
- Philippines
- Singapore
- Thailand
- Brunei
- Vietnam
- Laos
- Myanmar
- Cambodia

Historical Background

- 1967 – Established with the signing of the ASEAN Declaration (Bangkok Declaration) by Indonesia, Malaysia, Philippines, Singapore and Thailand.
- Following the end of the Vietnam War in 1975, Brunei became a member in 1985 and the Cold War in 1991, Vietnam (1995), Laos and Myanmar (1997), and Cambodia (1999) joined ASEAN.
- 1995 – Members signed a deal to create a nuclear-free zone in Southeast Asia.
- 1997 – Adoption of ASEAN **Vision 2020**.
- 2003 – **Bali Concord II** for the establishment of an ASEAN Community.
- 2007 – **Cebu Declaration,** to accelerate the establishment of ASEAN Community by 2015.
- 2008 – ASEAN Charter comes into force and becomes a legally binding agreement.
- 2015 – Launch of **ASEAN Community**.
  - ASEAN Community consist of:
  - ASEAN Political-Security Community
  - ASEAN Economic Community
  - ASEAN Socio-Cultural Community

Objective

- To accelerate economic growth, social progress and cultural development of Southeast Asian Nations.
- To promote regional peace and stability through the **rule of law** and adherence to the principles of the **United Nations Charter.**
- To promote active collaboration and mutual assistance on matters of common interest in the economic, social, cultural, technical, scientific and administrative fields.
- To collaborate more effectively for the greater utilization of resources and raising the living standards of peoples.
- To promote Southeast Asian studies.
- To maintain close and beneficial cooperation with existing international and regional organizations.

About India and ASEAN

After independence India did not have good relations with ASEAN because of ideological difference with ASEAN which was under the US camp during the Cold War. After the end of Cold War, India – ASEAN relations have evolved from just economic ties to strategic heights owing to common threats and aspirations.

- 1996- India became a member of ASEAN Regional Forum (ARF) for security dialogue in Asia in which members can discuss current regional security issues and develop cooperative measures to enhance peace and security in the region.
- 2002- India and ASEAN begin to hold annual summit level meetings.
- 2009- India- ASEAN Free Trade Agreement in Goods was concluded.
- 2012- India – ASEAN Strategic Partnership was concluded
- 2014- India – ASEAN Free Trade Agreement in Services and Investment was signed with an aim to facilitate movement of manpower and investments between India and ASEAN.
- 2018- India ASEAN celebrated 25 years of their relationship by holding a commemorative Summit. Leaders of all ten ASEAN countries were invited as Chief Guests for the Republic Day parade on January 26,2018.

Economic Cooperation

- ASEAN is India's fourth largest trading partner.
- The ASEAN-India Free Trade Area has been completed.
- ASEAN India-Business Council (AIBC) was set up in 2003 to bring key private sector players from India and the ASEAN countries on a single platform.

- Financial assistance has been provided to ASEAN countries from the following Funds:
  - ○ ASEAN-India Cooperation Fund
  - ○ ASEAN-India S&T Development Fund
  - ○ ASEAN-India Green Fund
- **Delhi Declaration** identifies cooperation in the Maritime Domain.
- **Delhi Dialogue:** Annual dialogue for discussing politico-security and economic issues between ASEAN and India.
- **ASEAN-India Centre (AIC):** To undertake policy research, advocacy and networking activities with organizations and think-tanks in India and ASEAN.
- **Political Security Cooperation:** India places ASEAN at the centre of its Indo-Pacific vision of Security and Growth for All in the Region.

Significance of ASEAN
• ASEAN have more influence on Asia-Pacific trade, political, and security issues than its members could achieve individually.
• Demographic dividend is huge in ASEAN countries with 3rd largest population in the world, of which more than half is below thirty years of age.

Australia-India Education Council

> Recently, Indian Union Minister for Education & Skill Development and Entrepreneurship held a bilateral meeting and co-chaired the 6th meeting of Australia India Education Council (AIEC) with Australian Counterpart.

6th Australia-India Education Council Meeting
- Both countries agreed to further strengthening cooperation in education, skill development, research, innovation, and entrepreneurship.
- Indian Minister welcomed Australian universities and skilling institutions to set up their campuses in India and explore areas of collaboration with Indian institutions.
- Both Ministers also agreed to expand the cooperation in learning, skilling and research with a view to make education a key pillar under the India-Australia Comprehensive Strategic Partnership.
- Indian Minister also invited Australian team to hold the 7th meeting of the AIEC in India next year.

Indian Proposals at 6th AIEC Meeting
- Indian Minister stressed on the research collaboration between the two countries in the areas of Ayurveda, Yoga, Agriculture, etc.
- He called for collaboration in skill certification and areas like mining, logistics management, etc.
- He further said that India has set up Digital University and Gati Shakti University for which the two countries can work together to develop curriculum and other aspects.

Australia-India Education Council (AIEC)
• **About:** The Australia India Education Council (AIEC) is a bi-national body chaired by the Education Ministers of India and Australia to expand collaboration in education, training and research.
○ The inaugural meeting of the AIEC was held in New Delhi in August 2011.
• **Participation:** The AIEC is a 'working council' of representatives from government, academia and industry.
• **Significance:** The AIEC provides a forum for members to collaborate with Ministers in deciding major bilateral education priorities for the coming year.

India – Australia relations
- India and Australia enjoy excellent bilateral relations that have **undergone transformative evolution in recent years**, developing along a positive track, into a friendly partnership.
- The India-Australia Comprehensive Strategic Partnership initiated during the India-Australia Leaders' Virtual Summit is the **cornerstone of the multi-faceted bilateral relations**.
- India and Australia have been each other's important trading partners. **Australia is the 17th largest trading partner of India** and India is Australia's 9th largest trading partner.

- India and Australia are partners in the trilateral **Supply Chain Resilience Initiative** (SCRI) arrangement along with Japan which seeks to enhance the resilience of supply chains in the Indo-Pacific Region.
- Further, India and Australia are also members of the **recently formed Quad**, also comprising US, and Japan, to further enhance cooperation and develop partnership across several issues of common concerns.

Refugee Policy

Recently, the Ministry of Home Affairs (MHA) declared that Rohingyas are illegal foreigners.

About Rohingyas

- Rohingya is an ethnic group comprising mostly the Muslims from the Rakhine province of west Myanmar and speak a Bengali dialect.
- Myanmar has classified them as "resident foreigners" or "associate citizens" and were forced to leave Myanmar in large numbers after violence against the which first began in 2012.
- The Myanmar army revived the attacks in 2017 and lakhs took shelter in Bangladesh.

India's Refugee Policy

- India lacks specific legislation to address the problem of refugees in spite of their increasing inflow.
- The Foreigners Act, 1946, fails to address the peculiar problems faced by refugees as a class and gives unbridled power to the Central government to deport any foreign citizen.
- The Citizenship Amendment Act, 2019 (CAA) strikingly excludes Muslims from its purview and seeks to provide citizenship only to Hindu, Christian, Jain, Parsi, Sikh, and Buddhist immigrants persecuted in Bangladesh, Pakistan, and Afghanistan.
- India is not a party to the 1951 Refugee Convention and its 1967 Protocol which are the key legal documents pertaining to refugee

protection, still India has a moral tradition for assimilating foreign people and culture.
- The constitution of India also respects the life, liberty, and dignity of human beings.
- The Supreme Court in the National Human Rights Commission vs. State of Arunachal Pradesh (1996) held that "while all rights are available to citizens, persons including foreign citizens are entitled to the right to equality and the right to life, among others."

Issue with 1951 Refugee Convention

- The definition of refugees in the 1951 convention only pertains to the violation of civil and political rights, but not economic rights, of individuals and if the violation of economic rights were to be included in the definition of a refugee, it would clearly pose a major burden on the developed world.

Need for a law on Refugees

- India frequently experiences a large inflow of refugees which requires a long-term practical solution to make a shift from India's charitable approach to a rights-based approach by enacting a national refugee law.
- A national refugee law will streamline refugee-status determination procedures for all kinds of refugees and will guarantee them the rights they have under international law.
- It could sufficiently address India's security concerns, while at the same time ensuring that there is no unlawful detention or deportation carried out in the view of national-security concerns.
- The bulk of the refugee population in India originates from Sri Lanka, Tibet, Myanmar and Afghanistan though only Tibetan and Sri Lankan refugees are recognized as such by the government.
- They are provided protection and assistance directly through specific policies and rules formulated by the government.

Way Forward

The people demanding refuge are in a vulnerable situation and see a last ray of hope in an inclusive and tolerant country. Considering this, there should

be an intake of refugees but not at the cost of the native population.

So, it is high time for India to define a clear-cut refugee legislation and policy.

India's presidency of the G20

In about three months, India will assume for the first time the Group of 20 (G20) year-long presidency from December 1, 2022 to November 30, 2023, culminating with the G20 Summit in India in 2023.

About G20

- The G20 is an international forum of the governments and central bank governors from 20 major economies.
- It was formed in 1999.

Features

- The G20 economies account for around 85 percent of the Gross World Product (GWP), 80 percent of world trade.
- The heads of governments of the G20 nations periodically participate in summits to tackle the problems or the address issues that plague the world.
- The group also hosts separate meetings of the finance ministers and foreign ministers.

Objectives

- The Group was formed with an aim of studying, reviewing, and promoting high-level discussion of policy issues pertaining to the promotion of international financial stability.
- The forum aims to pre-empt balance of payments problems and turmoil on financial markets by improved coordination of monetary, fiscal, and financial policies and seeks to address issues that go beyond the responsibilities of any one organization.

Challenges

- India needs to have a clear global financial agenda.

- The country should also have the capacity to lead the G20 year intellectually, financially, managerially and administratively.
- Geopolitically, India is more internationally engaged but less so geoeconomically and its narrow focus on the World Bank, IMF, WTO and foreign investment issues clearly indicates that.
- India has much to contribute on issues like reconfiguration of global financial regulations, design of a new framework for trade in services and the digital economy and establishing better cross-border standards for transparency in financial flows.
- India has to address organizational challenges and must address the infrastructure, management and intellectual gap.

What could India bring to the table?

- Maintaining its balanced stance, India needs to neutralize the situation between Russia and Ukraine by introducing peace talks between the two nations.
- It is about time for India to raise its voice in support of a transparent New Economic Order and building a prosperous and just world as unreasonable bans on certain commodities from various countries limits commerce between states when trade liberty exists.
- The global agenda has been tilted towards investment, whereas science and technology are the driving force for economic diversification, sustainably urbanizing the world, and ushering the hydrogen economy and new crop varieties as the answer to both human well-being and global climate change.
- Harnessing the potential of the digital-information-technology revolution requires redefining digital access as a "universal service" that goes beyond physical connectivity to sharing specific opportunities available.

Conclusion

India's presidency must leave the grouping with the ability and energy to respond to new realities, and it must create a future-ready multilateralism through a novel and robust institutional architecture.

Economy

Tight Monetary Policy

Eye on inflation, RBI goes for 3rd rate hike this year.

About Monetary policy

- Monetary policy refers to the policy of the central bank in using monetary instruments to achieve the goals specified in the RBI Act, 1934.

- The objective of the RBI's monetary policy is to maintain price stability while keeping in mind the objective of growth which is a necessary precondition to sustainable growth.

- The amended RBI Act, 1934 sets the inflation target (4% +-2%) for Government of India in consultation with the Reserve Bank.

- Monetary policy refers to the use of **monetary instruments** by the **central bank** to regulate monetary tools such as interest rates, money supply and availability of credit with a view to achieving the **ultimate objective of economic policy**.

Instruments of Monetary Policy

- **Liquidity Adjustment Facility (LAF)-** The LAF consists of overnight as well as term repo auctions.
- **Bank Rate-** The rate at which the RBI is ready to buy bills of exchange or other commercial papers. The Bank Rate is published under Section 49 of the RBI Act, 1934.
- **Repo Rate-**The interest rate at which the Reserve Bank provides liquidity to banks against the collateral of government and other approved securities under the liquidity adjustment facility (LAF).
- **Reverse Repo Rate-** The interest rate at which the Reserve Bank absorbs liquidity, on an overnight basis, from banks against the collateral of eligible government securities under the LAF.

- **Statutory Liquidity Ratio (SLR)-** The share of NDTL that a bank is required to maintain in safe and liquid assets, such as, **unencumbered government securities, cash and gold** changes in which often influence the availability of resources in the banking system for lending to the private sector.
- **Cash Reserve Ratio (CRR)-** The average daily balance that a bank is required to maintain with the Reserve Bank as a share of such per cent of its Net demand and time liabilities (NDTL) that the Reserve Bank may notify from time to time in the Gazette of India.
- **Marginal Standing Facility (MSF)-** A facility under which scheduled commercial banks can borrow additional amount of overnight money from the Reserve Bank by dipping into their Statutory Liquidity Ratio (SLR) portfolio up to a limit at a penal rate of interest.
- **Open Market Operations (OMOs)-** These include both, outright purchase and sale of government securities, for injection and absorption of durable liquidity, respectively.

About Tight Monetary Policy

- Central banks engage in tight monetary policy when an economy is accelerating too quickly or inflation—overall prices—is rising too fast.

- The central bank tightens policy or makes money tight by raising short-term interest rates which increases the cost of borrowing and effectively reduces its attractiveness.

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Monetary Policy in India

- RBI controls inflation in the country through Monetary policy in India.
- The Reserve Bank of India (RBI) is vested with the responsibility of conducting monetary policy, mandated under the Reserve Bank of India Act, 1934.
- To maintain price stability, inflation needs to be controlled and for this the government of India sets an inflation target for every five years in

which RBI has an important role in the consultation process regarding inflation targeting.

• The current inflation-targeting framework in India is flexible in nature.

• **Who sets the inflation target in India: The amended RBI Act provides for the inflation target to be set by the Government of India, in consultation with the Reserve Bank, once every five years.**

Role of RBI

• **Reserve Bank of India (RBI) operates the Monetary Policy Framework of the country.**

• The amended RBI Act provides the legislative mandate to the Reserve Bank to operate the monetary policy framework of the country which aims at **setting the policy (repo) rate** based on an assessment of the current and evolving macroeconomic situation, and **modulation of liquidity conditions to anchor money market rates at or around the repo rate.**

• Change in Repo rate affects the entire financial system, which, in turn, influences aggregate demand – a key determinant of inflation and growth.

• Once the repo rate is announced, the operating framework designed by the Reserve Bank envisages liquidity management on a day-to-day basis through appropriate actions.

Inflation in India

• Capacity utilization in the manufacturing sector in Q4 2021-22 went up to 75.3 per cent as against its long-term average of 73.7 per cent.

• RBI has also projected inflation at 6.7 per cent for the year 2022-23.

• While the consumer price inflation has eased from its surge in April, the RBI said it remains uncomfortably high and above the upper threshold of the target.

• While RBI projected an inflation of 7.1 per cent for Q2, it expects it to come down to 6.4 per cent in Q3; and 5.8 per cent in Q4. It has further projected inflation in Q1 2023-24 to be at 5 per cent.

Essential Commodities Act

With tur dal prices surging since mid-July and reports coming in of some traders creating artificial supply squeeze by restricting sales, the Centre has invoked the Essential Commodities Act of 1955 to ask States to monitor and verify the stocks available with such traders.

Historical Background

• The Essential Commodities Act was legislated at a time when the country was facing scarcity of foodstuffs due to persistent abysmal levels of foodgrain production.

• The country was dependent on imports and assistance (such as wheat import form US under PL-480) to feed the population.

• To stop the hoarding and black marketing of foodstuffs, the Essential Commodities Act was enacted in 1955.

Features

• The ECA 1955 is used to curb inflation by allowing the Centre to enable control by state governments of trade in a wide variety of commodities.

• The Ministry of Consumer Affairs, Food and Public Distribution, implements the Act.

• By declaring a commodity as essential, the government can control the production, supply, and distribution of that commodity, and impose a stock limit.

• There is no specific definition of essential commodities in the Essential Commodities Act, 1955. Section 2(A) states that an "essential commodity" means a commodity specified in the Schedule of the Act.

• Under the EC Act of 1955, if the Central government thinks that it is necessary to maintain or increase supplies of any essential commodity or make it available at fair prices, it can regulate or prohibit the production, supply, distribution and sale of that commodity.

• Some of the essential commodities listed out in the schedule to this Act are foodstuffs including

edible oils and oilseeds, drugs, fertilizers, petroleum and petroleum products.

- Centre has the power to add or remove any commodity in public interest from this list, and that's what it has done with masks and hand sanitizers.
- When the prices of any of the essential commodities rise, the government imposes stock-holding limits to prevent hoarding, confiscates the stocks of violators and imposes punishment.

Issues

- In recent years, there has been an argument that the EC Act was draconian and not suited for times when farmers face problems of plenty rather than scarcity.
- The Economic Survey 2019-20 argued that it hampered remunerative prices for farmers and discouraged investment in storage infrastructure.
- Traders generally buy less than their usual capacity which inflict huge loss for the farmers during surplus harvests of perishables which leads to farmers being unable to get better prices due to lack of investment in cold storage, warehouses, processing and export.
- Owing to these issues, the Parliament passed the Essential Commodities (Amendment) Bill, 2020 but due to farmers' protest the Government had to repeal this law.

Way Forward

The ECA 1955 was brought when India was not self-sufficient in food grains production but now India has become surplus in most agri-commodities, and the amendments in the ECA 1955 was an important step by the government to achieve its target of doubling farmers' income and also for ease of doing business. Though the same has been repealed due to protests, government should work closely with farmers and farmer's association to collectively amend the ECA as per farmer's need and bring about the changes that are suitable for present scenario.

Digital Technology in Agriculture

Recently, the Union Minister of Agriculture and Farmers Welfare, Shri Narendra Singh Tomar in Lok Sabha informed about various initiatives to give a push to digital agriculture in the country.

- Digital technologies are finding increasing use in the agricultural value system, and farmers are increasingly becoming more informed, as various measures are taken to provide them ready access to technology and information.
- Few important of the digital initiatives are mentioned below-

India Digital Ecosystem of Agriculture (IDEA) Framework
• India Digital Ecosystem of Agriculture (IDEA) would lay down the architecture for the federated farmers' database.
o Further, the databases related to the schemes governed by the Department have been integrated.
• The IDEA would serve as a foundation to build innovative agri-focused solutions leveraging emerging technologies to contribute effectively in creating a better Ecosystem for Agriculture in India.
• This Ecosystem shall help the Government in effective planning towards increasing the income of farmers in particular and improving the efficiency of the Agriculture sector as a whole.

National e-Governance Plan in Agriculture (NeGP-A)

- Under the Plan scheme, funds are released to the State(s)/UT(s) for project involving use of modern technologies viz.-
  - o Artificial Intelligence (AI),
  - o Machine Learning (ML),
  - o Robotics,
  - o Drones,
  - o Data Analytics,
  - o Block Chain etc.

Sub Mission on Agricultural Mechanization (SMAM)

- Sub Mission on Agricultural Mechanization (SMAM) is being implemented w.e.f April,2014.
- The SMAM scheme aims at 'reaching the unreached' by-
  - bringing to the small and marginal farmers in the core and giving the benefits of farm mechanization,
  - Promoting 'Custom Hiring Centers',
  - Creating hubs for hi-tech & high value farm equipments,
  - Distribution of various agricultural equipments,
  - Creating awareness among stakeholders through demonstration and capacity building activities, and
  - Ensuring performance- testing and certification at designated testing centers located all over the country.

Central Bank Digital Currency (CBDC)

Reserve Bank of India's (RBI) digital rupee — the Central Bank Digital Currency (CBDC) — may be introduced in phases beginning with wholesale businesses in the current financial year.

About Central Bank Digital Currency (CBDC)
• CBDC is the legal tender issued by a central bank in a digital form and is the same as a fiat currency and is exchangeable one-to-one with the fiat currency.
• The digital fiat currency or CBDC can be transacted using wallets backed by blockchain.
• Though the concept of CBDCs was directly inspired by Bitcoin, it is different from decentralized virtual currencies and crypto assets, which are not issued by the state and lack the 'legal tender' status.
• CBDCs enable the user to conduct both domestic and cross-border transactions which do not require a third party or a bank.

Advantages of CBDC

- CBDC is a high-security digital instrument and can be used for payment, a unit of account, and a store of value
- Like paper currency, each unit is uniquely identifiable to prevent counterfeit.
- It is a liability of the central bank just as physical currency is.
- It is a digital payment instrument that can be stored, transferred, and transmitted by all kinds of digital payment systems and services.
- It is efficient than printing.
- It reduces the risk of transactions.
- It makes tax collection transparent.
- Prevents money laundering.

How will CBDC help?

- Introduction of CBDC has the potential to provide significant benefits, such as reduced dependency on cash, higher seigniorage due to lower transaction costs, reduced settlement risk.
- Introduction of CBDC would also possibly lead to a more robust, efficient, trusted, regulated and legal tender-based payments option.
- RBI had proposed amendments to the Reserve Bank of India Act, 1934, which would enable it to launch a CBDC.
- The government had been planning at the time to introduce a Bill in Parliament that would prohibit "all private cryptocurrencies in India" with "certain exceptions."
- Government has received a proposal from Reserve Bank of India in October 2021 for amendment to the Reserve Bank of India Act, 1934 to enhance the scope of the definition of 'bank note' to include currency in digital form.

Reason for preference of CBDC over Cryptocurrency

- Cryptocurrencies pose risks to consumers and do not have any sovereign guarantee and hence are not legal tender.
- Their speculative nature also makes them highly volatile.
- A user loses access to their cryptocurrency if they lose their private.

- In some cases, these private keys are stored by technical service providers (cryptocurrency exchanges or wallets), which are prone to malware or hacking.
- Cryptocurrencies are more vulnerable to criminal activity and money laundering as they provide greater anonymity than other payment methods since the public keys engaging in a transaction cannot be directly linked to an individual.
- A central bank cannot regulate the supply of cryptocurrencies in the economy which could pose a risk to the financial stability of the country if their use becomes widespread.
- Since validating transactions is energy-intensive, it may have adverse consequences for the country's energy security. For example, the total electricity use of bitcoin mining, in 2018, was equivalent to that of mid-sized economies such as Switzerland.

Need in India

- India is a leader in digital payments, but cash remains dominant for small-value transactions which can be to a certain extent replaced by CBDC.
- India has a fairly high currency-to-GDP ratio.
- An official digital currency would reduce the cost of currency management while enabling real-time payments without any inter-bank settlement.

Overseas Investment Rules

The Finance Ministry has released the Rules for Foreign Exchange Management (Overseas Investment Rules), 2022 subsuming extant regulations for Overseas Investments and Acquisition and Transfer of Immovable Property outside India Regulations, 2015.

About Overseas Investment Rules

- With an eye on wilful defaulters, the new rules say that -Any Indian resident will have to seek a no objection certificate before making any overseas financial commitment:

I. Who has an account appearing as a non-performing asset?
II. Or is classified as a wilful defaulter by any bank
III. Or is under investigation by a financial service regulator or by investigative agencies in India.

Changes in overseas investment norms

- Any resident in India acquiring equity capital in a foreign entity or overseas direct investment (ODI), will have to submit an Annual Performance Report (APR) for each foreign entity, every year by December 31.
- No such reporting shall be required where a person resident in India is holding less than 10% of the equity capital without control in the foreign entity.
- No other financial commitment other than equity capital or a foreign entity is under liquidation.

Ceiling on investment

- Any resident individual can make ODI by way of investment in equity capital or overseas portfolio investment (OPI) subject to the overall ceiling under the Liberalized Remittance Scheme (LRS) of the Reserve Bank.
- Currently, the LRS permits $2,50,000 outward investment by an individual in a year.
- These norms make it easier for domestic corporates to invest abroad.

Prohibitions

- Any Indian resident, who has been classified as a willful defaulter or is under investigation by the CBI, the ED or the Serious Frauds Investigation Office (SFIO), will have to obtain a no-objection certificate (NOC).
- NOC can be obtained from his or her bank, regulatory body or investigative agency before making any overseas "financial commitment" or disinvestment of overseas assets.
- The rules also provide that if lenders, the concerned regulatory body or investigative agency fail to furnish the NOC within 60 days of receiving an application, it may be presumed that

they have no objection to the proposed transaction.

- Additionally, the new rules also prohibit Indian residents from making investments into foreign entities that are engaged in real estate activity, gambling in any form, and dealing with financial products linked to the Indian rupee without the specific approval of the RBI.

One Nation One Fertilizer Scheme

The Ministry of Chemicals and Fertilizers will implement One Nation One Fertilizer (ONOF) by introducing a Single Brand for Fertilizers and Logo under the fertilizer subsidy scheme named "Pradhanmantri Bhartiya Janurvarak Pariyojna" (PMBJP).

About One Nation One Fertilizer (ONOF)

- The single brand name for UREA, DAP, MOP and NPK etc. would be BHARAT UREA, BHARAT DAP, BHARAT MOP and BHARAT NPK etc. respectively for all Fertilizer Companies, State Trading Entities (STEs) and Fertilizer Marketing Entities (FMEs).
- Also, a logo indicating Fertilizer subsidy scheme namely Pradhanmantri Bhartiya Janurvarak Pariyojna will be used on the fertilizer bags.
- Under the scheme, companies are allowed to display their name, brand, logo and other relevant product information only on one-third space of their bags.
- On the remaining two-thirds space, the "Bharat" brand and Pradhanmantri Bharatiya Jan Urvarak Pariyojana logo will have to be shown.

What is the government's argument for introducing this scheme?

The government's logic for introducing a single 'Bharat' brand for all subsidized fertilizers +being marketed by companies is as follows:

- The maximum retail price of urea is currently fixed by the government, which compensates companies for the higher cost of manufacturing or imports incurred by them.

- The MRPs of non-urea fertilizers are, on paper, decontrolled.
- But companies cannot avail subsidy if they sell at MRPs higher than that informally indicated by the government.
- Simply put, there are some 26 fertilizers (inclusive of urea), on which government bears subsidy and also effectively decides the MRPs.
- Apart from subsidizing and deciding at what price companies can sell, the government also decides where they can sell.
- This is done through the Fertilizer (Movement) Control Order, 1973.
- Under this, the department of fertilizers draws an agreed monthly supply plan on all subsidized fertilizers in consultation with manufacturers and importers.
- This supply plan is issued before the 25th of each month for the following month, with the department also regularly monitoring movement to ensure fertilizer availability as per requirement, including remote areas.
- The government is spending vast sums of money on fertiliser subsidy (the bill is likely to cross Rs 200,000 crore in 2022-23).
- By deciding where and at what price companies can sell, it would obviously want to take credit and send that message to farmers.

Possible drawbacks of the scheme

- It may disincentivize fertilizer companies from undertaking marketing and brand promotion activities.
- They will now be reduced to contract manufacturers and importers for the government. Any company's strength ultimately is its brands and farmer trust built over decades.
- Currently, in case of any bag or batch of fertilizers not meeting the required standards, the blame is put on the company. But now, that may be passed on fully to the government.
- Politically, the scheme might well boomerang rather than benefit the ruling party.

Benami Law

The Supreme Court has declared as "unconstitutional and manifestly arbitrary" the amendments introduced to the Benami Property Transactions Act, 1988 in 2016, which apply retrospectively and can send a person to prison for three years even as it empowers the Centre to confiscate "any property" subject to a benami transaction.

What is Benami Property?
- Benami in Hindi means without name.
- So, a property bought by an individual not under his or her name is benami property which can include property held in the name of spouse or child for which the amount is paid out of known sources of income.
- A joint property with brother, sister or other relatives for which the amount is paid out of known sources of income also falls under benami property.
- The transaction involved in the same is called Benami transaction.
- The benami transactions include buying assets of any kind — movable, immovable, tangible, intangible, any right or interest, or legal documents.

What is the Benami Law?
• The first act against benami properties was passed in 1988 as the Prohibition of Benami Property Transactions Act, 1988.
• To block all loopholes, the government in July 2016 decided to amend the original act.
• So, after further amendment, Benami Transactions (Prohibition) Amendment Act, 2016 came into force on November 1, 2016.
• The PBPT Act defines benami transactions, prohibits them and further provides that violation of the PBPT Act is punishable with imprisonment and fine.
• The PBPT Act prohibits recovery of the property held benami from Benamidar by the real owner. Such, properties are liable for confiscation by the Government without payment of compensation.

The Amendments
- The 2016 law amended the original Benami Act of 1988, expanding it to 72 Sections from a mere nine.
- Sections 3(2) and 5 were introduced through the Benami Transactions (Prohibition) Amendment Act, 2016.
- A Bench, led by CJI N.V. Ramana, declared Sections 3(2) and 5 introduced through this amendment as unconstitutional.

Section 3(2)
- According to this, a person can be sent behind bars for a benami transaction entered into 28 years before the Section even came into existence.
- CJI Ramana held that the provision violated Article 20(1) of the Constitution. **Article 20(1) mandates that no person should be convicted of an offence, which was not in force "at the time of the commission of the act charged as an offence".**

Section 5
- It said that "any benami property shall be liable to be confiscated by the Central Government".
- The court held that this confiscation provision cannot be applied retrospectively.
- The CJI dismissed the government's version that forfeiture, acquisition and confiscation of property under the 2016 Act was not in the nature of prosecution and cannot be restricted under Article 20.

Need to curb benami transactions
- Rather than hoarding the black money in cash, the tax evader invests their accumulated illegal money in buying benami properties
- The whole process affects the revenue generation of government hampering growth and development of the state.
- Since the percentage of tax payer in the country is a dismal low, the government fails to successfully implement its policies and schemes due to lack of resources.
- Benami transactions also serves the illicit purpose of money laundering.

Way Forward
- Due process of law needs to be followed in true letter and spirit while enacting a tough law against benami properties which is the need of the hour to check corruption.

Social Issues

Pew Report on Sex Ratio at Birth in India

The latest study by the Pew Research Centre has pointed out that "son bias" is on the decline in India as it found that Sex ratio at birth normalises slightly.

Key Findings of Pew Report on Sex Ratio at Birth

- **Decrease in Number of Missing Girls:** Average annual number of baby girls "missing" in the country fell from 480,000 (4.8 lakh) in 2010 to 410,000 (4.1 lakh) in 2019.
  o The "missing" refers to how many more female births would have occurred during this time if there were no female-selective abortions.
- **Bridging the Sex Ratio at Birth Gap:** From a large imbalance of about 111 boys per 100 girls in India's 2011 census, the sex ratio at birth appears to have normalised slightly over the last decade.
  o Sex Ratio at Birth in India narrowed to about 109 in the 2015-16 wave of the National Family Health Survey and to 108 boys in the latest wave of the NFHS, conducted from 2019-21.
- **Sex-Selective Abortions:** The Pew Research Centre report points out that between 2000 and 2019, nine crore female births went "missing" because of female-selective abortions.

Religion-wise Sex Selective Abortion

- **Among Sikhs:** The report has also analysed religion-wise sex selection, pointing out that the gap was the highest for Sikhs.
  o The study points out that while the Sikhs make up less than 2% of the Indian population, they accounted for an estimated 5%, or approximately 440,000 (4.4 lakh), of the nine crore baby girls who went "missing" in India between 2000 and 2019.
  o In the 2001 census, Sikhs had a sex ratio at birth of 130 males per 100 females, far exceeding that year's national average of 110.

  o By the 2011 census, the Sikh ratio had narrowed to 121 boys per 100 girls.
  o It now hovers around 110, about the same as the ratio of males to females at birth among the country's Hindu majority (109).
- **Among Other Religions:** Both Christians (105 boys to 100 girls) and Muslims (106 boys to 100 girls) have sex ratios close to the natural norm, and this trend is holding.
  o The share of "missing" girls among Hindus is above their respective population share.

Tracing the Sex Selective Abortion in India

- The problem of sex-selective abortion began in the 1970s with the availability prenatal diagnostic technology allowing for sex selective abortions.
- Among the major religions, the biggest reduction in sex selection seems to be among the groups that previously had the greatest gender imbalances, particularly among Sikhs.
- The world over, boys modestly outnumber girls at birth, at a ratio of approximately 105 male babies for every 100 female babies.
  o That was the ratio in India in the 1950s and 1960s, before prenatal sex tests became available across the country.
- India legalised abortion in 1971, but the trend of sex selection started picking up in the 1980s due to the introduction of ultrasound scan technology.
  o In the 1970s, India's sex ratio was at par with the global average of 105-100, but this widened to 108 boys per 100 girls in the early 1980s, and reached 110 boys per 100 girls in the 1990s.

NAMASTE Scheme

Recently, National Action for Mechanised Sanitation Ecosystem (NAMASTE) Scheme was launched by the Ministry of Social Justice and Empowerment (MoSJE).

About NAMASTE Scheme

- **About:** NAMASTE envisages safety and dignity of sanitation workers in urban India by creating an enabling ecosystem that recognizes sanitation workers as one of the key contributors in operations and maintenance of sanitation infrastructure.
- **Mandate:** Ensuring safety and dignity of sanitation workers in urban India and providing sustainable livelihood and enhancing their occupational safety through capacity building and improved access to safety gear and machines.
- **Parent Ministry:** National Action for Mechanised Sanitation Ecosystem (NAMASTE) Scheme is a central sector scheme of the Ministry of Social Justice and Empowerment (MoSJE).
  - It is being jointly implemented by MoSJE and the Ministry of Housing and Urban Affairs (MoHUA).
- **Coverage:** Five hundred cities (converging with AMRUT cities) will be taken up under this phase of NAMASTE. The category of cities that will be eligible are given below:
  - All Cities and Towns with a population of over one lakh with notified Municipalities, including Cantonment Boards (Civilian areas),
  - All Capital Cities/Towns of States/ Union Territories (UTs), not covered in 4(i),
  - Ten Cities from hill states, islands and tourist destinations (not more than one from each State).
- **Funding:** The NAMASTE Scheme has been approved with an outlay of Rs. 360 crores for four years from 2022-23 to 2025-26.

Key Objectives of the NAMASTE Scheme

- NAMASTE would aim at-
  - Providing access to alternative livelihoods support and entitlements to reduce the vulnerabilities of sanitation workers and
  - Enable them to access self-employment and skilled wage employment opportunities and break the inter-generationality in sanitation work.
- In addition, NAMASTE would bring about a behavior change amongst citizens towards sanitation workers and enhance demand for safe sanitation services.

NAMASTE Scheme- Expected Outcomes

NAMASTE aims to achieve the following outcomes:

- Zero fatalities in sanitation work in India.
- All sanitation work is performed by skilled workers.
- No sanitation workers come in direct contact with human faecal matter.
- Sanitation workers are collectivized into SHGs and are empowered to run sanitation enterprises.
- All Sewer and Septic tank sanitation workers (SSWs) have access to alternative livelihoods.
- Strengthened supervisory and monitoring systems at national, state and ULB levels to ensure enforcement and monitoring of safe sanitation work.
- Increased awareness amongst sanitation services seekers (individuals and institutions) to seek services from registered and skilled sanitation workers.

NAMASTE Scheme Implementation

- **National NAMASTE Management Unit**: National Safai Karamchari Financial Development Corporation (NSKFDC) would be implementing agency for NAMASTE.
  - At the apex of the structure will be the National NAMASTE Monitoring Unit (NNMU) under Managing Director, NSKFDC, which will report to concerned Division head in the MoSJE, Government of India.
  - Maximum monitoring and reporting will be on real time basis through mobile app and dedicated website.
- **State Namaste Management Unit**: The State Govt. will decide a suitable officer to be designated as State Namaste Director to head State Namaste Management Unit (SNMU).
  - The officer may be from SBM, NULM, AMRUT or the ULB or any other relevant Department of the State.
  - He will be assisted by PMU resource (State NAMASTE Manager) to be deployed under the Scheme as per requirement.
  - At the City level, City NAMASTE Monitoring Unit (CNMU) shall consist of NAMASTE nodal

officer of the city to be designated by the concerned ULB, who will be assisted by PMU resource (City NAMASTE Manager) deployed under the Scheme.

- **City NAMASTE Monitoring Unit**: PMU would be organised in clusters of municipalities to work as City NAMASTE Monitoring Unit (CNMU) so as to coincide with the SBM clusters.
  - City NAMASTE Monitoring Unit (CNMU) would also ensure to cover any other urban body like sewerage board/jal board, cantonment board etc. dealing with sewerage operations in the city.
- **IEC Campaign**: Campaigns would be undertaken jointly by the ULBs & NSKFDC to spread awareness about the enumeration of target sanitation workers and other interventions of NAMASTE.
  - Electronic and print media and hoardings at prominent locations shall be used for the campaign in local language and English/Hindi.

Schemes for Anganwadi Workers

Recently, Parliamentarians across party lines supported an increase in salary of anganwadi workers and helpers who play a crucial role in the development of children at the grassroots level.

Key Benefits of Anganwadi Workers

- **Fixed Honorarium:** The AWWs and AWHs are paid fixed honorarium per month as decided by the Government from time to time.
  - The Government has enhanced the honorarium w.e.f. 01.10.2018 to AWWs from ₹ 3,000/- to ₹ 4,500/- per month;
  - AWWs at mini-AWCs from ₹ 2,250/- to ₹ 3,500/- per month;
  - AWHs from ₹ 1,500/- to ₹ 2,250/- per month; and introduced performance linked incentive of ₹ 250/- per month to AWHs and @ ₹ 500/- per month to AWWs.
- **Monetary Incentives by Concerned States:** Most of the States/UTs are also giving monetary

incentives to these workers out of their own resources.

- **Leave:** AWWs/AWHs are allowed paid absence of 180 days of maternity leave and 20 days annual leave.
- **Award:** In order to motivate AWWs/and give recognition to good voluntary work, a Scheme of Award for AWWs has been introduced, both at the National and State level.
  - The Award comprises Rs. 50,000/- cash and a Citation to AWW and Rs. 40,000/- to AWHs.
- **Uniform:** Government has made a provision for a set of two Uniform (saree/suit per annum @ Rs.500/- each).
- **Pradhan Mantri Garib Kalyan Package (PMGKP) Insurance Scheme for Health Care Workers fighting COVID-19 with personal accident cover of Rs. 50 Lakh**: It has also been extended to Anganwadi Workers/Helpers-
  - Who may have been in direct contact and care of COVID-19 patients and may be at risk of being impacted by this, subject to fulfillment of the certain conditions.

Benefits under POSHAN Abhiyaan

- **Technological Empowerment:** Under POSHAN Abhiyan, Anganwadi workers have been given smartphones for efficient service delivery.
- **Digitization of Records:** The mobile application of POSHAN Abhiyaan digitizes and automates physical registers used by Aanganwadi workers.
  - This saves the time of AWWs and AWHs, and improves the quality of their work while simultaneously allowing them real-time monitoring.

#POSHANAbhiyaan

POSHAN Abhiyaan

will promote positive behaviour change towards infant & young child feeding practices.

- Early initiation of breastfeeding within an hour after birth
- Exclusive breastfeeding for the first 6 months
- Complementary feeding from 6 months, along with breastfeeding up to 2 years

Government of India
Ministry of Women and Child Development

wcd.nic.in /PMOIndia /MinistryWCD @Manekagandhibjp /ManekaGandhiOfficial

PM POSHAN Scheme- Key Features
• Centrally supported hot meal programs in Government and Government-aided schools, covering 11.8 crore children, will be supplemented with nutritional elements in identified aspirational districts and areas with high anaemia.
o The scheme is proposed to be extended to pre-primary children.
• The PM POSHAN Scheme provides for-
o Social audit,
o Creation of school nutritional gardens to source fresh produce,
o Involvement of farmer-producer organizations as providers, and
o Lays emphasis on local food traditions.

Paalan 1000

Recently, Dr. Bharati Pravin Pawar, Union Minister of State virtually launched the Early Childhood Development Conclave, Paalan 1000 National Campaign and Parenting App in Mumbai.
• While Launching the Paalan 1000, she said that India has taken rapid strides in reducing child mortality since 2014 from 45 per 1000 live births to 35 per 1000 live births in 2019.

Paalan 1000 National Campaign & Parenting App

• **About:** 'Paalan 1000 National Campaign- Journey of the First 1000 Days', focuses on the cognitive developments of children in the first 2 years of its life.
• **Mandate:** Cognitive development of children under 2 years is a major focus area of this PAALAN 1000.
• **Key Features:** Paalan 1000 combines early years coaching for parents, families and other caregivers with services designed to meet families' basic needs.

o Infants and toddlers are shaped by their experiences – and those experiences are shaped by their caregivers.
o Caregivers are crucial for a strong start in the first years of life.
o The programme is aligned the mission of the Rashtriya Bal Swasthya Karyakram (RBSK), emphasizing responsive care and focusing interventions on the first 1000 days.
• **Paalan 1000 Parenting App:** It will provide caregiver with practical advice on what they can do in their everyday routine and will help resolving the various doubts of parents and will direct our efforts in the development of child.
• **Guiding Principles:** Paalan 1000 have focused on the 6 principles-
o Maximize Love,
o Talk & Engage,
o Explore through Movement and Play,
o Read and Discuss Stories,
o Mother's Engagement with the Child while Breastfeeding and
o Managing Stress and Staying Calm.
• **'Continuum of Care' Concept:** emphasises on care during critical life stages in order to improve child survival. It is being followed under the national programme.

Importance of Early Childhood Development in First 1000 Days

• The first thousand days encompasses the conception as well as the first two years of a child's life and during this period, the growing child needs right nutrition, stimulation, love and support.
• The first 1000 days establishes a solid platform for a child's physical, mental, emotional, cognitive and social health.
• The process of a baby's brain development begins during pregnancy and is influenced by a pregnant woman's health, nutrition and environment.
• After birth, apart from the physical growth, a human baby's brain development paves the way

for its future level of intelligence and quality of life.

• Each day of this journey is special and influences the way a baby develops, grows and learns - not just now, but for her entire life.

Anaemia Mukt Bharat (AMB) Strategy

Recently, Union Minister of State for Health and Family Welfare informed the Rajya Sabha about various interventions taken by the government to address anaemia under Anaemia Mukt Bharat (AMB) Strategy.

About Anaemia Mukt Bharat (AMB) Strategy

• **About:** The Government of India implements Anaemia Mukt Bharat (AMB) strategy under POSHAN Abhiyaan with the target for reducing anaemia among Indian people.

• **Mandate:** The Anemia Mukt Bharat strategy has been designed to reduce prevalence of anemia by 3% points per year among children, adolescents and women in the reproductive age group (15–49 years), between the year 2018 and 2022.

• **6X6X6 strategy:** Government aims to provide preventive and curative mechanisms through a 6X6X6 strategy including six target beneficiaries, six interventions and six institutional mechanisms for all stakeholders to implement the strategy.

• **Target Groups:** Anaemia Mukt Bharat (AMB) Strategy aims to reduce anaemia in the six population groups –

o Children (6-59 months),
o Children (5-9 years),
o Adolescents girls and boys (10-19 years),
o Pregnant women,
o Lactating women and
o Women of Reproductive Age (WRA) group (15-49 years) in life cycle approach.

• **Implementing Ministry:** Ministry of Health and Family Welfare is implementing the Anaemia Mukt Bharat (AMB) Strategy.

• **Implementation Areas:** The Anemia Mukt Bharat strategy will be implemented in all villages, blocks, and districts of all the States/UTs of India.

o Implementation will be done through existing delivery platforms as envisaged in the National Iron Plus Initiative (NIPI) and Weekly Iron Folic Acid Supplementation (WIFS) programme.

Status of Anaemia in India

• As per the fifth round of National Family Health Survey (NFHS), conducted by MoHFW during the year 2019-21, the prevalence of anaemia is -

o 25.0 percent in men (15-49 years)
o 57.0 percent in women (15-49 years)
o 31.1 percent in adolescent boys (15-19 yrs),
o 59.1 percent in adolescent girls,
o 52.2 percent in pregnant women (15-49 years) and
o 67.1percent in children (6-59 months).

• Thirteen (13) States/UTs have reported decline in prevalence of anaemia among women age 15-49 in NFHS-5 as compared to NFHS-4. Name of these States/UTs are-

o Andhra Pradesh,
o Andaman and Nicobar Island,
o Arunachal Pradesh,
o Chandigarh,
o Dadra and Nagar Haveli and Daman and Diu,
o Haryana,
o Himachal Pradesh,
o Lakshadweep,
o Meghalaya,
o NCT of Delhi,
o Tamil Nadu,
o Uttar Pradesh and
o Uttarakhand

Major Interventions by Government under AMB Strategy

• Prophylactic Iron and Folic Acid Supplementation.
• Deworming.
• Intensified year-round Behaviour Change Communication (BCC) Campaign and delayed cord clamping.

- Testing of anaemia using digital methods and point of care treatment.
- Addressing non-nutritional causes of anaemia in endemic pockets with special focus on malaria, hemoglobinopathies and fluorosis.
- Convergence and coordination with line department and other ministries.
- Engaging National Centre of Excellence and Advanced research on Anaemia Control for capacity building of health care providers.
- Monitoring progress in States/UTs using Anaemia Mukt Bharat Dashboard.

Drug Trafficking and National Security

Recently, National Conference on Drug Trafficking and National Security was held at Chandigarh by the Union government.

Drug Trafficking and National Security

- **About**: National Conference on Drug Trafficking and National Security is organized to generate awareness about drug trafficking and its impact, especially on national security.
- **Chairperson:** National Conference on 'Drug Trafficking and National Security' was held under the chairmanship of the Union Home Minister Shri Amit Shah.
- **Nasha Mukt Bharat Abhiyaan (NMBA) Awards:** It was given by Union Home Minister for best three performing -
  o **NMBA States** namely Madhya Pradesh first position, Jammu Kashmir second position and Gujarat third position and
  o **NMBA Districts** namely Datia first position, Thoubal second position and Chandigarh at third position.

NAVCHETNA Modules launched

- Two modules from class 6 to 8 and class 9 to 11 of Navchetna (A New Consciousness on Life Skills and Drug Education for School Children) were launched.
- NAVCHETNA is basically a teacher training modules and will increase awareness and education on life skills and drugs among students in schools in India.

- Further strengthening the reach and impact of NAVCHETNA, the training materials is being translated into 12 regional languages of India.
- As a teacher support aid, each module will be available as a video to be uploaded on the DIKSHA portal (Digital educational platform of Ministry of Education).
- The Ministry has set a target to generate awareness among 10 lakh Teachers and 2.4 crore Students through Navchetna Modules in a year.

Narcotics Control Bureau (NCB)- Key Points

- **About Narcotics Control Bureau**: NCB was constituted by the government in 1986 as per the provisions of the Narcotic Drugs and Psychotropic Substances Act, 1985.
  o Headquarter: New Delhi.
- **Parent Ministry:** Narcotics Control Bureau functions under the overall supervision of the Ministry of Home Affairs.
- **Mandate of Narcotics Control Bureau:** constituted for taking measures with respect to such matters under the Narcotic Drugs and Psychotropic Substances Act as may be specified by the Central Government, subject to the supervision and control of the Central Government.
- **Constitutional Backing:** The National Policy on Narcotic Drugs and Psychotropic Substances is based on the Directive Principles, contained in Article 47 of the Indian Constitution.
  o **Article 47:** It directs the State to endeavor to bring about prohibition of the consumption, except for medicinal purposes, of intoxicating drugs injurious to health.
- **International Obligations**: India is a signatory to various international conventions and protocols, mandating effective implementation of various drug-related issues. They are-
  o Convention on Narcotic Drugs 1961, as amended by the 1972 Protocol,
  o Conventions on Psychotropic Substances, 1971 and
  o United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988.

Environment & Biodiversity

Ethanol Blending

> Prime Minister Narendra Modi announced that India has achieved its target of blending 10% sugarcane-extracted ethanol in petrol, ahead of schedule while addressing the nation from the Red Fort on the 76th Independence Day.

About Ethanol Blending

- Blending ethanol with petrol to burn less fossil fuel while running vehicles is called ethanol blending.
- Ethanol is an agricultural by-product which is mainly obtained from the processing of sugar from sugarcane, but also from other sources such as rice husk or maize.
- Currently, 10% of the petrol that powers your vehicle is ethanol.
- Though we have had an E10 — or 10% ethanol as policy for a while, it is only this year that we have achieved that proportion.
- India's aim is to increase this ratio to 20% originally by 2030 but in 2021, when NITI Aayog put out the ethanol roadmap, that deadline was advanced to 2025.

Significance

- Ethanol blending will help bring down our share of oil imports (almost 85%) on which we spend a considerable amount of precious foreign exchange.
- More ethanol output would help increase farmers' incomes.
- The NITI Aayog report of June 2021 says, "India's net import of petroleum was 185 million tonnes at a cost of $55 billion in 2020-21," and that a successful ethanol blending programme can save the country $4 billion per annum.

First Generation and Second-Generation Ethanol

- With an aim to augment ethanol supplies, the government has allowed procurement of ethanol produced from other sources besides molasses — which is first generation ethanol or 1G.
- Ethanol can be extracted from materials such as rice straw, wheat straw, corn cobs, corn stover, bagasse, bamboo and woody biomass, which are second generation ethanol sources or 2G.

World Scenario

Though the U.S., China, Canada and Brazil all have ethanol blending programmes, as a developing country, Brazil stands out. It had legislated that the ethanol content in petrol should be in the 18-27.5% range, and it finally touched the 27% target in 2021.

India's Goal

- At the time of the NITI Aayog report in June last year, the industry had committed to the government to make all vehicles E20 material compliant by 2023.
- This meant that the petrol points, plastics, rubber, steel and other components in vehicles would need to be compliant to hold/store fuel that is 20% ethanol.
- Without such a change, rusting is an obvious impediment
- Society of Indian Automobile Manufacturers says that the industry has committed to becoming E20 engine compliant by 2025, which means that engines would need to be tweaked so as to process petrol which has been blended with 20% ethanol.
- Even though the industry is recovering from the economic losses bought on by the pandemic, it is bound to make some change to comply with India's promise for net-zero emissions by 2070.

Challenges

- Optimization of engine for higher ethanol blends and the conduct of durability studies on engines and field trials before introducing E20 compliant vehicles.

- Storage is going to be the main concern, for if E10 supply has to continue in tandem with E20 supply, storage would have to be separate which then raises costs.
- It does not reduce the emission of another key pollutant – nitrous oxide.
- The water needed to grow crops for ethanol is another debating point- a litre of ethanol from sugar requires 2,860 litres of water.
- Given the uncertainty about future production, India may not find it easy to simultaneously strengthen domestic food supply systems, set aside adequate stocks for lean years, maintain an export market for grains, and divert grain to ethanol at the expected rate in coming years, and this is an issue that warrants continued monitoring

New Ramsar Sites

Recently, 10 more Indian wetlands were designated as wetlands of international importance (Ramsar sites), as part of Ramsar Convention.

- Few days earlier, five new Indian wetland sites were also recognised as wetlands of international importance, as part of the Ramsar Convention.
- So far, 64 wetlands covering an area of 12,50,361 ha have been designated as Ramsar Sites of International Importance from India.

Key Details

- **About:** The 10 newly added Ramsar sites in India include-
  - o Six in Tamil Nadu
  - o One in Goa,
  - o One in Odisha,
  - o One in Madhya Pradesh and
  - o One in Karnataka (First Ramsar Designated Wetland in the State).

- **Significance:** Designation of these new Indian sites as Ramsar Sites would help in the conservation and management of wetlands and the wise use of their resources.

	Name of wetland	Area in Ha	State
1	Koonthankulam Bird Sanctuary	72.04	Tamil Nadu
2	Satkosia Gorge	98196.72	Odisha
3	Nanda Lake	42.01	Goa
4	Gulf of Mannar Marine Biosphere Reserve	52671.88	Tamil Nadu
5	Ranganathituu BS	517.70	Karnataka
6	Vembannur Wetland Complex	19.75	Tamil Nadu
7	Vellode Bird Sanctuary	77.19	Tamil Nadu
8	Sirpur wetland	161	Madhya Pradesh
9	Vedanthangal Bird Sanctuary	40.35	Tamil Nadu
10	Udhayamarthandapuram Bird Sanctuary	43.77	Tamil Nadu

Criteria for Designating a Wetland as Ramsar Site

As per Ramsar Convention, a wetland should be considered wetlands of international importance (Ramsar sites) based on the following criteria:

- **Criterion 1:** it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.
- **Criterion 2:** it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.
- **Criterion 3:** it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.

- **Criterion 4:** it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.
- **Criterion 5:** it regularly supports 20,000 or more waterbirds.
- **Criterion 6:** it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.
- **Criterion 7:** it supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.
- **Criterion 8:** it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.
- **Criterion 9:** it regularly supports 1 per cent of the individuals in a population of one species or subspecies of wetland-dependent non-avian animal species.

What are wetlands?
- According to WWF, a wetland is a place where the land is covered by water, either salt, fresh or somewhere in between.
- Marshes and ponds, the edge of a lake or ocean, the delta at the mouth of a river, low-lying areas that frequently flood—all of these are wetlands.

About Ramsar convention
- The Ramsar Convention on Wetlands is **the oldest** of the modern global intergovernmental environmental agreements.
- The treaty was negotiated through the 1960s by countries and non - governmental organizations concerned about the increasing loss and degradation of wetland habitat for migratory waterbirds.
- It was adopted in the Iranian city of Ramsar in 1971 and **came into force in 1975**.
- Since then, the Convention on Wetlands has been known as the Ramsar Convention.

- The Contracting Parties approved the **Fourth Strategic Plan for 2016-2024** at COP12.
- Ramsar Convention's broad aims are to **halt the worldwide loss of wetlands** and to conserve, through wise use and management, those that remain.

India's Nationally Determined Contribution (NDC)

Recently, the Union Cabinet chaired by the Prime Minister Shri Narendra Modi, has approved India's updated Nationally Determined Contribution (NDC) towards global response to climate change.
- The updated NDC will be communicated to be communicated to the United Nations Framework Convention on Climate Change

India's Updated Nationally Determined Contribution (NDC)
- **Background:** At Glasgow Summit (COP 26 of UNFCCC), Indian Prime Minister had announced intensifying India's climate action through five targets termed as "Panchamrit".
  o This update to India's existing NDC translates the 'Panchamrit' announced at COP 26 into enhanced climate targets.
- **Updated NDC (Panchamrit):** In order to curb the climate change, India aims to-
  o Reach non-fossil energy capacity of 500 GW by 2030,
  o Meet 50% of its energy requirements from renewable energy by 2030.
  o Reduce total projected carbon emissions by 1 billion tonne
  o Reduce carbon intensity of the economy to less than 45% by 2030 and
  o Achieve net zero carbon emission by 2070.
- **Implementation:** India's updated NDC will be implemented over the period 2021-2030 through programs and schemes of relevant Ministries /departments and with due support from States and Union Territories.
- **Significance:** The updated NDC seeks to enhance India's contributions towards achievement of the

strengthening of global response to the threat of climate change, as agreed under the Paris Agreement.

o Such action will also help India usher in low emissions growth pathways.

o It would protect the interests of the country and safeguard its future development needs based on the principles and provisions of the UNFCCC.

o The updated NDC also represents the framework for India's transition to cleaner energy for the period 2021-2030.

India's Efforts towards Updated NDC

- **LIFE Style Movement:** 'LIFE'– 'Lifestyle for Environment' is a mass movement announced by India at Glasgow Summit of UNFCCC as a key to combating climate change".

  o The vision of LIFE is to live a lifestyle that is in tune with our planet and does not harm it.

  o India's updated NDC also captures this citizen centric approach to combat climate change.

- **PLI Schemes:** Government provides tax concessions and incentives such as Production Linked Incentive scheme for promotion of manufacturing and adoption of renewable energy.

  o It will provide an opportunity for enhancing India's manufacturing capabilities and enhancing exports.

- **National Green Hydrogen Policy:** ministry of new and renewable energy came up with the National Green Hydrogen Policy and a comprehensive green hydrogen mission is in the works.

- Government has launched the national portal for rooftop solar to enable online tracking of installation of rooftop solar plants.

  o Further, it would come up with bids for 4GW of offshore wind energy, along with providing incentives to attract investors in the segment.

- The Net Zero target by 2030 by Indian Railways alone will lead to a reduction of emissions by 60 million tonnes annually.

- Similarly, India's massive LED bulb campaign is reducing emissions by 40 million tonnes annually.

India's NDC 2015 in Paris Agreement

- India has pledged to reduce emissions intensity per unit GDP by **33-35% of 2005 levels**.
- India aims to **reach 40% of installed capacity** from non-fossil fuels.
- India targets **175 GW of renewable energy** generation by 2022.
- India plans to enlarge forest cover to absorb **5 billion tonnes worth** of carbon dioxide.
- India will **reduce dependence on fossil fuels** through levies and reduction in subsidies.
- India exhorted on the principles of **equity and differentiated responsibilities**.
- India expects developed countries to **mobilize 100 billion US dollars** annually by 2020 for mitigation and adaptation in developing countries.

Endosulfan Crisis

The Supreme Court on Thursday directed the Kasargod District Legal Services Authority in Kerala to inspect the medical and palliative care facilities provided to endosulfan victims.

About EndoSulfan
• Endosulfan is an organochlorine insecticide which was first introduced in the first half of 20th century and is commonly known as Thiodan.
• It is usually sprayed on crops like cotton, cashew, fruits, tea, paddy, tobacco etc. for control of pests such as whiteflies, aphids, beetles, worms etc.

Impact of Endosulfan

- Endosulfan in the environment gets accumulated in food chains causing problems.
- Endosulfan in water absorbs to the sediment and may bioconcentrate in aquatic organisms.
- The Endosulfan ingestion results in such as physical deformities, cancer, birth disorders and damage to the brain and nervous system.

Ban on Endosulfan

- The Supreme Court in India has banned the manufacture, sale, use, and export of

endosulfan throughout the country, citing its harmful health effects in 2015.
- Endosulfan is listed under both Rotterdam Convention on the Prior Informed Consent and the Stockholm Convention on Persistent Organic Pollutants.

Rotterdam convention, 1998
- The convention aims to promote cooperation and responsibility sharing measures amongst different countries dealing with trade in hazardous chemicals and pesticides.
- PIC, Prior Informed Consent is the main feature of the convention and is legally binding on the party members.
- PIC facilitates information exchange about nature and trade-related information amongst the party members.
- The Convention creates obligations for the implementation of the Prior Informed Consent (PIC) procedure.

Stockholm convention, 2001
- The convention aims to reduce the concentration of persistent organic pollutants (POPs) which are chemical substances that not only remain in the atmosphere for longer periods but also possess the ability to bio-accumulate.
- The convention listed 12 POPs as 'dirty dozen'.

Cloudbursts and its rise in India

Over 20 people have been killed in destruction caused by cloudbursts and flash floods in different parts of Himachal Pradesh and Uttarakhand over the last three days.
- Isolated areas in these two states have reported heavy rainfall during this time, triggering landslides and flash floods that have disrupted rail and road traffic, and resulted in house and wall collapses.

About Cloudbursts
• A cloudburst is a localized but intense rainfall activity.
• Short spells of very heavy rainfall over a small geographical area can cause widespread destruction, especially in hilly regions where this phenomenon is the most common.
• Not all instances of very heavy rainfall, however, are cloudbursts.
• A cloudburst has a very specific definition: Rainfall of 10 cm or more in an hour over a roughly 10 km x 10-km area is classified as a cloudburst event.
• By this definition, 5 cm of rainfall in a half-hour period over the same area would also be categorized as a cloudburst.

How is it different from normal rainfall?
- To put this in perspective, in a normal year, India, as a whole, receives about 116 cm of rainfall over the entire year.
- This means if the entire rainfall everywhere in India during a year was spread evenly over its area, the total accumulated water would be 116 cm high.
- Though there are regional variations yet, any place in India can be expected to receive about 116 cm of rain in a year.
- During a cloudburst event, a place receives about 10% of this annual rainfall within an hour.

How common are cloudbursts?
- Cloudbursts are not uncommon events, particularly during the monsoon months.
- Most of these happen in the Himalayan states where the local topology, wind systems, and temperature gradients between the lower and upper atmosphere facilitate the occurrence of such events though not every event that is described as a cloudburst is actually, by definition, a cloudburst as these events are highly localized.
- They take place in very small areas which are often devoid of rainfall measuring instruments.
- The consequences of these events, however, are not confined to the small areas.

- The heavy rainfall events often trigger landslides and flash floods, causing extensive destruction downstream because of the nature of terrain and as a result of this, every sudden downpour that leads to destruction of life and property in the hilly areas gets described as a "cloudburst", irrespective of whether the amount of rainfall meets the defining criteria.
- At the same time, it is also possible that actual cloudburst events in remote locations are not recorded.

Can cloudbursts be forecast?
- The India Meteorological Department forecasts rainfall events well in advance, but it does not predict the quantum of rainfall — in fact, no meteorological agency does.
- The forecasts can be about light, heavy, or very heavy rainfall, but weather scientists do not have the capability to predict exactly how much rain is likely to fall at any given place.
- Additionally, the forecasts are for a relatively large geographical area, usually a region, a state, a meteorological sub-division, or at best a district.
- As they zoom in over smaller areas, the forecasts get more and more uncertain.
- Theoretically, it is not impossible to forecast rainfall over a very small area as well, but it requires a very dense network of weather instruments, and computing capabilities that seem unfeasible with current technologies.
- As a result, specific cloudburst events cannot be forecast.
- No forecast ever mentions a possibility of a cloudburst instead there are warnings for heavy to very heavy rainfall events, and these are routinely forecast four to five days in advance.
- Possibility of extremely heavy rainfall, which could result in cloudburst kind of situations, are forecast six to 12 hours in advance.

Increasing Incidents of Cloudbursts
- There is no long-term trend that suggests that cloudbursts, as defined by the IMD, are rising however, the incidents of extreme rainfall, as also

other extreme weather events, are increasing — not just in India but across the world.
- While the overall amount of rainfall in India has not changed substantially, an increasing proportion of rainfall is happening in a short span of time which means that the wet spells are very wet, and are interspersed with prolonged dry spells even in the rainy season.
- This kind of pattern, attributed to climate change, does suggest that cloudburst events might also be on the rise.

<div style="text-align:center">Green Finance</div>

> Inclusion of climate change and green finance in policy is crucial for a strong economy.

About Green Finance
- Green finance is a phenomenon that combines the world of finance and business with environment friendly behaviour.
- It may be led by financial incentives, a desire to preserve the planet, or a combination of both.
- In addition to demonstrating proactive, environment friendly behaviour, such as promoting of any business or activity that could be damaging to the environment now or for future generations.

Green Finance Instruments
- A **"green super fund"** could be established to jumpstart green investments by pooling together international and domestic capital.
- Sovereign green bond (SGB): The sovereign green bond is a novel idea. It will be a part of the government's borrowing programme. The gross borrowing programme of the government is pegged at Rs 14.95 lakh crore. The SGB (sovereign green bond) raised will be part of the aggregate borrowing programme and has to be used for projects which are ESG (environment, social and governance) compliant.

Network for Greening the Financial System

- The Network for Greening the Financial System is a network of 114 central banks and financial supervisors that aims to accelerate the scaling up of green finance and develop recommendations for central banks' role for climate change.
- The NGFS was created in 2017 and its secretariat is hosted by the Banque de France.
- The Network's purpose is to help strengthening the global response required to meet the goals of the Paris agreement and to enhance the role of the financial system to manage risks and to mobilize capital for green and low carbon investments in the broader context of environmentally sustainable development.

Significance

- Reaching net-zero emissions and other climate-related and environmental goals will require significant investments to enable decarbonization and innovation across all sectors of the economy. Greening the financial system is key to making these investments happen.
- Green finance initiatives also aim to achieve the 2030 Sustainable Development Goals (SDGs), shifting the focus from creating value for shareholders (economic) to creating value for stakeholders (economic, environmental, and social).
- As we begin to recover from the pandemic, green finance presents a huge opportunity to build back with a greener future, creating new businesses and jobs.

- Supports strong and green growth in all sectors of economy.

Issues with Green Finance

- The return on green finance is long term, low in monetary value & many times intangible, so that the ability of the financial system to mobilize private green finance, especially in developed countries is difficult.
- Developing countries like India have challenges of development & poverty alleviation, so allocation of resources towards meeting fundamental needs & promoting the green projects which require heavy investment is a challenge.
- In many countries, green finance & much of the green projects are limited to the investment in renewable energy
- India requires greening of coal technology which is mostly limited to private players in developed countries and is subjected to IPR.
- Green bonds are perceived as new and attach higher risk and their tenure is also shorter. There is a need to reduce risks to makes them investment grade.

Way Ahead

Our future depends on how we resolve our environmental challenges.

Further, we are the world's third-largest carbon emitter and will play a crucial role in getting the planet to a low-carbon trajectory. Simply put, we must urgently transform our economy to get to the green frontier.

Science and Technology

West Nile Virus

Recently, the New York City Health Department announced that the West Nile virus had been detected in two people, one in Brooklyn and another in Queens, as well as in a "record number" of infected mosquitoes throughout the city.

- A total of 54 cases and four deaths have been reported throughout the country this year, according to the health department's announcement.

Key Facts about West Nile virus

- **About:** The West Nile virus is spread through a bite from an infected mosquito and can infect humans, birds and other mammals.
- **Host and Carrier:** Birds are the main host of the virus and mosquitoes become infected by biting birds, according to the CDC.
  - West Nile virus cannot be spread from person to person through casual contact.
- **Symptoms:** Most people who are infected by West Nile virus do not develop any symptoms or may experience mild to moderate illness.
  - According to CDC, about 1 in 5 develop a fever, along with other symptoms like headaches, body aches, joint pains, diarrhea, vomiting or a rash.
  - About 1 in 150 people infected develop severe illness affecting the central nervous system.
  - Symptoms include high fever, headaches, neck stiffness, disorientation, coma, vision loss or paralysis.
- **Diagnosis:** A blood test can be conducted to determine a West Nile infection.
- **Treatment:** There are no vaccines or medicines that specifically treat West Nile virus infections.
  - Over-the-counter pain relievers can be used to help with some symptoms and hospitalization may be necessary for more severe cases.
- **Recovery:** Recovery from a severe case of West Nile can take anywhere from several weeks to

months, but central nervous system damage can be permanent.

West Nile Virus Transmission Cycle
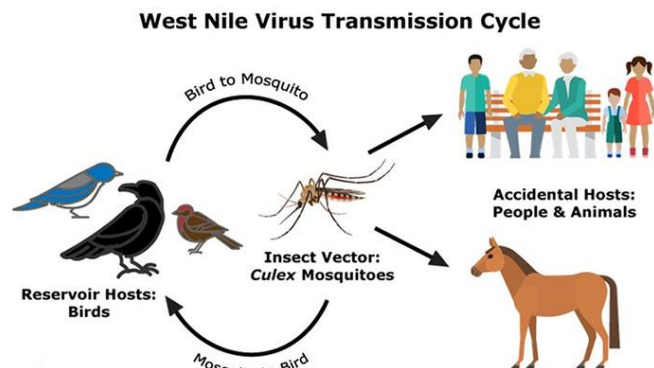
West Nile Virus- Measures to Reduce Infections

- **Using Insect Repellents:** The New York City Health Department suggests using approved insect repellents that contain picaridin, which can be applied directly on skin and clothing.
- **Limiting Outdoor Activities:** Mosquitoes are most active from April to October, so limiting outdoor activities during those seasons particularly at dawn and dusk can also reduce the risk of contracting the virus.
  - When outdoors, wear protective clothing during the evenings.
  - During the day, avoid dark-coloured clothing, shaded areas where mosquitoes lay eggs, and any perfumes, colognes and scented body lotions.
- **Eliminating Mosquito Breeding Areas:** People and government officials must actively eliminate mosquito breeding areas such as areas with standing water where they can breed.

Polio Virus

Recently, Polio, a deadly disease, is found to be spreading in London, New York and Jerusalem for the first time in decades, spurring catch-up vaccination campaigns.

- Vaccine-derived polio was detected in wastewater in the British capital, London, and in New York in the United States, with one case of paralysis reported in New York state.

- Genetically similar virus has also been found in Jerusalem, Israel, and scientists are working to understand the link.

Causes of Recent Polio Outbreak

- **After COVID Travel:** While countries including the Britain and the United States no longer use Polio live vaccine.
  - However, other countries do use live polio vaccine to stop outbreaks which allows for global spread, particularly as people began to travel again after COVID-19.
- **Under-Vaccinated Population:** experts agree that the major driver behind both vaccine-derived and wild polio outbreaks remains under-vaccinated populations.
- **COVID-19 & Vaccine Hesitancy:** According to UN, Vaccine hesitancy was a growing problem before the pandemic, then COVID-19 caused the worst disruption to routine immunization in a generation.
  - In 2020, there were 1,081 vaccine-derived polio cases, around three times as many as the previous year.
  - In 2022 so far, there have been 177 cases, after major efforts to get polio vaccination campaigns back on track.

About Polio

- **About:** Polio is a deadly viral infectious disease that used to paralyze tens of thousands of children every year by affecting nervous system of the patient.
- **Polio Type:** Polio can be categorized following three immunologically distinct wild poliovirus strains-
  - Wild Poliovirus type 1 (WPV1)
  - Wild Poliovirus type 2 (WPV2)
  - Wild Poliovirus type 3 (WPV3)
- **Symptoms:** Affecting mainly children under five, Polio is often asymptomatic but can also cause symptoms including fever and vomiting.
- **Impact:** Around one in 200 infections leads to irreversible paralysis, and among those patients, up to 10% die.

- **Prevention and Cure:** There is no cure of Polio, but since a vaccine was found in the 1950s, polio is entirely preventable.
- **Present Status:** Globally, the wild form of the disease has almost disappeared.
  - Afghanistan and Pakistan are now the only countries where the highly infectious disease, spread mainly through contact with faecal matter, remains endemic.
  - But this year, imported cases were also found in Malawi and Mozambique, the first in those countries since the 1990s.
- **Polio in India:** After three years of zero cases, India received polio-free certification by the WHO in 2014.
  - The last case due to wild poliovirus in the country was detected on 13th January 2011.
  - Pulse Polio Campaign is considered as the major Indian initiative that led to elimination of Polio in India.

North Eastern Space Applications Centre (NESAC)

Union government informed that the North Eastern Space Applications Centre (NESAC), Shillong will execute 110 projects in Eight North Eastern States by 2024.

- NESAC has coordinated preparation of Plan of Actions (PoA) by the Nodal Departments of the eight States.
- These projects are in the domains of Agriculture, Water Resources, Forestry & Ecology, Planning & Development, UAV Remote Sensing and Disaster Management Support, with joint funding from MoDONER, DoS and State Governments.

About North Eastern Space Applications Centre (NESAC)

- **About:** NESAC was established in 2000 to provide space technology inputs and services for the development of the North Eastern Region.

- **Establishment:** North Eastern Space Applications Centre (NESAC) was established by Department of Space jointly with North Eastern Council (NEC).
- NESAC is a society registered under the Meghalaya Societies Registration Act, 1983.
- **Mandate:** NESAC has mandate to develop high technology infrastructure support to play the catalytic role in holistic development of NER of India by providing space science and technology support.

Objectives of North Eastern Space Applications Centre (NESAC)

- To provide an operational remote sensing and geographic information system aided natural resource information base to support activities on development / management of natural resources and infrastructure planning in the region.
- To provide operational satellite communication applications services in the region in education, health care, disaster management support, and developmental communication.
- To take up research in space and atmospheric science area and establish an instrumentation hub and networking with various academic institutions of NER.
- To enable single window delivery of all possible space based support for disaster management.
- To set up a regional level infrastructure for capacity building in the field of geospatial technology.

North Eastern Space Applications Centre (NESAC)- Key Achievements

NESAC has developed and achieved following major milestones for the North Eastern Region including-

- Implementation of North Eastern Spatial Data Repository (NeSDR)
- Identification of potential areas for development of sericulture & horticulture,
- Remote Sensing based forest working plans & river atlas,

- Geospatial system for monitoring MoDONER sponsored projects & survey of Record of Forest Rights (RoFR),
- Flood Early Warning System (FLEWS) for Assam, and
- Training & capacity building, including for professionals from BIMSTEC region
- Satellite imaging-based inputs to support settling of border disputes between North Eastern States undertaken as per suggestion of MHA.

National Intellectual Property Awareness Mission (NIPAM)

Recently, government informed that National Intellectual Property Awareness Mission (NIPAM) has achieved target of imparting Intellectual Property (IP) awareness and basic training to 1 million students on 31st July 2022.
- The target of NIPAM was achieved ahead of the deadline which was 15 August 2022.

About National Intellectual Property Awareness Mission (NIPAM)

- **About:** NIPAM, a flagship program to impart IP awareness and basic training, was launched on 8 Dec 2021 as a part of "Azadi Ka Amrit Mahotsav" celebrations.
- **Mandate:** To contribute towards building an Aatmanirbhar Bharat by participating in Government of India's initiative 'Azadi Ka Amrit Mahotsav', and thereby under this Mission generating IP awareness among one million students across the country.
- **Implementation:** The NIPAM program is being implemented by Intellectual Property Office, the Office of Controller General of Patents, Designs and Trade Marks (CGPDTM), Ministry of Commerce and Industry.
- **Target group:** The NIPAM Mission targeted students at two levels as follows:

- o Level A - Schools (Class 9th to 12th)
- o Level B - Universities / Colleges
- **Performance:** During the period 08 December 2021 to 31st July 2022, the following milestones were achieved under NIPAM Program:
  - o No. of participants (students/faculty) trained on IP = 10, 05, 272
  - o Educational institutes covered = 3662
  - o Geographical coverage = 28 states and 7 Union Territories
- **Significance:**
- IP awareness is essential to ensure that the intellectual capital being generated in the country gets due recognition and protection, so that the IP creators can enjoy the benefits emanating therefrom.

NIPAM Program- Way Forward

- The government should strengthen the NIPAM program further to nurture and encourage innovation and creativity.
- This will be contributing towards cultural and economic development of the society through a revamped manner utilizing the existing resources of the IP Office in collaboration with Atal Innovation Mission (AIM), AICTE, UGC etc.

National CSR Awards 2022

Recently, Ministry of Corporate Affairs, Government of India, announced winners and honourable mentions for National CSR Awards 2020.
- 20 award winners and 17 Honourable Mentions across the three award categories have been selected for the National CSR Awards 2020.

About National CSR Awards

- **About:** the annual National Corporate Social Responsibility (CSR) Awards was constituted to recognize companies that have made positive impact on the society through their innovative & sustainable CSR initiatives.
  - o National CSR Awards are the apex national level recognition by the Government of India.
- **Associated Ministry:** The Ministry of Corporate Affairs, Government of India instituted National CSR Awards.
- **Key Objective:** The CSR awards seek to infuse excellence in CSR interventions undertaken by corporates in pursuance of Section 135 of the Companies Act, 2013.
- **National CSR Awards Categories:** Upto 20 awards and equal numbers of Honourable Mentions are conferred each year in three main categories, namely-
  - o Corporate Awards for Excellence in CSR,
  - o CSR Awards for CSR in Aspirational Districts / Difficult Terrains and
  - o CSR Awards for contribution in National Priority Areas.
- **First National CSR Awards:** First National CSR Awards were conferred on 29 October 2019 by His Excellency President of India in a ceremonial function held at the Vigyan Bhawan, New Delhi.
  - o There were total 19 winners and equal numbers of Honourable Mentions in different sub-categories of the award in the first cycle.
  - o National CSR Awards 2020 were got delayed due to COVID related lockdown and constraints.

National CSR Awards Categories

- **Corporate Awards for Excellence in CSR:** These are for recognition to a company based on total eligible CSR spend.
- **CSR Awards for CSR in Aspirational Districts / Difficult Terrains:** These are given for the recognition to a company based on their CSR efforts in Aspirational Districts, difficult terrains/ disturbed areas, challenging circumstances etc.
- **CSR Awards for contribution in National Priority Areas:** Awards in this category are chosen based on contribution of CSR projects in National Priority Areas.
- One Award in each of the three main categories is reserved for MSME.

Forever Chemicals

A recent study published in Environment Science and Technology has found that rainwater from many places across the globe is contaminated with "per- and polyfluoroalkyl substances," (PFAs).

- PFAs are also called "forever chemicals" because of their tendency to stick around in the atmosphere, rainwater and soil for long periods of time.

Forever Chemicals: Per- and Polyfluoroalkyl Substances (PFAs)
• **About:** According to the US Centre for Disease Control and Prevention (CDC), PFAs are man-made chemicals used to make non-stick cookware, water-repellent clothing, stain-resistant fabrics, cosmetics, firefighting forms and many other products that resist grease, water and oil.
• **Environmental Hazard:** PFAs can migrate to the soil, water and air during their production and use.
o Since most PFAs do not break down, they remain in the environment for long periods of time.
o Some of these PFAs can build up in people and animals if they are repeatedly exposed to the chemicals.

Harmful Effects on Human Health

- The United States Environmental Protection Agency (EPA) lists a variety of health risks that are attributed to PFA exposure, including-
  - o Decreased fertility,
  - o Developmental effects in children,
  - o Interference with body hormones,
  - o Increased cholesterol levels and
  - o Increased risk of some cancers.
- Recent research has also revealed that long-term low-level exposure to certain PFAs can make it difficult for humans to build antibodies after being vaccinated against various diseases.

Can PFAs be found in the rainwater in India?

- While the recently published research article did not include studies of samples collected in India, the nature of PFAs and the wide geographical breadth of samples and the nature of PFAs means that the results can be extrapolated to India.

Can Forever Chemicals be Destroyed?

- While there is no known method that can extract and remove PFAs from the atmosphere itself, there are many effective, albeit expensive, methods to remove them from rainwater that has been collected through various rainwater harvesting methods.
- One way to do this would be to use a filtration system with activated carbon. The activated carbon will need to be removed and replaced regularly.
  - o Also, the old contaminated material must be destroyed.

Facial Recognition Technology

Right to Information (RTI) responses received by the Internet Freedom Foundation, a New-Delhi based digital rights organization, reveal that the Delhi Police treats matches of above 80% similarity generated by its facial recognition technology (FRT) system as positive results.

About facial recognition

- Facial recognition is an algorithm-based technology which creates a digital map of the face by identifying and mapping an individual's facial features, which it then matches against the database to which it has access.
- It can be used for two purposes: first- 1:1 verification of identity wherein the facial map is obtained for the purpose of matching it against the person's photograph on a database to authenticate their identity. For example, 1:1 verification is used to unlock phones.

- However, increasingly it is being used to provide access to any benefits or government schemes.
- Secondly, there is the 1: n identification of identity wherein the facial map is obtained from a photograph or video and then matched against the entire database to identify the person in the photograph or video.
- Law enforcement agencies such as the Delhi Police usually procure FRT for 1: n identification.
- For 1: n identification, FRT generates a probability or a match score between the suspect who is to be identified and the available database of identified criminals.
- A list of possible matches is generated on the basis of their likelihood to be the correct match with corresponding match scores.
- However, ultimately it is a human analyst who selects the final probable match from the list of matches generated by FRT. According to Internet Freedom Foundation's Project Panoptic, which tracks the spread of FRT in India, there are at least 124 government authorised FRT projects in the country.

Why is the use of FRT harmful?

- India has seen the rapid deployment of FRT in recent years, both by the Union and State governments, without putting in place any law to regulate their use.
- The use of FRT presents two issues: issues related to misidentification due to inaccuracy of the technology and issues related to mass surveillance due to misuse of the technology.
- Extensive research into the technology has revealed that its accuracy rates fall starkly based on race and gender which can result in a false positive, where a person is misidentified as someone else, or a false negative where a person is not verified as themselves.
- Cases of a false positive result can lead to bias against the individual who has been misidentified.
- On the other hand, cases of false negative results can lead to exclusion of the individual from accessing essential schemes which may use FRT as means of providing access.
- At present, India does not have a data protection law or a FRT specific regulation to protect against misuse.

- In such a legal vacuum, there are no safeguards to ensure that authorities use FRT only for the purposes that they have been authorized to.
- FRT can enable the constant surveillance of an individual resulting in the violation of their fundamental right to privacy.

Issues to Solve

- Extensive research into FRT has revealed that its accuracy rates fall starkly based on race and gender.
- This can result in a false positive, where a person is misidentified as someone else, or a false negative where a person is not verified as themselves.
- The technology can also be used as a tool to facilitate state sponsored mass surveillance.

Way Forward

- Data is a valuable resource that should not be left unregulated and thus, the time is ripe for India to have a robust data protection regime.
- It is time that required amendments are made in the Personal Data Protection Bill, 2019 so that it ensures that it focuses on user rights with an emphasis on user privacy.
- The government would also have to respect the privacy of the citizens while strengthening the right to information.
- Technological advancement made in the last decade also needs to be addressed knowing that they have the capacity of making the law redundant.

Hydrogen Fuel Cell Bus

Recently, Union Minister Dr Jitendra Singh unveiled India's first truly indigenously developed Hydrogen Fuel Cell Bus developed by **KPIT-CSIR in Pune**.
- **India's first truly indigenously developed Hydrogen Fuel Cell Bus** is in tune with PM Modi's National Green Hydrogen Mission.

Associated Benefits of Hydrogen Fuel Cell Bus

- **Environmentally Sustainable:** Fuel cell utilizes Hydrogen and Air to generate electricity to power the bus and the only effluent from the bus is water, therefore making it possibly the most environmentally friendly mode of transportation.
  - o For comparison, a single diesel bus plying on long distance routes typically emits 100 tons of CO_2 annually and there are over a million such buses in India.
- **Cheaper Mode of Travel:** High efficiency of fuel cell vehicles and the high energy density of hydrogen ensures that the operational costs in rupees per kilometre for fuel cell trucks and buses are lower than diesel powered vehicles.
  - o Low cost of running the Hydrogen Fuel Cell Bus can bring freight revolution in India.
- **Zero Green House Emission:** Hydrogen Fuel Cell Bus vehicles also give zero green-house gas emissions.
  - o Hydrogen fuelled vehicles provide an excellent means to eliminate the on-road emissions from this sector.
  - o About 12-14% CO_2 emissions and particulate emissions come from diesel powered heavy commercial vehicles and these are decentralised emissions and hence difficult to capture.
- **Reducing Fossil Fuel Import:** By achieving the Hydrogen Fuel led Transport System, India can pole-vault from being net importer of fossil energy to becoming net exporter of clean hydrogen energy.
- **Global Leader in Hydrogen Fuel:** Effective Implementation may lead to global leadership to India in hydrogen space by becoming a large green hydrogen producer and supplier of equipment for green hydrogen.

What is Green hydrogen?

- Green hydrogen is produced through electrolysis using renewable sources of energy such as solar, wind or hydel power.

- The 'green' depends on how the electricity is generated to obtain the hydrogen, which does not emit greenhouse gas when burned.

How Green hydrogen is different from Grey Hydrogen and Blue Hydrogen?

- Green hydrogen is produced through electrolysis using renewable sources of energy such as solar, wind or hydel power.
- Grey hydrogen is generated through fossil fuels such as coal and gas and currently accounts for 95% of the total production in South Asia.
- Blue hydrogen, too, is produced using electricity generated by burning fossil fuels but with technologies to prevent the carbon released in the process from entering the atmosphere.

National Hydrogen Mission- Key Points

- **Background:** The proposal for National Hydrogen Mission was made in the Budget 2021 to enable the generation of hydrogen "from green power sources".

- **About:** On India's 75th Independence Day, the Prime Minister of India announced the launch of the National Hydrogen Mission (NHM).

- **Aim:** National Hydrogen Mission aims to make India a global hub for the production and export of green hydrogen.

- **Goal:** National Hydrogen Mission is expected to help in meeting the target of production of 5 million tonnes of Green Hydrogen by 2030 and the related development of renewable energy capacity.

Tomato Flu

Recently, cases of Tomato Flu reported from at least four states — Kerala, Tamil Nadu, Haryana, and Odisha.
- In this context, the Union Health Ministry issued a set of guidelines on prevention, testing, and treatment of the Tomato Flue infection.

What is Tomato Flu?

- **About**: Tomato flu or tomato fever is characterised by fever, joint pain, and red, tomato-like rashes usually seen in children below the age of five years.

- o Tomato Flue is accompanied by other symptoms of viral fevers such as diarrhoea, dehydration, nausea and vomiting, and fatigue.
- **Symptoms:** The red "tomato" rashes were traditionally restricted to the mouth (tongue, gums, and inside of the cheek), palms, and soles.
  - o However, now doctors are also reporting rashes on the buttocks, and a shedding of nails.
- **Causes**: researchers believe that it is hand-foot-and mouth disease (HFMD) caused by a group of enteroviruses (viruses transmitted through the intestine) like Coxsackievirus A-6 and A-16.
  - o Another pathogen — **Enterovirus71** — that also causes the disease. However, this one is not very prevalent now.
- **Impacts**: In almost all cases, say 99.9% cases, the disease is self-limiting. But, in a small number of cases it can lead to CNS (central nervous system) complications.

Treatment for Tomato Flu
- There is no specific treatment or vaccine available for the Tomato Flu Disease.
- Those with the Tomato Flu infection are treated symptomatically, such as prescription of paracetamol for fever.

Prevention of Tomato Flu- Centre's Advisory to States
As it happens mainly in children, the Centre's advisory to states that was issued focuses on preventions in these age groups.
- As per the advisory, anyone suspected to have the infection should remain in isolation for five to seven days after the onset of the symptoms.
- It states that children must be educated about the infection and asked not to hug or touch other children with fever or rashes.
- The children should be encouraged to maintain hygiene, stop thumb or finger sucking, and use a handkerchief for a running nose, the advisory states.
- If a child develops symptoms, they should be isolated, their utensils, clothing, and bedding must be regularly sanitised, they must be kept

hydrated, and the blisters must be cleaned using warm water
- It also states that testing should be conducted to take measures if there is an outbreak.
  - o Any respiratory, faecal, or cerebrospinal fluid samples (in cases with encephalitis or inflammation of the brain) have to be collected within 48 hours of illness.
  - o The biopsy of the lesions or skin scraping samples does not have such time limits.

DigiYatra

Recently, the Delhi International Airport Ltd (DIAL), run by GMR announced the soft launch of the Centre's DigiYatra initiative, rolling out the beta version of its app for android platforms.
- DigiYatra, the passenger processing system based on facial recognition technology, has been piloted at the Delhi airport and has had the required infrastructure set up at the airport's Terminal 3.

About DigiYatra
- **About:** DigiYatra envisages that travellers pass through various checkpoints at the airport through paperless and contactless processing, using facial features to establish their identity, which would be linked to the boarding pass.
- **Implementation:** The project is being implemented by the DigiYatra Foundation.
- **Airports Covered:** In addition to the above airports, DigiYatra will be rolled out at Varanasi and Bengaluru this month, and at five airports-Pune, Vijayawada, Kolkata, Delhi and Hyderabad-by March next year.
  - o The Airport Authority of India (AAI) will identify the airports where DigiYatra will be implemented in a phased manner.
- **Significance:** With DigiYatra technology, the entry of passengers would be automatically processed based on the facial recognition system at all checkpoints – including entry into the airport, security check areas, aircraft boarding, etc.

How to use DigiYatra Facility?

- **Download DigiYatra App:** Passengers will need to first download the DigiYatra app to use Digiyatra Facility.
- **Registration:** Users can register on the app using Aadhaar credentials, followed by a selfie with the Aadhaar card.
  - After this, vaccination details using CoWIN credentials will have to be added to the app.
- **Seamless Travel:** After above, the person will have to scan his or her boarding pass with the QR code or Bar code, after which the credentials will be shared with the airport.
  - For entry into the airport, passengers will need to scan their boarding passes at the e-gate and look into the facial recognition system camera installed there.
  - A similar method will be applicable for entry into other checkpoints.

DigiYatra Foundation

- **About:** DigiYatra Foundation is a joint-venture company whose shareholders are-
  - The Airports Authority of India (26% stake) and
  - Bengaluru Airport, Delhi Airport, Hyderabad Airport, Mumbai Airport and Cochin International Airport, equally holding the remaining 74% of the shares.
- **Key Role:** The DigiYatra Foundation will be the custodian of the passenger ID validation process.
  - It will also define the criteria for compliance and guidelines for the local airport systems.
- **Audit System:** There will be regular audits of the various compliances and guidelines (including guidelines on security, image quality, and data privacy) defined by the DigiYatra guidelines for the local airport Biometric Boarding Systems.

Vertical Launch Short Range Surface-to-Air Missile

The indigenously-developed ship-borne weapon system, **Vertical Launch Short Range Surface to Air Missile** (VL-SRSAM), was successfully flight tested by the Defence Research and Development Organization (DRDO) and Indian Navy off the Chandipur coast in Odisha.

About Vertical Launch Short Range Surface to Air Missile (VL-SRSAM)

- VL-SRSAM has been designed and developed jointly by three facilities of the Defense Research and Development Organization for deployment of Indian Naval warships.
- The key DRDO facilities that contributed to the development of the system are Defense Research and Development Laboratory (DRDL) and Research Centre Imarat (RCI), both from Hyderabad, and Research & Development Establishment (Engineers) based in Pune.
- The missile has the capability of neutralizing various aerial threats at close ranges including sea-skimming targets.
- The tactic of sea skimming is used by various anti-ship missiles and some fighter jets to avoid being detected by the radars onboard warships and thus, these assets fly as close as possible to sea surface and thus are difficult to detect and neutralize.

The design of VL-SRSAM

- The missile has been designed to strike at the high-speed airborne targets at the range of 40 to 50 km and at an altitude of around 15 km.
- Its design is based on Astra missile which is a Beyond Visual Range Air to Air missile.
- Two key features of the VL-SRSAM are cruciform wings and thrust vectoring.
- The cruciform wings are four small wings arranged like a cross on four sides and give the projective a stable aerodynamic posture. The thrust vectoring is an ability to change the direction of the thrust from its engine controlling the angular velocity and the attitude of the missile.
- VL-SRSAM is a canisterised system, which means it is stored and operated from specially designed compartments.
- In the canister, the inside environment is controlled, thus making its transport and storage easier and improving the shelf life of weapons.

Significance

- In Naval warfare, a warship has to employ various defense mechanisms to protect itself from anti-ship missiles and adversary aircraft.
- One of the age-old methods is chaffs — which is a countermeasure technology used worldwide to protect naval ships from enemy's radar and Radio Frequency (RF) missile seekers.
- Another method is deploying missiles to counter Anti-Ship missiles. These systems have to have a swift detection mechanism, quick response, high speed and high manoeuvrability.
- The VL-SRSAM claims to have all these qualities.

James Webb Space Telescope

The James Webb Space Telescope, NASA's latest and most powerful telescope, has captured new images of our solar system's largest planet, Jupiter, presenting it in a never-before-seen light.

About James Webb Space Telescope
• JWST is a space telescope jointly developed by NASA, the European Space Agency (ESA), and the Canadian Space Agency (CSA).
• It is planned to succeed the Hubble Space Telescope as NASA's flagship astrophysics mission.
• It will conduct a broad range of investigations across the fields of astronomy and cosmology, including:
▪ Observing some of the most distant events and objects in the universe such as the formation of the first galaxies.
▪ Detailed atmospheric characterization of potentially habitable exoplanets.

How is it different from other telescopes?

- JWST is more powerful and has the ability to look in the infrared spectrum, which will allow it to peer through much deeper into the universe, and see-through obstructions such as gas clouds.

- As electromagnetic waves travel for long distances, they lose energy, resulting in an increase in their wavelength.
- An ultraviolet wave, for example, can slowly move into the visible light spectrum and the infrared spectrum, and further weaken to microwaves or radio waves, as it loses energy.
- Hubble was designed to look mainly into the ultraviolet and visible regions of the electromagnetic spectrum.
- JWST is primarily an infrared telescope, the first of its kind.

Special features of JWST

- Powerful space telescopes, like JWST or the Hubble Telescope, are often called time machines because of their ability to view very faraway objects.
- he light coming from those objects, stars or galaxies, which is captured by these telescopes, began its journey millions of years earlier.
- Essentially, what these telescopes see are images of these stars or galaxies as they were millions of years ago.
- The more distant the planet or star, the farther back in time are the telescopes able to see.
- JWST will also be positioned much deeper into space, about a million miles from Earth, at a spot known as L2.
- It is one of the five points, known as Lagrange's points, in any revolving two-body system like Earth and Sun, where the gravitational forces of the two large bodies cancel each other out.
- Objects placed at these positions are relatively stable and require minimal external energy to keep them there. L2 is a position directly behind Earth in the line joining the Sun and the Earth.
- It would be shielded from the Sun by the Earth as it goes around the Sun, in sync with the Earth.
- JWST has one large mirror, with a diameter of 21 feet (the height of a typical two-storey building), that will capture the infra-red light coming in from the deep universe while facing away from the Sun.

- It will be shielded by a five-layer, tennis court-sized, kite-shaped sunscreen that is designed to block the heat from Sun and ensure the extremely cool temperatures that the instruments are built to operate at.
- Temperatures on the sun-facing side can get as high as 110°C, while the other side would be maintained at −200° to −230°C.
- The extremely cold temperatures are needed to detect the extremely faint heat signals from distant galaxies.
- The mirror as well as the sunscreen is so large, they could not have fit into any rocket. They have been built as foldable items and would be unravelled in space.

Important details about Jupiter

- The photographs have captured a new view of the planet, presenting in detail its massive storms, colourful auroras, faint rings and two small moons — Amalthea and Adrastea.
- While most of us are familiar with the yellow and reddish-brown gas giant.
- The JSWT's Near-Infrared Camera, with its specialized infrared filters, has shown Jupiter encompassed in blue, green, white, yellow and orange hues.
- Jupiter's famous Great Red Spot, a storm so big that it could swallow Earth, appeared bright white in the image, since it was reflecting a lot of sunlight.
- The brightness here indicates high altitude — so the Great Red Spot has high-altitude hazes, as does the equatorial region.
- The numerous bright white 'spots' and 'streaks' are likely very high-altitude cloud tops of condensed convective storms.

Lumpy Skin Disease (LSD)

Several states, including Gujarat and Rajasthan, have been battling the outbreak of Lumpy Skin Disease (LSD) which is a viral infection of cattle.

Spread of the Lumpy Skin Disease (LSD) in Recent Past

- Since 2019, outbreaks of the **Lumpy Skin Disease (LSD)** have been reported in 20 states of India.
- Since the first LSD case was reported on April 23 this year in Kutch, the **Lumpy Skin Disease** has spread to 26 of Gujarat's 33 districts and has claimed more than 4,000 cattle heads.
- In Rajasthan, around 27,000 cattle heads have reportedly succumbed to the **Lumpy Skin Disease (LSD)** virus.

Lumpy Skin Disease (LSD) Prevalence Across the World

- According to the FAO report, LSD was long restricted to sub-Saharan Africa.
- However, over the past decade, it spread to the Middle East and Turkey.
- From 2015 onward, it has impacted the Balkan (southeast Europe) countries, Caucus (eastern Europe) and Russia.
- Lumpy Skin Disease (LSD) entered India, Bangladesh and China in July 2019.

About Lumpy Skin Disease (LSD)
- **About:** Lumpy Skin Disease (LSD) is caused by the lumpy skin disease virus (LSDV), which is a virus of the capripoxvirus genus in the poxviridae family.
o Sheeppox virus and goatpox virus are the other members of the genus capripoxvirus.
- **Affected Animals:** The lumpy skin disease virus (LSDV) mainly affects cattle — cow and its progeny, and the Asian water buffaloes.
- **Periodic Occurrence:** According to a 2021 report of the Food and Agriculture Organisation (FAO) of the United Nations, LSD outbreaks occur in epidemics several years apart.
o As per the report, the existence of a specific reservoir for the virus is not known, nor is it known as to how and where the virus survives between epidemics.

Lumpy Skin Disease (LSD)- How does it Spread?

- The lumpy skin disease virus (LSDV) spreads through blood-sucking vectors like ticks and mites like houseflies, mosquitoes, etc.
- The lumpy skin disease virus (LSDV) also spreads through contaminated water, fodder and feed.
- Mosquito and housefly infestations remain at their peak during the monsoon, and veterinary scientists and government officers blame a very wet July for the rapid spread of the infection in Gujarat this year.
- Scientists have been advising isolation of infected animals from the healthy ones in an attempt to contain the spread of the virus.

Lumpy Skin Disease (LSD) Symptoms

- LSDV attacks the circulatory system of an animal and causes vasculitis or inflammation of blood vessels and lesions in various organs like liver, lungs, spleen, lymph nodes etc.
  - In turn, it causes epidermis, making the outer surface of the skin to get separated from dermis – the inner layer of the skin.
  - This, in turn, leads to formation of lumps or nodules on an animal's body.
- Fever, increased mucus secretion, loss of appetite etc are among other symptoms.

Lumpy Skin Disease (LSD) Vaccination & Treatment-Government Response

- **Vaccination:** LSD being a viral disease, there is no specific cure once an animal contracts the virus and therefore vaccination is the most effective tool.
  - **Goat Pox Vaccine:** The state government has been ring-vaccinating healthy cattle heads in the five-km radius of an outbreak by administering them goat pox vaccine.
  - As of August 23, the government had vaccinated 47.53 lakh cattle heads and around 87,000 cattle heads have already recovered from LSD.
- **Treatment**: As there is no specific treatment for Lumpy Skin Disease (LSD), Veterinarians are also administering drugs to alleviate symptoms of LSD in cattle.

- The government has facilitated setting up isolation centres for feral cattle in urban areas while prohibiting cattle fairs and exhibitions and transportation of cattle in the affected areas.

Traditional Knowledge Digital Library (TKDL)

Recently, the Cabinet chaired by the Prime Minister has approved the "Widening access of the Traditional Knowledge Digital Library (TKDL) database to users, besides patent offices.

Significance of Widening Access to TKDL

- The opening up of the TKDL database to users is an ambitious and forward-looking action by the Government of India.
- The opening up of the TKDL is also envisaged to inculcate thought and knowledge leadership through Bharatiya Gnana Parampara, under the New Education Policy 2020.
- It lays emphasis on integrating and co-opting traditional knowledge with current practices towards enhancing innovation and trade.
- The TKDL will act as an important sources of TK information for advancing knowledge and technology frontiers.
- The current contents of TKDL shall facilitate wider adoption of Indian traditional medicines, while also propelling new manufacturers and innovators to gainfully build enterprises based on our valuable knowledge heritage.

About Traditional Knowledge Digital Library (TKDL)
- **About:** The Traditional Knowledge Digital Library (TKDL) is a prior art database of Indian traditional knowledge established in 2001.
- **Mandate:** Primary mandate of TKDL is to prevent grant of wrong patents on Indian traditional knowledge.
o The TKDL database will also push creative minds to innovate for better, safer and more effective solutions for a healthier and

technology endowed population.

- **Implementing Body:** Traditional Knowledge Digital Library (TKDL) is managed jointly by the Council of Scientific and Industrial Research (CSIR) and Department of Indian Systems of Medicine and Homeopathy (ISM&H, now Ministry of AYUSH).

- **Accessibility:** Until now, access to the complete TKDL database is restricted to 14 Patent Offices worldwide for the purposes of search and examination.

o This defensive protection through TKDL has been effective in safeguarding Indian traditional knowledge from misappropriation, and is considered a global benchmark.

- **Accessibility Fee:** The access to the TKDL database would be through a paid subscription model with a phase-wise opening to national and international users.

Key Features

- The TKDL is a first of its kind globally and has been serving as an exemplary model to other nations.
- The TKDL currently contains information from existing literature related to ISM such as Ayurveda, Unani, Siddha, Sowa Rigpa and Yoga.
- The information is documented in a digitized format in five international languages which are English, German, French, Japanese and Spanish.
- TKDL provides information in languages and format understandable by patent examiners at Patent Offices worldwide, so as to prevent the erroneous grant of patents.

Defence & Security

Naga Ceasefire Agreement

The National Socialist Council of Nagalim (Isak-Muivah) has ruled the lack of progress in the Naga peace process after 25 years of signing ceasefire agreement with the Central government.

The Naga Political Issue

- The Britishers annexed Assam in 1826 and in 1881 and the Naga Hills became part of British India. The formation of the Naga Club in 1918, which told the Simon Commission in 1929 "to leave us alone to determine for ourselves as in ancient times" was the first sign of Naga resistance.
- The Naga National Council (NNC) declared Nagaland an independent state on August 14, 1947 though after India's independence in 1947, the Naga territory was initially a part of Assam.
- The NNC resolved to establish a "sovereign Naga state" and conducted a "referendum" in 1951, in which "99 per cent" supported an "independent" Nagaland.
- On March 22, 1952, the Naga Federal Government (NFG) and the Naga Federal Army (NFA) were formed. The Government of India sent in the Army to crush the insurgency and, in 1958, enacted the Armed Forces (Special Powers) Act.
- In 1957, an agreement was between Naga leaders/groups and the Indian government amalgamated the Naga Hills region of Assam and the Tuensang frontier division to the northeast together under a single unit directly administered by the Indian government.
- Nagaland achieved statehood in 1963, though the rebel activities continued.
- The Naga groups include- Nationalist Socialist Council of Nagaland-NK (NSCN), Nationalist Socialist Council of Nagaland- Reformation (NSCN-R) and Nationalist Socialist Council of Nagaland-K-Khango (NSCN-K-Khango) and are breakaway factions of National Socialist Council of Nagaland (NSCN-IM) and National Socialist Council of Nagaland-Khaplang (NSCN-K).

About the Naga Ceasefire Agreement

- The NSCN-IM (Isak-Muivah faction-extremist) signed a ceasefire agreement with the Centre in 1997 when the peace talks began.
- The Union government had signed a framework agreement with the NSCN-IM in 2015 to find a solution to the Naga political issue though the negotiations are yet to be concluded.

Features of Naga Ceasefire Agreement

- Interlocutor R.N. Ravi signed the agreement on behalf of the Centre in presence of PM Modi. The other two signatories were leader of NSCN(IM) i.e., Isak Chishi Swu, who died in 2016 and Thuingaleng Muivah (86) who is leading the talks.
- The Government of India recognized the unique history, culture and position of the Nagas and their sentiments and aspirations. The NSCN(IM) also appreciated the Indian political system and governance. Both sides agreed for concluding an accord in October 2019, which would settle all Naga issues
- Significance: It shows the governments strong intent to resolve the long-standing issue and adoption of diplomatic peaceful approach by Naga Society to fulfil their aspirations.
- The details of the agreement have not been made public by the government citing security reasons
- Despite of conclusion of successful talks on the government's deadline of October 31, 2019, no accord was signed.
- The negotiations hit an impasse in 2020 with differences cropping up between NSCN-IM and interlocutor Ravi. Subsequently, NSCN-IM demanded the removal of Mr. Ravi as interlocutor.

Conflicting Stance

- The then Joint Intelligence Chief R.N. Ravi noticed the difference in understanding the Framework Agreement as was evident from the group's insistence **on a Naga constitution**, and demand for a **Greater Nagalim** stretching beyond the boundaries of the present Nagaland state.
- In November 2017, Ravi signed an agreement with seven groups who had come together under the banner of the Naga National Political Groups (NNPGs), which did not include the NSCN (IM) which considers itself the principal representative of Naga aspirations and has been a rival of many of the NNPG groups. In a letter to Prime Minister Narendra Modi in 2020, the IM **accused Ravi of attempting to "segregate the Naga civil society".**
- After becoming Nagaland Governor in 2019, Ravi accused NSCN (IM) for delaying the settlement by raising the contentious symbolic issues of separate Naga national flag and constitution.
- Ravi's open criticism **made the NSCN(IM) publicly harden its position** with pushing the demand of Naga flag and Naga constitution as non-negotiable.
- NSCN(IM) claimed the framework agreement included the idea of unification of all Naga inhabited areas in Assam, Arunachal Pradesh, and Manipur and accused Ravi of **twisting the document** by deleting key words that suggested Nagaland would co-exist with India as a sovereign.
- This led to the demand of removal of Ravi which was eventually implemented.

Complexities in Nagaland Issue

- NSCN(IM) is in a delicate position and it is difficult to abandon the demand for a **Greater Nagalim** but India cannot accept that demand.
- Naga flag and Naga constitution which is one of the core demands of NSCN(IM) cannot be accepted by Indian Government given the abrogation of Article 370 (Special status to Jammu & Kashmir) in August 2019.
- Some demands that need discussion are
  - Bicameral Assembly with at least 40 nominated members representing different tribes;
  - Absorption of cadres as local armed forces or in the Indian paramilitary;
  - Setting up of autonomous councils in Naga-dominated areas of neighbouring states;
  - Use of the Naga flag for at least customary events.

Way Forward

- Any moves to alter boundaries will intensify ethnic conflicts and insurgencies beyond Nagaland and thus proper consultations and dialogues must be in line before taking any step further.
- The accord should be concluded only after consulting the states like Assam, Manipur and Arunachal Pradesh which have a stake in the matter.
- The Central government needs reiterate its commitment of finalizing the Naga accord while seeking to re-engage with the NSCN (I-M) without giving in to its arbitrary demands.

Exercise 'AL NAJAH-IV'

The 4th Edition of India Oman Joint Military Exercise 'AL NAJAH-IV' between contingents of Indian Army and the Royal Army of Oman is scheduled to take place from 01 to 13 August 2022.

About Exercise 'AL NAJAH-IV'

- **About**: Exercise Al NAJAH-IV is a joint military exercise between Indian Army and Royal Army of Oman.
  - The previous edition of the exercise 'Al Najah IV' was organised in Muscat in 2019.
- **Location:** Exercise Al NAJAH-IV 2022 is being taking place at the Foreign Training Node of Mahajan Field Firing Ranges (Rajasthan).
- **Mandate:** Exercise 'AL NAJAH-IV' aims to enhance the level of defence co-operation between Indian Army and Royal Army of Oman and will further manifest in enhancing the bilateral relations between the two nations.
- **Scope:** The scope of the 'AL NAJAH-IV' exercise includes professional interaction, mutual

understanding of drills & procedures, establishment of joint command & control structures and elimination of terrorist threats.

- **Focus Areas:** The joint exercise would focus on-
  o Counter Terrorism Operations,
  o Regional Security Operations,
  o Peace Keeping Operations under United Nations charter
  o Organising joint physical training schedules, tactical drills, techniques and procedures.
- **Representation:** In the Exercise 'AL NAJAH-IV', Royal Army of Oman contingent is represented by 60 personnel from the Sultan of Oman Parachute Regiment.
  o The Indian Army is represented by troops from the 18 Mechanised Infantry Battalion.
- **Key Activities:** A comprehensive training programme to culminate in a 48 hours long validation exercise involving establishing of-
  o Joint mobile vehicle checkposts,
  o Joint cordon and search operations and
  o Joint room intervention drills in a built up area.

VINBAX 2022

The 3rd Edition of Vietnam India Bilateral Army Exercise "Ex VINBAX 2022" is scheduled to be conducted at Chandimandir from 01 to 20 Aug 2022.

About VINBAX 2022 Exercise

- **Background:** The exercise VINBAX 2022 is a sequel to previously conducted bilateral exercise in Vietnam in 2019.
- **About:** Ex VINBAX 2022 is a bilateral joint military exercise between India and Vietnam military.
  o Ex VINBAX 2022 is a major milestone in strengthening the bilateral relations between India and Vietnam.
  o Indian Army is being represented by troops from the 105 Engineer Regiment in the Ex VINBAX 2022.
- **Location:** 3rd VINBAX 2022 Exercise will be held at Chandimandir

- **Ex VINBAX 2022 Theme:** Theme of the third VINBAX 2022 exercise is "employment and deployment of an Engineer Company and a Medical Team under United Nations Contingent for Peacekeeping Operations".
- **Key Activities to be Undertaken:** Under Ex VINBAX 2022-
  o A 48 hours Validation Exercise is part of the schedule to assess the standards achieved by both contingents while executing technical military operations under similar scenarios in UN missions.
  o A Humanitarian Assistance & Disaster Relief demonstration and equipment display will showcase India's capacity to undertake rescue and relief operations during natural and manmade disasters utilising indigenous solutions.

Ex VINBAX 2022 Significance

- India and Vietnam share a Comprehensive Strategic Partnership and defence cooperation is a key pillar of this partnership.
- Vietnam is an important partner in India's Act East policy and the Indo-Pacific vision and VINBAX 2022 will help in strengthening it.
- The conduct of Ex VINBAX – 2022 as a field training exercise with enhanced scope from previous editions of bilateral exercise will-
  o Strengthen mutual confidence, inter-operability
  o Enable sharing of best practices between the Indian Army and Vietnam People's Army.
- The joint exercise will also provide an opportunity to the troops of both the Contingents to learn about the social and cultural heritage of each other.

Exercise VAJRA PRAHAR

Recently, the 13th Edition of India - USA Joint Special Forces Exercise VAJRA PRAHAR 2022 culminated at Bakloh (Himachal Pradesh).

About Exercise VAJRA PRAHAR 2022

- **About:** Exercise VAJRA PRAHAR 2022 is annual exercise that is hosted alternatively between India and the United States.

- o The 12th edition VAJRA PRAHAR exercise was conducted at Joint Base Lewis Mc Chord, Washington (USA) in October 2021.
- **Focus Area**: The 21-day joint training provided an opportunity for the Special Forces from both nations to train in Air Borne Operations, Special Operations and Counter Terrorism operations in a joint environment under United Nations Charter.
- **VAJRA PRAHAR Phases:** The exercise **VAJRA PRAHAR 2022** was conducted in two phases-
  - o First phase involved combat conditioning and tactical level special missions training exercises and
  - o Second phase included 48 hours of validation of training received by both contingents in the first phase.

- **Key Activities:** Under VAJRA PRAHAR exercise, both contingents undertook joint training, planning and execution of a series of mock operations in simulated conventional and unconventional scenarios in mountainous terrain.
- **Significance**: Exercise VAJRA PRAHAR with the US Special Forces is significant in terms of security challenges faced by both Nations in the backdrop of the current global situation.
  - o The joint military exercise has further strengthened the traditional bond of friendship between the special forces of both Nations as well as improved bilateral defence cooperation between India and the USA.

History and Culture

Veeranganas

Prime Minister Narendra Modi's Independence Day speech underlined the role of women Veeranganas in our freedom movement.

- The initiative highlighting the brave women of our freedom struggle, under the broader celebration of Azadi Ka Amrit Mahotsav, will mark a turning point in Indian feminist history writing from an Indic perspective.

About Veerangana

Veerangana means a brave female, someone who can fight for their rights. A strong woman not only protects herself, but protects others too.

Role of Veeranganas in Freedom Struggle

- The historical memories of courage and sacrifice are preserved in folktales, songs and regional lore. They reveal the less-celebrated character of Indian society, in which women's power was acknowledged.
- The PM paid tribute not only to celebrated women but also to unsung veeranganas.
- Rani Lakshmi Bai, the first woman warrior of the revolt of 1857, is known to every young woman in India.
- Begum Hazrat Mahal took to the battlefields along with Lakshmi Bai in 1857 and till her last breath in 1879, fought the British.
- Remembered as the "Agni of India", Durgawati Devi was an armed revolutionary and active member of the Hindustan Socialist Republican Association and a close associate of Bhagat Singh, Sukhdev and Rajguru.
- Jhalkari Bai, whose tales of bravery have travelled far and wide. Her story presents a social reality where even a Dalit woman had acquired social and cultural significance.

- Uda Devi also belonged to the Dalit community from Awadh, a significant centre during the revolt of 1857. She is said to have formed a women's battalion, comprising mostly Dalit women, popularly known as "veerangana" or "warrior women."
- The story of Asha Devi Gurjari follows a similar trajectory — a Dalit, she led women in a bid to restore the political self-respect of the motherland.

These stories of the valour of veeranganas were not limited to any time or area rather, they are of a piece with the national consciousness of the times.

Paying Respect

- The Veeranganas are a potent symbol of nationalism and patriotism.
- They can overturn oppressive attitudes towards women in society.
- Their role and celebration in popular culture also refutes the colonial allegations about the suppression of women throughout Indian history.

PM's message to the Nation

After the holistic account of the veeranganas, the PM emphasised "nari shakti", which can be seen in various fields such as law, governance, science, technology, bureaucracy, academics, and politics. He restated the manifold contribution of women in both public and private spaces. But he also highlighted that there is much to be done to "provide opportunities and facilities to our daughters" in order to take the nation to new heights. He further pointed out that "if the considerable efforts of our nari shakti are added to fulfil the dreams in the Amrit Kaal, then it will take less hard work and our time limit will also be reduced. Our dreams will be more intense, vivacious and resplendent."

Sutr Santati Exhibition

Recently, Ministry of Culture and the National Museum in collaboration with Abheraj Baldota Foundation organized an exhibition 'Sutr Santati'.
- 'Sutr Santati' Exhibition is celebrating 75 years of India's birth as an independent nation, by bringing together diverse textile traditions of the country.

What is meeting of Sutr Santati?
- Sutr Santati literally means the continuity of yarn.
- As a title to the exhibition, it is a metaphor for ongoing dialogues in Indian culture and society, which shape its evolution, bridging the past with the future.

Sutr Santati Exhibition 2022
- **About:** 'Sutr Santati' is an exhibition to bring together diverse textile traditions of the country.
  - Sutr Santati Exhibition 2022 is being organised as part of Azadi ka Amrit Mahotsav (AKAM).
- **Organizing Ministry:** Sutr Santati Exhibition 2022 is being organized Ministry of Culture and the National Museum in collaboration with Abheraj Baldota Foundation.
- **Location & Duration:** The Sutr Santati exhibition will continue till 20th September, 2022 in New Delhi.
- **Objective:** The Sutr Santati exhibition's curatorial vision seeks to promote the ideals of organic and slow consumerism in defining a nation such as India's self-worth, and the inherent collective, collaborative efforts which are required to push towards such goals.
- **Key Events:**
  - On display are more than 100 textiles by 75 prominent artisans, craftspeople, designers, and artists.
  - On view are textiles created with processes of hand weaving, embroidery, resist-dyeing, printing, painting and appliqué, among other forms of yarn and fabric manipulation.

  - The fibres employed in these commissions range from local varieties such as Kandu and Kala cotton, mulberry and wild silks, camel and sheep wool, goat and yak hair.
- **Participation:** Artisans, Organizations / NGOs, participating fashion & textile designers, couturiers and multidisciplinary artists, Textile revivalists, and Textile artists are participating in the Sutr Santati Exhibition 2022.

Pandurang Khankhoje

Lok Sabha Speaker Om Birla, who is currently in Canada for the 65th Commonwealth Parliamentary Conference, will travel to Mexico where he will unveil statues of Swami Vivekananda and Maharashtra-born freedom fighter and agriculturalist Pandurang Khankhoje

Who was Pandurang Khankhoje?
- Born in Wardha, Maharashtra, in the late 19th century, Pandurang Khankhoje came in contact with other revolutionaries early on.
- His daughter Savitri Sawhney, who wrote his biography, wrote of his early years: "As a student, Khankhoje was an ardent admirer of the French Revolution and of the American War of Independence.
- Closer to home, the Hindu Reformer Swami Dayanand and his Arya Samaj movement, which called for a spirit of reform and social change, became the hero to a young student group led by Khankhoje."

On road to be a Revolutionary
- Khankhoje decided to go abroad for further training in revolutionary methods and militaristic strategy.
- At this time, the British government's suspicions of him were also growing due to his anti-government activities.
- Before leaving, he visited Bal Gangadhar Tilak, by whom he was inspired. Tilak advised him to go to

Japan, which was itself a strong, anti-West Asian imperialistic force then.

- After spending time with nationalists from Japan and China, Khankhoje eventually moved to the US, where he enrolled in college as a student of agriculture.
- But a year later, he joined the Mount Tamalpais Military Academy in California to fulfil his original purpose of leaving India.

Association with the Indian independence movement

- Khankhoje was one of the founding members of the Ghadar Party, established by Indians living abroad in 1914, mostly belonging to Punjab.
- Its aim was to lead a revolutionary fight against the British in India.
- While in the US, Khankhoje met Lala Har Dayal, an Indian intellectual teaching at Stanford University who had begun a propaganda campaign, publishing a newspaper that featured patriotic songs and articles in the vernacular languages of India. This was the seed from which the Ghadar Party would emerge.

The Ghadr Party

- The Ghadar Movement was an early 20th century, international political movement founded by expatriate Indians to overthrow British rule in India.
- Earlier activists had established a 'Swadesh Sevak Home' in Vancouver and a 'United India House' in Seattle to carry out revolutionary activities.
- Finally, in 1913, the Ghadr was founded.
- The Ghadar Party, originally known as the Pacific Coast Hindustan Association, was founded on July 15, 1913 in the US by Lala Har Dayal, Sant Baba Wasakha Singh Dadehar, Baba Jawala Singh, Santokh Singh, and Sohan Singh Bhakna.
- It fought against colonialism from 1914 to 1917, with the support of Imperial Germany and the Ottoman Empire, both of which were Central Powers opposed to the British.

- The party was organized around the weekly newspaper The Ghadar, which featured the masthead caption: Angrezi Raj Ka Dushman (an enemy of British rule); "Wanted brave soldiers to stir up rebellion in India," the Ghadar declared.

How did Khankhoje reach Mexico?

- At the military academy, Khankhoje met many people from Mexico.
- The Mexican Revolution of 1910 had led to the overthrow of the dictatorial regime, and this inspired Khankhoje.
- He also reached out to Indians working on farms in the US with the aim of discussing the idea of Indian independence with them.
- Along with the Indian workers, militant action was planned by Khankhoje in India, but the outbreak of the First World War halted these plans.
- He then reached out to Bhikaji Cama in Paris, and met with Vladimir Lenin in Russia among other leaders, seeking support for the Indian cause.
- However, as he was facing possible deportation from Europe and could not go to India, he sought shelter in Mexico.

A Mexican Hero

- In part due to his prior friendship with Mexican revolutionaries, he was appointed a professor at the National School of Agriculture in Chapingo, near Mexico City.
- He researched corn, wheat, pulses and rubber, developing frost and drought-resistant varieties, and was part of efforts to bring in the Green Revolution in Mexico.
- Later on, the American agronomist Dr Norman Borlaug, called the Father of the Green Revolution in India, brought the Mexican wheat variety to Punjab.
- Khankhoje was revered as an agricultural scientist in Mexico.
- The renowned Mexican artist Diego Rivera painted murals that featured Khankhoje, including one titled 'Our Daily Bread' that prominently

depicted him breaking bread with people seated around a table.

Return to India

- Pandurangreturned to India after 1947.
- His application for visa was initially rejected by the Indian government due to the ban by the British Indian Government, but was eventually overturned.
- He settled in Nagpur and subsequently embarked on a political career.
- Pandurang Khankhoje died on 22 January 1967.

Indian Institute of Heritage (IIH)

Government have decided to set up 'Indian Institute of Heritage' (IIH) as a Deemed to be University as per UGC (Institutions deemed to be Universities) Regulations, 2019.

About Indian Institute of Heritage (IIH)

- **About:** Indian Institute of Heritage (IIH) will be a world-class university that will focus on the conservation and research in India's rich tangible heritage.
  - Indian Institute of Heritage (IIH) will be a standalone institution of its kind in India.
- **Location:** Indian Institute of Heritage' is to be set up at Noida, Gautam Buddha Nagar.
- **Mandate**: IIH will offer research, development and dissemination of knowledge, excellence in the education of its students and activities associated with heritage that contribute to the cultural, scientific and economic life of India.
- **IIH as Deemed to be University:** The Indian Institute of Heritage is being set up as deemed to be a university by integrating following institutes-
  - The School of Archival Studies under National Archives of India, New Delhi
  - Institute of Archaeology (Pt Deendayal Upadhyaya Institute of Archaeology)
  - The National Research Laboratory for Conservation of Cultural Property (NRLC), Lucknow.

- Academic Wing of Indira Gandhi National Centre for the Arts (IGNCA), New Delhi.
- The National Museum Institute of History of Art, Conservation and Museology (NMICHM).
- **Significance:** The Institute will impact the higher education and research in the field of rich Indian Heritage and its conservation
- **Degree:** Indian Institute of Heritage (IIH) will lead to-
  - The Ph.D. and Masters courses in
    - History of Conservation,
    - Arts,
    - Museology,
    - Archaeology,
    - Archival Studies,
    - Preventive Conservation,
    - Manuscriptology,
    - Epigraphy, and Numismatics as well as
  - Conservation training facilities to in-service students and employees of the Institute.

India ki Udaan Initiative

Ministry of Culture and Google kick started 'India ki Udaan' initiative to celebrate the unwavering, undying, spirit of India and its achievements in past 75 years.

India ki Udaan Initiative

- **About:** India ki Udaan Initiative is a celebration of the unwavering and undying spirit of India. India ki Udaan Initiative was organized under the aegis of Azadi ka Amrit Mahotsav.
- **Aim:** The Joint initiative will take the netizens to the rich culture and heritage of India through its rich archives and featuring artistic illustrations.
- **Theme:** India ki Udaan project has been based on the theme 'Unwavering and undying spirit of India over these past 75 years.
- **Implementation:** India ki Udaan Initiative is being Executed by Google Arts and Culture, in collaboration with Ministry of Culture.
- **Significance:** The initiative will offer a unique view to users to witness India's remarkable moments virtually.

o If users will venture more into the collection they would be able to know about the iconic personalities in Indian history, scientific and sports achievements, and leading female personalities of the country.

India ki Udaan Initiative- Key Initiatives by Google

- Google in partnership with the Ministry of Culture is planning to create informative online content that will showcase the contribution of Indians in transforming the nation after and before independence.
- Google also announced to launch of a series of special initiatives across its products and services that will offer rich content and a prime experience to its Indian users all through the anniversary year.
- Google has planned to involve artists from India and across the globe to give a rich and unique experience through this online archive.

Bharat Rang Mahotsav 2022

Recently, Maharashtra Governor Shri Bhagat Singh Koshyari inaugurated the 22nd 'Bharat Rang Mahotsav' at Rabindra Natya Mandir in Mumbai.

About Bharat Rang Mahotsav 2022
• **About:** "Azadi Ka Amrit Mahotsav - Bharat Rang Mahotsav 2022" is being celebrated under Azadi Ka Amrit Mahotsav to pay tribute to our freedom fighters.
o Director of National School of Drama, Professor Ramesh Chandra Goud will preside over the programme.
• **Organizing Body:**
o National School of Drama is being organized by National School of Drama under Azadi Ka Amrit Mahotsav.
o In Mumbai, the Bharat Rang Mahotsav programmes is being jointly organised by Ministry of Cultural Affairs and P.L. Deshpande Maharashtra Kala Akademi.

- **Participation:** Bharat Rang Mahotsav 2022 festival is open for public.

Bharat Rang Mahotsav 2022- Key Activities

- As part of the 22nd Bharat Rang Mahotsav, 2022 (Azadi Segment), 30 plays will be showcased in Delhi, Bhubaneshwar, Varanasi, Amritsar, Bengaluru and Mumbai from 16th July to 14th August, 2022.
- The festival will showcase plays of renowned theatre directors based on life and sacrifices of our freedom fighters.
- Drama 'I am Subhash' directed by Chandrakant Tiwari will be played on the first day of the festival.
- The 22nd Bharat Rang Mahotsav 2022 festival will conclude on August 13 with the play 'Rang De Basanti Chola' directed by Mohammad Nazir Qureshi.

Key Facts about Azadi ka Amrit Mahotsav (AKAM)

- **About:** Azadi Ka Amrit Mahotsav is an initiative to celebrate and commemorate 75 years of progressive India and the glorious history of its people, culture and achievements.
  - o Azadi ka Amrit Mahotsav is an embodiment of all that is progressive about India's socio-cultural, political, and economic identity.
- **Celebrating People of India:** Azadi Ka Amrit Mahotsav is dedicated to the people of India who have been instrumental in bringing India thus far in its evolutionary journey.
  - o People of India also hold within them the power and potential to enable the Prime Minister's vision of activating India 2.0, fuelled by the spirit of Atmanirbhar Bharat.
- **Beginning of Azadi Ka Amrit Mahotsav:** The official journey of "Azadi ka Amrit Mahotsav" commenced on 12th March 2021 which starts a 75-week countdown to our 75th anniversary of Independence.
- **Categorize**: Azadi Ka Amrit Mahotsav is envisioned to be celebrated in five categories –
  - o Freedom Struggle,
  - o Idea @75,

- o Achievements @75,
- o Action @75 and
- o Resolve @75

Manusmriti

The Vice Chancellor of a renowned university recently criticized the Manusmriti, the ancient Sanskrit text, over its gender bias.

What is Manusmriti?

- The Mānavadharmaśāstra, also known as Manusmriti or the Laws of Manu, is a Sanskrit text belonging to the Dharmaśāstra of Hinduism.
- Composed sometime between the 2nd century BCE and 3rd century CE, the Manusmriti is written in sloka verses, containing two non-rhyming lines of 16 syllabi each.
- The text is attributed to the mythical figure of Manu, considered to be ancestor of the human race in Hinduism.
- There has been considerable debate between scholars on the authorship of the text.
- Many have argued that it was compiled by many Brahmin scholars over a period of time.
- However, Indologist Patrick Olivelle argues that Manusmṛiti's "unique and symmetrical structure," means that it was composed by a "single gifted individual," or by a "strong chairman of a committee" with the aid of others.

What is the text about?

- The Manusmriti is encyclopedic in scope, covering subjects such as the social obligations and duties of the various castes and of individuals in different stages of life.
- It seeks to govern the suitable social and sexual relations of men and women of different castes, on taxes, the rules for kingship, on maintaining marital harmony and the procedures for settling everyday disputes.
- At its core, the Manusmriti discusses life in the world, how it is lived in reality, as well as how it ought to be.

- They argue that the text is about dharma, which means duty, religion, law and practice.
- It also discusses aspects of the Arthashashtra, such as issues relating to statecraft and legal procedures.
- The aim of the text is to present a blueprint for a properly ordered society under the sovereignty of the king and the guidance of Brahmins.
- It was meant to be read by the priestly caste and Olivelle argues that it would likely have been part of the curriculum for young Brahmin scholars at colleges.

What is its significance?

- By the early centuries of the Common Era, Manu had become, and remained, the standard source of authority in the orthodox tradition for that centrepiece of Hinduism, varṇāśrama-dharma (social and religious duties tied to class and stage of life)".
- Indologists argue that it was a very significant text for Brahmin scholars — it attracted 9 commentaries by other writers of the tradition, and was cited by other ancient Indian texts far more frequently than other Dharmaśāstra.

Colonists View

- European Orientalists considered the Manusmṛiti to be of great historical and religious significance as well. It was the first Sanskrit text to be translated into a European language, by the British Philologist Sir William Jones in 1794.
- Subsequently, it was translated into French, German, Portuguese and Russian, before being included in Max Muller's edited volume, Sacred Books of the East in 1886.
- For colonial officials in British India, the translation of the book served a practical purpose.
- In 1772, Governor-General Warren Hastings decided to implement laws of Hindus and Muslims that they believed to be "continued, unchanged from remotest antiquity.
- For Hindus, the Dharmasastras were to play a crucial role, as they were seen by the British as 'laws,' whether or not it was even used that way in India.

Controversies

- The ancient text has **4 major divisions**:
  - Creation of the world.
  - Sources of dharma.
  - The dharma of the four social classes.
  - Law of karma, rebirth, and final liberation.
- The third section is the longest and most important section.
- The text is deeply concerned with maintaining the hierarchy of the four-fold varna system and the rules that each caste has to follow.
- Then, the Brahmin is assumed to be the perfect representative of the human race.
- While Shudras, who are relegated to the bottom of the order, are given the sole duty of serving the 'upper' castes.

- Some verses also contain highly prejudicial sentiments against women on the basis of their birth.
- There are many verses in the text that are considered highly controversial.

Dr. Ambedkar and Manusmriti

- On December 25, 1927, Dr B R Ambedkar had famously burned the Manusmṛiti, which he saw as a source of gender and caste oppression.
- However, he widely acknowledged that Manusmriti is not a religious decree but a social doctrine, manipulated since centuries to normalize oppression of the population.

Miscellaneous

National Gopal Ratna Awards

Recently, Department of Animal Husbandry and Dairying under the Ministry of Fisheries, Animal Husbandry and Dairying invited applications for National Gopal Ratna Awards during 2022.

- The **National Gopal Ratna** awards are to be conferred on the occasion of National Milk Day (26th Nov, 2022).

About National Gopal Ratna Awards

- **About:** The "Rashtriya Gokul Mission (RGM)", was launched in December 2014 for the first time in the country, with a view to conserve and develops indigenous bovine breeds in a scientific manner.
- **Objective:** National Gopal Ratna Awards are conferred with an objective to encourage the Milk producing farmer, individuals working in this sector, and Dairy cooperative societies who provide market access to the milk producers.
- **Concerned Ministry:** National Gopal Ratna Awards are conferred by the Department of Animal Husbandry and Dairying under the Ministry of Fisheries, Animal Husbandry and Dairying.
- **Online Application:** Eligible candidates can apply online through the National Award portal i.e., https://awards.gov.in from 01.08.2022 onwards.
  o The closing date for the submission of applications is **15.09.2022**.

National Gopal Ratna Awards Categories

National Gopal Ratna Award during 2022 in the following categories:

- Best Dairy farmer rearing indigenous cattle/buffalo breeds (list of registered breeds annexed)
- Best Artificial Insemination Technician (AIT)

- Best Dairy Cooperative Society/ Milk producer Company/ Dairy Farmer Producer Organisation.

National Gopal Ratna Awards

The National Gopal Ratna Award consists of a Certificate of merit, a memento, and amount in each category as under:

- Rs. 5,00,000/-(Rupee five lakh only) -1st rank
- Rs. 3,00,000/- (Rupee three lakh only) -2nd rank and
- Rs. 2,00,000/- (Rupee two lakh only) -3rd rank

Government's Efforts to Develop and Conserve Indigenous Bovine Breeds

- Department of Animal Husbandry and Dairying is making many efforts for the effective development of the Animal Husbandry and Dairy sector to provide sustainable livelihood to the farmers.
- Indigenous bovine breeds of India are robust and possess the genetic potential to play a crucial role in the national economy.
- Government has also launched schemes like Rashtriya Gokul Mission (Gokul Grams) for scientific development and Conservation of the indigenous bovine breeds

Rashtriya Gokul Mission

- **About:** The Rashtriya Gokul Mission (RGM) is being implemented for development and conservation of indigenous bovine breeds since December 2014.
  o RGM is also continued under umbrella scheme Rashtriya Pashudhan Vikas Yojna from 2021 to 2026 with a budget outlay of Rs.2400 crore.
- **Significance:** Rashtriya Gokul Mission is important in-
  o Enhancing milk production and productivity of bovines to meet growing demand of milk and
  o Making dairying more remunerative to the rural farmers of the country.
- **Funding:** All the components of Scheme will be implemented on 100% grant-in-aid basis except the components of-

- o Accelerated breed improvement programme under the component subsidy of Rs 5000 per IVF pregnancy will be made available to participating farmers as GoI share;
- o Promoting sex sorted semen under the component subsidy upto 50% of the cost of sex sorted semen will be made available to participating farmers and
- o Establishment of breed multiplication farm under the component subsidy upto 50% of the capital cost maximum upto Rs.2.00 crore of the project will be made available to entrepreneur.
- Objectives:
  - o To enhance productivity of bovines and increasing milk production in a sustainable manner using advance technologies.
  - o To propagate use of high genetic merit bulls for breeding purposes.
  - o To enhance Artificial insemination coverage through strengthening the breeding network and delivery of Artificial insemination services at farmers' doorstep.
  - o To promote indigenous cattle & buffalo rearing and conservation in a scientific and holistic manner.

76th I-Day Address of PM

Recently, Prime Minister Narendra Modi addressed the nation from the ramparts of Red Fort on the 76th Independence Day.
- While addressing the nation, he also asserted India's fight against corruption is entering a "decisive period" as he listed two big challenges of corruption and nepotism that are facing the country.

76th I-Day Address of PM- Key Details
- **Five Resolution for Amrit Kal:** PM Modi also announced five resolutions for the country for the next 25 years that he described as Amrit Kal. Following are the five resolves or panchpran he announced for the next 25 years-

- o **First:** Big resolve;
- o **Second:** To abandon the slave mentality;
- o **Third:** we have to feel proud about our heritage;
- o **Fourth:** Unity and solidarity; and
- o **Fifth:** The duty of citizens.
- **Fight Against Corruption:** he said that corruption is hollowing the country like a termite and we will have to fight it.
  - o The prime minister said that the country's fight against corruption is entering a "decisive period [nirnayak kalkhand]".
  - o He also added that the country needs to be aware of the corruption and corrupt.
- **Jai Jawan, Jai Kisan, Jai Anusandhan:** He emphasised the need for innovation and added a new phrase—Jai Anusandhan—to the slogan Jai Jawan, Jai Kisan.
  - o It was coined by the then prime minister Chaudhary Charan Singh and expanded to Jai Jawan, Jai Kisan and Jai Vigyan by former prime minister Atal Bihari Vajpayee.
  - o Now after addition of Jai Anusandhan, it is to be known as "Jai Jawan, Jai Kisan, Jai Vigyan, Jai Anusandhan,".
- **Call for Nepotism Free Nation:** PM Modi in his address to the Nation on 76th Independence, emphasised on eliminating nepotism from every institution of India and not just from the Politics.
  - o He said that Nepotism has gripped many institutions of the country and this hurts the nation's talent and potential and also one of the causes of the corruption in the Nations.
- **Increasing Women Participation in Nation Building:** PM Modi also urged people to take a resolve to respect women and called for increasing their contribution to the progress of the country during the next 25 years.

Indian Independence Day 2022- Background
- **British Rule:** The Englishmen entered Surat and Gujarat in 1619 for trading purposes.
  - o After the victory of the English East India Company at the Battle of Plassey in 1757, the Britishers made their control over India.

- **British Domination over India:** Britishers dominated over India for almost 200 years starting from 1757 after their victory in the Battle of Plassey which was further consolidated after Battle of Buxur.
- **Freedom Struggle:** To free India from British rule, many Indian Freedom Fighters like Bhagat Singh, Chandrashekhar Azad, Netaji Subhas Chandra Bose, Sardar Vallabhbhai Patel, Mahatma Gandhi and others sacrificed their everything.
- **India's Independence:** The Indian Independence movement began during World War I and was led by Mohandas Karamchand Gandhi.
  - On August 15, 1947, India got its freedom, ending an almost 200-year British rule.
- **I-Day Address of Prime Minister of India:** India's first prime minister Jawaharlal Nehru raised the Indian national flag above the Lahori Gate of Red Fort in Delhi on August 15, 1947.
  - It is a tradition that has since been followed by the incumbent Prime Minister, followed by an address to the country.

Stockholm World Water Week

Recently, National Mission for Clean Ganga organized a virtual session on the first day of the Stockholm World Water Week 2022 (August 24-September 01).
- Director General, National Mission for Clean Ganga gave a keynote speech on 'Arth Ganga: Model for Economic River-People Connect for Sustainable River Rejuvenation using Economic Bridge'.

About Stockholm World Water Week

- **About:** The World Water Week is an annual event organized by Stockholm International Water Institute (SIWI) to address the global water issues and related concerns of international development.
  - World Water Week is the leading conference on global water issues, held every year since 1991.

- **Participation:** The **Stockholm World Water** Week attracts a diverse mix of participants from many professional backgrounds and every corner of the world.
- **Stockholm World Water Week 2022 Theme:** theme of the Stockholm World Water Week 2022 is "Seeing the Unseen: The Value of Water".
- **Key Objectives:**
  - High-quality content, and inclusive, solution-driven collaboration at its core.
  - Changing the way people engage with and value water through awareness-raising, education, and transformative action.
  - Integrating and interacting with actors beyond the water community.
  - Mirroring SIWI's core values of integrity, passion, inclusiveness, and quality.

About Arth Ganga Model

- **Background**: PM Modi first introduced the concept during the first National Ganga Council meeting in Kanpur in 2019.
  - He urged for a shift from Namami Gange, the Union Government's flagship project to clean the Ganga, to the model of Arth Ganga.
  - The latter focuses on the sustainable development of the Ganga and its surrounding areas, by focusing on economic activities related to the river.
- **About**: At its core, the Arth Ganga model seeks to use economics to bridge people with the river.
  - Arth Ganga model strives to contribute at least 3% of the GDP from the Ganga Basin itself.
- **Significance:** The Arth Ganga project's interventions are in accordance with India's commitments towards the UN sustainable development goals.

Key Features of Arth Ganga Model

Under Arth Ganga, the government is working on the following six verticals.
- **Zero Budget Natural Farming** that includes chemical-free farming for 10 kms on either side

of the river, generating "more income, per drop", 'Gobar Dhan' for farmers.

- **Monetization and Reuse of Sludge & Wastewater** that envisages reuse of treated water for irrigation; industrial purposes and revenue generation for ULBs.
- **Livelihood Opportunities Generation** such as 'Ghat Mein Haat', promotion of local products, Ayurveda, medicinal plants, capacity building of volunteers like Ganga Praharis.

- **Public Participation** to ensure increased synergies between stakeholders.
- **Cultural Heritage &Tourism** that looks to introduce boat tourism through community jettis, promotion of yoga, adventure tourism etc. and Ganga Artis.
- **Institutional Building by enhancing the local capacities** for better decentralized water governance.

Editorial Analysis

Sticking to Commitments, Balancing Energy Use and Climate Change

Ahead of the 27th Conference of the Parties of the UNFCCC (COP 27), in Sharm El-Sheikh, Egypt, in November, the Union Cabinet has approved India's Nationally Determined Contributions (NDC), a formal statement detailing its action plan to address climate change.

2015 Paris Agreement - Historical Background

- In 1992, **Earth Summit was held in Brazil** where the countries entered into **an international treaty known as the United Nations Framework Convention on Climate Change (UNFCCC).**
- In 1997, **the Kyoto Protocol was adopted** and **legally bounded the developed countries** to reduce the emission targets. However, this agreement didn't work out as **the top two polluter countries in the world, China and the US didn't participate.**
- At the **COP17, negotiations for the Paris Agreement started in Durban, South Africa** to create a new, comprehensive, and legally binding climate treaty by 2015. The treaty was **to include major Carbon emitters to limit and reduce their emissions of Carbon and gases leading to global warming.**
- The Agreement was **adopted in Paris, France on 12 December 2015** to reduce the emission of gasses contributing to global warming. The **Paris agreement** was open for signatures from April 22, 2016, to April 21, 2017, **came into force on November 4, 2016.** The Paris Agreement (also known as Conference of Parties 21 or COP 21) is a multilateral agreement under the United Nations Framework Convention on Climate Change (UNFCCC) to combat climate change and its adverse effects. India had signed the agreement in New York in April 2016. As of November 2021,

193 members of the United Nations Framework Convention on Climate Change (UNFCCC) are parties to the agreement.
- It officially entered into force after 55 parties to the convention accounting for at least 55% of total GHG (greenhouse gas) emissions ratified it. India was 62nd country to ratify it.

Aim of Paris Agreement

- To keep the **increase** in **global temperature in this century below 2°C** above pre-industrial levels while making efforts to **limit the increase to 1.5°C by 2100.**
- To help and support the countries that are vulnerable to the adverse impacts of climate change.
- To provide **financial and technological support to the developing countries** to adapt to climate change and transition to clean energy.
- **The 20/20/20 targets of the Paris Agreement-**The Paris Agreement aims to **reduce Carbon Dioxide emissions by 20%** and targets to **increase the renewable energy market share and energy efficiency by 20% each.**

Financial Support Pledge during COP 21

1- During the Paris Agreement, the **developed countries committed $100 Billion a year.**
2- For the launch of CREWS (Climate Risk and Early Warning Systems) initiative and Climate Risk Insurance, the **G7 countries announced USD 420 Million.**

(G7 Countries-It includes 7 countries, namely, **Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.** These countries meet annually to discuss several **issues including global economic governance, international security, and energy policy.)**

Difference between the Kyoto Protocol and the Paris Agreement

Paris Agreement	Kyoto Protocol
1- No difference between developed and developing nations.	1- There was a differentiation between the developed and the developing nations.
2- Countries announce their next round of targets every five years.	2- No such specific announcement of targets was made.

India at the COP 21

1- India stated that rapid growth is required to meet the **requirements of the 1.25 billion population** of the globe. Out of this, **300 million people still do not have access to energy.**
2- Despite the increasing demands, India pledged to **limit the emissions intensity per unit GDP by 33-35% of 2005 levels.**
3- India also aims to reach **40% of the installed capacity via non-fossil fuels.**
4- By the year 2022, India targets **175 GW of renewable energy generation.**
5- India set a goal to **increase forest cover to absorb 2.5 billion tonnes worth of carbon dioxide.**

Sticking to Commitments

- India's first NDC, in 2015, specified eight targets, the most salient of them being reducing the emissions intensity of GDP by 33%-35% (of 2005 levels) by 2030, having 40% of its installed electricity capacity sourced from renewable energy, and creating an additional carbon sink of 2.5-3 billion tonnes of CO2 equivalent through forest and tree cover by 2030.
- At **COP 26 in Glasgow in 2021**, Prime Minister Narendra Modi laid out five commitments, or 'Panchamrit', as the Government references it, which included India **increasing its non-fossil**

energy capacity to 500 GW by 2030 and achieving "Net Zero" by 2070, or no net carbon dioxide emitted from energy sources.

- India is on way to achieve its existing targets well ahead of the 2030 timeline.
- 41.5 per cent of India's current installed electricity capacity of 403 GW is now powered by non-fossil fuels. With most of the new capacity additions happening in the renewable energy sector, a 10 per cent rise in the share of non-fossil fuels in electricity generation is not an unrealistic target.

PRIME MINISTER'S PANCHAMRIT ANNOUNCED IN GLASGOW

Promise	Whether included in new NDC
Non-fossil fuel electricity installed capacity to reach 500 GW	Not included
At least 50 per cent of total installed electricity generation capacity to come from non-fossil fuel sources	Included
Reduction of one billion tonnes of carbon dioxide equivalent from cumulative projected emissions between now and 2030	Not included
At least 45 per cent reduction in emission intensity of GDP by 2030	Included
Net zero status by 2030	Never intended to be part of NDC

Way Forward

- While India is within its right to specify its emissions pathway, it should not — at any forum — promise more than what it can deliver as this undermines the moral authority that India brings to future negotiations.
- India has expressed its intent, via several legislations, to use energy efficiently and many of its biggest corporations have committed to shifting away from polluting energy sources.
- Going ahead, these should be grounds for India, at its pace, to be an exemplar for balancing energy use, development and meeting climate goals.

Too Good to be True

Recently, Urban Development Minister Hardeep Puri's announcement on social media that government has decided to house about 1,100 Rohingya migrants became a point of controversy.

Rohingya's Housing Controversy- More on News
- Mr. Puri said that migrant Rohingyas are living in makeshift slums, in flats with amenities instead, proved "too good to be true".
- The details Mr. Puri shared, as well as documents from 2021, showed that the Government had indeed been considering moving the Rohingya, who live on land donated by an Islamic charity, after their previous homes were burnt down.
- However, Mr. Puri was countered by the Home Minister's Office, which denied any such intention, instead terming them "illegal foreigners".

Government's Stand on Rohingya's Housing Controversy
- Home Ministry's Office said the plan was to keep Refugee Rohingyas (illegal foreigners) sequestered in their present homes.
- These homes would be designated as detention centres while the Government continued efforts to deport them to Myanmar.

Associated Concerns
- **Denying Human Treatment to Rohingyas:** Many steps of government and associated individuals suggest this. For example-
  - Union Home Minister referring to migrants as "termites",
  - He stated in Parliament that India would "never accept" the Rohingya, and
  - India even violated the UN principle of non-refoulement by deporting a Rohingya woman to Myanmar this year.
- **Against "Vasudhaiva Kutumbakam" Philosophy:** The treatment of the Rohingya, who fled to India in 2012 and 2017 after state-sponsored ethnic cleansing, has been against India's philosophy of "vasudhaiva kutumbakam". For exa-
  - The Rohingya have been driven out of homes in Rajasthan and Haryana,
  - Stigmatised by local authorities and intelligence agencies who accuse them of criminal and even terrorist intent.
- **Diluting the "Regional leader" Image:** New Delhi has failed thus far-
  - To play its role as a "Regional leader" in convincing Myanmar to provide its citizens homes and assurances of safety, or
  - In brokering dialogue between Dhaka and Naypyidaw to ensure their return;

Way Forward
- **Balancing between Foreign Policy Commitments and Domestic Politics:** The Rohingya housing issue seems to be an example of the clash between the Modi government's foreign policy commitments and its domestic politics.
- **Respecting UN Convention of refugees, 1951:** Though India is not a signatory to the convention, India must follow and respect it, especially when it comes to right treatment of forcefully displaced Rohingya Refugees.

Conclusion
- In the absence of long-term measures to resolve the Rohinga Refugee issue, the Indian Government could at least, provide the hapless Rohingya community better living conditions, until their future is secured.

The Coming 75 Years

As India celebrates 75 years of Independence, it is apt to imagine what the next 75 years will look like.
- Can our nation, obsessed with politics, Bollywood, and cricket, aspire to make the next 75 years an enviable era with a higher standard of living for every citizen?

Associated Concerns with S & T in India

- **Poor Investment in S&T:** India spends a meagre 0.7% of its GDP on research and development (R&D).
  - On the other hand, Israel and South Korea are prime examples that drive their respective economies by spending nearly 5% of their GDP on R&D.
- **Inefficient Implementation:** Although there is a well-defined system to disburse research grants to scientists through their institutions, it is mired in inefficiencies.
- **Other Key Challenges faced by Scientific Community in India:**
  - Inadequate staffing at funding agencies,
  - Lack of transparency in fund disbursal,
  - Lack of a rigorous international standard review and feedback process,
  - Excessive delay in fund disbursal, and
  - An outdated appraisal system.

The Coming 75 Years- Making India Scientific Power

India needs a shift in focus to science and technology. Following steps can be taken to make India a Scientific Superpower in next 75 years-

- **Increasing the R&D budget to 4% of the nation's GDP:** spending 4% of the national GDP on R&D is required to drive science and innovation.
  - However, an increase in the science budget to innovate must precede appropriate macro-level policy changes on how and where the money needs to be spent.
  - A part of this increase needs to be earmarked for building physical and intellectual infrastructure across the country, especially in the universities.
  - A first-class infrastructure must be accompanied by well-trained, globally competitive institutional administrators and processes.
  - India cannot compete on a global stage unless the dwindling infrastructure of its universities is upgraded.
- **Ensuring that individual institutions implement processes to accommodate the large budget:** before any policy changes take effect, individual institutions must implement processes to accommodate the large budget.
  - This requires standardising procedures across institutions and borrowing the best practices from some global counterparts.
  - For example, when the government encourages public-private partnerships, each grant-receiving institution must have internal procedures to handle their scientists' requests to facilitate effective academia-industry collaboration.
  - Bring and implement best practices from the industry and some of the best-run science grant administrations abroad.
  - The involvement of the IT major, Tata Consulting Services, and technology use in transforming passport services across the globe gives us hope.
- **Encouraging individual entrepreneurs and Linking science with society:** it is time to bring the fruits of science and technology closer to the masses.
  - There is no better way to do this than by promoting and facilitating individual entrepreneurs.
  - This has received increased attention from the government with many positive policy changes.
- **Lab to Land Implementation:** There are no better cradles for creative ideas than our university labs.
  - A robust system to link the labs with the entrepreneurs to funnel innovative ideas, products, and solutions to our society needs to be in place.
  - To make this happen, the universities must encourage scientists to innovate and place standardised procedures to take ideas out of labs.
  - Entrepreneurship will only succeed in India if it is backed by a funnel of ideas and a liberal process of taking those ideas out of our university labs.

Conclusion

- We must realise that the next generation of war is economic, not military, and only a science and technology-driven economy can prepare us for that.

Sop or Welfare Debate

> Recent Supreme Court's decision to form a body of stakeholders to examine the issue of 'freebies' raises the question whether the legislature can be bypassed on such a far-reaching exercise.

Concerns over Freebies in Elections

*   A general concern over 'freebies' pushing the economy to ruin or unviable pre-election promises adversely affecting informed decision-making by voters seems reasonable.
*   Concerns over what constitutes 'freebies' and what are legitimate welfare measures to protect the vulnerable sections
    o   These are essentially political questions for which a court of law may have no answer.
*   Concerns over Supreme Court's decision to interfere on the freebies which is a legislative matter.

Supreme Court's Observation

The Chief Justice of India, N.V. Ramana, headed Bench hearing a petition against the distribution or promise of 'freebies' ahead of elections made following observations.

*   It said that the Court is not going to issue guidelines, but only ensure that suggestions are taken from stakeholders such as the NITI Aayog, Finance Commission, Law Commission, RBI and political parties.
*   All these institutions can submit a report to the Election Commission of India (ECI) and Government.
*   A suggestion that Parliament could discuss this issue was met with scepticism by the Bench, which felt that no party would want a debate on this, as all of them support such sops.
*   The Bench also disfavoured the ECI preparing a 'model manifesto' as it would be an empty formality.
*   The Court's concern over populist measures seems to resonate with the Government too, as

the Solicitor-General submitted that these distorted the voter's informed decision-making; and that unregulated populism may lead to an economic disaster.

S. Subramaniam Balaji vs Government of Tamil Nadu (2013) Judgement

*   SC addressed these questions and took the position that these concerned law and policy.
*   It upheld the distribution of television sets or consumer goods on the ground that schemes targeted at women, farmers and the poorer sections.
    o   It said that these were in furtherance of Directive Principles.
*   The Court also said that as long as public funds were spent based on appropriations cleared by the legislature, they could neither be declared illegal, nor the promise of such items be termed a 'corrupt practice'.
*   It had, however, directed the ECI to frame guidelines to regulate the content of manifestos.

Election Commission of India (ECI) on Freebies

Following the directions of SC in S. Subramaniam Balaji vs Government of Tamil Nadu (2013) Judgement, ECI took following measures-

*   The ECI included in its Model Code of Conduct a stipulation that parties should avoid promises "that vitiate the purity of the election process or exert undue influence on the voters".
*   It added that only promises which were possible to be fulfilled should be made and that manifestos should contain the rationale for a promised welfare measure and indicate the means of funding it.

Conclusion

*   Distinguishing welfare measures from populist sops and pre-election inducements, or adding to the obligations of fiscal responsibility and fiscal prudence ought to come from the legislature and not from Judiciary.

Rankings that Make No Sense

Recently released the National Institutional Ranking Framework (NIRF)'s ranking of higher education institutions (HEIs) has received considerable flak from different sections of academia.

NIRF's ranking of Higher Education Institutions (HEIs)

- **About NIRF Ranking:** The National Institutional Ranking Framework (NIRF) is a framework adopted in 2015 by the Ministry of Education (Erstwhile Ministry of Human Resource Development) to rank institutions of higher education in India.

- **Categories for Ranking:** NIRF ranks higher education institutions under 11 different categories. Initially, there were only four categories in the first NIRF Ranking 2016. The 11 categories are-

1. Management
2. Engineering
3. Universities
4. Pharmacy
5. Architecture
6. Medical
7. Dental
8. Law
9. Colleges
10. Research Institutions
11. Overall

- **Parameters used for NIRF Rankings:** Assessment of Higher Educational Institutions are done by the ministry on the following five parameters-

1. Teaching, Learning, and Resources (TLR)
2. Research and Professional Practice (RP)
3. Graduation Outcomes (GO)
4. Outreach and Inclusivity (OI)
5. Peer Perception

Associated Concerns with NIRF India Ranking 2022

- **Data Fudging:** An analysis of the data submitted by some multi-discipline private universities participating in various disciplines under the NIRF provides evidence of data fudging.
  - There seems to be a lack of a rigorous system of verification by the NIRF of the data submitted by HEIs.
  - For instance, the faculty-student ratio (FSR) is an important criterion for ranking.
  - Evidence suggests that some private multi-discipline universities have claimed the same faculty in more than one discipline.
  - Faculty in liberal arts have been claimed as faculty in law too, to claim an improved FSR.

- **Lack of Transparency:** The NIRF requires the data submitted to it be published by all the participating HEIs on their website so that such data can be scrutinised.
  - Some private multi-discipline universities have not granted free access to such data on their website; instead, they require an online form to be filled along with the details of the person seeking access.
  - Such non-transparency is antithetical to the ranking exercise.
  - There is also discrepancy in the data submitted to the NIRF and the data on the websites of these institutions.
  - For instance, the data uploaded on the websites omit details on the number, name, qualification and experience of the faculty.

- **Gap in Methodology Employed:** There is a gap between the methodology employed for accreditation purposes and for ranking purposes.
  - While the National Assessment and Accreditation Council gives due weightage to publications in UGC-Care listed journals, the NIRF uses publication data only from Scopus and Web of Science.

Conclusion

- Severe methodological and structural issues in the NIRF undermine the ranking process. The methodology must be revised in consultation with all the stakeholders.

Moving Policy Away from Population Control

> The United Nations' World Population Prospects (WPP), 2022, forecasts India becoming the most populous country by 2023, surpassing China, with a 140-crore population.

A Sea-Change
- In the 1960s, India had a population growth rate of over 2%. At the current rate of growth, this is expected to fall to 1% by 2025.
- Last year, India reached a significant demographic milestone as, for the first time, its total fertility rate (TFR) slipped to two, below the replacement level fertility (2.1 children per woman), as per the National Family Health Survey.
- Post-Independence, in the 1950s, India had a TFR of six.
- Bottlenecks in achieving a low TFR include high illiteracy levels, rampant child marriage, high levels of under-five mortality rates, a low workforce participation of women, and low contraceptive usage compared to other States.
- A majority of women in India do not have much of an economic or decisive say in their lives and without ameliorating the status of women in society (quality of life), only lopsided development is achievable.

Demographic Dividend
- A larger population is perceived to mean greater human capital, higher economic growth and improved standards of living.
- As in the World Population Prospects 2022, India will have one of the largest workforces globally, i.e., in the next 25 years, one in five working-age group persons will be living in India.
- This working-age bulge will keep growing till the mid-2050s, and India must make use of it.

Concerning Areas
1. Serious Health Risks
- The disease pattern in the country has also seen a tremendous shift in these 75 years: while India was fighting communicable diseases post-Independence, there has been a transition towards non-communicable diseases (NCDs), the cause of more than 62% of total deaths.
- India is a global disease burden leader as the share of NCDs has almost doubled since the 1990s, which is the primary reason for worry.
- India is home to over eight crore people with diabetes. Further, more than a quarter of global deaths due to air pollution occur in India alone.
- With an increasingly ageing population in the grip of rising NCDs, India faces a serious health risk in the decades ahead.
- In contrast, India's health-care infrastructure is highly inadequate and inefficient.
- Additionally, India's public health financing is low, varying between 1% and 1.5% of GDP, which is among the lowest percentages in the world.
2. Even after reaching the replacement level of fertility, the population will continue to grow for three to four decades owing to the population momentum (large cohorts of women in their reproductive age groups).
3. Demographic Dividend
- There are several obstacles to harnessing this demographic dividend.
- India's labour force is constrained by the absence of women from the workforce; only a fourth of women are employed.
- The quality of educational attainments is not up to the mark, and the country's workforce badly lacks the basic skills required for the modernized job market.
- Having the largest population with one of the world's lowest employment rates is another enormous hurdle in reaping the 'demographic dividend'.
- Another demographic concern of independent India is the male-dominant sex ratio.
- Every other woman in the reproductive age group in India is anemic, and every third child below five is stunted.
- India stands 101 out of 116 nations in the Global Hunger Index; this is pretty daunting for a country which has one of the most extensive welfare programmes for food security through the Public Distribution System and the Midday Meals Scheme.

Way Forward

- Improvement in sex ratio should be a priority as some communities face severe challenges from a marriage squeeze (an imbalance between the number of men and women available to marry in a specific society) and eventual bride purchase.
- India is called a young nation, with 50% of its population below 25 years of age
- Advance investments in the development of a robust social, financial and healthcare support system for old people is the need of the hour.
- The focus of action should be on extensive investment in human capital, on older adults living with dignity, and on healthy population ageing.
- We should be prepared with suitable infrastructure, conducive social welfare schemes and massive investment in quality education and health.
- The focus should not be on population control; we do not have such a severe problem now. Instead, an augmentation of the quality of life should be the priority.

Hard Truths about India's Labour Reforms

Independent India was born at the midnight hour on August 15, 1947, 75 years ago, when India's first Prime Minister Jawaharlal Nehru unfurled the country's tricolour flag and announced to Parliament that India had made a "tryst with destiny".

India had won its independence after a long, remarkably peaceful struggle for freedom, led by Mahatma Gandhi.

Gandhi's Vision- Gandhi had a vision of a country not divided into fragments by religious and communal walls. He envisioned a country in which all Indians, whether rich or poor, would hold their heads high in dignity. India's "tryst with destiny" was to provide "poorna swaraj" (i.e., full freedom) to all its citizens: political freedom, social freedom, and economic freedom.

The Country's Fault lines

- Political liberties and freedoms of speech are being curbed in India. Social equality amongst castes has not been achieved.
- Lower caste citizens continue to live in great indignity and lower caste poor women live in abject poverty in India's villages. They are among the most oppressed humans on the planet.
- While the numbers of Indian billionaires increased during the COVID-19 pandemic, hundreds of millions of Indians lost their incomes when the country locked down during the pandemic and struggled to find shelter, food, and even drinking water for their families.
- India's gravest socio-economic problem is the difficulty a vast majority of citizens have in earning good livelihoods which does not just include employment but the poor quality of employment: insufficient and uncertain incomes, and poor working conditions, wherever they are employed — in factories, farms, service establishments, or homes.

The Labour Reforms

- The V.V. Giri National Labour Institute's interim report, "Impact Assessment Study of the Labour Reforms undertaken by the States", provides insights into the impacts of the reforms so far.
- The report spans the period 2004-05 to 2018-19. It focuses on six States which have implemented reforms: Rajasthan, Maharashtra, Andhra Pradesh, Tamil Nadu, Jharkhand, and Uttar Pradesh.
- The report reveals that labour laws are only one factor affecting business investment decisions. Investors do not go out to hire people just because it has become easy to fire them. An enterprise must have a growing market for its products, and many things must be put together to produce for the market — capital, machinery, materials, land, etc. not just labour. Therefore, it must be worthwhile to employ more people before firing them.

A Clear Picture

- Reforms of labour laws have had little effect on increasing employment in large enterprises. The report says that the effects of labour reforms

cannot be revealed immediately: they will take time.

- The share of employment in plants employing more than 300 people increased from 51.1% to 55.3% between 2010-11 to 2014-15 (the period when the emphasis was on administrative reforms), and then increased less, from 55.3% to 56.3%, in 2017-18, when some States made the bolder reforms favourable for employers. **Though overall employment is affected by many factors, the bolder reforms post 2014 were designed to promote larger factories.**

- The report says, employment in formal enterprises is becoming more informal. Large investors can afford to use more capital and are also employing increasing numbers of people on short-term contracts, while perversely demanding more flexibility in laws.

- The report defines **"formal" employment as the grant of paid leave, a written contract, and some "social security."** An enterprise should not have to employ more than 300 people before it provides these benefits.

- Along with the right to be heard and dignity at work, these are the minimal "essentials" all employers must provide to all those who work for them, whether in small enterprises or domestic help.

- Increasing the threshold of the laws dilutes the rights of association and representation of workers in small enterprises.

Executions in Myanmar

In the past few days, a Myanmar kangaroo court sentenced country's Nobel Prize winner and civilian leader, Aung San Suu Kyi, to a further six years imprisonment in addition to the 11 already handed down.

- In July, the Myanmar military (Tatmadaw) regime executed four democracy activists, including a former lawmaker.
- While the regime is known to deploy harsh measures, this was the first time since the 1980s that any democracy activist was executed.

- The executions followed repressions by Tatmadaw that include solitary confinement of Suu Kyi, prolonged detention of Australian economist Sean Turnell, and use of heavy weaponry and air power in civilian areas against resistance groups.

Myanmar Military Coup and Associated Issues

- **Background**: In February last year, Tatmadaw arrested the entire civilian leadership, installed a State Administrative Council to govern the country, and hoped for smooth control, but the coup has met with fierce resistance.

- **Resistance against Military Regime**: There is much diversity among the resistance; young adults, members of political parties, civil society, and even some government officials participate in the protests.

o There is a self-styled National Unity Government (NUG) of elected members of legislatures attempting to coordinate the resistance, and the People's Defence Forces (PDFs), its armed wing, are conducting sporadic strikes on military targets.

Military Rule in Myanmar- Rise of Ethnic-based armed organisations (EAOs)

- Ethnic-based armed organisations (EAOs) have a long history of conflict with the military, and the ceasefire process has stalled after the coup.
- With public disillusion with military rule, many EAOs have scaled up operations against the regime and large parts of Myanmar are not under Tatmadaw's control.
- The regime reportedly mobilised armed militias to contain the uprising but the opposition is not dispirited. Despite limited resources, the EAOs and PDFs demonstrate resilience in confronting the regime.
- A National Unity Consultative Council was set up to ensure they operate with a shared vision but ground level coordination is found wanting.

- While EAOs have relatively better command structures, the NUG fails to exercise adequate control of all PDFs.

Military Rule in Myanmar- Response of India, China and ASEAN

- **ASEAN:** There is a growing concern among ASEAN countries over its fellow-member Myanmar.
  o ASEAN has, last year, drafted a five-point agenda to resolve the crisis, which included mediation by a Special Envoy.
  o The current holder of this office is the Cambodian foreign minister, who this year travelled twice to Myanmar.
  o Unable to meet any opposition leaders in detention, little progress was achieved, and he expressed his frustration by stating "even Superman cannot solve the Myanmar problem".
- **Support from China:** China has never hinted that it could reconsider its economic interests in Myanmar; instead, it is inclined to enhance economic engagement.
  o Due to Chinese Support, it appears the military regime is not unduly perturbed by censure from ASEAN despite significant economic interactions.
- **India:** There are concerns that New Delhi has not expressed sufficient concern about the executions in Myanmar.
  o **India cannot afford to lose a geo-**strategic ally like Myanmar, especially to China.
  o The question is what India could do to facilitate a stable, federal democratic polity in our neighbour.

Conclusion

- Though the window of opportunity is narrow, India could adopt a three-pronged strategy-
  o Collaborating with like-minded ASEAN countries;
  o Urging Tatmadaw to start a genuine reconciliation process; and
  o Preparing the political/administrative resources in Northeast India to provide humanitarian aid to affected people across the border.

Cooling the Temperatures

> The four-day military exercises conducted by China, in the waters and airspace surrounding Taiwan, concluded on August 7 without incident comes as a relief to the region.

US-China Conflict over Taiwan

- **Chinese Military Exercise:** The drills saw the Chinese military not only cross the median of the Taiwan Strait but fire conventional missiles above Taiwan, aggressive acts that could have easily led to unintended escalation.
- **Taiwan's Response:** That they did not lead to any incidents is credit to the sober response from Taiwan's military.
  o Taiwan said it monitored China's exercises, some of which were held within 12 nautical miles of Taiwan, but chose to neither engage Chinese aircraft and warships, nor shoot down missiles.
- **Chinese Justification:** China's justification is that they were a needed response to draw a red line after what Beijing has seen as needless American provocation that triggered this entire crisis.
  o Recent visit of U.S. House Speaker Nancy Pelosi to Taiwan, the first such high-level engagement in 25 years, was in China's view further evidence of Washington "hollowing out" its commitment to a One China Policy.

US-China Conflict over Taiwan- Expected Impact

It is difficult to see what all three parties – the U.S., Taiwan and China – will ultimately gain from a visit.

- **For USA:** The recent visits appear to have been driven more by Ms. Pelosi's political inclinations than any well-considered long-term strategic objectives.
  o Even U.S. President Joe Biden and the U.S. military had cautioned against a trip that brings no lasting strategic benefits for Washington.
- **For Taiwan:** For Taiwan's 23 million people and for President Tsai Ing-wen, the rare high-profile

foreign visit was no doubt welcome in the face of increasing global isolation on account of China's pressure.

- o That short-term benefit may, however, be offset by the fact that Ms. Pelosi has arguably left Taiwan with a far worse strategic environment.
- **For China:** China's military has indicated its actions have now heralded a new normal in military activity across the Taiwan Strait, bringing it ever closer to Taiwan's shores.
  - o In response to Ms. Pelosi's visit, Beijing last week said it will cut off military channels with Washington by cancelling three key dialogue mechanisms, that too at a time of heightened military tensions.

Way Forward

- The focus must now turn to cooling the temperatures. Doing so will be easier said than done with the low levels of trust between the world's two biggest powers.
- War, it is said, is too important to be left to the generals. The same may be said of relations between nations: they should not be hostage to personal ambitions of politicians.

Bringing Eurasia Closer

Recently, RailFreight.Com reported that two 40-ft containers of wood laminate sheets crossed the Caspian Sea from Russia's Astrakhan port, and eventually reach Nhava Shiva port in Mumbai, marking the beginning of INSTC.

- The ships crossed the Caspian Sea from Russia's Astrakhan port, entered Iran's Anzali port, continued their southward journey towards the Arabian Sea, entered the waters at Bandar Abbas and eventually reach Nhava Shiva port in Mumbai.

International North South Transport Corridor (INSTC)

- **Background:** The legal framework for the INSTC is provided by a trilateral agreement signed by India, Iran and Russia at the Euro-Asian Conference on Transport in 2000.
- **About:** International North South Transport Corridor (INSTC) is a 7,200-km multi-modal transport corridor that combines road, rail and maritime routes connecting Russia and India via central Asia and Iran.
  - o The INSTC is expected to consolidate the emerging Eurasian Free Trade Area.
- **INSTC Members:** India, Iran and Russia are the founding members of the International North South Transport Corridor (INSTC).
  - o Later, Kazakhstan, Belarus, Oman, Tajikistan, Azerbaijan, Armenia and Syria have signed instruments of accession to become members of the INSTC.
- **Significance** of INSTC
  - o Once fully operational, the INSTC is expected to reduce freight costs by 30% and journey time by 40% in comparison with the conventional deep sea route via the Suez Canal.
  - o Indeed, the need for an alternative route was deeply felt last year, when the Ever Given container ship was stuck in the Suez, halting maritime traffic between the Mediterranean Sea and the Red Sea.
  - o India being founding member of both QUAD and INSTC, shows a shift in Indian foreign policy from non-alignment to multi-alignment.

Importance of INSTC for India

- India's investment in the INSTC is exemplified by its involvement in Iran's Chabahar port and the construction of a 500-km Chabahar-Zahedan railway line.
  - o Once completed, this infrastructure will allow India access to Afghanistan and central Asia, a prospect strengthened by the Taliban government's support for the project.
- India can now bypass Pakistan to access Afghanistan, central Asia and beyond.

- INSTC can shape a north-south transport corridor that can complement the east-west axis of the China-led Belt and Road Initiative (BRI).
- The INSTC offers a platform for India to closely collaborate with Russia, Iran and Central Asian republics.

Conclusion

- As a transcontinental multi-modal corridor that aims to bring Eurasia closer together, the INSTC is a laudable initiative in its own right. That it helps India consolidate its multi-alignment strategy sweetens the deal.

A Turning Point in Crypto Regulation, led by Europe

Finance Minister Nirmala Sitharaman's answer to a question recently in Parliament about the Indian government's stance on cryptocurrencies led to the speculation of a possible crypto ban in India.

What is a Cryptocurrency?

- Any form of currency that exists digitally or virtually and designed to work as a medium of exchange.
- Individual coin ownership records are stored in a ledger existing in a form of a computerized database.
- It uses strong cryptography to secure transaction records, to control the creation of additional coins, and to verify the transfer of coin ownership.
- Not issued by a central authority, cryptocurrencies typically use decentralized system based on blockchain technology as opposed to central banking systems which makes it nearly impossible to counterfeit or double-spend.
- The first blockchain-based cryptocurrency was Bitcoin, which still remains the most popular and most valuable.

Significance of Cryptocurrency

- It can help in keeping corruption in check by tracking the flow of funds and transactions due to its peer-to-peer network.
- Cryptocurrencies can help in saving money and substantial time for the remitter and the receiver, as it is conducted entirely on the Internet, runs on a mechanism that involves very less transaction fees and is almost instantaneous.
- Integrating blockchain into these sectors could result in hundreds of billions of dollars in savings.

Benefits of cryptocurrency

- Funds transfer between two parties will be easy and cheap without the need of third party like credit/debit cards or banks.
- Last few years have seen a sharp rise in the price of cryptocurrencies and due to this, cryptocurrencies can become a preferred investment destination.
- Due to the high demand for cryptocurrency its prices have largely remained on a growing trajectory as a result people tend to hold more cryptocurrency than spending it that may cause a deflationary effect on the currency.

Drawbacks of Cryptocurrency

- Cryptocurrencies do not have any sovereign guarantee and hence are not legal tender posing risks to consumers.
- Being very speculative in nature cryptocurrencies are highly volatile.
- Losing the private key will lead to the loss of access to crypto (unlike traditional digital banking accounts, this password cannot be reset).
- Private keys are stored by technical service providers (cryptocurrency exchanges or wallets), which are prone to malware or hacking.
- The public keys engaging in a transaction cannot be directly linked to an individual which makes cryptocurrencies more vulnerable to criminal activity and money laundering. They provide greater anonymity than other payment methods as well.

- Central bank cannot regulate the supply of cryptocurrencies in the economy posing a risk to the financial stability of the country in case of widespread use.
- It may have adverse consequences for the country's energy security (the total electricity use of bitcoin mining, in 2018, was equivalent to that of mid-sized economies such as Switzerland).

Europe's approach
- The European market is second to the United States economically and behind Asia in terms of the number of Internet users and yet Europe is the global yardstick on technology regulations.
- The General Data Protection Regulation, or GDPR, first published in 2016 and implemented in 2018, marked a turning point on consumer data protection and privacy not just in Europe but the world over.
- The GDPR introduced a framework for seeking user consent and introduced several progressive rules such as the right to forget. **The Supreme Court of India has also held that the right to privacy is a fundamental right and an integral part of the right to life and liberty.**
- This June, amid all the attention over inflation and the related capital market turmoil, the European Parliament and Council, the legislative arms of the European Union, came to a provisional agreement on long-awaited regulations on crypto, namely, the Regulation of Markets in Crypto-Assets, or MiCA.

Path to regulate crypto assets - Europe's way
- The Council presidency and the European Parliament reached a provisional agreement on the **markets in crypto-assets (MiCA)** proposal which covers issuers of unbacked crypto-assets, and so-called "stable coins", as well as the trading venues and the wallets where crypto-assets are held.
- By regulating crypto asset services and crypto asset issuers, Europe intends to provide consumer protection, transparency, and governance standards, regardless of the decentralized nature of the technology.
- Under MiCA, crypto asset service providers will be liable in case they lose investors' assets, and will

be subject **to European market-abuse regulations**, including those on market manipulation and insider trading.
- MiCA rightly demarcates stablecoins from other crypto assets.
- Under the proposed rules, issuers of stablecoins — asset-referenced tokens is the term it uses — are subject to a greater degree of compliance and declaration and stablecoin issuers must maintain reserves to cover all claims of the coins, and should implement a process for immediate redemption if and when holders seek one.

The recent collapse of **TerraUSD**, an algorithmic stablecoin that had no adequate reserve and relied mainly on the demand-and-supply balance with its sister coin, **Luna**, had caused significant losses to retail and institutional investors. If the laws Europe proposes were in effect, TerraUSD issuers would have had to maintain 1:1 reserve, which would have prevented the bank run that roiled the crypto market.

On right path
Europe still has some distance to cover to implement these proposed rules. But like the GDPR did for data protection, Europe has shown the way forward to regulate crypto in a manner that enables responsible businesses and protects users.

A Tryst with the Past

Recently, India celebrated its 76th years of Independence. Seventy-five years ago, on this day, India's first Prime Minister Pandit Jawaharlal Nehru made first PM address from the Red Fort. Few Lines of the speech are given below-
"The achievement we celebrate today is but a step, an opening of opportunity, to the greater triumphs and achievements that await us. Are we brave enough and wise enough to grasp this opportunity and accept the challenge of the future?"
In this context, the various achievements and missed opportunities over these seventy-five years for India are discussed below.

A Tryst with the Past- Achievements and Missed Opportunities

- **Achievements:** There have been significant achievements —
  - A constitutional scheme guaranteeing rights that included freedom of speech, religion and a secular state,
  - Implementation of universal adult franchise in periodic elections,
  - A thriving legislature,
  - Establishments allowing for a formal separation of powers,
  - A quasi-federal union of States that were reorganised on a linguistic basis,
  - The building of institutions (industrial, educational, medical) that heralded progress, and
  - The unleashing of knowledge and communication sectors that tied India beneficially to the world economy.
- **Missed Opportunities:** There have also been missteps and failings —
  - The inability to eradicate extreme poverty and marginalisation even though these did come down dramatically since 1947,
  - The strains in implementing the constitutional order and values,
  - Burgeoning communal majoritarianism, which was decidedly rejected by both the freedom fighters as well as the framers of the Constitution,
  - The incomplete nature of decentralisation of power, and
  - Rising economic inequality.
- **India's Potential:** India stands tall as-
  - One of the world's emerging economies with an advantageous demographic dividend,
  - A vibrant democracy that ensures enthusiastic participation in elections,
  - A diverse polity, and
  - A diversified economy.

A Tryst with the Past- Associated Challenges

India also faces humongous challenges.

- **Global Conservatism and Climate Change:** Its people live in a more chaotic world where cooperation and liberal trade relations have taken a beating and where climate change is a challenge.
- **Over Centralization:** The emergence and consolidation of a dominant political force that seeks to centralise power and homogenise the idea of India.
  - This has threatened to unravel the constitutional structure of recognition of diversity and inclusion as the means for overall progress.
- **Economic progress through inclusive growth** — a process that was accelerated following comprehensive reforms in the early 1990s and the institution of a rights-based approach towards welfare in the mid-2000s — has slowed down in the last few years.
- **Inter-State Disparity:** There is an exacerbation of inter-State disparities, with southern and western India delivering better outcomes in education, health care and thoroughgoing economic growth than other regions.
  - This is an issue that requires careful deliberation in the near future.

Conclusion

- India must continue policies, framed in the 1990s, of allowing entrepreneurial energies to flourish while relying on comprehensive welfare with a rights approach, which was given impetus in the late 2000s, to help utilise its demographic potential.
- India's progress in the 21st century would depend upon the re-ignition of the values like social justice, equality and unity in diversity.

A Timely Gesture

Recently, the Central Government decided to transfer a large chunk of tax devolution dues to States in one go.

- The norms for the ₹1 lakh crore interest-free loans offered to States for discretionary projects this year could also be reviewed to help it gain greater traction with State governments.

Tax Devolution to States

- **Reason:** Higher than anticipated buoyancy in tax receipts has nudged the Finance Ministry into raising the States' monthly share of the divisible pool of taxes from about ₹48,000 crore in the first quarter of 2022-23, to ₹58,332.86 crore for August.
  - o Surplus cash balances with the exchequer have created room to transfer two months' dues to States in one go, translating into a significant lump sum of nearly ₹1.17 lakh crore.
- **Significance:** It is a pragmatic step that will not only lend impetus to fresh capital spending on the ground but also temporarily soothe tempers amid a fresh round of unease between the Centre and States.

Why this Move is Important for States?

- **End of GST Compensation Phase:** States no longer have the fallback option of assured revenues from GST Compensation in the five years till June 30, 2022.
  - o Even for the GST dues that accrued this year, the Centre frontloaded the release of around ₹87,000 crore to States for April and May.
  - o Although accruals in the GST Compensation Cess account at the time were just ₹25,000 crore, by dipping into its own coffers.
  - o With another ₹35,000-odd crore of GST dues outstanding for June, the overall recompense for States from GST will be around ₹1.22 lakh crore, less than half of the ₹2.5 lakh-odd crore in 2021-22.
- **Changes in the Borrowing Norms of States:** There is another uncertainty facing States that has led to extremely tentative behaviour from their treasuries in recent auctions of State development loans- changes in their net borrowing norms.
  - o While the Centre had pegged States' borrowing limit at 3.5% of their Gross State Domestic Product for the year, this ceiling is to be pared in accordance with off-budget debt raised by States since 2020-21.

- o However, Finance Ministry clarified that only their off-budget debt for 2021-22 will be adjusted against the ceiling and that too, in a staggered manner between this year and 2025-26.

Conclusion

- These steps should help States, which expressed concerns about dwindling revenues at the recent NITI Aayog governing council meet, back the effort to rev up the economy with a capex spree.
- Friction points between the Centre and States will persist with fluctuating intensities, but a rising economic tide will ease constraints for both.

Making Bail Impossible

Recently, in Vijay Madanlal Choudhary v. Union of India case, the supreme Court upheld the constitutionality of the Prevention of Money Laundering Act (PMLA), is proof that the ghost of ADM Jabalpur has been resurrected.
- The old maxim of bail being the norm and jail the exception has been judicially cremated with this decision. Bail is now not even an exception; it is impossible.

Concerning Bail Provisions under PMLA

- **Section 45 of the PMLA:** To be eligible for bail, the arrested person must persuade the court that there are reasonable grounds for believing that he is not guilty of the money laundering offences brought by the Enforcement Directorate (ED).
  - o The onus is on the accused to prove that an event did not transpire. If he cannot do this, he will continue to languish in jail.
- **Judicial Observation:** To justify this high bar, the court overturned its decision in Nikesh Tarachand Shah v. Union of India (2017).
  - o In above case, SC had directed treating the offence of 'money laundering' as less heinous and therefore differently a crime from 'terrorism' under the Terrorist and Disruptive Activities (Prevention) Act (TADA).

- o The court stated that the offence of money laundering was as heinous as a terrorist act and as great a danger to the sovereignty and integrity of our country.
- **Associated Concerns:** SC ignored the fact that under the PMLA, money laundering also covers monies associated with offences relating to infringement of copyrights and trademarks, arts and antiquities, securities, information technology, companies, and air and water pollution.
- **Secrecy:** The court also declared that the ED does not need to share the Enforcement Case Information Report (ECIR) with the accused.
  - o This is bizarre because the same notion of secrecy is not applicable to equivalent documents (FIRs) for agencies like the police and the Central Bureau of Investigation.
  - o The ECIR contains the rationale for the ED to register the offence. However, the court chose not to equate the ECIR with an FIR.

Conclusion

- When someone is arrested for an offence under the PMLA, he will be placed in prolonged incarceration without being told the specifics of why this is so. And no court will ever be able to reasonably conclude that the person is entitled to bail under the law as it now stands.

The implications of the 5G roll-out for law enforcement

Prime Minister Narendra Modi recently announced that 5G deployment in India will commence sooner than expected.

Ensuring security

- The 5G roll-out is set to enhance efficiency, productivity, and security by helping the police access critical information in real-time and nab criminals.
- 5G has high bandwidth and low latency, so its adoption would ensure the best performance of

police devices such as body cams, facial recognition technology, automatic number-plate recognition, drones, and CCTVs.

- 5G promises to transmit clearer images which will simplify the task of the police who, at present, often look at hazy images from devices and attempt to decipher them while working on cases.
- The increased storage capacity promised by 5G will allow the police to streamline their investigation methods.
- 5G will also allow rapid and secure communication within the organization as well as between civilians and emergency responders.
- With 5G, the police can remotely access and analyse crime data and information from other infrastructure such as traffic lights.

Challenges in adopting 5G

- The government and telecommunication companies must first ensure that law enforcement agencies have the necessary infrastructure to take full advantage of all that 5G can offer.
- Most police systems are outdated and may not be compatible with 5G. To bridge this technology gap, the police must invest in modern tools, software and infrastructure.

Cyber security concerns

- Deploying 5G when we have a shaky cyber security foundation is like erecting a structure on soft sand.
- Since 5G is a software-defined digital routing making it susceptible to cyber threats such as botnet attacks, man-in-the-middle attacks, and distributed denial-of-service (DDoS) overloads.
- Besides, as 5G lacks end-to-end encryption, hackers can plot their attacks more precisely and perpetrate cybercrimes by hacking into systems or disseminating illegal content.
- The bandwidth expansion due to 5G will enable criminals to embezzle data bases easily and with time, as 5G connects with additional devices, the frequency of attacks could increase.

- 5G may also make it easier for criminals to perpetrate cyber bullying.
- Criminal groups may be able to easily coordinate DDoS onslaughts because of the real-time communication capabilities between multiple criminal groups. They could also hack into Internet-of-Things (IoT) devices and remotely commit crimes. Security patching of all IoT devices may eventually become necessary.
- Terrorists, too, could benefit from 5G as the high speed would allow them to execute attacks more rapidly and precisely.
- With 5G, terrorists can plan attacks without having to travel physically or use telephones, which could leave a trail for law enforcement agencies to act on.

What can be done?
Authorities will have to adopt measures to hinder crimes facilitated by 5G technology.

- **First**, the police will need to be trained so that they recognize new 5G-enabled crimes.
- **Second**, training programmes focusing on such crimes must be developed. This includes identifying potential scenarios for new types of crimes and their prevention.
- **Third**, the government and telecom companies could think of setting up a 5G crime monitoring task force to monitor and identify new crimes and develop countermeasures.
- **Fourth**, it is imperative to create regulations that make it a crime for people to use 5G technology to commit crimes. Such a regulation could help prevent criminals from using stolen or counterfeit equipment since telecom companies will be able to track the location of the equipment and shut it down remotely.
- **Fifth**, regulations may also require telecom companies to allow police officers access to their equipment to track the location of victims and perpetrators of 5G-facilitated crimes for countermeasures. These countermeasures may not only safeguard critical infrastructure but also defend private citizens from cyber-attacks using 5G technology.

- **Finally**, law enforcement agencies will have to evolve strategies to identify victims of 5G-facilitated crimes, locate them and act against the perpetrators of such crimes.

Conclusion
- The 5G roll-out will be a game-changer for law enforcement agencies. It will enable the police fight crime effectively. At the same time, criminal use of 5G is inevitable. In this context, the recent recommendation of the Telecom Regulatory Authority of India to the government to develop a national road map for India to implement 5G in the best possible manner should encompass law enforcement requirements.

Heading the G20 and New Delhi's Choices

In about three months, India will assume for the first time the Group of 20 (G20) year-long presidency from December 1, 2022 to November 30, 2023, culminating with the G20 Summit in India in 2023.

India hosting G20 Summit 2023
- G20 Summit in India will hosted as the culmination of India's G20 Presidency (from December 1, 2022 to November 30, 2023).
- The subsequent months will witness India hosting over 200 meetings with hundreds of ministers, officials, diplomats, businessmen, non-governmental organisations, working groups, and engagement groups of the G20 composed of 19 powerful economies and the European Union (EU).
- India has hosted large international conferences such as the Non-Aligned Movement (NAM) summit in 1983 and the Third India-Africa Forum summit in 2015. But nothing compares with hosting the G20.

Importance of G20
- G20 is the world's informal steering directorate on global economic issues. G20 entails the

responsibility of shaping decision-making on key challenges facing the world today.
o G20 summit is preceded by a large quantum of preparatory deliberations that feed into the final outcome.
- The G20 membership represents nearly 90% of the world's GDP, 80% of global trade, and 67% of the planet's population.
- It is an advisory body, not a treaty-based forum and, therefore, its decisions are recommendations to its own members.
- The weight of this powerful membership carries enormous political and economic influence.
- The representation of the United Nations, the World Bank, the International Monetary Fund, the World Trade Organization, the World Health Organization, and other multilateral institutions in it makes the G20 an incomparable body.

Contemporary Challenges Faced by G20 Grouping
- Even present chair Indonesia is facing following challenges leading to 2022 Bali summit (in November) where all G20 leaders may not be sitting physically in the same room.
  o Disastrous impact of the novel coronavirus pandemic,
  o War in Ukraine,
  o India-China border tensions,
  o EU/U.S.-Russia hostility, and
  o Deteriorating U.S.-China relations
- At G20 Summit 2023, India's mission will be not only to save the G20 but also the future of multilateral cooperation in diverse domains of the grouping's multi-dimensional agenda.
  o The outcome in Bali will affect the Delhi summit.
  o Indian officials are thus carefully planning their strategy as the burden and the prestige of the presidency are bestowed on India.

Heading the G20 and New Delhi's Choices
As a president and host of G20 Grouping, India is guided by the triple motivation of promoting India's national interest, leaving its mark on the G20, and maintaining its primacy as an effective instrument of global governance.

- **Promoting Brand India:** G20 presidency offers a unique branding opportunity for India's recent achievements, including the ability to combat COVID-19 effectively at home and abroad through vaccine aid and diplomacy. Other major achievements are-
  o India's digital revolution,
  o Its steady progress in switching to renewables,
  o Meeting its targets to counter climate change, and
  o Its push for self-reliance in manufacturing and reshaping global value chains.
  o New trends in entrepreneurship, business innovation, the rise of many start-ups as unicorns, and gender progress.
- It can also be utilised to transform India's sub-optimal physical infrastructure to create an attractive investment and tourism destination, especially as several important G20 meetings will be hosted outside Delhi.
- **Asserting Leadership of Global South:** four democracies on the path to becoming powerful economic players — Indonesia, India, Brazil, and South Africa — hold the presidency from December 2021 to November 2025.
  o This offers a rare opportunity for synergy and solidarity to advance the interests of the developing world and to assert their combined leadership of the Global South.
- **Promoting IBSA:** An exceptional coincidence is that all three members of IBSA- India, Brazil, and South Africa- will hold the G20 presidency consecutively in 2023, 2024, and 2025.
  o IBSA needs an urgent rejuvenation by convening an informal meeting of its top leaders, perhaps on the sidelines of the Bali summit to develop a cohesive plan to project the priority concerns of the Global South.
- **Projecting India as a Chief Global Diplomat:** As the G20 president, India will be obliged to take a broader view of the G20 agenda to synthesise divergent interests of all constituents of the forum:
  o Five permanent members of the UN Security Council,

- o The developed world united under the flag of the G7,
- o Five members of BRICS, and
- o Other G20 members such as Argentina and Mexico.
- **Including the Interests of Non-G20 Members**: As the president and host, India should factor in the perspectives of countries not represented in the G20.
  - o India will advocate an inclusive approach, with pragmatic and human-centric solutions to global issues.
  - o An important aim should be to end Africa's marginalisation by elevating the African Union (AU) from permanent observer to a full-fledged member of the G20, thus placing it on a par with the EU.

Conclusion

- India should combine an India-focused view, promote the vital interests of the Global South, and demonstrate diplomatic acumen to communicate with and reconcile the viewpoints of rival and adversarial power centres such as the West, Russia, and China.

Sops for Votes

The Supreme Court has stayed its earlier judgement on providing freebies to people by various political parties and referred the issue to a three-judge Bench.

- Earlier, the Supreme Court considered the formation of an expert body to examine the issues relating to political parties promising free goods to voters in their election manifestoes.

Supreme Court Judgement on Freebies in Election Manifesto

- In recent judgement, SC referred for deeper consideration is the correctness of an earlier judgment in S. Subramaniam Balaji vs Tamil Nadu (2013), which ruled that making promises in

a manifesto would not amount to a corrupt practice.

- The proceedings before a Bench, headed by the now retired Chief Justice of India N.V. Ramana, last week, offered crucial perspectives on the political economy of welfarism, socialism and pre-election promises of 'freebies'.
- Over the few hearings, the Bench moved from vague references to 'freebies' to making rational distinctions between welfare schemes and socio-economic concessions on the one hand, and poll-time announcements of material goods and items as incentives to vote.

Government Stand on Political Freebies in the Election Manifesto

- Those who have approached the Court against irrational promises found support from the Union government.
- Following Prime Minister Narendra Modi making public comments disapproving of the 'freebie' culture, the Government's stand is no surprise.
- However, the Government was reluctant to examine the issue through discussions among political parties and favoured a judicially appointed panel.
  - o But, such a panel may not achieve much.

Opposition Parties on Freebies in Election Manifesto

- Most parties oppose any fetters on their right to appeal to voters through means of their choice and, if elected, use their mandate to distribute finances and resources as they deem fit, subject to law and legislative approval.
- To alleviate their Grievances, the Bench has included in its reference, questions on the scope of judicial intervention in the matter and whether any enforceable order can be passed.

SC observations on Freebies and DPSPs

- The two-judge Bench judgment in 2013 had examined the issue in the backdrop of the DMK coming to power in 2006 on a promise to distribute television sets to the poor and implementing it.

- It ruled that the Directive Principles of State Policy allow such schemes and that spending of public funds on them could not be questioned if it was based on appropriations passed by the legislature.
- It also concluded that poll promises by a party could not be termed a 'corrupt practice'.
- That Bench had also rejected the argument that giving benefits to everyone, that is, the poor and the well-off, would violate the equality norm in Article 14.
  o When it came to state largesse, it said, the rule against treating unequals as equals would not be applicable.

Floods and Foes

Prime Minister Narendra Modi's message, in a recent tweet, expressing condolences to the victims of the flooding in Pakistan, is a welcome gesture.
  o Pakistan has been facing one of the worst natural disasters in recent times in the form of Floods.

Flood in Pakistan- Loss of Life and Property

- More than 1,100 people have died, and over 33 million people have been affected, as officials say one-third of the country is under water, and estimate about $10 billion in damage to homes, roads and infrastructure.
- The floods have also affected standing crops, and as the waters recede, fears of disease as well as food shortages are expected to rise.
- In addition, the worry that the devastating floods have been caused due to climate change is a worry for all of South Asia, one of the world's regions most vulnerable to global warming.

Flood in Pakistan- Support from Other Countries

- UN Secretary General Antonio Guterres launched a global appeal for aid to Pakistan, that he said had been hit by a "monsoon on steroids", indicating unnatural climate patterns.

- Countries such as the U.K., the U.S., China, the UAE, Qatar and Turkey have already dispatched aid to Pakistan, and many others have promised help.
- The IMF announced a $1.1 billion bailout tranche, as part of ongoing negotiations with the Pakistan that is already steeped in an economic crisis.

Flood in Pakistan- India's Support

- Pakistan Finance Minister Miftah Ismail said that he may propose lifting the trade ban imposed on India after the Jammu-Kashmir reorganisation in 2019, so as to import Indian vegetables and essential commodities.
- Thus far, Islamabad has only made exceptions for pharmaceutical imports from India during the COVID-19 pandemic, and India's humanitarian aid to Afghanistan

Flood in Pakistan- Way Forward

- Despite the poor state of India-Pakistan ties, both New Delhi and Islamabad must put aside their domestic considerations, and seize the moment to help those stranded in the flooding as best they can.
- It would be churlish and short-sighted of Pakistan to reject an opportunity to lift the trade ban with India that has only hurt its own interests, and to give up a source of affordable supplies at a time of such calamity.

Conclusion

- it would be both tragic and ridiculous if the enmity between the two countries would not allow them to work together at a time such as this, even as their governments allow their cricket teams to play each other for financial considerations.
  - While a more lasting dialogue, that has been suspended between the two countries for nearly a decade over the terrorism issue, is unlikely, the leaders must find the time to discuss ways to mitigate the catastrophe at hand.

Practice Questions

SET-01

1. Consider the following statements regarding the National Anti-Doping Bill
   1. It aims to make the National Anti-Doping Agency (NADA) a statutory authority.
   2. The Bill establishes a National Board for Anti-Doping in Sports to make recommendations to the government on anti-doping regulation and compliance with international commitments on anti-doping.
   3. Under this NADA can publicly disclose certain information related to the athlete if the anti-doping rule is violated

   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 1 and 3   (d) 1,2 and 3

2. Consider the following statements regarding World Anti-Doping Agency (WADA)
   1. It was set up under the International Olympic Committee
   2. It is headquartered in Paris.
   3. WADA is recognized by the UNESCO International Convention against Doping in Sport (2005).

   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 1 and 3   (d) 1,2 and 3

3. Consider the following statements
   1. The rare earth elements (REE) include the 15 elements under the Lanthanides series plus Scandium and Yttrium.
   2. Light RE elements (LREE) are not available in Indian deposits in extractable quantities
   3. China tops in the global production of the REE with the highest imports for Heavy RE elements HREEs.

   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 1 and 3   (d) 1,2 and 3

4. Consider the following statements regarding Minerals Security Partnership (MSP)
   1. It is a US-led partnership initiative of 11 nations that aims to bolster critical mineral supply chains
   2. India has recently joined this.
   3. It is aimed at catalyzing investment from governments and the private sector to develop strategic opportunities.

   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 1 and 3   (d) 1,2 and 3

5. Consider the following statements
   1. Minerals for military and defense are termed as Critical minerals whereas Minerals whose threat to supply can disrupt and harm the economy are called as strategic minerals
   2. A critical mineral may or may not be strategic but a strategic mineral will always be critical Minerals.

   Which of the statements given above is/are correct?
   (a) 1 only   (b) 2 only
   (c) Both 1 and 2   (d) Neither 1 nor 2

6. Wetlands, according to the Environment Ministry include
   1. Natural and not artificial area of marsh, fen, or peatland
   2. Areas of marine water the depth at which low tide does not exceed six metres
   3. Flowing river channels
   4. permanent or temporary water body that is static or flowing having fresh, brackish or salt water

   Which of the statements given above is/are correct?
   (a) 1,2,3 and 4   (b) 2 and 4
   (c) 1,3 and 4   (d) 1,2 and 3

7. To be a Ramsar site, however, it must meet at least one of the nine criteria as defined by the Ramsar Convention of 1971. Which of the following is not one of those?
   (a) an important source of food for fishes, spawning ground, nursery, and/or migration path on which fish stocks are dependent upon
   (b) regularly supports 20,000 or more waterbirds
   (c) regularly supports 1% of the individuals in a population of one species or subspecies of waterbird
   (d) All of the above are the criteria of the Ramsar Convention 1971

8. Consider the following statements regarding Ramsar sites
   1. Ramsar is an intergovernmental environmental treaty established in 1971 by UNESCO
   2. India ratified the Convention in 1981.
   3. Currently, India has 64 Ramsar sites
   4. Tamilnadu has the highest number of Ramsar Sites in India.

Which of the statements given above is/are correct?
(a) 1,2,3 and 4   (b) 2 and 4
(c) 1,3 and 4   (d) 1,2 and 3

9. Which of the following pair is incorrect?
   Ramsar Site   -   State
   1) Koothankulam Bird Sanctuary - Tamilnadu
   2) Nanda Lake   - Goa
   3) Ranganathittu Bird Sanctuary - Kerala
   4) Sirpur Wetland   Madhya Pradesh.

10. Consider the following statements regarding non-permanent members of the UN security council
   1. These ten non-permanent members are elected by the United Nations General Assembly for two-year terms starting on 1 January.
   2. The African continent has the highest number of non-permanent members.

Which of the statements given above is/are correct?
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Solutions

1. **(d):** Currently, anti-doping rules are implemented by the National Anti-Doping Agency, which was established as a society. The Bill provides for constituting this National Anti-Doping Agency as a statutory body. It will be headed by a Director General appointed by the central government.
   The Agency will also have the power to collect certain personal data of athletes such as: (a) sex or gender, (ii) medical history, and (iii) whereabouts information of athletes (for out-of-competition testing and collection of samples). The Agency will prescribe the procedure for collection, usage, processing, and disclosure of such personal data. It will publicly disclose certain information such as the name of the athlete, the anti-doping rule violated, and the consequences imposed.
   The Bill establishes a National Board for Anti-Doping in Sports to make recommendations to the government on anti-doping regulation and compliance with international commitments on anti-doping.
   Only France, the US, China, and Japan have their own anti-doping laws.

2. **(c):** In November 1999 the World Anti-Doping Agency (WADA) was set up under the International Olympic Committee. Note that WADA is recognized by the UNESCO International Convention against Doping in Sport (2005). Currently it is headquartered in Quebec, Canada.
   Trick-
   Remember Headquarters by **WADA-CANADA**.

3. **(c):** What are rare earth elements?
   The 17 rare earth elements (REE) include the 15 Lanthanides (atomic numbers 57 — which is Lanthanum — to 71 in the periodic table)

plus Scandium (atomic number 21) and Yttrium (39).

REEs are classified as light RE elements (LREE) and heavy RE elements (HREE).

Some REEs are available in India — such as Lanthanum, Cerium, Neodymium, Praseodymium Samarium, etc. Others such as Dysprosium, Terbium, and Europium, which are classified as HREEs, are not available in Indian deposits in extractable quantities. Hence, there is a dependence on countries such as China for HREEs, which is one of the leading producers of REEs, with an estimated 70 percent share of the global production.

4. **(c):** As part of a global 'China-plus-one' strategy adopted post the Covid-19 pandemic that caused massive supply-chain disruptions, a group of western nations are cooperating to develop alternatives to China to ensure key industrial supplies. A new US-led partnership initiative of 11 nations aims to bolster critical mineral supply chains. India is not part of this arrangement — called the Minerals Security Partnership (MSP) — but **New Delhi is working through diplomatic channels to fetch an entry.**

The US and 10 partners — Australia, Canada, Finland, France, Germany, Japan, the Republic of Korea (South Korea), Sweden, the United Kingdom, and the European Commission — have come together to form the MSP. The new grouping is aimed at catalyzing investment from governments and the private sector to develop strategic opportunities.

5. **(a):** The terms in statement 1 are swapped.
   1. Minerals for military and defense are termed as strategic minerals whereas Minerals whose threat to supply can disrupt and harm the economy are called as Critical minerals
   2. A critical mineral may or may not be strategic but a strategic mineral will always be critical.

Strategic minerals were distinguished by their essentiality to the national defense, their high degree of salience in wartime, and the need for strict conservation and control over distribution. While, Critical minerals were considered less essential and more available domestically, requiring some degree of conservation

6. **(b):** Wetlands, according to the Environment Ministry, are an "area of marsh, fen, peatland or water; whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres, but does not include river channels, paddy fields, human-made water bodies/ tanks specifically constructed for drinking water purposes and structures specifically constructed for aquaculture, salt production, recreation and irrigation purposes".

7. **(d):** A wetland can be considered internationally important if any of the following nine criteria apply:
   - Criterion 1: "it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region."
   - Criterion 2: "it supports vulnerable, endangered, or critically endangered species or threatened ecological communities."
   - Criterion 3: "it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region."
   - Criterion 4: "it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions."
   - Criterion 5: "**it regularly supports 20,000 or more waterbirds**."
   - Criterion 6: "**it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.**"

- Criterion 7: "it supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity."
- Criterion 8: "it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend."
- Criterion 9: "it regularly supports 1% of the individuals in a population of one species or subspecies of wetland-dependent non-avian animal species."

8. **(d):** A **Ramsar site** is a wetland site designated to be of international importance under the Ramsar Convention, also known as "The Convention on Wetlands", an intergovernmental environmental treaty established in 1971 by UNESCO, which came into force in 1975.

    India ratified the Convention in 1981.

    With the announcement of the Ministry of Environment, Forest and Climate Change (MoEFCC) on July 26 to designate five more wetlands as Ramsar sites, India now has 64 Ramsar sites in total. India has the highest number of wetlands in a country in south Asia.

    Uttar Pradesh with 10 Ramsar sites is the state with the highest number of Ramsar Sites in India.

9. **(c):** India has added 10 more Ramsar sites or wetlands that are of international importance, taking the number of such sites to 64.

    The sites are
    - **Koothankulam Bird Sanctuary**, Gulf of Mannar Marine Biosphere Reserve, Vembannur Wetland Complex, Vellode Bird Sanctuary, Vedanthangal Bird Sanctuary and Udhayamarthandapuram Bird Sanctuary, all **in Tamil Nadu**
    - Satkosia Gorge in Odisha
    - **Nanda Lake** in **Goa**
    - **Ranganathittu Bird Sanctuary** in **Karnataka**, and
    - **Sirpur Wetland** in **Madhya Pradesh.**

10. **(c):** **Context:** India to host UNSC meet on counterterrorism in October

    Along with the five permanent members, the Security Council of the United Nations has temporary or Nonpermanent members that hold their seats on a rotating basis by geographic region.

    These ten non-permanent members are elected by the United Nations General Assembly for two-year terms starting on 1 January, with five replaced each year.o be approved, a candidate must receive at least two-thirds of all votes cast for that seat

    The African Group is represented by the highest three members; the Latin America and the Caribbean, Asia-Pacific, and Western European and Others groups by two apiece; and the Eastern European Group by one.

SET-02

1. Consider the following statements regarding Pradhan Mantri Adi Adarsh Gram Yojna
    1. It aims at the integrated development of selected villages in which the population of Scheduled Castes and Schedule tribes is above 50%.

2. It is being implemented by the Ministry of Tribal Affairs

    Which of the statements given above is/are correct?
    (a) 1 only   (b) 2 only
    (c) Both 1 and 2   (d) Neither 1 and 2

2. Consider the following statements regarding Pharmacopoeia Commission for Indian Medicine and Homeopathy
   1. It is a statutory body.
   2. It works under the aegis of the ministry of health and family welfare
   3. It develops Pharmacopoial Standards for Ayurvedic, Unani, Siddha & Homoeopathic drugs

   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 3 only   (d) 1,2 and 3

3. Consider the following statements regarding National AYUSH Mission (NAM)
   1. It is a flagship scheme of the Ministry of AYUSH, launched in 2014.
   2. is a Centrally Sector Scheme of the Union Government.

   Which of the statements given above is/are correct?
   (a) 1 only   (b) 2 only
   (c) Both 1 and 2   (d) Neither 1 and 2

4. Consider the following statements regarding Industrial Outlook Survey **(IOS)**
   1. Industrial Outlook Survey **(IOS)** is conducted by the *Reserve Bank of India (RBI)*
   2. It is an annual survey that publishes the performance of the manufacturing sector.

   Which of the statements given above is/are correct?
   (a) 1 only   (b) 2 only
   (c) Both 1 and 2   (d) Neither 1 and 2

5. Consider the following statements regarding The Undavalli caves
   1. The Undavalli caves are an example of monolithic rock-cut architecture
   2. The Undavalli caves are located on the banks of the Krishna River, In Andhra Pradesh

   Which of the statements given above is/are correct?
   (a) 1 only   (b) 2 only
   (c) Both 1 and 2   (d) Neither 1 and 2

6. The Dhebar Commission frequently seen in the news is associated with
   (a) Financial devolution in panchayats.
   (b) Administrative reforms
   (c) Classification of Tribal communities into "Primitive Tribal Groups (PTGs)"
   (d) Preserving the Groundwater

7. Consider the following statements regarding Cholas
   1. Dravidian architecture emerged in the southern part of the Indian subcontinent during the Chola period.
   2. Cholas continued with the temple building tradition of the Pallavas but shifted to using bricks instead of stones.
   3. The magnificent Shiva temple of Thanjavur or Brihadeeshwarar temple was completed around by Rajaraja Chola

   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 3 only   (d) 1,2 and 3

8. Par and Paat systems are basically
   (a) Traditional methods of fish catching
   (b) Traditional organic farming techniques
   (c) Traditional water conservation techniques
   (d) Traditional methods of conservation of Ecologically important areas related to fauna and Flora

9. Portulaca oleracea, commonly known as purslane, is
   (a) A newly discovered marine Fish
   (b) A Seaweed which can help in creating drought-tolerant crops
   (c) A newly discovered species of rattlesnake from Western Ghats
   (d) A newly discovered Species of Butterfly

10. Consider the following statements regarding Ocean Thermal Energy Conversion (OTEC) Plant
    1. It is the world's first self-powered desalination plant commissioned at Lakshadweep
    2. Its system uses seawater or ammonia as working fluid.
    3. It runs fully on renewable energy.

    Which of the statements given above is/are correct?
    (a) 1 and 2   (b) 2 and 3
    (c) 3 only   (d) 1,2 and 3

Solutions

1. **(b):** PM Adi Adarsh Gram Yojna The earlier scheme of 'Special Central Assistance to Tribal Sub-Scheme (SCA to TSS) was modified to "Pradhan Mantri Adi Adarsh Gram Yojna" (PMAAGY). The Scheme is intended for implementation during 2021-22 to 2025-26. It aims at mitigating gaps and providing basic infrastructure in villages in convergence with funds available under different schemes in Central Scheduled Tribe Component.

   Pradhan Mantri Adi Adarsh Gram Yojna (PMAAGY)' is being implemented by the Ministry of Tribal Affair.

   PM Adarsh Gram Yojana (PMAGY) aims at the integrated development of villages in which the population of Scheduled Castes is above 50%.

2. **(c):** Recently, the Government of India established Pharmacopoeia Commission for Indian Medicine & Homoeopathy (PCIM&H), as a subordinate office under the Ministry of Ayush.

   The Commission was initially established as Pharmacopoeia Commission for Indian Medicine (PCIM) in 2010 and was registered under Societies Registration Act, 1860 later in the same year.

   PCIM&H is now created by merging the Pharmacopoeia Commission of Indian Medicine & Homoeopathy (PCIM&H) and the two central laboratories namely- Pharmacopoeia Laboratory for Indian Medicine (PLIM), Ghaziabad and Homoeopathic Pharmacopoeia Laboratory (HPL).

   The Commission is engaged in the development of Pharmacopoial Standards for Ayurvedic, Unani, Siddha & Homoeopathic drugs.

3. **(a):** National AYUSH Mission (NAM) is a flagship scheme of the Ministry of AYUSH, launched in 2014. National AYUSH Mission is a Centrally Sponsored Scheme of the Union Government.

4. **(a):** Industrial Outlook Survey (IOS) is conducted by the Reserve Bank of India (RBI) On a quarterly basis. The survey assesses business sentiment for the first quarter and expectations for the ensuing quarter period, based on qualitative responses on a set of indicators pertaining to demand conditions, financial conditions, employment conditions, and the price situation. The survey provides useful insight into the performance of the manufacturing sector.

5. **(c):** The Undavalli caves, an example of monolithic rock-cut architecture, is one of the finest testimonials to ancient Viswakarma Sthapathis located in the Guntur district of Andhra Pradesh. These caves are located at the top of the high hills facing the Krishna River.

   These caves were carved out of solid sandstone on a hillside in the 4th to 5th centuries CE

   Source: https://www.thehindu.com/news/national/andhra-pradesh/andhra-pradesh-tricolour-hues-for-undavalli-caves-konda-reddy-buruju/article65722146.ece

6. **(c):** Tribals account for around 8.6% of the Indian population. Article 342 of the Constitution says that: The Scheduled Tribes (STs) are the tribes or tribal communities which have been declared as such by the President through a public notification. The Dhebar Commission (1973) created a separate category "Primitive Tribal Groups (PTGs)" which was renamed in 2006 as "Particularly Vulnerable Tribal Groups (PVTGs)".

7. **(b):** Dravidian Temple Architecture style emerged in the southern part of the Indian subcontinent during the Pallava period. It has two sub-styles: Nayaka style and Vijayanagar style.

Cholas continued with the temple building tradition of the Pallavas but shifted to using bricks instead of stones. They also contributed a lot to the Dravidian-style Temple designs, which reached their perfection under the Cholas.

The magnificent Shiva temple of Thanjavur called the Rajarajeswara or Brahadeeshwarar temple was completed around 1009 by Rajaraja Chola and is the largest and tallest of all Indian temples. Having the world's tallest temple tower, 1,30,000 tonnes of granite in the structure, and being a UNESCO World Heritage Site, Brihadeeshwar temple is a great Marvel.

S8. (c): Focus on traditional water storing structures can save gallons of water.
For example,
Baolis (Rajasthan, Gujarat), tanks,
Ponds (Talabs),
Check dams (called Bandha in the Mewar region), etc.
Paar system (western Rajasthan): It is a common place where the rainwater flows from the agar (catchment) and in the process percolates into the sandy soil.
Pat System (Bundelkhand region): This system was devised according to the peculiarities of the terrain to divert water from swift-flowing hill streams into irrigation channels called pats.

S9. (b): Scientists integrated two metabolic pathways to produce a novel type of photosynthesis that enables the weed to withstand drought while remaining highly productive. A common weed and succulent—Portulaca oleracea, commonly known as purslane, offers important clues about creating drought-tolerant crops in a world beset by climate change. Purslane has the evolutionary adaptations that help it to be both highly productive and drought tolerant, an unlikely combination for a plant.

10. (d): Chennai-based National Institute of Ocean Technology (NIOT) has recently build the world's first self-powered desalination plant using Ocean Thermal Energy Conversion (OTEC) at Kavaratti Island in Lakshadweep.
OTEC is an eco-friendly method to generate power using the difference in temperatures of the surface and the deep sea. As we go deeper and deeper in the sea, the temperature get lower. In tropical countries like India, the temperature gradient is more or less constant throughout the year, thus ensuring constant power generation potential. The process involves vaporizing a low-boiling-point fluid like ammonia or water under vacuum using the surface warm sea water and condensing the vapor thus generated using deep-sea cold water. The vapor generated would drive a turbine connected to a generator, thus generating power. This cycle can be continued without breaks and is fully renewable.
The main advantage of OTEC is that it's completely environment friendly.

SET-03

1. Which of the following statements regarding Atal Pension Yojana (APY) is incorrect
   (a) APY was launched in 2016
   (b) APY is open to all saving bank/post office saving bank account holders in the age group of 18 to 60 years
   (c) Subscribers would receive the guaranteed minimum monthly pension of 1000 rs after 60 years -5000 Rs
   (d) All are correct

2. Which of the following statements regarding the Pacific Islands Forum is incorrect?
   (a) It is an inter-governmental organization that aims to enhance cooperation between countries and territories of Oceania, regarding trade bloc and peacekeeping operations.
   (b) India is a part of it.

(c) It provides half of the world's tuna fish.

(d) It is a United Nations General Assembly observer

3. Consider the following statements regarding Diphtheria and measles
   1. Both Diphtheria and measles are viral infections.
   2. Both can spread from person to person by air droplets.
   3. Both have no vaccines for prevention.

   Which of the statements given above is/are correct?

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

4. Consider the following statements regarding Bal Adhaar
   1. Children in the age group of 0-5 years are issued Bal Aadhaar by UIDAI
   2. it is issued in blue color.
   3. It is based on based on a facial image of the child, and biometric authentication of the parent/guardian

   Which of the statements given above is/are correct?

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

5. Consider the following statements regarding Unique Identification Authority of India
   1. It is a non-statutory body made by an executive resolution
   2. It is mandated to assign a 12-digit unique identification (UID) number to all the residents of India.
   3. It is under the jurisdiction of the Ministry of Electronics and Information Technology

   Which of the statements given above is/are correct?

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

6. Consider the following pairs
   1. 61st constitutional amendment act - Reduced the voting age from 21 to 18 years.

2. 91st constitutional amendment act -fixed the total number of Ministers, including the Prime Minister, in the Council of Ministers to 15 percent of the Lok Sabha's strength

3. 7th amendment act –introduced the Union territories of India.

How many of the pairs given above is/are correct?

(a) one pair   (b) two pairs
(c) three pairs   (d) None

7. Consider the following statements regarding The world population prospectus report 2022
   1. It is released by United Nations Population Fund.
   2. As per the report India is at the 3rd stage of the demographic transition (DT) having constant low mortality and rapidly declining fertility

   Which of the statements given above is/are correct?

   (a) 1 only   (b) 2 only
   (c) Both 1 and 2   (d) Neither 1 nor 2

8. Nagorno-Karabakh region was recently seen in the news .it is a disputed region between-
   (a) Syria and Isreal
   (b) Yemen and Saudi Arabia
   (c) Djibouti and South Sudan
   (d) Azerbaijan and Armenia

9. Exercise Vajra Prahar is a Joint Special Forces exercise between India and which of the following country?
   (a) South Korea   (b) USA
   (c) Japan   (d) UK

10. Consider the following pairs
    Ramsar Site-Place
    1. Yashwant Sagar wetland-Madhya Pradesh
    2. Vaduvur Bird Sanctuary-Kerala
    3. Shallbugh Wetland Conservation-Jammu Kashmir

    Which of the pair/s given above is/are correct?

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

Solutions

1. **(b):** Atal Pension Yojana (APY)

    APY was launched on 9th May 2015 by the Prime Minister. APY is open to all saving bank/post office saving bank account holders in the age group of 18 to 40 years and the contributions differ, based on the pension amount chosen. Subscribers would receive the guaranteed minimum monthly pension of Rs. 1,000 or Rs. 2,000 or Rs. 3,000 or Rs. 4,000 or Rs. 5,000 at the age of 60 years.

    The pension amount depends on the contribution made by subscribers. However, the account will not be open for subscription for everyone soon. According to the new rule, individuals who file their Income Tax Returns or pay tax will not be allowed to open APY accounts from October 1, 2022.

2. **(b):** The **Pacific Islands Forum (PIF)** is an inter-governmental organization that aims to enhance cooperation between countries and territories of Oceania, including the formation of a trade bloc and regional peacekeeping operations.

    *   It was founded in 1971 as the **South Pacific Forum (SPF)**, and changed its name in 1999 to "Pacific Islands Forum", so as to be more inclusive of the Forum's Oceania-spanning membership of both north and south Pacific island countries, including Australia.
    *   It is a United Nations General Assembly observer.
    *   India is not part of it.
    *   The 17 μεμβερ nations of the Pacific Islands Forum are of great geopolitical importance to major trade rivals, US and China. Their exclusive economic zones, spanning a total of 30 million sq km, provide half of the world's tuna, the most consumed fish.
    *   The seat of Secretariat-Suva, Fiji

3. **(a):** Diphtheria is a serious infection caused by strains of bacteria called Corynebacterium

    diphtheriae that make a toxin (poison). It is the toxin that can cause people to get very sick.

    Measles is caused by **a single-stranded, enveloped RNA virus** of the genus Morbillivirus in the Paramyxoviridae family.

    Diphtheria bacteria spread from person to person, usually through respiratory droplets, like from coughing or sneezing.

    Measles also spread through the air when an infected person coughs or sneezes. It is so contagious that if one person has it, up to 9 out of 10 people around him or her will also become infected if they are not protected.

    Both diphtheria and Measles are preventable by vaccines.

4. **(d):** Bal Aadhaar Initiative

    About: Children in the age group of 0-5 years are issued Bal Aadhaar by UIDAI. Collection of biometrics (fingerprints and iris) is a key feature in issuing Aadhaar as the same is required to establish uniqueness based on de-duplication of these biometrics. However, for Aadhaar enrolment of children in the age group of 0-5 years, these biometrics are not collected.

    It is based on a facial image of the child, and biometric authentication of the parent/guardian (having a valid Aadhaar).

    A proof of relationship document (preferably a birth certificate) is collected at the time of enrolment for Bal Aadhaar.

    To differentiate the Bal Aadhaar from normal Aadhaar, it is issued in blue color.

5. **(b):** The Unique Identification Authority of India (UIDAI) is a statutory authority established in 2016 by the Government of India under the jurisdiction of the Ministry of Electronics and Information Technology, following the provisions of the Aadhaar Act 2016.

    The UIDAI is mandated to assign a 12-digit unique identification (UID) number (Aadhaar) to all the residents of India.

The UIDAI was initially set up by the Government of India in January 2009, as an attached office under the aegis of the Planning Commission.

6. **(c):** In 1956, the Nehru government passed the seventh amendment which abolished the distribution of States into classes A, B, C and D, and introduced the Union territories of India.

Passed by the Rajiv Gandhi government in 1988, the sixty-first amendment reduced the voting age from 21 years to 18 years, making the right to vote a constitutional right.

The ninety-first amendment fixed the total number of Ministers, including the Prime Minister, in the Council of Ministers to 15 per cent of the Lok Sabha's strength. A similar limit was applied to State cabinets too.

7. **(b):** The world population prospectus report 2022 was released On World Population Day, **the United Nations Department of Economic and Social Affairs**. This is just an analysis of the trend. Findings: India is at the 3rd stage of the demographic transition (DT). India is experiencing a slowing population growth rate due to constant low mortality and rapidly declining fertility. Its population growth is further expected to fall to 1% by 2025.
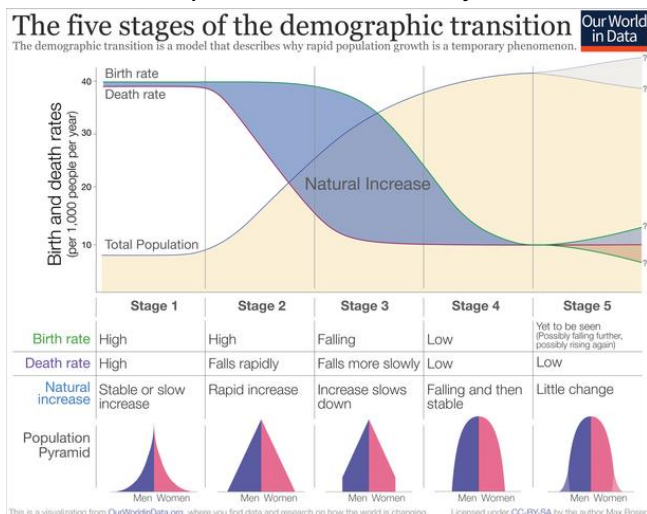
8. **(d):** Key points:
   - Nagorno-Karabakh is a breakaway region that is inside Azerbaijan but is run by ethnic Armenians.
   - It broke away from Azerbaijan in a conflict that broke out as the Soviet Union collapsed in 1991.
   - Though a ceasefire was agreed in 1994, Azerbaijan and Armenia frequently accuse each other of attacks around Nagorno-Karabakh and along the separate AzeriArmenian frontier

9. **(b):** Exercise Vajra Prahar is a Special Forces joint military training exercise. It takes place alternately in India and the US since 2010. Aim: To enable sharing of best practices and experiences in areas such as, joint mission planning capabilities and operational tactics. Significance: The exercise is a significant step in strengthening the traditional bond of friendship between the special forces of both Nations as well as improving bilateral defense cooperation between India and the USA.

10. **(c):** The 11 Indian wetlands which have been designated as new Ramsar sites:
    - Tampara Lake in Odisha;
    - Hirakud Reservoir in Odisha;
    - Ansupa Lake in Odisha;
    - **Yashwant Sagar in Madhya Pradesh**;
    - Chitrangudi Bird Sanctuary,Suchindram Theroor Wetland Complex ,**Vaduvur Bird Sanctuary** , Kanjirankulam Bird Sanctuary in Tamil Nadu;
    - Thane Creek in Maharashtra;
    - Hygam Wetland Conservation Reserve ,**Shallbugh Wetland Conservation** Reserve in Jammu and Kashmir.

SET-04

1. Consider the following statements regarding Development Financial Institution
   1. DFIs accept deposits from people for raising funds.
   2. DFIs are set up for providing short-term as well as long-term finance for infrastructure projects.
   3. National Bank for Financing Infrastructure and Development NBFID is set up as a development financial institution (DFIs) for infrastructure financing with an authorized share capital of one lakh crore rupees.
   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 3 only   (d) 1,2 and 3

2. Consider the following statements regarding Endosulfan
   1. It is an organochlorine insecticide commonly known as Thiodan
   2. it is currently not listed under either the Rotterdam Convention on Prior Informed Consent or the Stockholm Convention on Persistent Organic Pollutants
   3. It is a potentially bioaccumulator and acts as an endocrine disruptor
   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 1 and 3
   (c) 2 and 3   (d) 1,2 and 3

3. Consider the following statements regarding National Fisheries Development Board (NFDB)
   1. It is a statutory body established under The Marine Products Export Development Authority Act, 1972.
   2. It works under the aegis of the ministry of commerce and Industries.
   3. It is headquartered in Hyderabad, Telangana
   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 3 only   (d) 1,2 and 3

4. 'Al-Hilal' and 'Al-Balagh' journals were published by-
   (a) Maulana Abul Kalam Azad
   (b) Aurobindo Ghosh
   (c) MG Ranade
   (d) Badruddin tayyabji

5. Consider the following statements regarding FIFA
   1. It is the international governing body of association football, futsal, and beach soccer.
   2. India was one of the founding members of the FIFA
   3. It is headquartered in Zurich
   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 1 and 3   (d) 1,2 and 3

6. Consider the following statements
   1. Web 1.0 refers to the "read-only Web,"
   2. Web 2.0 refers to the "participative social Web,"
   3. Web 3.0 refers to the "read, write, execute Web."
   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 1,2 and 3   (d) 1and 3

7. Consider the following statements regarding the Traditional Knowledge Digital Library (TKDL)
   1. It seeks to prevent the misappropriation of the country's traditional medicinal knowledge through patenting
   2. It was established by the Ministry of health and family welfare
   Which of the statements given above is/are correct?
   (a) 1 only   (b) 2 only
   (c) both 1 and 2   (d) Neither 1 nor 2

8. "Megalodon" Term recently seen in the news is-
   (a) Malware
   (b) Biggest marine fish
   (c) Biggest predatory animal of all time
   (d) Newly discovered Invasive species of Vegetation in western ghats

9. Consider the following statements regarding the Modified Interest Subvention scheme (MISS)
   1) Under this, the bank provides short-term loans for all agriculture and allied activities at 7% and gives extra 3% subventions for prompt repayment.
   2) The nodal agency for this scheme are NABARD and RBI

   Which of the statements given above is/are correct?
   (a) 1 only   (b) 2 only
   (c) Both 1 and 2   (d) Neither 1 nor 2

10. Consider the following statements regarding Godavari river
    1. It is India's second longest river after the Ganga River
    2. Sabri, Pranhita nad Manjira are left bank tributaries of it.
    3. It rises near Trimbakeshwar in Maharashtra.

    Which of the statements given above is/are correct?
    (a) 1 and 2   (b) 2 and 3
    (c) 1 and 3   (d) 1,2 and 3

Solutions

1. **(c):** Development Financial Institutions (DFIs) are set up for providing long-term finance for infrastructure projects. Unlike banks, DFIs do not accept deposits from people. They source funds from the market, government, as well as multilateral institutions, and are often supported through government guarantees.

   The National Bank for Financing Infrastructure and Development (NBFID) is set up as the principal development financial institution (DFIs) for infrastructure financing. NBFID is set up as a corporate body with an authorized share capital of one lakh crore rupees.

   Recently, RBI said that NaBFID will be regulated and supervised as an All India Financial Institution (AIFI) under the Reserve Bank of India Act, 1934.

   It becomes the fifth AIFI after EXIM Bank, NABARD, NHB, and SIDBI.

2. **(b):** Endosulfan is an organochlorine insecticide that was first introduced in the first half of the 20th century and is commonly known as Thiodan.

   Endosulfan is listed under both Rotterdam Convention on Prior Informed Consent and the Stockholm Convention on Persistent Organic Pollutants.

   Endosulfan became a highly controversial agrichemical due to its acute toxicity, potential for bioaccumulation, and role as an endocrine disruptor.

3. **(c):** NFDB was established as an autonomous organization under the administrative control of the Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India.It is not a statutory body.

   It is headquartered in Hyderabad, Telangana.
   Note that:
   The Marine Products Export Development Authority (*MPEDA*) is a Government of India company headquartered at Kochi. It was constituted by the MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY ACT 1972. It works under the aegis of the ministry of commerce and industries.

4. **(a):** Under the Maulana Azad Fellowship Scheme (MANF), students from notified minority communities who are interested in pursuing an M. Phil and Ph. D are eligible to receive financial aid in the form of fellowships that last for a period of five years. Maulana Abul Kalam Azad was an educationist, freedom fighter, politician, and journalist. Azad started publishing weeklies called 'Al-Hilal' and 'Al-Balagh' in the 1910s.

5. **(c):** Federation Internationale de Football Association(FIFA): It is the highest governing body of football in the world. It is the

international governing body of association football, futsal, and beach soccer. FIFA is a non-profit organization. Founded in 1904, FIFA was launched to oversee international competition among the national associations of Belgium, Denmark, France, Germany, Netherlands, Spain, Sweden, and Switzerland. FIFA now comprises 211 member nations. It is headquartered in Zurich.

India was one of the founding members of the Asian Football Confederation in 1954, not FIFA.

6. **(c):** Web 1.0 is the "read-only Web," Web 2.0 is the "participative social Web," and Web 3.0 is the "read, write, execute Web." Web 1.0. Web 1.0 was all about reading, and getting information. Web 2.0 was all about reading, writing, and creating. So, users joined social platforms, and these platforms got big because of this created content. Web 3.0 is all about reading, writing, and owning. So, builders and creators can now own a piece of their own community, through NFTs, tokens, etc.

7. **(a):** The TKDL contains documentation of publicly available traditional knowledge (TK) that relates to Ayurveda, Unani, Siddha and Yoga in digitized format.
It was established in 2001 by CSIR and the Ministry of AYUSH.
It seeks to prevent the misappropriation of the country's traditional medicinal knowledge through patenting worldwide or against bio-piracy.

8. **(c):** Using fossil evidence to create a three-dimensional model, researchers have found new evidence about the life of one of the biggest predatory animals of all time — the Megalodon. Megalodons roamed the oceans an estimated 23 million to 2.6 million years ago.

9. **(c):** About MISS
Under this, the bank provides short-term loans up to 3 lakh for all agriculture and allied activities at 7% per annum. For prompt repayment of loans: Farmers repaying loans before due data are given extra 3% subventions (i.e., they will have to pay just 4% interest rate) Funding: 100% by center Nodal agency: NABARD and RBI

10. **(c):** The Godavari is India's second longest river after the Ganga river and drains into the third largest basin in India, covering about 10% of India's total geographical area.[3] Its source is in Trimbakeshwar, Nashik, Maharashtra.
In terms of length, catchment area, and discharge, the Godavari is the largest in peninsular India and had been dubbed as the **Dakshina Ganga**
Tributaries
left Banganga, Kadva, Shivana, Purna, Kadam, **Pranahita,** Indravati, Taliperu, **Sabari**
• right Nasardi, Pravara, Sindphana, **Manjira**, Manair, Kinnerasani

SET-05

1. 'Vizhinjam sea port' recently seen in the news, is located in
   (a) Ennore, Tamil Nadu
   (b) Cochin, Kerala
   (c) Trivandrum, Kerala
   (d) Mangalore, Karnataka

2. Consider the following statements regarding the BrahMos Missile

1. It is a medium-range stealth ramjet supersonic cruise missile that can be launched from submarine, ships, aircraft, or land,
2. It functions on the Fire and Forget principle with high accuracy.
3. It has been inducted in all three divisions of the Indian military

Which of the statements given above is/are correct?
(a) 1 and 2   (b) 2 and 3
(c) 1 and 3   (d) 1,2 and 3

3. "CSAI Match" technology, often seen in the news, is related to-
(a) Tracking Biodiversity loss from a particular region for a specific time period.
(b) Identifying Criminals on the basis of facial features
(c) Securing internet connections over data exchanging process
(d) Tracking Child abuse on social media

4. Consider the following statements regarding James Webb Telescope
   1. James Webb Telescope was developed with the assistance of the European Space Agency and the Canadian Space Agency by NASA
   2. It doesn't orbit around the Earth rather it orbits around the second Lagrange point or L2
   3. it is the largest optical telescope in space, to capture far distant galaxies.
Which of the statements given above is/are correct?
(a) 1 and 2   (b) 2 and 3
(c) 1 and 3   (d) 1,2 and 3

5. Consider the following statements regarding the Legal Aid Defense Counsel System system
   1. it aims to provide free *legal aid* to accused persons to defend themselves in criminal trials.
   2. It was launched by the Ministry of Law and justice.
Which of the statements given above is/are correct?
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

6. The societal concept where the changes that occur when two or more groups come in contact with each other and exchange aspects of their cultures such as values and practices of the other while still retaining their own distinct identity, is known as-
(a) Enculturation   (b) Acculturation
(c) Anomie   (d) Ethnocentrism

7. Consider the following statements regarding Tiangong
   1. It is a T-shaped China's new permanent space station.
   2. China is only the third country in history to have put both astronauts into space and built a space station
   3. India has installed an indigenously made spectroscope aboard the space station
Which of the statements given above is/are correct?
(a) 1 and 2   (b) 2 and 3
(c) 1 and 3   (d) 1,2 and 3

8. Consider the following statements regarding VRSAM
   1. It is a canisterised system, designed to strike high-speed airborne targets at the range of 40 to 50 km
   2. It is launched by ISRO.
Which of the statements given above is/are correct?
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

9. Consider the following statements regarding Indian Olympic Association
   1) The Indian Olympic Association is the governing body for the Olympic Movement and the Commonwealth Games in India.
   2) The election for the Executive Council is held once every 4 years.
   3) It is registered as Company under the Companies act 1956
Which of the statements given above is/are correct?
(a) 1 and 2   (b) 2 and 3
(c) 1 and 3   (d) 1,2 and 3

10. Which of the following statements regarding Bis Phenol A is incorrect?
(a) It is a colorless solid which is soluble in organic solvents, but poorly soluble in water.
(b) It is used in the process of manufacturing polycarbonates plastics and epoxy resins as a plasticizer
(c) BPA is known as an endocrine disruptor.
(d) all are correct

Solutions

1. (c): Vizhinjam International Deepwater Multipurpose Seaport, also known as the **Vizhinjam Port** is an under-construction port on **the Arabian Sea coast at Trivandrum**.

2. (d): The BrahMos has been developed as a joint venture between **the Defence Research and Development Organisation (DRDO) of India and the Federal State Unitary Enterprise NPO Mashinostroyenia (NPOM) of Russia** as BrahMos Aerospace via an inter-government agreement.

The BrahMos is a medium-range stealth ramjet supersonic cruise missile that can be launched from submarine, ships, aircraft, or land, notably being the fastest supersonic cruise missile in the world.

Maximum speed: Mach 3+

The missile functions on the Fire and Forget principle with high accuracy.

India has tested the NAVAL version of the BrahMos supersonic cruise missile from the Navy's indigenously built stealth destroyer INS Chennai. Indian Air Force has also tested the air-launched version of the weapon from a Sukhoi fighter aircraft (Su-30 MKI). And Indian army has already tested it.

3. (d): CSAI Match is **YouTube's proprietary technology for combating CSAI (Child Sexual Abuse Imagery) videos online**. This technology was the first to use hash-matching to identify known violative content and allows us to identify this type of violative content amid a high volume of non-violative video content.

What hash matching does is that the company does not store the CSAM itself, but a value or hash that represents the image, video, or content in question. If a similar hash is found for another photo or video, then it likely is CSAM, and the content in question is flagged. The technology relies on machine learning and deep neural networks for image processing. T

4. (d): NASA's $10 billion James Webb Telescope was developed with the assistance of the European Space Agency and the Canadian Space Agency.

It was launched to space on December 25, 2021, and is currently observing from Lagrange point 2, approximately 1.5 million km beyond Earth's orbit around the Sun. The telescope released its first image on July 11, 2022. It is designed to see the first galaxies that sprung up in the young universe in the first hundreds of millions of years following the dark ages after the Big Bang.

5. (a): LADC is a NALSA-funded project to provide free *legal aid* to accused persons to defend themselves in criminal trials.

LADCS system is in line with the 'Public Defender System'. It will have full-time legal aid lawyers in 365 district legal services authorities across the country.

6. (b): The process of learning our own culture is called enculturation, while the process of learning another culture is called acculturation.

The concept of acculturation was coined in 1880 by American geologist John Wesley Powel in a report for the U.S. Bureau of Ethnology. He defined it as the psychological changes induced in people due to cross-cultural imitation, resulting from the interaction with different cultures.

Additional points:

- **Ethnocentrism:** The tendency to judge another culture by the standards of one's own culture.
- **Anomie:** According to strain theory, the feeling of being disconnected from society can occur when people aren't

provided with the institutionalized means to achieve their goals. The term was coined by Émile Durkheim.

7. **(a):** The T-shaped Tiangong space station, when complete, is expected to be around 20% as massive as the International Space Station.

It will be only the second such station after the International Space Station in orbit.

Tiangong space station, or "Heavenly Palace", is China's new permanent space station. The country has previously launched two temporary trial space stations, named as Tiangong-1 and Tiangong-2. The station will have its own power, propulsion, life support systems, and living quarters. China is only the third country in history to have put both astronauts into space and to build a space station, after the Soviet Union (now Russia) and the US. Chinese astronauts are currently excluded from the ISS because US law bans its space agency, NASA, from sharing its data with China.

Indian astrophysicists are involved in an ambitious project to install an India-made spectroscope aboard the developing Chinese space station, Tiangong.

The plan is to have it ready by the year-end so that it can be launched in the summer of 2023. Though the plan is on schedule, scientists at the IIA are now consulting with the Indian Space Research Organisation (ISRO) as well as the Ministry of External Affairs (MEA) on whether they are in the clear to go ahead with the project amid the India China tensions.

8. **(a):** defense Research & Development Organisation (DRDO) and the Indian Navy successfully flight tested the indigenously developed Vertical Launch Short Range Surface-to-Air Missile (VL-SRSAM) from the Integrated Test Range (ITR), Chandipur off the coast of Odisha. The VL-SRSAM system has been designed to strike high-speed airborne targets at the range of 40 to 50 km and at an altitude of around 15 km. VL-

SRSAM is a canisterised system, which means it is stored and operated from specially designed compartments.

9. **(a):** The Indian Olympic Association is the governing body for the Olympic Movement and the Commonwealth Games in India. The IOA administers various aspects of sports governance and athletes' welfare in the country.

The IOA oversees the representation of athletes or teams participating in the Olympic Games, Commonwealth Games, Asian Games, and other international multi-sport competitions of IOC, CGF, OCA, and ANOC. The Indian Olympic Association is recognised by the Ministry of Youth Affairs and Sports. Foundation The IOA was established in the year 1927 with Sir Dorabji Tata and Dr. A.G. Noehren as the Founding President and Secretary General respectively. It is registered as a Non-Profit Organisation under the Societies Registration Act of 1860.

The election for the Executive Council is held once every 4 years.

10. **(d):** Bisphenol A (BPA) is a chemical compound primarily used in the manufacturing of various plastics. It is a colorless solid which is soluble in most common organic solvents but has very poor solubility in water

BPA's largest single application is as a co-monomer in the production of polycarbonates, which accounts for 65-70% of all BPA production.

The manufacturing of epoxy resins and vinyl ester resins accounts for 25–30% of BPA use. · BPA can also be found in breast milk. BPA is a known endocrine disruptor.

Generally, BPA acts on the hormonal level by distorting hormonal balance and inducing estrogenic effects through binding with estrogen-related receptors (ERR)

The resultant effects are numerous of which hormonal related abnormalities have been mostly reported.