CURRENT AFFAIRS (SEPTEMBER 2023)

Section - A

NCERT AS DEEMED-TO-BE-UNIVERSITY

- NCERT has been given the status of a Deemed-to-be-University.
- NCERT has established a formidable research presence, actively shaping school education, teacher training, and adult literacy.
- NCERT on becoming a research university will offer opportunities for global collaborations and contributions to the global educational landscape
- As the apex organisation for school education, the NCERT undertakes various activities and programmes, including
 educational research and innovation, curriculum development, and textual and teaching-learning materials
 development.
- The NCERT has been granted the deemed-to-be-university status in the 'De Novo' category.
- A De-Novo deemed university is an institution that can apply to the UGC for setting up a new institution as
 deemed-to-be-university, which will undertake study and research in unique and emerging areas of knowledge
 that are not offered by any existing institution.

The major objectives of NCERT and its constituent units are to:

- Undertake, promote, and coordinate research in areas related to school education; prepare and publish model textbooks
- Organise pre-service and in-service training of teachers
- Develop and disseminate innovative educational techniques
- Practices; collaborate and network with state educational departments, universities, NGOs
- Act as a clearing house for ideas and information in matters related to school education
- Act as a nodal agency for achieving the goals of Universalisation of Elementary Education.
- NCERT is an implementation agency for bilateral cultural exchange programmes with other countries in the field of school education.
- In 2023, NCERT constituted a 19-member committee including author and Infosys Foundation chair Sudha Murthy, singer Shankar Mahadevan, to finalise the curriculum, textbooks, and learning material for classes 3 to 12.
- Jadui Pitara, a play-based learning-teaching material tailored for children between the age group of 3-8 years developed by NCERT will come up as an instrument of change that will benefit 10 crore children of the country

ULLAS (UNDERSTANDING OF LIFELONG LEARNING FOR ALL IN SOCIETY)

 A Centrally Sponsored Scheme ULLAS- Nav Bharat Saaksharta Karyakram on Education for All (erstwhile termed as Adult Education), was approved by the Government of India for implementation during FYs 2022-27 in alignment with National Education Policy (NEP) 2020.

The Scheme has five components, namely

- 1. Foundational Literacy and Numeracy
- 2. Critical Life Skills

- 3. Basic Education
- 4. Vocational Skills
- 5. Continuing Education

ULLAS: Nav Bharat Saksharta Karyakram

- A Scheme of Adult Education under 'Education for All ' is in consonance with the objectives of NEP 2020 and SDG 4.0. It targets to achieve 100% Adult Literacy by 2030.
- With an aim to create awareness about the objectives of ULLAS: Nav Bharat Saksharta Karyakram, a week-long literacy activity from Sept 1 to Sept 8, 2023, along with the celebration of International Literacy Day on 8th September 2023 shall be observed in registered Govt. Schools

Aarogya Maitri Initiative and Project BHISHM

- INS Delhi departed Colombo, Sri Lanka on 03 September 2023, after a two-day visit to the port city.
- The visit concluded with a Passage Exercise (PASSEX) at sea off Colombo between INS Delhi and SLN ship Vijayabahu.
- As part of India's 'Aarogya Maitri' initiative to provide essential medical supplies to friendly countries, the High Commissioner of India to Sri Lanka, Shri Gopal Baglay, presented state-of-the-art Arogya Maitri Cube to the Hon'ble Speaker of Sri Lanka Parliament during a reception hosted onboard INS Delhi.
- These medical cubes have been indigenously developed *under the Project BHISHM (Bharat Health Initiative for Sahyog Hita and Maitri)*.

Aarogya Maitri Cube

- India has unveiled the world's first portable disaster hospital, known as the 'Aarogya Maitri Cube'.
- This innovative healthcare solution, developed under the BHISHM project (Bharat Health Initiative for Sahyog Hita and Maitri), consists of 72 cubes, organized into three frames, with each frame containing 12 mini-cubes.
- India's Aarogya Maitri Cube, airlifted and versatile, houses critical medical equipment, including operation theatres, mini-ICUs, ventilators, and more, supporting 200 survivors for 48 hours.

DST INSTITUTES KEY DRIVERS IN ADITYA-L1 MISSION

- India's Aditya-L1, a space observatory with 7 payloads heading for a vantage point to study the Sun
- IIA, an autonomous institute of the Department of Science and Technology (DST), had initially proposed a 'suitable coronagraph' payload to be mounted on a small satellite offered by ISRO.

Payloads

Visible Emission Line Coronagraph (VELC)

- Led by IIA, the VELC was designed, assembled, characterized, tested, and integrated at the Centre for Research
 and Education in Science and Technology (CREST) campus in Hosakote and delivered in close collaboration with
 ISRO.
- The VELC will image the Sun's atmosphere, the corona, closer to the Sun than ever before, at high resolution and time cadence.
- The payload has 40 different optical elements of high precision and will be kept at a temperature of 22 degrees Celsius in space.

Other Payloads

- In addition, Aditya-L1 carries an ultraviolet imager, two X-ray spectrometers, and four in-situ instruments to measure plasma parameters.
- These are made by various centres of ISRO and IUCAA with contributions from many other institutions.

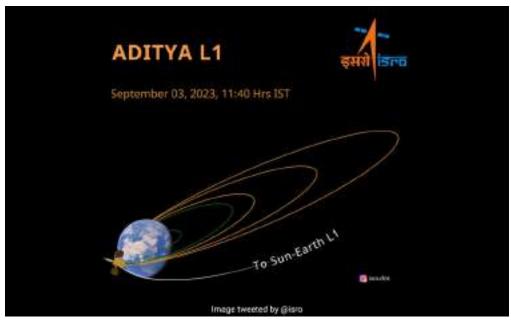
Coronal Mass Ejections (CMEs)

- IIA and Aryabhatta Research Institute of Observational Sciences (ARIES), another institute of DST, designed an automated algorithm to detect Coronal Mass Ejections (CMEs) on board Aditya-L1 using the VELC instrument.
- It will be the first of its kind to track the huge bubbles of gas threaded with magnetic field lines that are ejected from the Sun, disrupting space weather and causing geomagnetic storms, satellite failures, and power outages.
- This algorithm has been hard-coded by ISRO and will be used to detect CMEs automatically on board Aditya-L1, making it one of the first onboard intelligence algorithms for this purpose as no similar thing has been attempted in previous NASA or ESA missions studying the Sun.

Coronal Mass Ejections (CMEs)

- CMEs are large expulsions of plasma and magnetic field from the Sun's corona.
- They can eject billions of tons of coronal material and carry an embedded magnetic field (frozen in flux) that is stronger than the background solar wind interplanetary magnetic field (IMF) strength.
- CMEs travel outward from the Sun at speeds ranging from slower than 250 kilometers per second (km/s) to as fast as near 3000 km/s.
- The fastest Earth-directed CMEs can reach our planet in as little as 15-18 hours.
- Slower CMEs can take several days to arrive.
- They expand in size as they propagate away from the Sun and larger CMEs can reach a size comprising nearly a quarter of the space between Earth and the Sun by the time it reaches our planet.

PSLV-C57/ADITYA-L1 MISSION



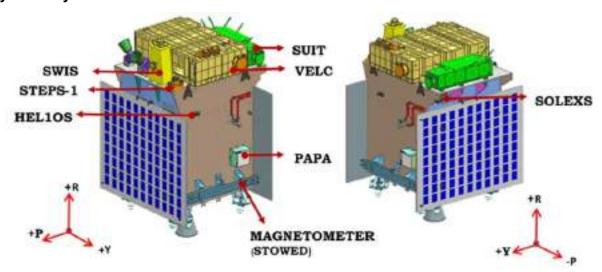
- Aditya L1 launched successfully from Satish Dhawan Space Cenre in Sriharikota
- PSLV will carry the Aditya L1 mission on a 125-day voyage to the Sun.
- The Aditya L1 spacecraft will stay in Earth's orbit for sixteen days.
- After four months of journey, the satellite will be placed on the L1 point in the halo orbit around the Sun.
- The satellite was placed into Earth's elliptical orbit. Now, the space agency will perform orbit-raising exercise within fixed duration
- Aditya L1 shall be the first space-based Indian mission to study the Sun.
- The spacecraft shall be placed in a halo orbit around the Lagrange point 1 (L1) of the Sun-Earth system, which is about 1.5 million km from the Earth.

- A satellite placed in the halo orbit around the L1 point has the major advantage of continuously viewing the Sun without any occultation/eclipses.
- This will provide a greater advantage of observing the solar activities and its effect on space weather in real time.
- The spacecraft carries seven payloads to observe the photosphere, chromosphere and the outermost layers of the Sun (the corona) using electromagnetic and particle and magnetic field detectors.
- Using the special vantage point L1, four payloads directly view the Sun and the remaining three payloads carry out in-situ studies of particles and fields at the Lagrange point L1, thus providing important scientific studies of the propagatory effect of solar dynamics in the interplanetary medium
- The suits of Aditya L1 payloads are expected to provide most crucial informations to understand the problem of coronal heating, coronal mass ejection, pre-flare and flare activities and their characteristics, dynamics of space weather, propagation of particle and fields etc.

The major science objectives of Aditya-L1 mission are:

- Study of Solar upper atmospheric (chromosphere and corona) dynamics.
- Study of chromospheric and coronal heating, physics of the partially ionized plasma, initiation of the coronal mass ejections, and flares
- Observe the in-situ particle and plasma environment providing data for the study of particle dynamics from the Sun.
- Physics of solar corona and its heating mechanism.
- Diagnostics of the coronal and coronal loops plasma: Temperature, velocity and density.
- Development, dynamics and origin of CMEs.
- Identify the sequence of processes that occur at multiple layers (chromosphere, base and extended corona) which eventually leads to solar eruptive events.
- Magnetic field topology and magnetic field measurements in the solar corona .
- Drivers for space weather (origin, composition and dynamics of solar wind .

Aditya-L1 Payloads



- The instruments of Aditya-L1 are tuned to observe the solar atmosphere mainly the chromosphere and corona.
- In-situ instruments will observe the local environment at L1.
- There are total seven payloads on-board with four of them carrying out remote sensing of the Sun and three of them carrying in-situ observation.

INTERNATIONAL SOLAR ALLIANCE

- The International Solar Alliance (ISA) convened its 5th regional meeting in Kigali, Rwanda, on August 31, 2023, with the support of the Government of Rwanda.
- This significant event witnessed the participation of 36 countries and ministers from 15 nations.
- During the meeting, Shri R. K. Singh, the President of ISA and Union Minister for Power and New & Renewable Energy of the Government of India, virtually inaugurated nine solar power demonstration projects spanning the Republic of Uganda, the Union of Comoros, and the Republic of Mali.
- Among these, four projects were located in Uganda, two in Comoros, and three in Mali.
- The ISA has provided grants for these projects, which include the solarization of rural healthcare centers and primary schools.
- The International Solar Alliance (ISA) is an action-oriented, member-driven, collaborative platform for increased deployment of solar energy technologies as a means for bringing energy access, ensuring energy security, and driving energy transition in its member countries.
- The ISA strives to develop and deploy cost-effective and transformational energy solutions powered by the sun to help member countries develop low-carbon growth trajectories, with particular focus on delivering impact in countries categorized as Least Developed Countries (LDCs) and the Small Island Developing States (SIDS).
- Being a global platform, ISA's partnerships with multilateral development banks (MDBs), development financial institutions (DFIs), private and public sector organisations, civil society and other international institutions
- The ISA is guided by its 'Towards 1000' strategy which aims to mobilise USD 1,000 billion of investments in solar energy solutions by 2030, while delivering energy access to 1,000 million people using clean energy solutions and resulting in installation of 1,000 GW of solar energy capacity.
- This would help mitigate global solar emissions to the tune of 1,000 million tonnes of CO2 every year.
- The ISA was conceived as a joint effort by India and France to mobilize efforts against climate change through deployment of solar energy solutions.
- It was conceptualized on the sidelines of the 21st Conference of Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Paris in 2015.
- With the amendment of its Framework Agreement in 2020, all member states of the United Nations are now eligible to join the ISA.
- At present, 116 countries are signatories to the ISA Framework Agreement, of which 94 countries have submitted the necessary instruments of ratification to become full members of the ISA.

NATIONAL GREEN HYDROGEN MISSION



- India has set its sight on becoming energy independent by 2047 and achieving Net Zero by 2070.
- To achieve this target, increasing renewable energy use across all economic spheres is central to India's Energy Transition.
- Green Hydrogen is considered a promising alternative for enabling this transition.
- Hydrogen can be utilized for long-duration storage of renewable energy, replacement of fossil fuels in industry, clean transportation, and potentially also for decentralized power generation, aviation, and marine transport.

The National Green Hydrogen Mission was approved by the Union Cabinet on 4 January 2022, with the intended objectives of:

- Making India a leading producer and supplier of Green Hydrogen in the world
- Creation of export opportunities for Green Hydrogen and its derivatives
- Reduction in dependence on imported fossil fuels and feedstock
- Development of indigenous manufacturing capabilities
- Attracting investment and business opportunities for the industry
- Creating opportunities for employment and economic development
- Supporting R&D projects

Mission Outcomes

The mission outcomes projected by 2030 are:

- Development of green hydrogen production capacity of at least 5 MMT (million metric tonne) per annum with an associated renewable energy capacity addition of about 125 GW in the country
- Over Rs. eight lakh crore in total investments
- Creation of over six lakh jobs
- Cumulative reduction in fossil fuel imports over Rs. one lakh crore
- Abatement of nearly 50 MMT of annual greenhouse gas emissions

Types of Hydrogen Based on Extraction Methods

Depending on the nature of the method of its extraction, hydrogen is categorised into three categories, namely, Grey, Blue and Green.

- **Grey Hydrogen**: It is produced via coal or lignite gasification (black or brown), or via a process called steam methane reformation (SMR) of natural gas or methane (grey). These tend to be mostly carbon-intensive processes.
- **Blue Hydrogen**: It is produced via natural gas or coal gasification combined with carbon capture storage (CCS) or carbon capture use (CCU) technologies to reduce carbon emissions.
- **Green Hydrogen**: It is produced using electrolysis of water with electricity generated by renewable energy. The carbon intensity ultimately depends on the carbon neutrality of the source of electricity (i.e., the more renewable energy there is in the electricity fuel mix, the "greener" the hydrogen produced).

THE PRADHAN MANTRI DAKSHATA AUR KUSHALATA SAMPANNA HITGRAHI (PM-DAKSH) YOJANA

- The Pradhan Mantri Dakshata Aur Kushalata Sampanna Hitgrahi (PM-DAKSH) Yojana, a Central Sector Scheme, was launched during 2020-21.
- The main objective of the Scheme is to enhance competency level of the target groups to make them employable both in self- employment and wage-employment for their socio-economic development.
- The target group under this scheme are SCs, OBCs, EBCs, DNTs Safai Karamcharis including waste pickers etc.

- The age criterion of scheme between 18-45 years and income criteria is no income limit for SCs, SafaiKaramcharis Including waste picker and DNT.
- The annual family income should be below Rs.3 lakh for OBCs and the EBCs (Economically Backward Classes) annual family income below Rs.1 lakh.

EDUCATION TO ENTREPRENEURSHIP PARTNERSHIP

- Union Minister for Education and Skill Development & Entrepreneurship launched a 3-year partnership "Education to Entrepreneurship: Empowering a generation of students, educators and entrepreneurs" between Ministry of Education, Ministry Skill Development & Entrepreneurship and Meta in New Delhi today.
- 3 Letters of Intent (LoI) were exchanged between Meta and NIESBUD, AICTE and CBSE.
- Education to Entrepreneurship partnership will take Digital Skilling to the grassroots.
- It will build capacities of our talent pool, seamlessly connect students, youth, workforce & micro-entrepreneurs, with futuristic technologies and transform our Amrit Peedhi into new-age problem solvers and entrepreneurs.
- Under the partnership with NIESBUD, 5 lakh entrepreneurs will get access to digital marketing skills by Meta over the next 3 years.
- Budding and existing entrepreneurs will be trained in digital marketing skills using Meta platforms in 7 regional languages to begin with.

NIESBUD

- The National Institute for Entrepreneurship and Small Business Development is a premier organization of the Ministry of Skill Development and Entrepreneurship, engaged in training, consultancy, research, etc. in order to promote entrepreneurship and Skill Development.
- The major activities of the Institute include Training of Trainers, Management Development Programmes, Entrepreneurship-cum-Skill Development Programmes, Entrepreneurship Development Programmes and Cluster Intervention.

GUJARAT DECLARATION

- World Health Organization (WHO) has released the outcome document of first WHO Traditional Medicine Global Summit 2023 in form of "Gujarat Declaration".
- The declaration reaffirmed global commitments towards indigenous knowledge, biodiversity and traditional, complementary, and integrative medicine.
- WHO underlined that India as host of the WHO Global Traditional Medicine Centre at Jamnagar, Gujarat has
 an important role in scaling up WHO's capacities to support member states and stakeholders in taking forward
 the summit action agenda and other relevant priorities.
- The First global summit on Traditional Medicine was organised by the World Health Organization (WHO) and co-hosted by the Ministry of Ayush, from August 17-18, 2023, at Gandhinagar, Gujarat.

20TH ASEAN-INDIA SUMMIT AND 18TH EAST ASIA SUMMIT (EAS)

- Prime Minister attended the 20th ASEAN-India Summit and the 18th East Asia Summit (EAS) in Jakarta on 7 September 2023 hosted by Indonesia as current Chair of Association of Southeast Asian Nations (ASEAN).
- The summit was held on the sidelines of the 43rd ASEAN Summit 2023.
- The theme of ASEAN Summit in 2023 is 'ASEAN Matters: Epicentrum of Growth.
- At the ASEAN-India Summit, Prime Minister held extensive discussions with ASEAN partners on further strengthening of ASEAN-India Comprehensive Strategic Partnership and charting its future course.
- Prime Minister reaffirmed ASEAN centrality in the Indo-Pacific and highlighted the synergies between India's Indo-Pacific Ocean's Initiative (IPOI) and ASEAN's Outlook on the Indo-Pacific (AOIP).
- He also emphasized the need to complete the review of ASEAN-India FTA (AITIGA) in a time bound manner.

Association of Southeast Asian Nations, or ASEAN

- The Association of Southeast Asian Nations, or ASEAN, was established on 8 August 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by the Founding Fathers of ASEAN: Indonesia, Malaysia, Philippines, Singapore and Thailand.
- Brunei Darussalam joined ASEAN on 7 January 1984, followed by Viet Nam on 28 July 1995, Lao PDR and Myanmar on 23 July 1997, and Cambodia on 30 April 1999, making up what is today the ten Member States of ASEAN.

East Asia Summit (EAS)

- ASEAN also participates in the East Asia Summit (EAS), a pan-Asian forum held annually by the leaders of eighteen countries in the East Asian region, with ASEAN in a leadership position.
- Initially, membership included all member states of ASEAN plus China, Japan, South Korea, India, Australia, and New Zealand, but was expanded to include the United States and Russia at the Sixth EAS in 2011.
- The first summit was held in Kuala Lumpur on 14 December 2005, and subsequent meetings have been held after the annual ASEAN Leaders' Meeting.
- The summit has discussed issues including trade, energy, and security and the summit has a role in regional community building.

REGULATION OF DARK PATTERNS

- The Department of Consumer Affairs, Government of India, has sought public comments on Draft Guidelines for Prevention and Regulation of Dark Patterns.
- The draft Guidelines for Prevention and Regulation of Dark Patterns have been framed after detailed deliberations with all stakeholders including e-commerce platforms, law firms, Government and Voluntary Consumer Organizations (VCO's).
- The draft sent by the Secretary, Department of Consumer Affairs to E-commerce companies, Industry Associations, requesting them to refrain from incorporating any design or pattern in the online interface of their platform that may deceive or manipulate consumer choice and fall in the category of dark patterns.
- It strongly advised online platforms to not engage in 'unfair trade practices' by incorporating dark patterns in their online interface to manipulate consumer choice and violate 'consumer rights' as enshrined under Section 2(9) of the Consumer Protection Act, 2019.
- The draft guidelines define dark patterns as any practices or deceptive design patterns using UI/UX (user interface/user experience) interactions on any platform; designed to mislead or trick users to do something they initially did not intend or want to do; by subverting or impairing the consumer autonomy, decision making or choice; amounting to misleading advertisement or unfair trade practice or violation of consumer rights.

Under the Guidelines, following Dark patterns have been specified:

- **False Urgency** means falsely stating or implying the sense of urgency or scarcity so as to mislead a user into making an immediate purchase or take an immediate action, which may lead to a purchase
- Basket sneaking means inclusion of additional items such as products, services, payments to charity/donation at the time of checkout from a platform, without the consent of the user, such that the total amount payable by the user is more than the amount payable for the product(s) and/or service(s) chosen by the user
- Confirm shaming means using a phrase, video, audio or any other means to create a sense of fear or shame or ridicule or guilt in the mind of the user, so as to nudge the user to act in a certain way that results in the user purchasing a product or service from the platform or continuing a subscription of a service.
- Forced action shall mean forcing a user into taking an action that would require the user to buy any additional good(s) or subscribe or sign up for an unrelated service, in order to buy or subscribe to the product/service originally intended by the user
- **Subscription trap** means the process of making cancellation of a paid subscription impossible or a complex and lengthy process including similar other practices

- Interface interference means a design element that manipulates the user interface in ways that (a) highlights certain specific information; and (b) obscures other relevant information relative to the other information; to misdirect a user from taking an action desired by her.
- **Bait and switch** means the practice of advertising a particular outcome based on the user's action but deceptively serving an alternate outcome.
- **Drip pricing** means a practice whereby-elements of prices are not revealed upfront or are revealed surreptitiously within the user experience; and/or other such practices
- **Disguised advertisement** means a practice of posing, masking advertisements as other types of content such as user generated content or new articles or false advertisements.
- **Nagging** shall mean a dark pattern due to which users face an overload of requests, information, options, or interruptions; unrelated to the intended purchase of goods or services, which disrupts the intended transaction.
- Guidelines would be made applicable to all persons and online platforms including sellers and advertisers.
- The objective of the Guidelines is to identify and regulate such practices which tend to manipulate or alter consumer choices, often by using deceptive or misleading techniques or manipulated user interfaces/web designs.

GATI SHAKTI VISHWAVIDYALAYA (GSV)

- Indian Railways' Gati Shakti Vishwavidyalaya (GSV) Vadodara and Airbus entered into a collaboration to significantly strengthen the Indian aviation sector.
- Airbus and Tata had recently announced a partnership to design, innovate, make, manufacture and develop in India C295 aircraft facility at Vadodara (Gujarat).
- Airbus is the world's largest manufacturer of commercial aircraft and a leading producer of helicopters, defence and space equipment.
- GSV will focus on intense industry-academia partnerships. All its courses will be designed in collaboration with industry. The students who study at GSV will be industry-ready.
- They will be highly sought after for employment in transportation and logistics sectors.
- Gati Shakti Vishwavidyalaya (GSV) Vadodara was established through an Act of Parliament in 2022, for creating best-in-class manpower and talent for the entire transportation and logistics sectors.
- This Central University is sponsored by the Ministry of Railways, Govt. of India and has Shri Ashwini Vaishnaw, Minister of Railways, Communications, Electronics and IT as its First Chancellor.
- Focusing exclusively on transport and logistics sectors, GSV is a "first of its kind" university aiming to fulfil the mandate of the National Developmental Plans (PM Gati Shakti National Master Plan 2021 and National Logistics Policy 2022) across railways, shipping, ports, highways, roads, waterways, and aviation etc.
- GSV shall create a resource pool of professionals across technology, economics, management and policy comprising multidisciplinary teaching (bachelors/masters/doctoral), executive training and research.
- GSV shall also undertake trainings for Indian Railways probationers and serving officers.

BATTERY ENERGY STORAGE SYSTEMS (BESS)

- The Union Cabinet, chaired by the Prime Minister approves the Scheme for Viability Gap Funding (VGF) for the development of Battery Energy Storage Systems (BESS).
- The approved scheme envisages development of 4,000 MWh of BESS projects by 2030-31, with a financial support of up to 40% of the capital cost as budgetary support in the form of Viability Gap Funding (VGF).
- The scheme aims to provide clean, reliable, and affordable electricity to the citizens.
- To ensure that the benefits of the scheme reach the consumers, a minimum of 85% of the BESS project capacity will be made available to Distribution Companies (Discoms).
- The selection of BESS developers for VGF grants will be carried out through a transparent competitive bidding process, promoting a level playing field for both public and private sector entities.

• This approach will foster healthy competition and encourage the growth of a robust ecosystem for BESS, attracting significant investments and generating opportunities for associated industries.

Viability Gap Funding scheme

- The Viability Gap Funding (VGF) Scheme aims at supporting infrastructure projects that are economically justified but fall marginally short of financial viability.
- Support under this scheme is available only for infrastructure projects where private sector sponsors are selected through a process of competitive bidding.
- The total VGF under the scheme does not exceed 20% of the total project cost, however, the Government may decide to provide additional grants up to a limit of a further 20%.

SOVEREIGN GOLD BONDS 2023-24

- Sovereign Gold Bonds 2023-24 (Series II) was opened for subscription during the period September 11-15, 2023 with a Settlement date of September 20, 2023.
- The issue price of the Bond during the subscription period was Rs. 5,923 per gram
- The Government of India in consultation with the Reserve Bank of India allowed a discount of Rs. 50 per gram from the issue price to those investors who apply online and the payment is made through digital mode.

Sovereign Gold Bond Scheme

- It was launched by Govt in November 2015, under Gold Monetisation Scheme.
- Under the scheme, the issues are made open for subscription in tranches by RBI in consultation with GOI.
- RBI Notifies the terms and conditions for the scheme from time to time.
- The rate of SGB will be declare by RBI before every new tranche by issuing a Press Release.

Features

- The Sovereign Gold Bond will be sold through banks, Stock Holding Corporation of India Ltd (SHCIL), designated
 post offices, and recognised stock exchanges such as the National Stock Exchange (NSE) and the Bombay Stock
 Exchange (BSE).
- To be issued by Reserve Bank India on behalf of the Government of India.
- The Bonds will be restricted for sale to Resident individuals, Hindu Undivided Family (HUF), Trusts, Universities and Charitable Institutions
- The tenor of the SGB will be for a period of eight years with an option of premature redemption after the fifth year to be exercised on the date on which interest is payable.
- The minimum permissible investment in the Sovereign Gold Bond is one gram. However, the maximum limit of subscription shall be 4 kg for individuals, 4 kg for HUF and 20 kg for trusts and similar entities per fiscal year (April-March) notified by the Government from time to time.
- The investors will be compensated at a fixed rate of 2.50 per cent per annum payable semi-annually on the nominal value.
- The interest on Gold Bonds shall be taxable as per the provision of Income Tax Act, 1961 (43 of 1961).
- The capital gains tax arising on redemption of SGB to an individual has been exempted.
- The Gold Bonds will be issued as Government of India Stocks under Government Security Act, 2006.
- All the branches of the State Bank of India are authorised to accept the subscription.
- Bonds can be used as collateral for loans.

TRIBAL PRODUCTS SHOWCASED AT THE TRIBES INDIA PAVILION AS PART OF THE G-20 LEADERS' SUMMIT

• The Tribal Cooperative Marketing Development Federation of India Ltd. (TRIFED), Ministry of Tribal Affairs is showcasing a wide range of traditional tribal art, artifacts, paintings, pottery, textiles, organic natural products, and many more at the 'Tribes India' pavilion.

• The exhibition is being hosted at the Crafts Bazaar (Hall 3), as part of the G-20 Leaders' Summit at Bharat Mandapam, New Delhi on 9th and 10th September 2023.

Highlights

- Pithora art, revered by Rathwa, Bhilala, Naik and Bhil tribes of Gujarat and Madhya Pradesh. (Pithora is a ritualistic painting done on the walls by the Rathwa, Bhila and Bhilala tribes. The name Pithora also refers to the Hindu deity of marriage.
- Gond painting from Madhya Pradesh
- Saura painting by artisans from Odisha
- Angora and Pashmina shawls from the high altitudes of Leh-Ladakh and Himachal Pradesh, woven by the Bodh and Bhutia tribes
- The colorful jewelry by the Konyak tribals of Nagaland
- Maheshwari silk sarees from Madhya Pradesh
- Eri or "Millenium Silk", so delicately made by Bodo tribe from Assam which gives richness a new dimension altogether.
- Dhokra jewellery: Origins of Dhokra dates back to over 4000 years. It is amongst the oldest traditional techniques of metal casting dates back to pre-historic times of the Harappa and Mohenjo-Daro Civilizations. This technique of casting non-ferrous metals was popular in the ancient regions of present-day West Bengal and Odisha.
- Grace and beauty are so delicately carved out of Meena tribal artisans of Rajasthan in the Metal Ambabari craft.

Hallmarking of Gold Jewellery and Gold Artefacts (Third Amendment) Order, 2023

- The third phase of the mandatory hallmarking vide Hallmarking of Gold Jewellery and Gold Artefacts (Third Amendment) Order, 2023 came into force on September 8, 2023
- The third phase of the mandatory hallmarking will cover additional 55 new districts under the mandatory hallmarking system, wherein a hallmarking centre has been setup post-implementation of the second phase of the mandatory hallmarking order thereby making the total number of districts covered under mandatory hallmarking as 343.
- The Government of India notified the order on September 8, 2023.
- BIS has been successful in the implementation of Mandatory Hallmarking in 256 districts of the country with
 effect from 23 June 2021, in the first phase and in the additional 32 districts with effect from 04 April 2022, in the
 second
- More than 4 lakh gold articles are being hallmarked with HUID every day.
- Consumers are encouraged to verify the authenticity and purity of the hallmarked gold jewellery items with the HUID number purchased by using 'verify HUID' in BIS Care app which can be downloaded from the play store.

HALLMARK UNIQUE IDENTIFICATION (HUID) NUMBER

- It is a six-digit alphanumeric code consisting of numbers and letters.
- With the help of this number, a buyer can get all the information related to jewellery.

Bureau of Indian Standards (BIS)

- The Bureau of Indian Standards (BIS) is the National Standards Body of India under Department of Consumer affairs, Ministry of Consumer Affairs, Food & Public Distribution, Government of India.
- It is established by the Bureau of Indian Standards Act, 2016 which came into effect on 12 October 2017.
- The Minister in charge of the Ministry or Department having administrative control of the BIS is the ex-officio President of the BIS.

G20 SUMMIT 2023 HIGHLIGHTS

Major takeaways

- New Delhi Declaration: The New Delhi Declaration was adopted by the leaders of the G20 leaders during the Leader's Summit
- The biggest takeaway of the declaration was that all 83 paras of the declaration were passed unanimously with a 100 percent consensus along with China and Russia in agreement.
- A G20 Declaration without any footnote or chair's summary demonstrates India's ability to bring everybody to the same table,
- Global Biofuel Alliance launched under India's G20 Presidency.
- India-Middle East-Europe Economic Corridor (IMEE EC) Announcement of a mega India-Middle East-Europe shipping and railway connectivity corridor by India, the US, Saudi Arabia, and the European Union.
- Inclusion of the African Union as a permanent member of the Group of 20 (G20).
- PM Modi handed over the G20 presidency to Brazil's Lula Da Silva, marking the end of the G20 Summit in Delhi.

G20

- The G20 or Group of 20 is an intergovernmental forum comprising 19 sovereign countries, the European Union (EU), and the African Union (AU).
- The G20 was upgraded to the level of Heads of State/Government in the wake of the global economic and financial crisis of 2007, and, in 2009, was designated the "premier forum for international economic cooperation".
- The G20 Summit is held annually, under the leadership of a rotating Presidency.
- The G20 initially focused largely on broad macroeconomic issues, but it has since expanded its agenda to interalia include trade, sustainable development, health, agriculture, energy, environment, climate change, and anticorruption.
- The G20 was founded in 1999 after the Asian financial crisis as a forum for the Finance Ministers and Central Bank Governors to discuss global economic and financial issues.
- Members: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Türkiye, United Kingdom and United States) European Union, and African Union
- The G20 members represent around 85% of the global GDP, over 75% of the global trade, and about two-thirds of the world population
- The Group does not have a permanent secretariat.
- The Presidency is supported by the Troika previous, current, and the incoming presidency



• During India's Presidency, the troika will comprise Indonesia, India, and Brazil, respectively.

GLOBAL BIOFUELS ALLIANCE (GBA) ANNOUNCED AT G20 EVENT

- Prime Minister Shri Narendra Modi along with the leaders of Singapore, Bangladesh, Italy, USA, Brazil, Argentina, Mauritius, and UAE, launched the Global Biofuel Alliance on 9 September 2023, on the sidelines of the G20 Summit in New Delhi.
- The Global Biofuel Alliance (GBA) is an initiative by India as the G20 Chair.
- The Alliance intends to expedite the global uptake of biofuels through facilitating technology advancements, intensifying utilization of sustainable biofuels, shaping robust standard setting and certification through the participation of a wide spectrum of stakeholders.
- The alliance will also act as a central repository of knowledge and an expert hub.
- GBA aims to serve as a catalytic platform, fostering global collaboration for the advancement and widespread adoption of biofuels.
- The initiative will be beneficial for India at multiple fronts. It will help accelerate India's existing biofuels programs such as PM-JIVANYojna, SATAT, and GOBARdhan scheme

Countries and organizations which have already joined GBA

19 countries and 12 international organizations have already agreed to join.

- G20 countries (07) supporting GBA: 1. Argentina, 2. Brazil, 3. Canada, 4. India 5. Italy, 6. South Africa, 7.USA
- G20 Invitee Countries (04) supporting GBA: 1. Bangladesh, 2. Singapore, 3. Mauritius, 4. UAE
- Non G20 (08) supporting GBA: 1. Iceland, 2. Kenya, 3. Guyana, 4. Paraguay, 5. Seychelles, 6. Sri Lanka, and 7. Uganda have agreed to be initiating members of GBA, and 8. Finland
- International organizations (12): World Bank, Asian Development Bank, World Economic Forum, World LPG
 Organization, UN Energy for All, UNIDO, Biofutures Platform, International Civil Aviation Organization,
 International Energy Agency, International Energy Forum, International Renewable Energy Agency, World Biogas
 Association.
- GBA Members constitute major producers and consumers of biofuels. USA (52%), Brazil (30%) and India (3%), contribute about 85% share in production and about 81% in consumption of ethanol.

Biofuels

- Unlike other renewable energy sources, biomass can be converted directly into liquid fuels, called "biofuels," to help meet transportation fuel needs.
- The two most common types of biofuels in use today are ethanol and biodiesel, both of which represent the first generation of biofuel technology.

Ethanol

- It is a renewable fuel that can be made from various plant materials, collectively known as "biomass."
- Ethanol is an alcohol used as a blending agent with gasoline to increase octane and cut down carbon monoxide and other smog-causing emissions.
- The most common blend of ethanol is E10 (10% ethanol, 90% gasoline) and is approved for use in most conventional gasoline-powered vehicles up to E15 (15% ethanol, 85% gasoline).
- Some vehicles, called flexible fuel vehicles, are designed to run on E85 (a gasoline-ethanol blend containing 51%–83% ethanol, depending on geography and season), an alternative fuel with much higher ethanol content than regular gasoline.
- Roughly 97% of gasoline in the United States contains some ethanol.

Biodiesel

Biodiesel is a liquid fuel produced from renewable sources, such as new and used vegetable oils and animal fats
and is a cleaner-burning replacement for petroleum-based diesel fuel.

- Biodiesel is nontoxic and biodegradable and is produced by combining alcohol with vegetable oil, animal fat, or recycled cooking grease.
- Biodiesel can be blended with petroleum diesel in any percentage, including B100 (pure biodiesel) and, the most common blend, B20 (a blend containing 20% biodiesel and 80% petroleum diesel).

PARTNERSHIP FOR GLOBAL INFRASTRUCTURE AND INVESTMENT (PGII) & INDIA-MIDDLE EAST-EUROPE ECONOMIC CORRIDOR (IMEC)



- Prime Minister Shri Narendra Modi and the President of USA, Mr. Joe Biden co-chaired a special event on Partnership for Global Infrastructure and Investment (PGII) and India-Middle East-Europe Economic Corridor (IMEC), on 9 September 2023 on the sidelines of the G20 Summit in New Delhi.
- The event aimed at unlocking greater investment for infrastructure development and strengthening connectivity in its various dimensions between India, Middle East and Europe.
- Leaders of the European Union, France, Germany, Italy, Mauritius, UAE and Saudi Arabia, as well as the World Bank, participated in the event.
- PGII is a developmental initiative aimed at narrowing the infrastructure gap in developing countries as well as help towards accelerate progress on SDGs globally.
- The IMEC comprises of an Eastern Corridor connecting India to the Gulf region and a Northern Corridor connecting the Gulf region to Europe.
- It will include a railway and ship-rail transit network and road transport routes.
- IMEC would help promote economic integration between India and Europe.
- An MOU on IMEC was signed by India, USA, Saudi Arabia, UAE, European Union, Italy, France and Germany.
- The IMEC is expected to stimulate economic development through enhanced connectivity and economic integration between Asia, the Arabian Gulf, and Europe.
- The IMEC will be comprised of two separate corridors, the east corridor connecting India to the Arabian Gulf and the northern corridor connecting the Arabian Gulf to Europe.
- It will include a railway that, upon completion, will provide a reliable and cost-effective cross-border ship-to-rail transit network to supplement existing maritime and road transport routes enabling goods and services to transit to, from, and between India, the UAE, Saudi Arabia, Jordan, Israel, and Europe.
- Along the railway route, participants intend to enable the laying of cable for electricity and digital connectivity, as well as pipe for clean hydrogen export.
- This corridor will secure regional supply chains, increase trade accessibility, improve trade facilitation, and support an increased emphasis on environmental social, and government impacts.

Inclusion of African Union in G20

- African Union became a new permanent member of the grouping of the largest economies of the world.
- It is the first expansion of the influential bloc since its inception in 1999.
- All member countries of the G20 accepted India's proposal to bring the key bloc of the Global South to the high table of the world's top economies.
- During the Summit, Indian Prime Minister asked the President of the Union of Comoros and Chairperson of the African Union (AU), Azali Assoumani, to join other leaders at the high table, making the 55-member bloc the second multi-nation grouping after the European Union to be a permanent member of the G20

African Union (AU)

- The Addis Ababa-headquartered African Union (AU) comprises the 55 member states that make up the countries of the African Continent.
- It was officially launched in 2002 as a successor to the Organisation of African Unity, Africa's first post-independence continental institution set up in 1963 with 32 members.
- Collectively, African Union member states have a GDP of nearly USD 3 trillion and a population of around 1.4 billion.

FIRST GLOBAL SYMPOSIUM ON FARMERS' RIGHTS

- The President of India inaugurated the first 'Global Symposium on Farmers' Rights' (GSFR) at the ICAR Convention Centre, National Agricultural Science Centre Complex
- Organized by the Secretariat of the International Treaty on Plant Genetic Resources for Food and Agriculture (International Treaty) of the Food and Agriculture Organization (FAO), Rome
- The Global Symposium is being hosted by Ministry of Agriculture and Farmers Welfare in collaboration with Protection of Plant Varieties and Farmers' Rights (PPVFR) Authority, Indian Council of Agricultural Research (ICAR), ICAR-Indian Agricultural Research Institute (IARI), and ICAR-National Bureau of Plant Genetic Resources (NBPGR).
- India hosted the first 'Global Symposium on Farmers' Rights' from September 12 to 15, 2023.
- India has been the first country in the world to include Farmers' Rights in the context of Plant Variety Registration through its Protection of Plant Varieties and Farmers' Rights (PPVFR) Act, 2001.
- The proposal to hold the first GFSR was mooted by the Government of India at the Ninth Session of the Governing Body (GB9) of the International Treaty on Plant Genetic Resources for Food and Agriculture (International Treaty) held in India in September 2022, which was agreed by the FAO.

Protection of Plant Varieties and Farmers' Rights (PPVFR) Act, 2001.

- The Govt. of India enacted "The Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001" adopting sui generis system.
- Indian legislation is not only in conformity with International Union for the Protection of New Varieties of Plants (UPOV), 1978, but also have sufficient provisions to protect the interests of public sector breeding institutions and the farmers.
- The legislation recognizes the contributions of both commercial plant breeders and farmers in plant breeding activity

Objectives of the PPV & FR Act, 2001

- To establish an effective system for the protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants.
- To recognize and protect the rights of farmers in respect of their contributions made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties.

- To accelerate agricultural development in the country, protect plant breeders' rights; stimulate investment for research and development both in public & private sector for the development new of plant varieties.
- Facilitate the growth of seed industry in the country which will ensure the availability of high quality seeds and planting material to the farmers.

Rights under the Act

- Breeders' Rights: Breeders will have exclusive rights to produce, sell, market, distribute, import or export the
 protected variety.
- **Researchers' Rights:** Researchers can use any of the registered variety under the Act for conducting experiment or research.
- Farmers' Rights: A farmer who has evolved or developed a new variety is entitled for registration and protection in like manner as a breeder of a variety; Farmers variety can also be registered as an extant variety; A farmer can save, use, sow, re-sow, exchange, share or sell his farm produce including seed of a variety protected under the PPV&FR Act, 2001 in the same manner as he was entitled before the coming into force of this Act provided farmer shall not be entitled to sell branded seed of a variety protected under the PPV&FR Act, 2001;

Implementation of the Act

• To implement the provisions of the Act the Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare established the Protection of Plant Varieties and Farmers' Rights Authority on 11" November, 2005. The Chairperson is the Chief Executive of the Authority.

International Treaty on Plant Genetic Resources for Food and Agriculture

- The International Treaty on Plant Genetic Resources for Food and Agriculture (also known as ITPGRFA, International Seed Treaty or Plant Treaty, is a comprehensive international agreement in harmony with the Convention on Biological Diversity, which aims at guaranteeing food security through the conservation, exchange and sustainable use of the world's plant genetic resources for food and agriculture (PGRFA), the fair and equitable benefit sharing arising from its use, as well as the recognition of farmers' rights.
- It was signed in 2001 in Madrid
- The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) is a legally binding instrument adopted by the FAO Conference in 2001 and it entered into force on 29 June 2004.
- Article 9 of the Treaty focuses on recognizing, realizing, and promoting Farmers' Rights concerning plant genetic resources for food and agriculture (PGRFA).
- The Treaty places the responsibility for realizing Farmers' Rights on national governments and outlines potential measures to safeguard, enhance, and achieve these rights

EASTERN ECONOMIC FORUM, 2023

- The 8th Eastern Economic Forum 2023 is taking place on 10–13 September 2023 in Vladivostok on the Far Eastern Federal University (FEFU) campus.
- The Eastern Economic Forum is a key international platform for establishing and strengthening ties within the
 Russian and global investment communities, and for comprehensive expert evaluation of the economic potential
 of the Russian Far East, the investment opportunities it offers, and business conditions within advanced special
 economic zones.
- The Eastern Economic Forum was established by decree of the President of the Russian Federation Vladimir Putin
 in 2015 to support the economic development of Russia's Far East and to expand international cooperation in the
 Asia-Pacific region.

EASTERN MARITIME CORRIDOR



- The Eastern Maritime Corridor is aimed at reducing cargo transit times between our nations.
- The journey from Indian ports to the Russian Far East takes just 24 days, compared to 30 days through the port of Novorossiysk.
- This corridor holds immense potential to unlock new opportunities for trade and cooperation for both India and Russia.

Chennai-Vladivostok Maritime Corridor

• It is a proposed sea route covering approximately 5,600 nautical miles, or about 10,300 km, aimed at increasing bilateral trade between India and Russia. In September 2019 in Vladivostok, Prime Minister Narendra Modi signed a Memorandum of Intent for the route.

ASPIRATIONAL BLOCKS PROGRAMME (ABP)

- iGOT Karmayogi Bharat, the capacity development ecosystem for government officials, managed by Karmayogi Bharat SPV, in partnership with NITI Aayog, has launched a new curated collection dedicated to the Aspirational Blocks Programme (ABP).
- NITI Aayog has launched the Aspirational Blocks Programme, building on the success of the Aspirational Districts Programme.
- The collection seeks to build functional, domain and behavioural competencies of 5000 Block-level officials across 500 identified Blocks by acquainting learners with subjects crucial for performing their duties and responsibilities effectively.
- Through the curated module, the iGOT Platform will strive to enrich and enable Block officials' contribution to the transformation of the under-served Blocks, thus improving grassroots governance across India.

iGOT Karmayogi

- It is a comprehensive online portal to guide government officials in their capacity-building journey.
- The portal combines 6 functional hubs for online learning, competency management, career management, discussions, events, and networking.
- More than 22.2 lakh learners from across the government spectrum are currently registered on the iGOT Platform having access to 685+ courses.

INDO-RUSSIAN WORKSHOP ON EASTERN MARITIME CORRIDOR IN CHENNAI

• The Union Minister of Ports, Shipping & Waterways extended an invitation for an Indo-Russian Workshop on Eastern Maritime Corridor (EMC) in Vladivostok, Russia

- The Minister was addressing the session aimed at forging possibilities on early operationalisation of EMC as an alternative trade route between Russian port city of Vladivostok and Indian port city of Chennai.
- The workshop is proposed to take place from 30 October to 1st November 2023 in Chennai, India.
- The operationalisation of Eastern Maritime Corridor (EMC) will usher a new era of trade relationship between India and Russia.
- It may be recalled that a Memorandum of Intent on Development of Maritime Communications between the two Ports of Vladivostok and Chennai was exchanged in the presence of Prime Minister Narendra Modi and the President Putin during Eastern Economic Forum in Vladivostok in September 2019.
- Eastern Maritime Corridor (EMC) is estimated to reduce the time required to transport cargo between Indian and Russian Ports of Far-East Region by up to 16 days, i.e., 24 days in comparison to over 40 days currently taken to transport goods from India to Far East Russia via Europe.
- Present trade route between Mumbai in India and St Petersburg in Russia covers a distance of 8,675 nautical miles which takes approximately 35 to 40 days.
- The Chennai-Vladivostok sea route (EMC) will be covering a distance of about 5,600 nautical miles.
- A large container ship which travels at the normal cruising speed of 20-25 knots (37-46 km/hour), will be able
 to cover this distance in approximately 10 to 12 days. This corridor holds immense potential to unlock new
 opportunities for trade and cooperation.

SHANTI SWARUP BHATNAGAR PRIZE FOR S&T 2022

- At the inaugural event of 'One Week One Lab' programme of CSIR-National Institute of Science Communication & Policy Research (NIScPR), winners of the Shanti Swarup Bhatnagar (SSB) Prize for the year 2022 were announced
- The prestigious SSB Prize for the year 2022 has been awarded to twelve leading scientists in the seven disciplines.
- Two scientists each have been awarded the prize for Biological, Chemical, Engineering, Mathematical and Physical Sciences respectively.
- The award is named after the founder Director of the Council of Scientific & Industrial Research (CSIR) India, the late Dr (Sir) Shanti Swarup Bhatnagar and is known as the 'Shanti Swarup Bhatnagar (SSB) Prize for Science and Technology'.
- The Prize is given each year for outstanding contributions to science and technology.
- SSB Prizes, each of the value of Rs 5,00,000 (Rupees five lakh only), are awarded annually for notable and outstanding research, applied or fundamental, in the following disciplines: (i) Biological Sciences, (ii) Chemical Sciences, (iii) Earth, Atmosphere, Ocean and Planetary Sciences, (iv) Engineering Sciences, (v) Mathematical Sciences, (vi) Medical Sciences and (vii) Physical Sciences.
- The purpose of the award is to recognise outstanding Indian work in science and technology.
- Any citizen of India engaged in research in any field of science and technology up to the age of 45 years as reckoned on 31st December of the year preceding the year of the Prize. Overseas citizens of India (OCI) and Persons of Indian Origin (PIO) working in India are also eligible.
- The Prize is bestowed on a person who, in the opinion of CSIR, has made conspicuously important and outstanding contributions to human knowledge and progress fundamental and applied in the particular field of endeavour, which is his/her specialization.
- The Prize is awarded on the basis of contributions made through work done primarily in India during the five years preceding the year of the Prize.

World Duchenne Muscular Dystrophy Day

- World Duchenne Muscular Dystrophy Day is observed on the Seventh September each year to raise awareness about Duchenne muscular dystrophy.
- The purpose of the day is to support efforts that will improve the quality of life for those who have dystrophinopathies through education, advocacy, and social inclusion.

- A rare degenerative illness called Duchenne muscular dystrophy makes muscles weaker over time until it affects the entire body. One in five thousand boys are born with the condition.
- It results from an X-chromosome mutation. First, walking becomes challenging, then other motor functions follow, and finally, breathing and heart function are affected because the heart is also a muscle.
- Learning and behavioral problems may potentially be a symptom of the condition because the missing protein also has a purpose in the brain.
- This year's World Duchenne Muscular Dystrophy Day theme is Duchenne: Breaking Barriers.
- The Department of Empowerment of Persons with Disabilities (DEPwD) under Ministry of Social Justice and Empowerment, Government of India is the nodal department to look after all the development agenda of Persons with Disabilities of the country.
- With the vision to create awareness about Duchenne muscular dystrophy among the masses, the Department observed the World Duchenne Muscular Dystrophy Day on 7th September 2023

INTERNATIONAL CONFERENCE ON DAM SAFETY



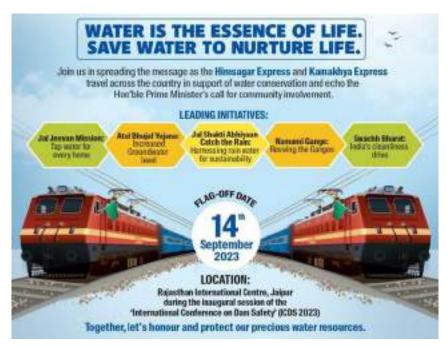
- The Department of Water Resources, River Development, and Ganga Rejuvenation (DoWR, RD &GR), Ministry of Jal Shakti is organizing an International Conference on Dam Safety (ICDS) at Rajasthan International Centre (RIC) in Jaipur from 14th to 15th September 2023,
- The Vice President of India, Shri Jagdeep Dhankhar will inaugurate the International Conference on the theme "Safe & Secure Dams Ensure Nation's Prosperity".
- Professionals from across the nation and about fifteen countries are expected to participate in the ground-breaking event dedicated to advancing the cause of dam safety and management.
- The conference will focus on highlighting the objectives of Dam Rehabilitation and Improvement Project (DRIP) Phase II and III, as well as how the project contributes to the improvement of dam safety in India.
- ICDS 2023 is the first in a series of Dam Safety Conferences planned under the DRIP Phase II & III.
- The conference is being organised in collaboration with the Rajasthan Water Resources Department, the Central Water Commission, the National Dam Safety Authority, MNIT Jaipur, WAPCOS Ltd., the World Bank and the Asian Infrastructure Investment Bank. ICDS 2023 is backed by esteemed organisers, academics, DRIP implementing agencies, sponsors, and media partners

Dams in India: Overview and steps taken by the government

- Dams are huge symbols of modern India.
- Dams have been essential to civilization's development, and have played a multifaceted role in meeting the everincreasing demand for drinking water, irrigation, hydropower, flood protection, and more.
- From Kallanai Dam, the first dam built in the 2nd century AD by King Karikala Chola, India boasts of over 6,000 dams in the present times, making it the third globally in terms of large dams and ensuring their safety is of paramount importance.
- With over 6,000 dams in India, ranked third globally in terms of large dams and approximately 80% of these dams exceeding 25 years of age while 234 surpassing the century mark, ensuring their safety is of paramount importance.
- In the backdrop of such a rich history, the Dam Safety Act (DSA) 2021 was enacted.
- This progressive legislation underscores the nation's dedication to dam surveillance, inspection, and maintenance, setting a benchmark for global dam safety standards.
- The Act mandates the establishment of the National Committee on Dam Safety, National Dam Safety Authority (NDSA) at the Central level and establishment of the State Committee on Dam Safety and State Dam Safety Organisation at the state level.
- Further, dam owners are now required to have a dedicated Dam Safety Unit, prepare Emergency Action Plans, and conduct Comprehensive Safety Evaluations at regular intervals.
- The responsibility of ensuring their safety primarily rests with dam owners, a mix of state governments, Central Public Sector Undertakings (CPSUs), and private agencies.
- To address these concerns, the Dam Rehabilitation and Improvement Project (DRIP) Phase I, launched in 2012, paved the way for addressing dam safety concerns in India.
- It covered 223 dams across seven states with a budget of R s 2,100 crore, leading to significant safety enhancements.
- Building upon its success, DRIP Phase II and III, funded by the World Bank and AIIB, continue the efforts to improve dam safety.
- These phases focus on rehabilitating dam structures, enhancing instrumentation, and establishing dam safety institutions, reflecting India's commitment to safeguard its water infrastructure.
- The scheme aims to fully rehabilitate 736 dams in 19 states.
- The 10-year system is being implemented in two six-year phases, Phase-II and Phase-III, with a two-year overlap.



Pani Ki Rail



- One of the highlights of the inaugural session will be the flagging off of the Vinyl-Wrapped 'Pani Ki Rail' i.e., two prominent trains, namely, the Himsagar Express & the Kamakhya Express
- This novel initiative led by the National Water Mission under Ministry of Jal Shakti, in collaboration with the Ministry of Railways titled "Rails for Water
- The primary aim of this initiative is to disseminate the crucial message of water conservation to every corner of India.

AYUSHMAN BHAV CAMPAIGN

- The President of India inaugurated the visionary 'Ayushman Bhav' campaign on September 13, 2023.
- This event is a step towards achieving Universal Health Coverage (UHC) and ensuring healthcare for all.
- The 'Ayushman Bhav' campaign, initiated by the Ministry of Health and Family Welfare, Government of India, is a comprehensive nationwide healthcare initiative that aims to provide saturation coverage of healthcare services, reaching every village and town in the country.
- This ground-breaking initiative builds upon the success of the Ayushman Bharat program and signifies a paradigm shift in healthcare services.
- The campaign, which will be implemented during the 'Seva Pakhwada' from September 17th to October 2nd, 2023, embodies a whole-of-nation and whole-of-society approach.
- It unites government sectors, civil society organizations and communities under a common mission to ensure that every individual receives essential health services without any disparity or exclusion.
- The Ayushman Bhav campaign is a collaborative effort spearheaded by Gram Panchayats in coordination with the Department of Health, other government departments, and local elected bodies in the rural and urban areas.
- Its core objective is to extend comprehensive healthcare coverage to every village and town, transcending geographical barriers and ensuring that no one is left behind.
- This synergistic approach aims to saturate coverage of health services through its three components Ayushman Apke Dwar 3.0, Ayushman Melas at Health and Wellness Centres (HWCs) and Community Health Centres (CHCs) and Ayushman Sabhas in every village and panchayat:
- Ayushman Apke Dwar 3.0: This initiative aims to provide Ayushman cards to remaining eligible beneficiaries enrolled under the PM-JAY scheme, ensuring that more individuals have access to essential health services.

- Ayushman Melas at HWCs and CHCs: These Melas at Ayushman Bharat- HWCs and CHCs will facilitate the
 creation of ABHA IDs (Health IDs) and issuance of Ayushman Bharat Cards. They will also offer early diagnosis,
 comprehensive primary health care services, teleconsultation with specialists, and appropriate referrals.
- Ayushman Sabhas: These gatherings in every village and Panchayat will play a pivotal role in distributing Ayushman
 cards, generating ABHA IDs, and raising awareness about vital health schemes and disease conditions, such as
 non-communicable diseases, tuberculosis (Nikshay Mitra), sickle cell disease, as well as blood donation and organ
 donation drives.
- The Ayushman Bhav campaign is aligned with the vision of creating 'Healthy Villages' and 'Healthy Gram Panchayats,' laying the foundation for achieving Universal Health Coverage in the country.
- Panchayats that successfully saturate the health schemes will earn the prestigious title of 'Ayushman Gram Panchayat' or 'Ayushman Urban Ward,' symbolizing their dedication to equitable healthcare provision.

MARITIME INFORMATION SHARING WORKSHOP 2023 (MISW 23)



- Gurugram, India takes centre stage as the regional maritime security community gathers for the Maritime Information Sharing Workshop 2023 (MISW 23).
- The workshop, hosted by the Information Fusion Centre Indian Ocean Region (IFC-IOR), brings together 31 countries of the Indian Ocean Rim Association (IORA) and the Djibouti Code of Conduct/ Jeddah Amendment (DCoC/JA), from September 14th to 16th, 2023.

Navigating the Ocean's Vital Role

- The *Information Fusion Centre Indian Ocean Region (IFC-IOR), Gurugram, was inaugurated on December 22, 2018,* with a mission to enhance maritime safety and security in the region.
- IFC-IOR, is a unique Centre where International Liaison Officers (ILOs) from partner nations collaborate to counter challenges to maritime safety and security.
- Presently, ILOs from twelve countries viz., Australia, France, Italy, Japan, Maldives, Mauritius, Myanmar, Seychelles, Singapore, Sri Lanka, UK and USA are appointed to the Centre.

Setting Sail with MISW

- To further India's vision of 'Security And Growth for All in the Region (SAGAR),' IFC-IOR conducts a series of workshops and training programs, of which the Maritime Information Sharing Workshop (MISW) is the flagship event.
- The inaugural edition of MISW was conducted in 2019.
- The MISW is a dynamic platform for the exchange of best practices amongst working-level professionals in the maritime security domain across the globe.

1. Djibouti Code of Conduct /Jeddah Amendment



- The Code of Conduct concerning the Repression of Piracy and Armed Robbery against Ships in the Western Indian Ocean and the Gulf of Aden, also referred to as the Djibouti Code of Conduct, was adopted on 29 January 2009 by the representatives of: Djibouti, Ethiopia, Kenya, Madagascar, Maldives, Seychelles, Somalia, the United Republic of Tanzania and Yemen. Comoros, Egypt, Eritrea, Jordan, Mauritius, Mozambique, Oman, Saudi Arabia, South Africa, Sudan and the United Arab Emirates
- It was established under the International Maritime Organization (IMO).
- India joined the Djibouti Code of Conduct (DCOC) as an observer as part of efforts aimed at enhancing maritime security in the Indian Ocean region.

Jeddah Amendment to the Djibouti Code

• The Jeddah Amendment calls on the signatory States to cooperate to the fullest possible extent to repress transnational organized crime in the maritime domain, maritime terrorism, illegal, unregulated and unreported (IUU) fishing and other illegal activities at sea.

2.Indian Ocean Rim Association (IORA)

- It is an international organisation consisting of 23 states bordering the Indian Ocean.
- The IORA is a regional forum, tripartite in nature, bringing together representatives of Government, Business and Academia, for promoting co-operation and closer interaction among them.
- It is based on the principles of for strengthening Economic Cooperation particularly on Trade Facilitation and Investment, Promotion as well as Social Development of the region.
- The Coordinating Secretariat of IORA is located at Ebene, Mauritius.
- The Indian Ocean Rim Association is an inter-governmental organisation which was established on 7 March 1997.
- IORA's apex body is the Council of Foreign Ministers (COM) which meets annually.
- The United Arab Emirates (UAE) assumed the role of Chair since November 2019 November 2021, followed by the People's Republic of Bangladesh November 2021 November 2023.

3. The Information Fusion Centre – Indian Ocean Region (IFC-IOR)

• IFC-IOR is a regional maritime security centre hosted by the Indian Navy. Launched in December 2018, the centre works towards enhancing maritime security and safety in the Indian Ocean.

- Currently, the IFC-IOR has International Liaison Officers (ILO) from 12 partner nations.
- It also has more than 65 international working-level linkages with nations and multi-national/ maritime security centres.

NATIONAL E-VIDHAN APPLICATION (NEVA)

- The President of India, Smt Droupadi Murmu inaugurated 'National e-Vidhan Application' (NeVA) and addressed the Gujarat Legislative Assembly at Gandhinagar
- The mission of e-Vidhan MMP (National e-Vidhan Application-NeVA) is to make all the States/UTs Legislatures paperless/ digitalized legislatures
- Streamlining all the processes for information exchange with the different State Government Departments
- It also aims to assist the Members of the States/UTs Legislatures to use the latest ICT tools for preparing themselves for participation in the legislative debates more effectively.
- NeVA is a work-flow system deployed on NIC Cloud, MeghRaj which helps the Chair of the House to conduct
 the proceedings of the House smoothly, Hon'ble Members to carry out their duties in the House efficiently, and
 to conduct Legislative Business of the House in a Paperless manner.
- NeVA is a device-neutral and member-centric application created to equip them to handle diverse House Business
 smartly by putting entire information regarding member contact details, rules of procedure, list of business, notices,
 bulletins, bills, starred/unstarred questions, and answers, papers laid, committee reports, etc. in their handheld
 devices/ tablets and equip all Legislatures/ Departments to handle it efficiently.
- NeVA will completely eliminate the process of sending out a notice/request for the collection of data.
- The aim of the project is to bring all the legislatures of the country together, in one platform thereby creating a massive data depository without having the complexity of multiple applications.
- mNeVA is a user-friendly Mobile App of NeVA which is available on Android as well as on iOS.
- mNeVA has made information on the conduct of business in Legislatures accessible anytime, anywhere to everyone.

PRADHAN MANTRI UJJWALA YOJANA (PMUY)

- The Union Cabinet, chaired by the Prime Minister, has approved the extension of Pradhan Mantri Ujjwala Yojana (PMUY) for the release of 75 lakh LPG connections over three years from Financial Year 2023-24 to 2025-26.
- Provisioning of 75 lakh additional Ujjwala connections will take total number of PMUY beneficiaries to 10.35 crore.
- As per the existing modalities of Ujjawala 2.0, the first refill and stove will also be provided free of cost to Ujjwala beneficiaries.
- A targeted subsidy of Rs.200 per 14.2 kg LPG cylinder for upto 12 refills per year is being provided to PMUY consumers.
- The PMUY scheme has empowered women economically and socially.

Initiatives to expand LPG coverage

- PAHAL (Pratyaksh Hastantarit Labh): Instead of providing LPG cylinders at subsidized price, those were sold
 at market price, and applicable subsidy was directly transferred to individual's bank account electronically. This
 reduced «ghost» accounts and illegal use of household cylinders for commercial purposes, ensuring that only the
 intended beneficiaries receive the benefits.
- 2. Give it up: Instead of removing subsidies forcefully, people were encouraged to voluntarily surrender their subsidies. Through extensive promotion, millions of people willingly gave up the subsidies, which helped redirect the funds to those who genuinely needed assistance in acquiring LPG cylinders.
- **3.** During Covid-19 pandemic lockdown in 2020, free refill scheme under **Pradhan Mantri Garib Kalyan Yojana** was implemented. Under this scheme, assistance of Rs. 9670.41 crore was given to PMUY beneficiaries in support of 14.17 crore LPG refills.
- **4.** Per capita consumption of PMUY beneficiaries which was 3.01 in 2018-19 has increased to 3.71 in 2022-23. PMUY beneficiaries took more than 35 cr LPG refills a year now (2022-23).

ECOURTS PROJECT PHASE III



- The Union Cabinet chaired by the Prime Minister has approved the eCourts Project Phase III as a Central Sector Scheme spanning four years (2023 onwards) with a financial outlay of Rs.7210 crore.
- As part of the National eGovernance Plan, the e-Courts Project has been under implementation since 2007 for ICT enablement of the Indian Judiciary Phase II of which has concluded in 2023.
- Phase III of the e-Courts Project in India is rooted in philosophy of "access and inclusion".
- The e-Courts Phase-III aims to usher in a regime of maximum ease of justice by moving towards digital, online and paperless courts through digitization of the entire court records including legacy records, and by bringing in universalization of e-filing/ e-Payments through saturation of all court complexes with e-Sewa Kendras.
- It will put in place intelligent smart systems enabling data-based decision-making for judges and registries while scheduling or prioritizing cases.
- The main objective of the Phase-III is to create a unified technology platform for the judiciary, which will provide a seamless and paperless interface between the courts, the litigants, and other stakeholders.
- The Centrally Sponsored Scheme of eCourts Phase III is being implemented under the joint partnership of Department of Justice, Ministry of Law & Justice, Government of India and eCommittee, Supreme Court of India, in a decentralized manner through the respective High Courts to develop a judicial system that would promote ease of justice by making the system more accessible, affordable, reliable, predictable, and transparent for all stakeholders.

The expected outcomes of the scheme are as follows:

- Citizens who do not have access to technology can access the judicial services from eSewa Kendras, thus bridging
 the digital divide.
- Digitization of court records lays the foundation for all other digital services in the project.
- Virtual participation in the court proceedings thus reducing costs associated with court proceedings
- Payment of court fees, fines and penalties from anywhere, anytime.
- Expansion of eFiling for reducing the time and effort required to file documents.
- Expansion of virtual courts beyond the adjudication of traffic violation cases,
- Emphasis on automated delivery of court summons by further expanding the NSTEP (National Serving and Tracking of Electronic Processes), hence drastically reducing the delays in trials.

MOU WITH THE REPUBLIC OF ARMENIA, ANTIGUA & BARBUDA, AND THE REPUBLIC OF SIERRA LEONE TO USE INDIA STACK

- The Union Cabinet approves the signing of a Memorandum of Understanding (MoU) between India Armenia, Antigua & Barbuda, and the Republic of Sierra Leone on Cooperation in the field of sharing successful Digital Solutions implemented at the Population Scale for Digital Transformation.
- The MoU intends to promote closer cooperation and exchange of experiences and digital technologies-based solutions (viz. INDIA STACK) in the implementation of digital transformational initiatives of both the country.
- MoU envisages improved collaboration leading to employment opportunities in the field of IT.
- The MoU shall come into effect from the date of signature of the Parties and shall remain in force for a period of 3 years.
- MeitY is collaborating with a number of countries and multilateral agencies for fostering bilateral and multilateral cooperation in the ICT domain.
- This is in consonance with the various initiatives taken by Government of India such as Digital India, Atmanirbhar Bharat, Make in India etc. to transform the country into a digitally empowered society and knowledge economy.
- Over the last few years, India has demonstrated its leadership in implementation of Digital Public Infrastructure (DPI) and has successfully provided delivery of services to public even during COVID pandemic.
- As a result, many countries have evinced interest in learning from India's experiences and entering into MoUs with India for learning from India's experiences.

India Stack Solutions are DPIs

- India Stack Solutions are DPIs developed & implemented by India at population scale to provide access & delivery
 of public services It aims to provide meaningful connectivity, promote digital inclusion, and enable seamless access
 to public services.
- These are built on open technologies, are interoperable and are designed to harness industry and community participation which foster innovation.

India Stack

• India Stack is a set of open APIs(application programming interface) that allows governments, businesses, startups and developers to utilise an unique digital Infrastructure to solve India's hard problems towards presence-less, paperless, and cashless service delivery.

The following APIs are considered to be a core part of the India Stack.

- Aadhaar Authentication
- Aadhaar e-KYC
- eSign
- Digital Locker
- Unified Payment Interface (UPI)

Benefits of DPIs

- Citizens: Brings millions of Indians into the formal economy by reducing friction.
- Software ecosystem: Fosters innovation to build products for financial Inclusion, healthcare & educational services at scale.
- Government: Brings a paradigm shift in the way government services are delivered in a transparent, accountable and leakage-free model.

Pillars of Digital Public Infrastructure

1. Aadhaar

identity

- digital identity system
- 2010
- Covers 1.3 billion people

2. Unified Payment Interface

- Payments
- Digital payment
- 2016
- Accounts for 73 percent of all non-cash retail payments

3. Digi Locker

- Data Management
- Using 12 digit and a number, we can access online documents
- Digilocker is connected to tax documents, vaccine certificates etc
- Access crucial documents

DIGITAL TRANSFORMATION IN INDIA

- Hundreds of millions in India's welfare system receive "direct benefit transfers" straight to their Aadhaar-linked bank accounts, which has slashed corruption. This system also helps disburse emergency funds, such as during the pandemic.
- The Open Network for Digital Commerce (ONDC) is a newish government-backed non-profit dedicated to helping e-commerce services work together. The idea is to help millions of small businesses connect to third-party payments and logistics providers.
- Sahamati, an NGO is setting up a platform to allow "account aggregators" to enable individuals to share financial information in a standardized format and this makes giving loans easier by Banks and NBFCs.
- Aadhaar is run by the government, whereas UPI is managed by a public-private venture, the National Payments Corporation of India (NPCI).
- India is promoting its digital offer through its year-long leadership of the G20 and it is also trying to launch a multilateral funding body to push DPI globally.
- NPCI International, a subsidiary of the NPCI was set up in 2020 to deploy India's payments systems abroad.

India's DPI Ecosystem across the World

- The International Institute of Information Technology in Bangalore, launched the Modular Open Source Identity Platform (MOSIP) in 2018 to offer a publicly accessible version of Aadhaar-like technology to other countries.
- The Philippines was the first to sign up. 76 million of its 110 million people have been issued with digital IDs using MOSIP's technology.
- Morocco conducted a trial of the technology in 2021 and has made it available to 7 million of its 36 million people.
- Other countries using or piloting MOSIP include Ethiopia, Guinea, Sierra Leone, Sri Lanka and Togo.
- NPCI connected UPI with Singapore's digital payments system, PayNow.
- NPCI connected with the United Arab Emirates' system.

Study In India (SII) Portal

- The Department of Higher Education, Ministry of Education in association with EDCIL organised a Study In India (SII) workshop at AICTE auditorium, New Delhi
- The objective was to familiarise all the stakeholders from various ministries/ Departments, FRROs, Indian Missions abroad, and Compliance Officers of Higher Educational Institutions (HEIs) about the functioning of the SII portal and their specific roles in running it.

SII portal

- The portal was jointly launched by the Union Education Minister and Union External Affairs in New Delhi on 3rd August 2023 as part of the Internationalisation of Higher Education efforts.
- Study in India is a flagship programme of Government of India re-establishing India as a global hub of education.
- The website-portal acts as a single window system for registration, visa approvals, thereby simplifying the entire journey, enabling students to choose their desired courses, receive institute offer letters, and successfully pursue their academic dreams in India.

TTPS (TACTICS, TECHNIQUES AND PROCEDURES)-BASED CYBERCRIME INVESTIGATION FRAMEWORK



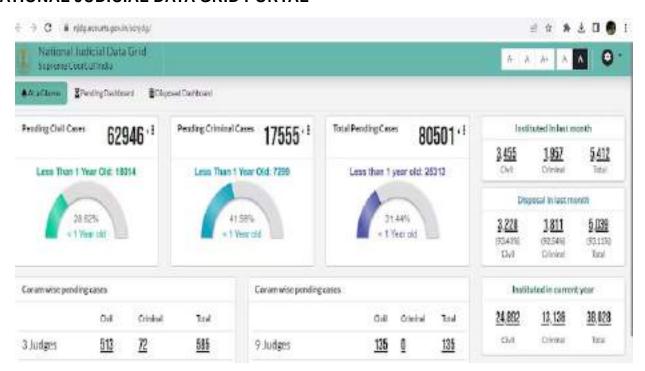
- A new cybercrime investigation tool would soon be able to track cyberattacks targeting humans, like insurance fraud, online matrimonial fraud, and so on.
- The tool called TTPs (tactics, techniques, and procedures)-based cybercrime investigation framework can help in tracking and classifying cybercrimes identifying the chain of evidence required to solve the case, and in mapping evidences onto the framework to convict criminals.
- In order to fill this gap, I-hub NTIHAC foundation (c3ihub) at IIT Kanpur with support from the Department of Science and Technology (DST) under National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS), developed a methodology and tool for apprehending cybercriminals' modes of operations in a crime execution lifecycle.
- It was developed with the help of literature study, case studies, framework building, incorporating pre-existing crime in the framework, evolving interactive framework navigator and mapping real cases onto the framework.
- The technology can create an approximate crime execution path and suggest crime path based on user derived set of keywords.
- It can also compare modus operandi (Mode of Operation) used in different crimes and manage user roles and track activity for crime paths.
- The TTPs-based investigation framework could be highly effective as it restricts the numbers of forms and methods
 the investigation can be conducted and primarily rely on criminals' TTPs.

STATE VISIT OF THE CROWN PRINCE OF THE KINGDOM OF SAUDI ARABIA TO INDIA

- India and Saudi Arabia agreed to work towards building undersea interlink between their electricity grids, renewable power, and green hydrogen capacities.
- The MoU, signed has the potential to change India's status from a net buyer of Saudi oil and cooking gas (LPG) to an energy exporter with green power and hydrogen exports.

- Ministry of Commerce and Industry of India and the Saudi Ministry of Investment organized an India-Saudi Arabia Investment Forum 2023 ("The Forum") in New Delhi
- The Forum witnessed the attendance of more than 500 companies from India and Saudi Arabia.
- This is the first such formal investment symposium between India and Saudi Arabia
- In the first India-Saudi Arabia Strategic Partnership Council meeting, both countries inked eight pacts to boost cooperation in a range of areas including digitisation and investment, among others.
- India and Saudi Arabia decided to expedite the implementation of the USD 50 billion West Coast refinery project, and identified energy, defence, semiconductor and space as areas for intensified cooperation
- West Coast refinery project is a trilateral cooperation between Aramco, ADNOC and Indian companies
- The West Coast Refinery project is to come up in Maharashtra. The mega refinery-cum-petrochemicals complex project was first announced in 2015.
- India and Saudi Arabia also agreed to explore opportunities for cooperation in the area of payment systems including the acceptance of RuPAY card in Saudi Arabia for the benefit of the Indian community in general and more particularly the Hajj/Umrah pilgrims.
- Prime Minister Modi and the Saudi leader co-chaired the first meeting of the Strategic Partnership Council that was established in October 2019.
- More than 45 Memorandum of Understanding (MoUs) were concluded between the two sides, in G2B and B2B formats.
- These MoUs are expected to further deepen the economic engagement between the two sides and are also likely to accelerate investment flows between the two sides.

NATIONAL JUDICIAL DATA GRID PORTAL



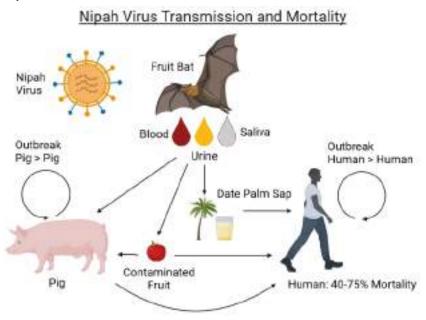
- With Supreme Court of India onboarding the National Judicial Data Grid (NJDG) portal, the flagship project of the e-Courts project completes the full circle
- Now we have all three tiers of Indian judiciary on NJDG portal.
- NJDG is recognized as a significant innovation under the ease of doing business initiative of the Government of India.

- The NJDG portal is a national repository of data relating to cases instituted, pending, and disposed of by the courts across the length and breadth of the country.
- Now with a click of a button, one may access case-related information, statistics such as institution, pendency and disposal of cases, case types, and year-wise break-up of the Supreme Court of India.
- NJDG has been developed by the National Informatics Centre (NIC) in close coordination with the in-house software development team of the Computer Cell, Registry with an interactive interface and analytics dashboard.
- The entire database shall be periodically updated on the NJDG portal.
- To date, the NJDG portal remains unparalleled, and the same is accessible at a click of a button to its citizenry.
- NJDG is *sui generis* as it has brought transparency, and accountability within the realm of the Indian judicial system by sharing all relevant data of cases instituted, pending, and disposed of.

Since the launch of the NJDG portal, the benefits of the NJDG portal can be summed up as under:

- 1. increased transparency
- 2. accountability and responsibility
- 3. improved efficiency
- 4. increased coordination
- 5. informed decision making
- 6. optimum deployment of resources and manpower
- 7. single source of data
- 8. huge potential for high-quality research work

NIPAH VIRUS (NIV)



- Union Health Minister reviewed steps taken for containment of Nipah virus outbreak in Kozhikode, Kerala, from the Indian Council of Medical Research National Institute of Virology (ICMR-NIV)
- Nipah virus (NiV) is a zoonotic virus, meaning that it can spread between animals and people.
- Fruit bats, also called flying foxes, are the animal reservoir for NiV in nature.
- Nipah virus is also known to cause illness in pigs and people.
- Infection with NiV is associated with encephalitis (swelling of the brain) and can cause mild to severe illness and even death.
- Outbreaks occur almost annually in parts of Asia, primarily Bangladesh and India.

- Nipah virus infection can be prevented by avoiding exposure to sick pigs and bats in areas where the virus is present, and not drinking raw date palm sap which can be contaminated by an infected bat.
- During an outbreak, standard infection control practices can help prevent person-to-person spread in hospital settings.
- Nipah virus (NiV) infection can be diagnosed during illness or after recovery.
- Currently, there are no licensed treatments available for Nipah virus (NiV) infection.
- Treatment is limited to supportive care, including rest, hydration, and treatment of symptoms as they occur.
- There are, however, immunotherapeutic treatments (monoclonal antibody therapies) that are currently under development and evaluation for treatment of NiV infections.

BHARAT BECOMES THE 13TH COUNTRY IN WORLD THAT CAN ISSUE INTERNATIONALLY ACCEPTED OIML (INTERNATIONAL ORGANIZATION OF LEGAL METROLOGY) CERTIFICATES

- Bharat has now become the authority for issuing internationally accepted OIML certificates for selling weights & measures anywhere in the world.
- To sell a weight or measure in the International market an OIML Pattern Approval certificate is mandatory, which Department of Consumer Affairs can issue now.
- Bharat follows OIML recommendations and procedures of testing and calibration of weights and measures.
- The reports prepared by the Legal Metrology's Regional Reference Standards Laboratories are now acceptable to the OIML issuing authorities.
- Now, Bharat is an authority for issuing OIML pattern approval certificates and can act as a support system for indigenous manufacturers.
- The domestic manufacturers can now export their weighing and measuring instruments worldwide without incurring additional testing fees, resulting in significant cost savings.
- Bharat can also support the foreign manufacturers by issuing OIML pattern approval certificates from our certified RRSLs.
- By issuing the OIML approval certificates of weighing & measuring instrument to the foreign manufacturers Bharat will also generate forex in terms of fees etc.
- Bharat may now influence the OIML's policies and provide input to the OIML Strategy.
- Bharat now joins an exclusive group of nations, including Australia, Switzerland, China, Czech Republic, Germany,
 Denmark, France, United Kingdom, Japan, Netherlands, Sweden, and Slovakia, as the 13th country worldwide,
 authorized for issuing OIML approval certificates.

OMIL

- OIML is an Intergovernmental organization which was established in 1955.
- Bharat became its member in 1956.
- It has 63 Member States and 64 Corresponding Members.
- It develops model regulations, standards, and related documents for use by legal metrology authorities and industry,
- It provides mutual recognition systems which reduce trade barriers and costs in a global market.

ROSH HASHANAH

- The Prime Minister has extended his warmest greetings to the people of Israel, and the Jewish people around the world on the occasion of Rosh Hashanah.
- This Jewish New Year, celebrated by millions of people around the world, marks the beginning of the year 5784 in the Gregorian calendar and is a joyous occasion filled with traditions, food, and celebration.
- It is mainly observed on the first or the second day of the Hebrew month of Tishrei.

- In 2023, Rosh Hashanah will begin on September 15 and the celebration will continue till September 17.
- Rosh Hashana is also known as the Day of Remembrance, for on this day Jews commemorate the creation of the world, and the Jewish nation recalls its responsibilities as God's chosen people.

ENGINEERS DAY

- The Prime Minister of India paid tributes to Sir M Visvesvaraya on the occasion of Engineers Day.
- National Engineers Day is also known as Visvesvaraya Jayanti. National Engineer's Day is observed every year on September 15.
- The day is celebrated to commemorate the birthday of Mokshagundam Visvesvaraya, a diwan of the former Mysore kingdom who is credited with pioneering engineering achievements.
- Sir M Visvesvaraya was India's first Engineer and his contributions towards nation building are remarkable.
- The government of India declared M Visvesvaraya's birth anniversary as Engineers' Day in 1968.

RAJ BHASHA KIRTI PURASKAR, 2022-23

- Department of Pension & Pensioners' Welfare (DoPPW) has been conferred the prestigious *First Raj Bhasha Kirti Puraskar*, 2022-23 in the category of Ministries/Departments with less than 300 employees.
- The Raj Bhasha Kirti Puraskar is a prestigious award conferred every year on a department which stands first among all the Ministries/Departments with less than 300 employees during the Akhil Bhartiya Raj Bhasha Sammelan and Hindi Diwas celebrations organized by the Department of Official Language, Ministry of Home Affairs.

SAMUDRA PRAHARI

- The Indian Coast Guard Ship Samudra Prahari, a specialized Pollution Control Vessel, is currently on an overseas deployment to ASEAN countries
- This deployment is part of India's ASEAN initiatives for Marine Pollution Response, showcasing the Pollution Response capabilities of the Indian Coast Guard (ICG) and its commitment to addressing marine pollution issues and enhancing capacity in the region.
- The ship is equipped with a Chetak Helicopter in Pollution Response configuration, enhancing its capabilities in this area.
- This initiative was announced by Raksha Mantri Rajnath Singh during the ASEAN Defence Minister Meeting Plus meeting in Cambodia in November 2022.
- As part of an overseas exchange program, the ship has embarked 13 NCC cadets to participate in "Puneet Sagar Abhiyan," an international outreach program focused on beach clean-ups and similar activities in coordination with partner nations.

Pollution Control Vessels

The Samudra-class Pollution Control Vessel is a class of three vessels built by the ABG Shipyard in Gujarat for Indian Coast Guard.

- 1. Samudra Prahari
- 2. Samudra Paheredar
- 3. Samudra Pavak

Samudra Prahari

- It is an Indian Coast Guard Ship (ICGS)
- It is specially designed for pollution control.
- It is equipped with the most advanced pollution Response and Control equipment for mitigating oil spills in the Exclusive Economic Zone.
- It has tanks and inflatable barges for storage of oil spills.

- It is capable of unhindered oil recovery operations
- The vessel is designed to operate a twin-engine Advanced Light Helicopter and to operate and embark Chetak helicopter.

Puneet Sagar Abhiyaan

• The NCC had, on December 01, 2021, launched 'Puneet Sagar Abhiyan', a nationwide flagship campaign, to clean sea shores of plastic & other waste material, while raising awareness about the importance of cleanliness.

WORLD OZONE DAY

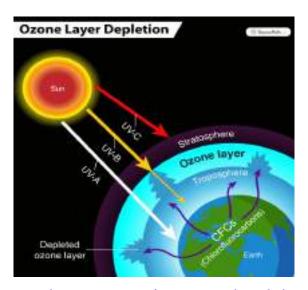


Image source - https://www.sciencefacts.net/ozone-layer-depletion.html

- Ministry of Environment, Forest and Climate Change (MoEF&CC), celebrated the 29th World Ozone Day
- World Ozone Day is celebrated on 16th September each year to commemorate the signing of the Montreal Protocol, an international environmental treaty for phasing out of production and consumption of Ozone Depleting Substances, that came into force on this day in 1987.
- World Ozone Day is celebrated every year to spread awareness among people about the depletion of Ozone Layer and the measures taken/ to be taken to preserve it.
- The Ozone Cell, Ministry of Environment, Forest and Climate Change, Government of India has been celebrating the World Ozone Day since 1995 at the National and State levels.
- The theme for World Ozone Day 2023 is "Montreal Protocol: fixing the ozone layer and reducing climate change".
- India has been proactive in the Montreal Protocol implementation and highlighted achievements of the country and the new initiatives being taken for preparing for implementation of the Kigali Amendment to the Montreal Protocol for phase down of Hydrofluorocarbons (HFCs).

Montreal Protocol: A Brief Background

- Ozone Layer exists in the Stratosphere, between 10 KM and 40 KM above the Earth's surface and protects us from UV radiation from the Sun.
- Ozone formed in the stratosphere called stratospheric ozone or good Ozone.
- Without the Ozone layer, radiation from the sun would reach earth directly, having ill effects on human health, i.e., eye cataract, skin cancer, etc., and adverse impacts on agriculture, forestry and marine life.
- Manmade chemicals containing chlorine and bromine reach the stratosphere and undergo a complex series of catalytic reactions, leading to destruction of ozone.
- These chemicals are called Ozone Depleting Substances.
- The Vienna Convention, an international treaty on the protection of the Ozone Layer, came into force in 1985.

- Under this convention, the Montreal Protocol's came into force in 1987 to repair the ozone layer to protect the earth's Ozone Layer by phasing out production and consumption of Ozone Depleting Substances for end applications.
- The Montreal Protocol provides a set of practical, actionable tasks to phase out ozone-depleting substances. and is one of the most successful and effective environmental treaties ever negotiated and implemented,

India's Achievements in Implementation of Montreal Protocol

- India, as a Party to the Montreal Protocol since June 1992, has been successfully implementing the Montreal Protocol and its ozone-depleting substances phase-out projects and activities in line with the phase-out schedule of the Protocol.
- India has phased out Chlorofluorocarbons, Carbon tetrachloride, Halons, Methyl Bromide, and Methyl Chloroform for controlled uses as on 1 January 2010, in line with the Montreal Protocol phase-out schedule.
- Currently, Hydrochlorofluorocarbons (HCFCs) are being phased out as per the accelerated schedule of the Montreal Protocol.

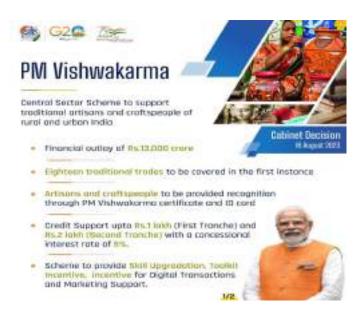
Kigali Amendment to the Montreal Protocol

- The phase-out of Ozone Depleting Substances led to the growth of Hydrofluorocarbons (HFCs), used as alternatives to the ODSs, particularly in the refrigeration and air- conditioning sector.
- While HFCs do not deplete the Ozone Layer, they have a high global warming potential ranging from 12 to 14000, which has an adverse impact on climate.
- The decision to add HFCs to the list of controlled substances under the Montreal Protocol during 2016 led to the Kigali Amendment to the Montreal Protocol, under which all Parties shall gradually reduce the consumption and production of HFCs.
- As per the Kigali Amendment, India will complete its phase down of production and consumption of HFCs for controlled uses in 4 steps from 2032 onwards with cumulative reduction of 10% in 2032, 20% in 2037, 30% in 2042 and 85% in 2047.
- India has ratified the Kigali Amendment to the Montreal Protocol during September 2021 National Strategy for phase down of HFCs in close cooperation with the industry stakeholders shall be developed by 2023.

India Cooling Action Plan (ICAP)

- The MoEFCC has developed and launched the India Cooling Action Plan (ICAP) during March 2019
- The first of its kind in the world is to look for synergies in actions having the potential to provide socio-economic and
 environmental benefits related to reduced refrigerant use, climate change mitigation, and Sustainable Development
 Goals with a 20-year time horizon.

PM-VISHWAKARMA



- Prime Minister launched the Central Sector Scheme PM-Vishwakarma
- PM Vishwakarma is fully funded by the Union Government with an outlay of ₹ 13,000 crores.
- Under the scheme, the Vishwakarmas will be registered free of charge through Common Services Centres using the biometric-based PM Vishwakarma portal.
- They will be provided recognition through PM Vishwakarma certificate and ID card, skill upgradation involving basic and advanced training, toolkit incentive of ₹15,000, collateral-free credit support up to ₹1 lakh (first tranche) and ₹2 lakh (second tranche) at a concessional interest rate of 5%, incentive for digital transactions and marketing support.
- The Scheme aims to strengthen and nurture the Guru-Shishya parampara or family-based practice of traditional skills by Vishwakarmas working with their hands and tools.
- The prime focus of PM Vishwakarma is to improve the quality as well as the reach of products and services of artisans and craftspeople and to ensure that they are integrated with the domestic and global value chains.
- The scheme will provide support to artisans and craftspeople in rural and urban areas across India. Eighteen traditional crafts will be covered under PM Vishwakarma. These include (i) Carpenter; (ii) Boat Maker; (iii) Armourer; (iv) Blacksmith; (v) Hammer and Tool Kit Maker; (vi) Locksmith; (vii) Goldsmith; (viii) Potter; (ix) Sculptor, Stone breaker; (x) Cobbler (Shoesmith/ Footwear artisan); (xi) Mason (Rajmistri); (xii) Basket/Mat/Broom Maker/Coir Weaver; (xiii) Doll & Toy Maker (Traditional); (xiv) Barber; (xv) Garland maker; (xvi) Washerman; (xvii) Tailor; and (xviii) Fishing Net Maker.
- Ministry of Micro, Small & Medium Enterprise is the nodal ministry of PM Vishwakarma Yojana.

INTERNATIONAL COASTAL CLEAN-UP DAY - 2023



- The Indian Coast Guard conducted International Coastal Clean-up Day 2023 (ICC-2023) across all Coastal States and Union Territories on 16 Sep 2023.
- The International Coastal Clean-up day is held worldwide on the third Saturday of September every year under the aegis of United Nations Environment Programme (UNEP) and South Asia Co-operative Environment Programme (SACEP) in the South Asian Region.
- The Indian Coast Guard has been coordinating this activity in India since 2006.
- This year, Maharashtra witnessed the highest participation of 11,425 volunteers followed by Tamil Nadu which had 5,166 volunteers. Nationwide, a total of 25,245 volunteers participated in the ICC-2023 campaign.

SWACHH SAGAR SURAKSHIT SAGAR

• The Ministry of Earth Sciences (MoES) conducted mega citizen-led beach clean-up drives at 79 locations in 8 coastal states and 4 Uts of the country on 16 September 2023 that continued on 17 September 2023 to mark International Coastal Clean-up Day.

- The event was aimed to encourage citizens to clean up the coastal line and create awareness about preserving and protecting the oceans and waterways.
- It witnessed mass participation from government institutions, NGOs, students and youth, local dwellers, and the public.
- The 2033 Swachh Sagar Surakshit Sagar beach clean-up drives by five MoES institutes—Indian National Centre
 for Ocean Information Services (INCOIS), National Centre for Coastal Research (NCCR), National Centre for
 Ocean and Polar Research (NCPOR), Centre for Marine Living Resources and Ecology (CMLRE), and National
 Centre for Earth System Sciences (NCESS)— got associated many volunteers and NGOs making it a one-of-itskind successful event.

International Coastal Clean-up Day

• The International Coastal Clean-up Day is observed annually worldwide on the third Saturday of September every year.

TWO INDIAN SITES JOIN UNESCO WORLD HERITAGE LIST

- The World Heritage Committee has named 37 new sites to UNESCO's World Heritage List including one in the Israeli-occupied West Bank.
- The newly inscribed properties were announced during the 45th session of the World Heritage Committee being held from Sept. 10 to 25 in Riyadh, Saudi Arabia.
- India has 42 world heritage properties overall, which includes 34 in the cultural category, seven in the natural category and one mixed property
- Presently, India has the sixth largest number of (UNESCO) sites in the world.
- The countries that have 42 or more world heritage sites are Italy, Spain, Germany, China and France

Santiniketan, West Bengal

- It has been officially inscribed on @UNESCO's World Heritage List, becoming 41st World Heritage Property of India.
- Santiniketan, the town in West Bengal's Birbhum district where Nobel laureate Rabindranath Tagore spent much of his life, has been included in the UNESCO World Heritage List.
- Established in 1901 by poet and philosopher Tagore, Santiniketan was a residential school and centre for art based on ancient Indian traditions and a vision of the unity of humanity transcending religious and cultural boundaries.
- A 'world university' was established at Santiniketan in 1921, recognising the unity of humanity or "Visva Bharati".
- India had been striving for long to get a UNESCO tag for this cultural site located in the Birbhum district.

Sacred Ensembles of the Hoysalas

- The Sacred Ensembles of the Hoysalas has been nominated as a serial property comprising three temples in Karnataka, namely the Channakeshava temple in Belur, the Hoysaleshvara temple in Halebidu and the Keshava temple in Somanathapura, reflecting the creative brilliance of the 13th-century architects
- "These temples are a culmination of various temple building traditions prevalent in the northern, central and southern India such as the Nagara, Bhumija and Dravida styles
- Hence the inscription of these temples in the World Heritage List is a combined homage to the great temple-building tradition of India.

World Heritage Convention

- The World Heritage Convention, adopted by UNESCO in 1972, strives to safeguard exceptional places for future generations, recognizing their universal value and the need for international cooperation in their protection.
- UNESCO encourages the identification, protection, and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity.

KISAN RIN PORTAL (KRP), KCC GHAR GHAR ABHIYAAN, WEATHER INFORMATION NETWORK DATA SYSTEMS (WINDS)

- The Ministry of Agriculture & Farmers Welfare launched three initiatives, namely the Kisan Rin Portal (KRP), KCC Ghar Ghar Abhiyaan, an ambitious campaign aiming to extend the benefits of the Kisan Credit Card (KCC) Scheme to every farmer across the nation, and a manual on Weather Information Network Data Systems (WINDS).
- These initiatives aim to revolutionize agriculture, enhance financial inclusion, optimize data utilization, and improve the lives of farmers across the nation.

Kisan Rin Portal (KRP)

- Developed collaboratively by MoA&FW, the Department of Financial Services (DFS), Department of Animal Husbandry & Dairying (DAH&D), Department of Fisheries (DoF), RBI, and NABARD, KRP is poised to revolutionize access to credit services under the Kisan Credit Card (KCC).
- It will also assist farmers in availing subsidized agriculture credit through the Modified Interest Subvention Scheme (MISS).
- The KRP portal serves as an integrated hub, offering a comprehensive view of farmer data, loan disbursement specifics, interest subvention claims, and scheme utilization progress.
- By fostering seamless integration with banks, this pioneering portal enables proactive policy interventions, strategic
 guidance, and adaptive enhancements for more focused and efficient agriculture credit and optimum utilization
 of interest subvention.

Ghar-Ghar KCC Abhiyaan: Door to Door KCC Campaign

- MoA&FW's commitment to universal financial inclusion is underscored by this campaign, ensuring that every farmer has unhindered access to credit facilities that drive their agricultural pursuits.
- MoA&FW has diligently verified existing KCC account holders' data against the PM KISAN database, identifying
 account holders who match with the PM KISAN database and those who, although PM KISAN beneficiaries, do
 not have KCC accounts.

Launch of WINDS Manual

- The Weather Information Network Data Systems (WINDS) initiative stands as a pioneering effort to establish a network of Automatic Weather Stations & Rain Gauges at the taluk/block and gram panchayat levels.
- This initiative creates a robust database of hyper-local weather data, supporting various agricultural services.

PROMOTION OF TRIBAL PRODUCTS FOR NORTH EAST REGION (PTP-NER 2.0) SCHEME

- Tribal Cooperative Marketing Development Federation of India Ltd. (TRIFED) under Union Ministry of Tribal Affairs, would be launching the phase 2 of the 'Promotion of Tribal Products for North East Region' (PTP-NER 2.0) scheme
- In this phase, 29 districts with as many teams of TRIFED, North Eastern Handicrafts and Handlooms Development Corporation (NEHHDC) – Union Ministry of DoNER, and State Administration teams will travel the North East Region, to once again reach out to tribal artisans and showcase their cultural richness and heritage not only to the Nation but world over.

PTP-NER (2.0) Scheme

- Union Minister for Tribal Affairs launched the Central Sector Scheme 'Marketing and Logistics Development for Promotion of Tribal Products from North-Eastern Region (PTP-NER)', for the benefit of Scheduled Tribes of North-eastern Region, in Manipur on 18th April, 2023.
- The scheme was initiated on the same day by TRIFED, with the aim of strengthening and giving impetus to
 livelihood opportunities for tribal artisans by increasing their production capacity through technology and giving
 their products access to markets by effective marketing and attractive packaging.

ASIA PACIFIC FORUM ON HUMAN RIGHTS

• The President of India inaugurated Annual General Meeting and Biennial Conference of the Asia Pacific Forum on Human Rights in New Delhi



- The APF was established in 1996 with five members.
- Today, itsmembership includes 26 National Human Rights Institutions from all corners of the Asia Pacific.
- The APF has 17 full members and eight associate members.
- To be admitted as a full member, a National Human Rights Institution must fully comply with the minimum international standards set out in the Paris Principles.
- National Human Rights Institutions that partially comply with the Paris Principles are granted associate membership.
- APF can use the accreditation decisions of the Global Alliance of National Human Rights Institutions (GANHRI) to determine APF membership status.
- It also provide practical support to our members before, during and after the GANHRI accreditation process
- Full membership of the APF is equivalent to the GANHRI accreditation of "A status" and associate membership of the APF is equivalent to the GANHRI accreditation of "B status".

Global Alliance of National Human Rights Institutions (GANHRI)

- The Global Alliance of National Human Rights Institutions brings together and supports national human rights institutions to promote and protect human rights
- GANHRI, through the Sub-Committee on Accreditation (SCA), is responsible for reviewing and accrediting NHRIs in compliance with the Paris Principles.
- It is a rigorous, peer-based process, undertaken by representatives of NHRIs from each of the four regions: Africa, Americas, Asia Pacific and Europe.

Paris Principles

• The Paris Principles set out internationally agreed minimum standards that NHRIs must meet to be considered credible. Developed by NHRIs in 1991 and adopted by the UN General Assembly in 1993, the Paris Principles require NHRIs to be independent in law, membership, operations, policy and control of resources.

PM VISHWAKARMA

• PM Vishwakarma, a Central Sector Scheme, was launched on 17th September, 2023 by the Prime Minister to provide end-to-end support to artisans and craftspeople who work with their hands and tools.

The Scheme envisages provisioning of the following benefits to the artisans and craftspersons:

- (i) **Recognition**: Recognition of artisans and craftspeople through PM Vishwakarma certificate and ID card.
- (ii) **Skill Upgradation**: Basic Training of 5-7 days and Advanced Training of 15 days or more, with a stipend of Rs. 500 per day;
- (iii) **Toolkit Incentive**: A toolkit incentive of upto Rs. 15,000 in the form of e-vouchers at the beginning of Basic Skill Training.
- (iv) **Credit Support**: Collateral free 'Enterprise Development Loans' of upto Rs. 3 lakh in two tranches of Rs. 1 lakh and Rs. 2 lakh with tenures of 18 months and 30 months, respectively, at a concessional rate of interest fixed at 5%, with Government of India subvention to the extent of 8%.
- (v) **Incentive for Digital Transaction**: An amount of Re. 1 per digital transaction, upto maximum 100 transactions monthly will be credited to the beneficiary's account for each digital pay-out or receipt.
- (vi) Marketing Support: Marketing support will be provided to the artisans and craftspeople in the form of quality certification, branding, onboarding on e-commerce platforms such as GeM, advertising, publicity and other marketing activities to improve linkage to value chain.
- In addition to the above-mentioned benefits, the Scheme will onboard the beneficiaries on Udyam Assist Platform
 as 'entrepreneurs' in the formal MSME ecosystem.
- Enrolment of beneficiaries shall be done through Common Service Centres with Aadhaar-based biometric authentication on PM Vishwakarma portal.
- The enrolment of beneficiaries will be followed by a three-step verification which will include (i) Verification at Gram Panchayat/ ULB level, (ii) Vetting and Recommendation by the District Implementation Committee (iii) Approval by the Screening Committee.

WORLD FEDERATION FOR MEDICAL EDUCATION (WFME) RECOGNITION STATUS

- The National Medical Commission (NMC), India has achieved the remarkable feat of being granted the coveted World Federation for Medical Education (WFME) Recognition Status for a remarkable tenure of 10 years.
- This recognition is a testament to NMC's unwavering commitment to the highest standards in medical education and accreditation.
- As part of this recognition, all the 706 existing medical colleges in India will become WFME accredited and the new medical colleges that will be set up in the coming 10 years will automatically become WFME accredited.
- The recognition will further enhance the quality and standards of medical education in India by aligning them with the global best practices and benchmarks.
- It will also enable Indian medical graduates to pursue postgraduate training and practice in other countries that require WFME recognition, such as the United States, Canada, Australia, and New Zealand.
- It will increase the international recognition and reputation of Indian medical schools and professionals
- With NMC being WFME accredited all the Indian students become eligible to apply for Education Commission on Foreign Medical Education and United States Medical Licensing Examination.

World Federation for Medical Education (WFME)

- The World Federation for Medical Education (WFME) is a global organization dedicated to enhancing the quality
 of medical education worldwide.
- WFME's accreditation program plays a pivotal role in ensuring that medical institutes meet and uphold the highest international standards of education and training.

National Medical Commission (NMC)

• The National Medical Commission (NMC) is India's premier regulatory body overseeing medical education and practice. Committed to upholding the highest standards in healthcare education, N M C ensures the delivery of quality medical education and training across the nation.

PRIMARY REFERENCE TIME CLOCK (PRTC)

- Centre for Development of Telematics (C-DOT), the premier Telecom R&D Centre of the Department of Telecommunications (DoT) and CSIR-National Physical laboratory (NPL) signed an agreement for 'Development of NavIC based IST traceable Primary Reference Time Clock (PRTC) for Telecom Sector'.
- The agreement is signed under the Telecom Technology Development Fund (TTDF) scheme of the DoT for
 providing funding support to domestic companies and institutions involved in technology design, development,
 commercialization of telecommunication products and solutions to enable affordable broadband and mobile
 services in rural and remote areas.

Benefits of PRTC

- The project focuses on the development of a device which shall provide direct Indian Standard Time (IST) traceability to all the Telecom Service Providers (TSPs) and Internet Service Providers (ISPs) within ± 20 ns.
- This shall benefit India in multiple ways starting from reducing the dependency on GPS, shifting to IRNSS/NavIC, digital forensic analysis of transactions, cyber secure networks, reduce call drops & further synchronise all the telecom services with one reference time source IST, developed by CSIR-NPL.
- Time synchronization of the telecom networks will be foundation for a strong cyber secured nation, as every bank transaction, stock market transactions and exchange of information is through the TSPs and ISPs.
- Development of NavIC based IST traceable Primary Reference Time Clock (PRTC) is an initiative which aims towards achieving the objective of "One nation One time".

PARLIAMENT PASSES WOMEN'S RESERVATION BILL

- Rajya Sabha cleared the landmark bill to reserve one-third of the seats in the Lok Sabha and state assemblies for women.
- The 128th Constitution Amendment Bill was approved by a two-thirds majority in the Lok Sabha a day before.
- With Rajya Sabha's nod, the landmark bill has been passed by Parliament.
- The Constitution (One Hundred and Twenty-Eighth Amendment) Bill, 2023 was passed by Parliament on September 21, 2023.
- The women's reservation bill was passed in Lok Sabha with 454 members supporting it and two opposing it.
- The women's quota bill was passed with a unanimous vote in Rajya Sabha

Key features of the Bill



Reservation for women: The bill, called the 'Nari Shakti Vandan Adhiniyam', seeks to reserve, as nearly as may
be, one-third of all seats for women in Lok Sabha, state legislative assemblies, and the Legislative Assembly of the

National Capital Territory of Delhi. This will also apply to the seats reserved for SCs and STs in Lok Sabha and states legislatures. The quota won't apply to Rajya Sabha or state Legislative Councils

- Commencement of reservation: The reservation will be effective after the census conducted after the commencement of this Bill has been published. Based on the census, delimitation will be undertaken to reserve seats for women. The reservation will be provided for a period of 15 years. However, it shall continue till such date as determined by a law made by Parliament.
- **Rotation of seats:** Seats reserved for women will be rotated after each delimitation as determined by a law made by Parliament.

Other Highlights

- The 73rd and 74th Amendments passed in 1993, which introduced panchayats and municipalities in the Constitution, reserve one-third of seats for women in these bodies.
- The Constitution also provides for reservation of seats in Lok Sabha and state legislative assemblies for Scheduled Castes (SCs) and Scheduled Tribes (STs) in proportion to their number in the population.
- The Constitution does not provide for the reservation of seats for women in the Lok Sabha and state legislative assemblies.
- 15% of the total members of the 17th Lok Sabha are women while in state legislative assemblies, women on average constitute 9% of the total members.
- In 2015, the Report on the Status of Women in India noted that the representation of women in state assemblies and Parliament continues to be dismal.
- It recommended reserving at least 50% seats for women in local bodies, state legislative assemblies, Parliament, ministerial levels, and all decision-making bodies of the government.
- Bills amending the Constitution to reserve seats for women in Parliament and state legislative assemblies have been introduced in 1996, 1998, 1999, and 2008.

INDIA WINS BID TO HOST 17TH INTERNATIONAL CONGRESS ON THE CHEMISTRY OF CEMENT



- India has won the bid to host the prestigious International Congress on the Chemistry of Cement (ICCC) at New Delhi in 2027.
- India's leading research and academic institutes, National Council for Cement and Building Materials (NCCBM) along with IIT Delhi successfully presented India's bid before the Steering Committee members of the Conference during the ongoing 16th ICCC at Bangkok, Thailand.
- The International Congress on the Chemistry of Cement is the largest and most prestigious event of its kind which reviews the progress of research in the area of Cement and Concrete.

- The congresses have been held generally at intervals of four to six years since 1918, providing a strong and fruitful link between the academic world and the cement industry.
- The 9th Congress was organized at New Delhi in 1992 by NCCBM and the present 16th ICCC is being held at Bangkok, Thailand from 22-18 September 2023.

National Council for Cement and Building Materials (NCCBM)

- It is an apex Research and Development organization under the administrative control of DPIIT, Ministry of Commerce & Industry, Government of India.
- NCCBM is dedicated to research, technology development & transfer, education & industrial services for cement, allied building materials & construction industries.

India Cement Industry

- India is the fifth largest economy today and is likely to become third largest by the next five years and its cement industry is second largest in the world with installed cement capacity of 600 million tonnes.
- The cement industry in India plays a key role in circular economy framework in the country by utilizing various industrial wastes and is having one of the lowest CO₂ footprints and most energy efficient in the world.

RASHTRIYA VIGYAN PURASKAR

- The Government of India has come out with a new set of National Awards in the field of Science, Technology, and Innovation known as "Rashtriya Vigyan Puraskar".
- The objective of the Rashtriya Vigyan Puraskar (RVP) is to recognize the notable and inspiring contribution made by the scientists, technologists, and innovators individually or in teams in various fields of science, technology, and technology-led led innovation.
- The Rashtriya Vigyan Puraskar shall be one of the highest recognitions in the field of science, technology, and innovation in India.
- Scientists/ technologists/innovators working in government, private sector organizations or any individual working
 outside any organization, who have made distinguished contributions in terms of path-breaking research or
 innovation or discovery in any field of science, technology, or technology-led-led innovation shall be eligible for
 the awards.
- People of Indian Origin staying abroad with exceptional contributions benefiting the Indian communities or society shall also be eligible for the awards.

The awards shall be given in the following four categories:-

- a. Vigyan Ratna (VR) award will recognize lifetime achievements & contributions made in any field of science and technology.
- b. Vigyan Shri (VS) award will recognize distinguished contributions in any field of science and technology.
- c. Vigyan Yuva-Shanti Swarup Bhatnagar (VY-SSB) award will recognize & encourage young scientists up to the age of 45 years who made an exceptional contribution in any field of science and technology.
- d. Vigyan Team (VT) award to be given to a team comprising of three or more scientists/researchers/innovators who have made an exceptional contribution working in a team in any field of science and technology.

Other Highlights

- The Rashtriya Vigyan Puraskar shall be given in 13 domains, namely Physics, Chemistry, Biological Sciences, Mathematics & Computer Science, Earth Science, Medicine, Engineering Sciences, Agricultural Science, Environmental Science, Technology & Innovation, Atomic Energy, Space Science and Technology, and Others.
- All nominations received for the Rashtriya Vigyan Puraskar awards shall be placed before the Rashtriya Vigyan Puraskar Committee (RVPC) to be headed by the Principal Scientific Adviser (PSA) to Government of India
- The nominations for this bouquet of awards will be invited every year on 14th January which would remain open till 28th February (National Science Day) every year.

- These awards shall be announced on 11th May (National Technology Day) every year.
- The Award Ceremony for all categories of awards will be held on 23^{rd August (National Space Day)}.

HILSA FISH

- The Hilsa from Bangladesh's Padma and Meghna rivers as well as Chandpur, where the two rivers intersect, has long been prized by Hilsa connoisseurs as among the tastiest of fishes.
- Hilsa or Tenualosa ilisha is an anadromous fish that spends most of its life in the ocean but moves towards the
 estuary during the rainy season.
- It is the place where the rivers of Indian Bangladesh meet the Bay of Bengal.
- The largest producer of Hilsa is Bangladesh, making a good profit by exporting it to India. Over 86 percent of the world's hilsa is produced in the country.

INDIA GLOBAL FORUM AND WORLD GOVERNMENTS SUMMIT LAUNCH EMERGING ECONOMIES PROGRAMME

- India Global Forum and World Governments Summit have signed a Memorandum of Understanding (MoU) to develop an Emerging Economies Programme.
- The programme will convene key stakeholders, including government officials, business leaders, economists, and experts to foster high-level discussions on sustainable economic growth, geo-economic perspectives, and innovative solutions.
- India Global Forum, alongside the World Governments Summit, are launching an Emerging Economies Programme.
- The programme will be a pivotal new platform that will directly respond to the needs and aspirations of the Global South.
- This unique partnership will unite the experience and expertise of both organisations with the aim of unleashing the limitless potential of the world's emerging economies."
- The Emerging Economies Programme is a significant initiative that will help to promote sustainable economic growth and development in the Global South.
- It is a testament to the commitment of India Global Forum and the World Governments Summit to working together to create a better future for all.

India Global Forum

- India Global Forum tells the story of contemporary India.
- The pace of change and growth India has set itself is an opportunity for the world.
- IGF is the gateway for businesses and nations to help seize that opportunity.
- We are uniquely placed to understand the political, economic, and cultural nuances of those wanting to enter the Indian market and those wanting to go global.

World Governments Summit

- The World Governments Summit Organization is a global, neutral, non-profit organization dedicated to shaping the future of governments.
- The Summit, in its various activities, explores the agenda of the next generation of governments, focusing on harnessing innovation and technology to solve universal challenges facing humanity.

108 FT HIGH STATUE OF ADI SHANKARACHARYA AT OMKARESHWAR, MP

- In Madhya Pradesh, Chief Minister Shivraj Singh Chouhan unveiled the 108 feet high 'Statue of Oneness' of Adi Shankaracharya on Mandhata mountain at Omkareshwar in Khandwa district (on the banks of Narmada River)
- The 108-foot-high statue of Adi Shankaracharya in Omkareshwar is made of various types of metal.

- In this statue, Adi Shankaracharya is depicted as 12-year-old Aacharya Shankar because he attained knowledge at this age.
- The statue of Adi Shankaracharya has been named the Statue of Oneness.
- Omkareshwar is famous for being home to one of the 12 Jyotirlingas, the sacred shrines dedicated to Lord Shiva.
- This extraordinary structure, conceptualized to honour the life and philosophy of Adi Shankaracharya, is a tribute to the great saint's masterpiece of commentary on 'Bharmasutrabhasya' (comment on Brahma Sutra), a fundamental text of the Vedanta school of Hinduism and the concept of Oneness that he preached

Ekatma Dham project

- The construction of the statue on the Mandhata mountain in the temple town is part of the first phase of the Ekatma Dham project.
- The project includes the development of the Advaita Lok museum, showcasing the life and philosophy of Acharya Shankar (Adi Shankaracharya) through exhibits reflecting the message of Advaita Vedanta.

Direction	South India	West India	North India	East India
Place	Sringeri	Dwaraka	Badrinath	Puri
Math Name	Sringeri Math	Sarada Math	Jyotir Math	Govardhan Math
Acharya	Sureswara	Hastamalaka	Trotaka	Padmapada
Veda	Yagur	Sama	Atharva	Rik
Mantra	Aham Brahmasmi	Tattvamasi	Ayamatma brahma	Prajnanam brahma
Sanyasa Order	Saraswati, Bharati, Puri	Tirtha, Ashrama	Giri, Parvata, Sagara	Vanam, Aranyam

Ekatmadham (idea of Advaita)

- Advaita Vedanta is a school of Hindu philosophy and a Hindu path of spiritual discipline and experience.
- In a narrow sense it refers to the oldest extant scholarly tradition of the orthodox Hindu school Vedānta, written
 in Sanskrit in a broader sense it refers to a popular, syncretic tradition, blending Vedānta with other traditions
 and producing works in vernacular.

INDIA'S EXPANSION TO COUNTER CHINA'S PRESENCE IN THE INDIAN OCEAN REGION



Recent Developments by India to Counter Chinese Presence in IOR

- In Oman, the Indian Navy has prepared a support base in Duqm port for maintenance, repair and overhaul of Indian ships as well as provide berthing, fuel and rest facilities in the vicinity and travelling beyond, Hindustan Times newspaper reported citing sources.
- In Mauritius, India has built an airstrip in north Agalega islands, around 1,050km north of Port Louis, to provide maritime security to the island nation as well as to help protect its tourism assets in the region.
- The decision to have support facilities in the two countries is partly due to the increased forays of PLA Navy ships into Indian Ocean Region.

China's Increased Presence in IOR

- Since 2019 to till date, there have been 48 surveillance and scientific research vessels deployed in IOR with the general area of deployment in the Bay of Bengal, South Indian Ocean, north of Agalega islands and the Persian Gulf
- According to data by India's Ministry of External Affairs, Chinese vessels in IOR have been increasing every year, with 24 Chinese ships entering the region to date in 2023
- A Chinese surveillance ship Shi Yan 6 will also enter IOR on September 23 to undertake joint military scientific research in Sri Lankan EEZ in October-November 2023.
- With an increasing number of Chinese ships and warships entering the Indian Ocean through Malacca straits, Sunda, Lombok and Ombi-Wetar straits in Indonesia, India not only needs to be aware of PLA activities in its backyard but also has to provide coastal and maritime security to its key allies in the Persian Gulf and south Indian Ocean, said experts and analysts.
- It comes after reports mentioned that the Indian Navy is bolstering its fleet strength in the Indian Ocean and now plans to have at least 175 warships by 2035 to monitor the IOR.

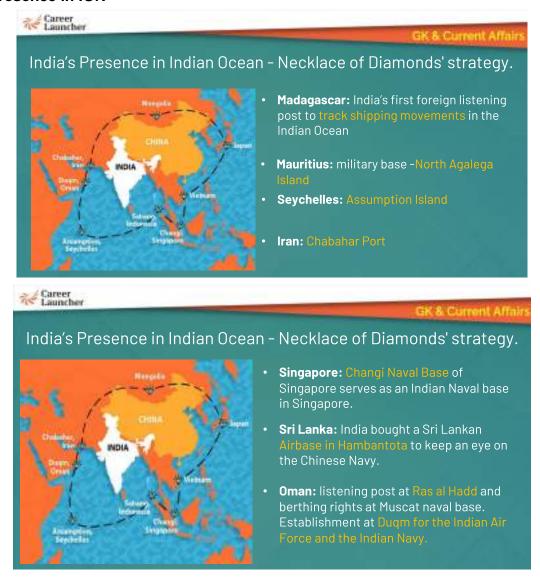
Other Chinese Military Bases in the Indian Ocean Region

- 1. China's base in Djibouti
 - It is China's first overseas military base
 - It is located by the strategic Bab-El-Mandeb Strait which separates the Gulf of Aden and the Red Sea
 - It guards the approach to the Suez Canal
 - Chinese Yuzhao-class landing ship (Type 071) docked
- 2. Hambantota
 - Last year China has docked the 25,000-tonne satellite and ballistic missile tracking ship Yuan Wang 5 in the Sri Lankan port of Hambantota.

Yuan Wang 5

- It has robust tracking, sensing and communication relay system
- It is capable of detecting foreign satellites, aerial assets and missile systems.
- This vessel supports Chinese military missions far from home
- It can monitor space events located away from the Chinese mainland communication network directly tracks key satellite assets.
- 3. Military base at Ream, Cambodia.
- 4. Port in Kyaukphyu, Sittwe in the Rakhine state, Myanmar
- 5. Gwadar port in Pakistan.
- 6. Permanent submarine base in Cox Bazaar, Chittagong in Bangladesh
- 7. Artificial Island in the Maldives.

India's Presence in IOR



NADI UTSAV

- The fourth 'Nadi Utsav' is being organized by the National Mission on Cultural Mapping (NMCM) of IGNCA and the Janapada Sampada Division
- This year's 'Nadi Utsav' was hosted in Delhi, situated on the banks of River Yamuna.
- The three-day event includes a variety of events, including scholarly discussions with environmentalists and scholars on various subjects, screening of films, presentations by eminent artists, puppet shows, and discussions on various books.
- The Indira Gandhi National Centre for the Arts (IGNCA), an institution dedicated to art and culture, under the Ministry of Culture has been organizing the 'Nadi Utsav' on a grand scale for the last few years.
- This noble initiative was conceived by Dr. Sachchidanand Joshi to create awareness and sensitize people about their ecology and environment.
- The 'Nadi Utsav' commenced in 2018, with its inaugural event held in Nashik (Maharashtra) city situated on the banks of River Godavri.
- The second 'Nadi Utsav' took place in Vijayawada (Andhra Pradesh) city situated on the banks of river Krishna, and the third in Munger (Bihar) city situated on the banks of river Ganga.

INNOVATIVE MOBILE APPLICATION AND WEB PORTAL FOR GENERAL CROP ESTIMATION SURVEY (GCES) LAUNCHED

- Department of Agriculture and Farmers Welfare (DA&FW) launched the mobile application and the web portal for GCES (General Crop Estimation Survey)
- This revolutionary portal and mobile application have been designed to transform agricultural practices across
 the nation.

Salient Features of the Portal and the Mobile Application of GCES

- It has been developed by Department of Agriculture and Farmers' Welfare for leveraging technology to enhance the reach, scope, and outcome of government actions in the course of development.
- The automation of the GCES process will ensure on-time reporting of crop statistics and accuracy of the data.

Key Challenges Addressed by GCES Web Portal and Mobile Application:

- *Delay in reporting*: Till date data collection, compilation, and yield estimation is completely manual process which cause delay in reporting by states. In the new process, the field data will be collected using GPS GPS-enabled mobile application and will be stored in the server which ensures on-time reporting of crop statistics.
- *Transparency*: GPS-enabled devices provide precise latitude and longitude coordinates for data collection points. This information ensures that data is linked to specific geographic locations, leaving no room for ambiguity or manipulation of data regarding where it was collected.

Key Features of the GCES Web Portal and Mobile Application

- Comprehensive Information: The portal and the app provide a comprehensive repository of yield estimation including village-wise GCES plan and plot details where the crop-cutting experiments are conducted, post-harvesting crop weight and drainage weight of the crop.
- Geo-referencing: Geo-referencing is one of the key features of the mobile application, which enables the primary
 worker to draw the boundary of the experimental plot and upload photos of the plot as well as of the crops through
 it. This feature will ensure transparency and accuracy of the data as well.

NARI SHAKTI VANDAN BILL (HIGHLIGHTS)

- 128th Constitutional Amendment Bill
- 33% reservation for women (for 15 years) in Lok Sabha, State Assemblies And Legislative Assembly of NCT Of Delhi
- 1/3RD of the total number of seats to be filled by direct election
- It is expected to become a reality by 2029
- Seats reserved for women will be rotated after each subsequent delimitation exercise
- There will be 1/3rd quota for women also within the seats reserved for SC/STs
- As per Article 368, the Constitutional Amendment bill requires ratification of not less than one-half of the state

Why do we have to wait till 2029?

- It will come into effect after the delimitation exercise
- Delimitation is the process of redrawing Parliamentary and Assembly constituencies based on the latest population data. The job of delimitation is assigned to a high-power body. Such a body is known as Delimitation Commission or a Boundary Commission.
- As per Constitutional Amendment (2002), the next delimitation exercise can't take place before 2026
- A Census report is also required for delimitation and the 2021 Census is yet to be conducted as it was postponed due to Covid 19
- Therefore, the earliest implementation is possible after the 2029 Lok Sabha election and Subsequent State assembly
 elections

DELEGATION FROM INDIA ATTENDS MEETING OF NEUTRAL EXPERT PROCEEDINGS AT PERMANENT COURT IN VIENNA

- A delegation from India, led by the Secretary, the Department of Water Resources, attended a meeting of the Neutral Expert proceedings in the Kishenganga and Ratle matter at the Permanent Court of Arbitration in Vienna on 20th and 21st of this month.
- Senior Advocate Harish Salve was present in the capacity of India's Lead Counsel in this matter.
- The meeting was convened by the Neutral Expert appointed on India's request under the aegis of the Indus Waters Treaty and was attended by representatives of India and Pakistan.
- India's participation in this meeting is in line with India's consistent, principled stand that as per the graded mechanism provided for in the Indus Waters Treaty, the Neutral Expert proceedings are the only valid proceedings at this juncture.
- It is for this reason that India has taken the Treaty-consistent decision to not participate in the parallel proceedings being conducted by an illegally constituted Court of Arbitration on the same set of issues pertaining to the Kishenganga and Ratle Hydro-Electric Projects.
- The Neutral Expert proceedings are ongoing and expected to continue for some time.

The Indus Water Treaty (IWT)

- It is a water-distribution treaty between India and Pakistan, arranged and negotiated by the World Bank, to use the water available in the Indus River and its tributaries.
- It was signed in Karachi on 19 September 1960 by then-Indian Prime Minister Jawaharlal Nehru and then-Pakistani president Ayub Khan.
- The Treaty gives control over the waters of the three "eastern rivers" the Beas, Ravi and Sutlej to India, while control over the waters of the three "western rivers" the Indus, Chenab, and Jhelum located in India to Pakistan.
- India got about 30% of the total water carried by the Indus system located in India while Pakistan got the remaining 70%.
- The treaty allows India to use the western river waters for limited irrigation use and unlimited non-consumptive use such as power generation, navigation, floating of property, fish culture, etc.
- It lays down detailed regulations for India in building projects over the western rivers.
- The Indus system of rivers comprises three western rivers the Indus, the Jhelum and Chenab and three eastern rivers the Sutlei, the Beas and the Ravi.

Permanent Court of Arbitration (PCA)

- The Permanent Court of Arbitration (PCA) is a non-UN intergovernmental organization located in The Hague, Netherlands.
- PCA was established by the First International Peace Conference held at The Hague, the Netherlands, in 1899.
- Unlike a judicial court in the traditional sense, the PCA provides services of arbitral tribunal to resolve disputes
 that arise out of international agreements between member states, international organizations or private parties.
- The cases span a range of legal issues involving territorial and maritime boundaries, sovereignty, human rights, international investment, and international and regional trade.
- The PCA is constituted through two separate multilateral conventions with a combined membership of 122 states.
- It is not a United Nations agency, but a United Nations observer.
- India is a party to the PCA under the Hague Convention of 1899.

Kishenganga Hydro-Electric Project

- The Kishanganga Hydroelectric Project is a run-of-the-river hydroelectric scheme in Jammu and Kashmir, India.
- Its dam diverts water from the Kishanganga River to a power plant in the Jhelum River basin.

- Construction on the project began in 2007 and was expected to be completed in 2016.
- It was halted in 2011 due to a dispute with Pakistan under the Indus Water Treaty, which went to a court of arbitration.
- In December 2013, the Court ruled that India could divert water for power generation while ensuring a minimum flow of 9 cumecs (m3/s) downstream to Pakistan.
- All three units of 110 MW each were commissioned and synchronized with the electricity grid by 30 March 2018.
- The Kishanganga (Neelum) River is a major tributary of the west-flowing Jhelum River.

Ratle Hydroelectric Plant

- Ratle Hydoelectric Project (850 MW), is a Run of River Scheme located on River Chenab at village Drabshalla, district Kishtwar, Union Territory of Jammu and Kashmir.
- It includes a 133 m tall gravity dam and two power stations adjacent to one another.
- The installed capacity of both power stations will be 850 MW.
- In June 2013, the then Indian Prime Minister laid the foundation stone for the dam.
- Pakistan has frequently alleged that it violates the Indus Water Treaty, of 1960.

INDIA-CANADA RELATIONS

- Canadian PM made wild allegations against India
- The killing of Hardeep Singh Nijjar(Khalistan Movement leader) involvement of Indian agencies
- India rejected the claims and accused Canada of sheltering Khalistani terrorists
- Nijjar was the head of the Khalistan Tiger Force(KTF). Both Nijjar and KTF proscribed under UAPA
- Actions taken were expelling of diplomats, trade talks stopped
- India-Canada relations not on the expected lines in last 3-4 decades
- Indian diaspora is significant in Canada
- Canadian investment in India is substantial
- Canadian population is around 80 million
- Sikh constitute 8 lakh (around 2% of the Canadian population) but wields a lot of significance in Canadian politics
- The incumbent Canadian PM is surviving with the support of Sikh led New Democratic Party
- Sikh community in Canada is a powerful lobbying group
- Whatever political party is empowered, they are not in a position to antagonize Sikhs
- India and Canada are part of the Commonwealth
- Canada is part of the NATO alliance, Five Eyes Alliance (intelligence sharing arrangement among the anglosphere countries)
- Anglosphere countries are that have native English speakers (USA, UK, Canada, Australia, New Zealand)
- In almost all the anglosphere countries, Sikh Khalistani activities are active for the past 20-30 years

Modern Sikh Independence Movement (Genesis)

- Dated back to 1940s
- In 1940's the demand for Khalistan raised
- In 1980s became an armed insurgency
- In 1984, Indira Gandhi ordered Operation BlueStar to capture armed separatists. Subsequently, Indira Gandhi was killed and as a consequence, anti-Sikh riots took place across India
- The government could control Sikh extremist elements only by the early 1990s but Khalistani activists continue to be active in anglosphere countries.

Reasons for Khalistani activism in anglosphere countries especially Canada's soft corner towards Khalistani elements

- These countries allow free speech up to a greater extent.
- Western countries consider Fundamental rights as sacrosanct
- Free rights up to a greater extent (e.g. burning of the Holy Quran in Sweden and caricature of gods allowed by France)
- Governments of these countries avoid taking any action against them as they are viewed as minorities (fear of being accused of racism)
- These minorities thought they are less in number, they vote in blocs- hence important for each and every political party.
- In Canadian political system candidates are required letters of support for themselves and for their political parties to get nominated. Sikhs have a tight knit community structure due to which they are able to bring more letters and effectively secure nominations for themselves or other candidates or even in those areas where they are not in the majority.

Consequences of Khalistani insurgency in India (how this is affecting India's internal security)

- Insurgency in Punjab increased after the referendum 2020 campaign (launched 5 yrs ago) eg, the arrest of Amritpal Singh (self-styled Khalistan leader)
- Sikhs themselves rejected the separatist Khalistani ideology (London-based report)
- Increase in coordination between Khalistani and Pakistan-based Kashmir military groups (Hudson report)

INDIA AGEING REPORT 2023

- UNFPA (United Nations Population Fund) India, in collaboration with the International Institute for Population Sciences (IIPS), unveiled the highly anticipated "India Ageing Report 2023."
- This report sheds light on the challenges, opportunities and institutional responses surrounding elderly care in India, as India navigates a demographic shift towards an ageing population.
- The India Ageing Report 2023 represents a thorough review of the living conditions and welfare of older individuals in India.
- It leverages the latest data available from the Longitudinal Ageing Survey in India (LASI), 2017–18, Census of India, Population Projections by the Government of India (2011–2036) and World Population Prospects 2022 by the United Nations Department of Economic and Social Affairs to provide an up-to-date perspective.

The report's key findings encompass a range of analyses related to elderly well-being, including:

- The enhancement of geriatric care to cater to the unique healthcare needs of seniors.
- A multitude of government schemes and policies addressing the health, financial empowerment, and capacitybuilding needs of the elderly population.
- Community-based organizations actively engaged in digital empowerment through computer and internet usage sessions.
- Ministerial committees dedicated to shaping policies for elderly welfare.
- Corporate efforts for joyful aging, social assistance, old age homes, and elder abuse awareness campaigns.

WORLD TOURISM DAY

- World Tourism Day is being celebrated every year on September 27 to promote tourism all over the globe.
- The celebrations are also aimed at fostering awareness among the international community on the importance of tourism and its social, cultural, political, and economic value.

- The theme for this year's World Tourism Day is 'Tourism and Green Investments'.
- Since 1980, the United Nations World Tourism Organization has celebrated World Tourism Day as international observances on September 27.
- This date was chosen as on that day in 1970, the Statutes of the UNWTO were adopted.
- The adoption of these Statutes is considered a milestone in global tourism

Global Launch of 'Travel for LiFE'

- On the occasion of World Tourism Day 2023, Ministry of Tourism, Government of India organised the *Global Launch of 'Travel for LiFE*', a sectoral program under Mission LiFE, targeted towards the tourism sector, in partnership with the Ministry of Environment, Forest and Climate Change (MoEFCC), United Nations World Tourism Organisation (UNWTO), and the United Nations Environment Programme (UNEP) at Bharat Mandapam, New Delhi
- The Tourism Minister urges travellers to travel responsibly, to respect our environment, and to understand and appreciate the diverse cultures that make our world so beautifully complex.
- The Travel for LiFE program, which is a part of Mission LiFE, sets out the path to a sustainable planet Earth
- The event saw the launch of the Travel for LiFE program for two different verticals viz. *Travel for LiFE for Cleanliness* a national TFL campaign for cleaning tourist sites and monuments in convergence with the Swachhata campaign and *Travel for LiFE for Rural_Tourism* encouraging tourists to explore the rural and lesser-known hinterland promoting sustainable rural tourism thereby empowering rural communities.

INTERNATIONAL FINANCE CORPORATION (IFC) LAUDS INDIA'S EFFORTS

- International Finance Corporation (IFC) has lauded the efforts of India in tackling the impact of climate change by taking proactive policy measures to support green financing initiatives.
- IFC released a report, Blended Finance for Climate Investments in India
- India has significantly developed its climate actions, resulting in a path to achieving its Nationally Determined Contribution well before 2030.
- The report states that the Reserve Bank of India included the small Renewable Energy energy sector under its priority sector lending scheme in 2015.
- Since the issuance of Green Bonds, India has developed the second-largest green bonds market among emerging economies.
- More than 10 billion US dollars worth of green bonds have been issued by private companies and public sector entities.
- The report mentions that renewable energy sources contributed to 41 percent of India's total installed capacity and the country stands fourth globally in terms of total renewable energy installed capacity.
- India is committed to meet 50 percent of its energy requirements from renewable energy by 2030.

International Finance Corporation (IFC)

- It is an international financial institution that offers investment, advisory, and asset-management services to encourage private-sector development in less developed countries.
- IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector in developing countries
- The IFC is a member of the World Bank Group and is headquartered in Washington, D.C. in the United States.
- It was established in 1956, as the private-sector arm of the World Bank Group, to advance economic development by investing in for-profit and commercial projects for poverty reduction and promoting development.
- The IFC is owned and governed by its member countries but has its own executive leadership and staff that conduct its normal business operations.

SCHEME FOR PROMOTION OF RESEARCH AND INNOVATION IN PHARMA MEDTECH SECTOR (PRIP)



- Union Minister of Chemicals and Fertilizers and Minister of Health & Family Welfare, Government of India launched the National Policy on Research and Development and Innovation in Pharma-MedTech Sector in India and Scheme for promotion of Research and Innovation in Pharma MedTech Sector (PRIP)
- The scheme will focus on transforming India into a high-volume, high-value player in the global market of pharmaceuticals, meeting the quality, accessibility, and affordability goals.
- The policy will help to create an ecosystem of skills and capacities including the academia and the private sectors, and give impetus to new talent among the youth through start-ups.



CELL BROADCAST ALERT SYSTEM TESTING

- The DOT in collaboration with the National Disaster Management Authority (NDMA) will be conducting comprehensive testing of the Cell Broadcast Alert System.
- This initiative aims to bolster emergency communication during disasters and prioritize the safety and well-being
 of our esteemed citizens.

Cell Broadcast Alert System

- The Cell Broadcast Alert System represents a cutting-edge technology that empowers us to disseminate critical and time-sensitive disaster management messages to all mobile devices within specified geographical areas, regardless of whether the recipients are residents or visitors.
- This ensures that crucial emergency information reaches as many individuals as possible promptly.
- Government agencies and emergency services employ Cell Broadcast to inform the public about potential threats and provide vital updates during critical situations.
- Common applications of Cell Broadcast include delivering emergency alerts such as severe weather warnings (*e.g.*, Tsunamis, Flash Floods, Earthquakes), public safety messages, evacuation notices, and other critical information.

UTTAR PRADESH ACHIEVES 100% ODF PLUS COVERAGE UNDER SWACHH BHARAT MISSION GRAMEEN

- Uttar Pradesh has achieved yet another major milestone under the Swachh Bharat Mission (Grameen) Phase II with all 95, 767 villages in the State i.e., 100% villages achieving ODF Plus status under Phase II of the Mission.
- As on date, 4.4 lakh (75%) villages across the nation have declared themselves ODF Plus, which is a significant step towards achieving the SBM-G phase II goals by 2024-25
- This achievement of 100 % is marked during ongoing Swachhata Hi Seva (SHS) 2023 campaign.
- SHS is celebrated annually from 15th September to 2nd October under Swachh Bharat Mission (Grameen), Drinking Water & Sanitation Department, Ministry of Jal Shakti.

ODF Plus Model village

- An ODF Plus Model village is one which is sustaining its ODF status and has arrangements for both Solid Waste Management and Liquid Waste Management; and observes visual cleanliness, i.e., minimal litter, minimal stagnant wastewater, no plastic waste dump in public places; and displays ODF Plus Information, Education & Communication (IEC) messages.
- The achievement of 100% ODF Plus villages is a significant milestone, as State has moved from ODF to ODF Plus in Swachh Bharat Mission Phase II.

The major components of the Phase-II of SBM (G) are

- Sustaining Open Defecation Free Status (ODF-S)
- Solid (Bio-degradable) Waste Management
- Plastic Waste Management (PWM)
- Liquid Waste Management (LWM)
- Faecal Sludge Management (FSM)
- GOBARdhan
- Information Education and Communication/Behavior Change Communication (IEC/BCC)
- · Capacity Building.

TASHKENT INTERNATIONAL FILM FESTIVAL

• Union Minister of State for Information and Broadcasting will lead an Indian Delegation to the Tashkent International Film Festival, at Tashkent, Uzbekistan

- Known as the "Pearl of The Silk Road", the Tashkent International Film Festival was started in 1968, and the Indian film Amrapali was screened in the opening edition of the festival.
- Relations between Uzbekistan and India have their roots deeper in history.
- In recent years, there has been significant intensification in bilateral ties
- To create an enriching filming ecosystem and a future-ready Industry with ongoing growth prospects in India for the world, India has been keen to co-produce movies, exchange the understanding and techniques of cinema, and develop ways to make our cinema/industries inclusive.

INDIA IS COMMITTED TO ACHIEVE THE NET ZERO EMISSIONS TARGET BY 2070

 India is committed to achieve the Net Zero emission target by 2070, as announced by Prime Minister Shri Narendra Modi.

India is set to achieve its short-term and long-term targets under the Panchamrit action plan, like-

- 1. reaching a non-fossil fuel energy capacity of 500 GW by 2030;
- 2. fulfilling at least half of its energy requirements via renewable energy by 2030;
- 3. reducing CO2 emissions by 1 billion tons by 2030;
- 4. reducing carbon intensity below 45 percent by 2030; and
- 5. finally, pave the way for achieving a Net-Zero emission target by 2070.

Steps taken by India

- Prime Minister of India at the 26th session of the Conference of the Parties (COP26) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Glasgow, United Kingdom in November 2021, expressed to intensify India's Climate Action Plan (CAP) by presenting to the world five nectar elements (Panchamrit) of India's climate action plan.
- Prime Minister of India asserted the need to follow a sustainable lifestyle and emphasized on the idea of making 'Lifestyle for Environment' (LiFE) a global mission through bolder steps by the global clean energy fraternity.
- Mission Innovation (MI) and International Solar Alliance, were announced at COP21 in 2015, when the United Nations conferred on him the 'Champions of Earth Award 2018.'
- Mission Innovation (MI) is a global initiative of 23 countries and the European Commission (on behalf of the European Union) to accelerate the Clean Energy revolution and progress towards the Paris Agreement goals and pathways to net zero.
- India is a founding member of Mission Innovation.
- The first phase of Mission Innovation (MI) (2015-2020) was announced at COP21 on November 30, 2015.
- In the first phase of Mission Innovation, India led three MI Innovation Challenges, such as Smart Grids, Off Grid Access to Electricity, and Sustainable Biofuels, and hosted many workshops.
- The government of India through Public-Private Partnerships is ensuring the funding for clean energy innovations as envisioned under Mission Innovation 2.0.
- The Clean Energy Ministerial (CEM) setup has been able to provide a unique opportunity for India to showcase its contribution to clean energy development
- Major CEM initiatives include CEM's Global Lighting Challenge (GLC) campaign, Street Lighting National
 Programme, Unnat Jyoti by Affordable LEDs for All (UJALA) program and the 'One Sun-One World-One Grid'
 Initiative which was first floated by the Prime Minister of India to harness the tremendous potential of solar energy.
- The Global Biofuels Alliance (GBA) to be led by India, Brazil and the United States, as leading biofuel producers and consumers, will greatly help achieve the MDG Goals of India turning Net Zero by 2070.
- India has committed to ambitious Nationally Determined Contributions (NDCs) of reducing emission intensity by 33-35% in 2030 against the levels of year 2005.

- India also launched the National Hydrogen Energy Mission to enable cost-competitive green hydrogen production.
- India is among the few countries in the world to design a Cooling Action Plan (CAP) with a long-term vision (spanning a 20-year period from 2017-18 to 2037-38) that addresses cooling requirements across sectors.
- CAP identifies possible actions to reduce cooling demand arising from residential and commercial buildings, cold
 chains, etc., covering aspects of building design and technological innovations that do not compromise on energy
 efficiency

TECHNICAL TEXTILES

- Union Minister of Textiles said that Industry and Institute's pro-active and robust engagement is essential for the indigenous development of technical textiles in India
- Ministry of Textiles approved 18 R&D projects worth INR 46.74 crores across key strategic areas of Geotech, Protech, Indutech, Sustainable Textiles, Sportech, Smart E-Textiles, Meditech segments
- Technical textiles are defined as textile materials and products used primarily for their technical performance and functional properties rather than their aesthetic or decorative characteristics.
- This is one of the fastest-growing sectors of the Textile Industry, which is manufacturing high-tech, high-performance fabric designed not just to look attractive, but to present a significant added value in terms of functionality.
- The textile coating process is widely used in the manufacturing of technical textiles.
- Technical textiles can be divided into many categories, depending on their end-use



INDIA RETAINS 40TH RANK IN THE GLOBAL INNOVATION INDEX 2023

- India retains 40th rank out of 132 economies in the Global Innovation Index 2023 rankings published by the World Intellectual Property Organization.
- India has been on a rising trajectory, over the past several years in the Global Innovation Index (GII), from a rank of 81 in 2015 to 40 in 2023.
- The GII is a reliable tool for governments across the world to assess the innovation-led social and economic changes in their respective countries.
- The country ranked first among the 37 lower-middle group income and first among the 10 economies in Central and South America.

- India maintains its 40th position overall and takes the helm in the lower middle-income group.
- It holds the record for overperforming on innovation for the 13th consecutive year.
- India holds top rankings in key indicators, including ICT services exports (at place 5), VC received (6), graduates in science and engineering (11) and global corporate R&D investors (13)," read a press state from the GII.
- The GII tracks the innovation ecosystem performance of 132 global economies and the most recent global innovation trends.
- In 2015, India stood at the 81st spot and has been rising in the past eight years.

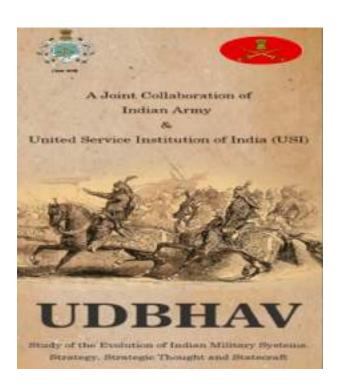
BHARATIYA BHASHA UTSAV AND TECHNOLOGY & BHARATIYA BHASHA SUMMIT

- Union Minister for Education launched a two-day Bharatiya Bhasha Utsav and Technology & Bharatiya Bhasha Summit
- Objective To set the course for a technologically enriched future for Bharatiya languages in education.
- The Government of India has proposed to celebrate the birthday of renowned Tamil poet and freedom fighter Mahakavi Chinnaswami Subramania Bharati as Bharatiya Bhasha Divas (11 December).
- The Bharatiya Bhasha Utsav will be held from 28th September 2023 to 11th December 2023.

The summit, organized as part of the Bharatiya Bhasha Utsav, will encompass three pivotal thematic sessions:

- 1. Technology for Bharatiya Languages
- 2. Technology in Bharatiya Languages
- 3. Technology through Bharatiya Languages.
- These themes emphasize the integration of technology in promoting Bharatiya Bhasha, including its role in teaching, training, examination, and translating educational materials.
- The summit aims to facilitate a seamless transition from the current education ecosystem to one rooted in Bharatiya Languages, in line with the NEP-2020 vision.
- NEP2020 has formally included Foundational Literacy and Numeracy (FLN) for the first time.
- The summit was organised jointly by the Ministry of Education (MOE), Ministry of Skill Development and Entrepreneurship (MSDE), and their constituent institutions

PROJECT UDBHAV



- The Indian Army in collaboration with the United Service Institution of India (USI), concluded a hybrid-panel discussion under Project Udbhav on the topic "Evolution of Indian Military Systems, War fighting and Strategic Thought- Current Research in the Field and Way Forward".
- Project Udbhav is an initiative set in motion by the Indian Army to rediscover the profound Indic heritage of statecraft and strategic thoughts derived from ancient Indian texts of statecraft, warcraft, diplomacy and grand strategy.
- The project endeavours to explore India's rich historical narratives in the realms of statecraft and strategic thoughts.
- It focuses on a broad spectrum including Indigenous Military Systems, Historical Texts, Regional Texts and Kingdoms, Thematic Studies, and intricate Kautilya Studies.
- This pioneering initiative stands testimony to the Indian Army's recognition of India's age-old wisdom in statecraft, strategy, diplomacy, and warfare.
- At its core, Project Udbhav seeks to bridge the historical and the contemporary.
- The goal is to understand the profound depths of indigenous military systems, their evolution, strategies that have been passed down through the ages, and the strategic thought processes that have governed the land for millennia.
- The aim of Project Udbhav is not limited to just rediscovering these narratives but also to also develop an indigenous strategic vocabulary, which is deeply rooted in India's multifaceted philosophical and cultural tapestry.
- Overall aim is to integrate age-old wisdom with modern military pedagogy.
- Since 2021, under the aegis of the Indian Army, there has been a project in progress on the compilation of Indian stratagems based on ancient texts.
- A book has been released under this project which lists 75aphorisms selected from ancient texts.

United Service Institution of India (USI)

- It is a national security and defence services think tank based in New Delhi, India.
- It describes its aim as the "furtherance of interest and knowledge in the art, science and literature of the defence services".
- USI operates centres for research in various areas of national security.
- The USI Journal, published quarterly since 1872, is the oldest defence journal in Asia.
- The United Service Institution was established in 1870 by Major General Sir Charles MacGregor in Shimla.
- It was founded as a society in the furtherance of interest and knowledge in the art, science and literature of the Defence Services.

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (NIPER)

- Union Home Minister and Minister of Cooperation inaugurated the permanent campus of the National Institute of Pharmaceutical Education and Research (NIPER), Ahmedabad, in Gujarat
- NIPER Ahmedabad would serve as a good launching platform to revamp the pharma education and research, to initiate the new era of pharmaceutical and biomedical sciences.
- NIPER Hyderabad is an "Institute of National Importance"
- NIPER-Mohali was the first institute established in the year 1998 under the aegis of Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, the Govt. of India.
- The visionary augmentation of the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, Government of India has led to the establishment of six new NIPERS in 2007

Section - B

(Practice Questions for the Preliminary Examination based on Current Affairs September 2023)

- 1. Consider the following statements with respect to superconductors:
 - 1. Superconductors exhibit the characteristic property of a ferromagnetic material.
 - 2. The Superconducting behaviour is exhibited only above the Critical Temperature.
 - 3. The Meissner Effect is exhibited as the material transitions to the superconducting state.

How many of the statements given above are correct?

(a) Only one

(b) Only two

(c) All three

(d) None

Answer: (a)

Explanation: Only the third statement is correct.

Superconductivity refers to a state where a material offers zero or near-zero resistance to electric current. Superconductors exhibit a strong repulsion of magnetic fields, a property known as perfect diamagnetism. Hence statement 1 is incorrect.

Every superconductor has a critical temperature. Below this temperature, the material exhibits superconducting behaviour. Above the critical temperature, the material returns to its normal state with resistive behaviour. Hence statement 2 is incorrect.

The Meissner Effect is the expulsion of a magnetic field from the interior of a superconductor as it transitions into the superconducting state. This effect results in the material's ability to trap a magnetic field within its interior, preventing it from penetrating the material. Hence statement 3 is correct.

- 2. Consider the following statements about the Chandrayaan Missions:
 - 1. The mission life for the lander and rover of Chandrayaan 3 Mission is 14 lunar days.
 - 2. The Chandrayaan 3 mission was launched with Lander Hazard Detection & Avoidance Cameras which were not there in the Chandrayaan 2 Mission.
 - 3. Unlike Chandrayaan 2, the Propulsion Module of Chandrayaan 3 will have a payload 'SHAPE' to study Earth from lunar orbit.

Which of the statements given above is/are correct?

(a) 1 only

(b) 3 only

(c) 2 and 3 only

(d) None of the above

Answer: (b)

Explanation: The Mission Life for Chandrayaan 3 will be One lunar day (~14 Earth days). Hence statement 1 is incorrect.

The Chandrayaan 3 mission is being launched with Lander Hazard Detection & Avoidance Cameras that will be used to coordinate with the Orbiter and the mission control as the lander makes its descent approach to the surface of the Moon. While Chandryaan-2 had just one such camera, Chandrayaan-3 has been fitted with two such cameras. Hence statement 2 is incorrect.

The significance of the Chandrayaan-3 mission, unlike its unsuccessful predecessor, is that the Propulsion Module has a payload -- SHAPE -- Spectro- polarimetry of HAbitable Planet Earth which is to study Earth from lunar orbit. Hence statement 3 is correct.

- 3. Consider the following statements with respect to Termination of Pregnancy in India:
 - 1. Extension of abortion rights to single, unmarried women is interpreted as the Fundamental Right by the Supreme Court under Article 21.

- 2. The Registered Medical Practitioner is obliged to report to the police, under the Medical Termination pf Pregnancy (Amendment) Act 2001, when a minor approaches him or her for an abortion.
- 3. To terminate pregnancy, a married woman need not seek registration of FIR against her spouse.

How many of the statements given above are correct?

(a) Only one

(b) Only two

(c) All three

(d) None

Answer: (b)

Only the 1st and 3rd statements are correct.

Explanation: According to the milestone judgment dated 29 September 2022, the Supreme Court bench of Justices D.Y. Chandrachud, A.S. Bopanna and J.B. Pardiwala ruled that the right to reproductive choice for women is a facet of the right to personal liberty under Article 21 of the Constitution. "The rights of reproductive autonomy, dignity and privacy under Article 21 give an unmarried woman the right of choice on whether or not to bear a child, on a similar footing of a married woman," the judgment said. Hence statement 1 is correct.

Under the Protection of Children from Sexual Offences Act 2012 (POCSO), the Registered Medical Practitioner is obliged to report to the police when a minor approaches him or her for an abortion. But, the Supreme Court noted that the Medical Termination of Pregnancy (MTP) Act recognizes minors as a special category entitled to an abortion up to 24 weeks. "For the limited purposes of providing medical termination of pregnancy in terms of the MTP Act, we clarify that the RMP, only on request of the minor and the guardian of the minor, need not disclose the identity and other personal details of the minor in the information provided under Section 19(1) of the POCSO Act," the court ordered. Hence statement 2 is incorrect.

As per the Supreme Court, MTP Rules 2003, as amended on 12 October 2021, includes a husband's act of sexual assault or rape committed on his wife. To terminate pregnancy, a married woman need not seek registration of FIR against her spouse. Hence statement 3 is correct.

- 4. Consider the following statements with respect to the Urban River Management Plan:
 - 1. The design philosophy of the URMP is built specifically around the Environment, Economic and Social elements.
 - 2. Adopting increased reuse of treated wastewater is one of the main objectives of the Plan.
 - 3. The financing Mechanism for the URMP is open for both Viability Gap Funding and Compensatory Afforestation Fund Management and Planning Authority (CAMPA) funds.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d)None

Answer: (c)

All the three statements are correct.

Explanation: Viability Gap Funding (VGF), Value Captured Finance (VCF), Centre/State Finance Commission Grants, CAMPA Fund etc are some of the financing options for URMP.

The URMP framework is based on the three pillars of sustainable development — Environment, Economics and Social. Hence, it is envisaged that the activities carried out under the URMP will be:

- Environmentally responsible
- · Economically beneficial
- Socially inclusive

The objectives of the URMP Framework

Design Philosophy	Environmentally responsible	Economically beneficial	Socially inclusive
Element	Environmental	Economic	Social
Vision	The river will be to support a habitat for biodiversity to thrive	The river will provide opportunities for economic development	
Objectives	 To ensure effective regulation of activities in the flood plain To keep the river free from pollution To rejuvenate waterbodies and wetlands in the city To enhance the riparian buffer along river banks To adopt increased reuse of treated wastewater To ensure maximum good quality return flow from the city into the river 	7. To develop eco-friendly riverfront projects8. To leverage on the economic potential of the river	sensitive behaviour among citizens

Source: URMP document

- **5.** Consider the following statements
 - 1. Chandrayaan-3 landing spot is known as Shiv Shakti point
 - 2. The Path where Chandrayaan's-3 Rover Pragyan left its footprints will now be called Tiranga.
 - 3. August 23 will be celebrated as ISRO day.

How many of the statements given above are correct?

(a) Only one

(b) Only two

(c) All three

(d) None

Answer: (a)

Explanation: Only the first statement is correct.

The Path where Chandrayaan - 2 left its footprints will now be called Tiranga

August 23 will be celebrated as National Space Day. Hence, statements 2 and 3 are incorrect.

- **6.** Consider the following statements about LK-99, recently in the news:
 - 1. LK-99 is a room-temperature and ambient-pressure superconductor.
 - 2. The electrical resistivity of LK-99 dropped sharply at around 104° Celsius

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

Answer: (b)

Explanation: The scientific community is now confident that the material known as LK-99 is not a room-temperature and ambient-pressure superconductor. Hence statement 1 is incorrect.

The South Koreans reported that the electrical resistivity of LK-99 dropped sharply at around 104° Celsius, a potential sign of superconductivity. However scientists observed the drop due to the copper sulphide material as an impurity. Hence statement 2 is correct.

- 7. Which of the following statements is/are correct with respect to the Medical Board which is to be constituted under the Medical Termination of Pregnancy (Amendment) Act, 2021?
 - 1. The Act Mandates the Centre government to constitute a Medical Board by notification in the Official Gazette, for the purpose of this Act.
 - 2. The Medical Board shall consist of a radiologist as well as a paediatrician.

Select the correct answer using the codes given below:

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (b)

Explanation: As per the Medical Termination of Pregnancy (Amendment) Act, 2021, every State Government or Union territory, as the case may be, shall, by notification in the Official Gazette, constitute a Board to be called a Medical Board for the purposes of this Act to exercise such powers and functions as may be prescribed by rules made under this Act. Hence statement 1 is incorrect.

The Medical Board shall consist of the following, namely:—

- (a) a Gynaecologist;
- (b) a Paediatrician;
- (c) a Radiologist or Sonologist; and
- (d) such other number of members as may be notified in the Official Gazette by the State Government or Union territory, as the case may be.".

Hence statement 2 is correct.

- 8. Which of the following is/are used as indicators for the Urban River Management Index (URMindex)?
 - 1. Net Dissolved Oxygen (DO)
 - 2. Riparian buffer
 - 3. Return flow
 - 4. floodplain management
 - 5. water body revival
 - 6. Eco-friendly riverfront

Select the correct answer using the codes given below:

(a) 1, 3, 5, and 6

(b) 1, 3, 4, 5 and 6

(c) 1, 4, 5 and 6

(d) 1, 2, 3, 4, 5 and 6

Answer: (d)

Explanation: The implementation of the URMP shall be monitored through 10 indicators, one for each objective of the URMP framework. These indicators shall collectively culminate into an index called the Urban River Management Index (URMindex). The URMindex is measured on a scale from one to five, and is useful to paint a snap shot of the situation, which can be used to monitor the implementation of the URMP, and develop overall strategies and policies for enhancement.

Indicators:

Indicator 1: floodplain management score

Indicator 2: Net Dissolved Oxygen (DO) score

Indicator 3: water body revival score

Indicator 4: Riparian buffer score

Indicator 5: wastewater reuse score

Indicator 6: Return flow score

- Indicator 7: Eco-friendly riverfront score
- Indicator 8: River economy score
- Indicator 9: Citizen sensitization score
- Indicator 10: Citizen engagement score
- 9. Find the incorrect statement with reference to Canada
 - a) Canada is a part of the NATO alliance
 - b) Canada is not a part of Anglo-Sphere countries
 - c) Both India and Canada are part of Commonwealth countries
 - d) None of the above

Answer: (b)

Explanation:

- The five core countries of the Anglosphere are usually taken to be Australia, Canada, New Zealand, the United Kingdom, and the United States. These countries enjoy close cultural and diplomatic links with one another and are aligned under military and security programs.
- 10. The Five Eyes is an intelligence-sharing alliance consisting of which of the following countries?
 - 1. Australia
 - 2. Canada
 - 3. New Zealand
 - 4. United Kingdom
 - 5. United States

Codes

a) 1,3 and 5 only

b) 1, 2, 4 and 5 only

c) 3, 4 and 5 only

d) 1, 2, 3, 4 and 5

Answer: (d)

Explanation:

- The Five Eyes (FVEY) is an intelligence alliance comprising Australia, Canada, New Zealand, the United Kingdom, and the United States.
- 11. Find the incorrect statement with reference to the Women's Reservation bill
 - a) 33% seats to be reserved for women for the period of 20 years
 - b) Seats reserved for women will be rotated after each subsequent delimitation exercise
 - c) There will be 1/3rd quota for women also within the seats reserved for SC/STs
 - d) As per Article 368, the Constitutional Amendment bill requires ratification of not less than one-half of the state Answer: (a)
 - 128th Constitutional Amendment Bill: 33% reservation for women (for 15 years) in Lok Sabha, State Assemblies and Legislative Assembly of NCT of Delhi
- 12. Consider the following statements about the delimitation exercise
 - 1. It is the process of redrawing Parliamentary and Assembly constituencies based on the latest population data
 - 2. As per Constitutional Amendment (2002), the next delimitation exercise can't take place before 2026

Find the incorrect statement

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: (d)

Explanation:

- Delimitation: Delimitation is the process of redrawing Parliamentary and Assembly constituencies based on the latest population data. The job of delimitation is assigned to a high-power body. Such a body is known as Delimitation Commission or a Boundary Commission.
- As per Constitutional Amendment (2002), the next delimitation exercise can't take place before 2026
- 13. Consider the following statements about Military Nursing Service (MNS)
 - 1. The origin of MNS dates back to the pre-independence colonial era
 - 2. The British Indian government established the Indian Army Nursing Services (IANS) in the year 1888 Find the correct statement

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: (c) Explanation:

- Military Nursing Service (MNS) celebrated its 98th Raising Day on Oct 1, 2023
- It is one of the oldest and most distinguished all-women services in the Armed Forces, the Service holds more than 5,000 officers posted at various Armed Forces hospitals.
- **14.** Which of the following is a way that National e-Vidhan Application' (NeVA) could be used to improve the efficiency and effectiveness of the House of Representatives?
 - a) Members of the House could use NeVA to access and review legislative documents.
 - b) Members of the House could use NeVA to communicate with each other and with their constituents.
 - c) NeVA could be used to automate tasks such as scheduling votes, tracking attendance, and generating reports.
 - d) All of the above

Answer: (d)

Explanation:

- The President of India, Smt Droupadi Murmu inaugurated 'National e-Vidhan Application' (NeVA) and addressed the Gujarat Legislative Assembly at Gandhinagar
- The mission of e-Vidhan MMP (National e-Vidhan Application-NeVA) is to make all the States/UTs Legislatures paperless/ digitalized legislatures
- NeVA can be used to improve the efficiency and effectiveness of the House of Representatives in all of the ways listed.
- **15.** Which of the following APIs is/are considered to be a core part of the India Stack?
 - 1. Aadhaar Authentication
 - 2. Aadhaar e-KYC
 - 3. eSign
 - 4. Digital Locker
 - 5. Unified Payment Interface (UPI)

Find the correct answer

a) 1, 2, 4 and 5

b) 2, 3, 4 and 5

c) 1, 2, 3 and 4

d) 1, 2, 3, 4 and 5

Answer: (d)

Explanation:

• India Stack is a set of open APIs(application programming interface) that allows governments, businesses, startups and developers to utilise an unique digital Infrastructure to solve India's hard problems towards presence-less, paperless, and cashless service delivery.

The following APIs are considered to be a core part of the India Stack.

- Aadhaar Authentication
- Aadhaar e-KYC
- eSign
- Digital Locker
- Unified Payment Interface (UPI)
- 16. A tool called TTPs (tactics, techniques, and procedures) is used in which of the following domains?
 - a) Cyber Investigation

b) Forensic Investigation

c) Satellite Navigation

d) Diplomatic Channels

Answer: (a) Explanation:

- A new cybercrime investigation tool would soon be able to track cyberattacks targeting humans, like insurance fraud, online matrimonial fraud, and so on.
- The tool called TTPs (tactics, techniques, and procedures)-based cybercrime investigation framework can help in tracking and classifying cybercrimes identifying the chain of evidence required to solve the case, and in mapping evidences onto the framework to convict criminals
- 17. Consider the following statements
 - It is a zoonotic virus
 - It is also known to cause illness in pigs and people
 - Infection with this virus is associated with encephalitis
 - Currently, there are no licensed treatments available

The above statement is talking about which of the following Viruses?

a) Monkeypox Virus

b) Canine Parvovirus

c) Nipah virus

d) Adenoviruses

Answer: (c)

Explanation:

- Nipah virus (NiV) is a zoonotic virus, meaning that it can spread between animals and people.
- Fruit bats, also called flying foxes, are the animal reservoir for NiV in nature.
- Nipah virus is also known to cause illness in pigs and people.
- Infection with NiV is associated with encephalitis (swelling of the brain) and can cause mild to severe illness and even death.
- Outbreaks occur almost annually in parts of Asia, primarily Bangladesh and India.
- 18. Consider the following statements about the International Organization of Legal Metrology (OIML)
 - 1. OIML is an Intergovernmental organization
 - 2. India recently became its member
 - 3. India has the authority to issue internationally accepted OIML certificates for selling weights & measures anywhere in the world

Find the incorrect statement

a) 1 only

b) 2 only

c) 1 and 3 only

d) None of the above

Answer: (b)

Explanation:

- Bharat has now become the authority for issuing internationally accepted OIML certificates for selling weights & measures anywhere in the world
- OIML is an Intergovernmental organization which was established in 1955. Bharat became its member in 1956.
- **19.** Which of the following is/are Pollution Control Vessels?
 - 1. Samudra Prahari
 - 2. Samudra Paheredar
 - 3. Samudra Pavak
 - 4. Samudra Parcham

Codes

a) 1, 2 and 4

b) 1, 2 and 3

c) 2 only

d) 1, 2, 3 and 4

Answer: (b)

Explanation: The Samudra-class Pollution Control Vessel is a class of three vessels built by the ABG Shipyard in Gujarat for Indian Coast Guard.

- 5. Samudra Prahari
- 6. Samudra Paheredar
- 7. Samudra Pavak
- **20.** Puneet Sagar Abhiyaan is an initiative of?
 - a) Ministry of Defence

b) Indian Navy

c) Indian Coast Guard

d) NCC

Answer: (d) Explanation:

- The NCC had, on December 01, 2021, launched 'Puneet Sagar Abhiyan', a nationwide flagship campaign, to clean sea shores of plastic & other waste material, while raising awareness about the importance of cleanliness.
- 21. Find the correct statement with reference to National Building Code of India (NBC)
 - 1. It is formulated and published by the Indian Statistical Institute
 - 2. It serves as a Model Code for adoption by all agencies involved in building construction
 - 3. It also provides guidelines for regulating building construction activities across the country.

Codes

a) 1 only

b) 2 and 3 only

c) 1 and 3 only

d) 1, 2 and 3

Answer: (b) Explanation:

- The National Building Code of India (NBC of India) is formulated and published by the Bureau of Indian Standards (BIS)
- 22. Consider the following statements about Multiple System Operator
 - 1. It is used for telecom companies that offer services beyond telecommunication
 - 2. MSOs offer a "triple play" of internet and telephone service alongside their traditional cable television offerings. Find the correct statement
 - a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: (b)

Explanation:

- Multiple System Operator, also referred to as a multi-system operator is a designation often used for cable companies that offer services beyond television broadcast.
- Many MSOs offer a "triple play" of internet and telephone service alongside their traditional cable television offerings.
- 23. Find the correct statement about Mission Innovation (MI)
 - 1. Mission Innovation (MI) was announced at COP21 in 2015
 - 2. India is a founding member of Mission Innovation.
 - 3. It is a global initiative of 23 countries and the European Commission
 - 4. Its objective is to accelerate the Clean Energy revolution and progress towards the Paris Agreement goals

Codes

a) 1 and 2 only

b) 13 and 4 only

c) 23 and 4 only

d) 123 and 4

Answer: (d) Explanation:

- Mission Innovation (MI) is a global initiative of 23 countries and the European Commission (on behalf of the European Union) to accelerate the Clean Energy revolution and progress towards the Paris Agreement goals and pathways to net zero.
- 24. India retains 40th rank out of 132 economies in the Global Innovation Index 2023 rankings published by _____
 - a) World Bank
 - b) World Economic Forum
 - c) World Intellectual Property Organization.
 - d) United Nations Conference on Trade and Development

Answer: (c)

- 25. National Service Scheme Awards have been instituted by which of the following Ministries?
 - a) Ministry of Home Affairs

b) Ministry of Social Justice

c) Ministry of Defecne

d) Ministry of Youth Affairs and Sports

Answer: (d) Explanation:

 The NSS Awards, instituted by the Union Ministry of Youth Affairs and Sports, are presented every year to the NSS Volunteers, Programme Officers, NSS Units, and the Universities/+2 Councils to recognize their voluntary service.

Section - C

Practice Questions for the Main Examination based on Current Affairs September 2023

- 1. Describing the objectives of the Aditya L1 Mission, give the overall significance of the mission.
- **2.** What do you understand by Dark Patterns? Explain the different types of dark patterns and briefly describe the government's steps to manage them.
- **3.** Drones are one of the most potent emerging technologies that can become either a bane or a boon for humanity. Justify.
- **4.** The best development policy for tribals is the one which is tribal-led. In this context, describe the steps taken by the government for tribal empowerment and capacity development.

- **5.** The successful execution of the G20 Presidency of India marks a new chapter in validating the widening and strengthening global footprint of India in the world. Examine.
- **6.** Enumerating the benefits and needs of biofuels, explain the significance of the Global Biofuel Alliance.
- 7. How does the farmers' rights regime set in India vary from the global standards set by different multilateral institutions?
- **8.** Assessing the performance of the Pradhan Mantri Ujjwala Yojana, mention the different initiatives taken under the scheme to meet its objectives.
- 9. Give the important teachings from the life of Adi Shankaracharya and also relate them with present-day relevance.
- **10.** China's aggression and presence in the Indian Ocean region have been on the rise over the last decade. In this context, mention the steps taken by India to counter Chinese influence in the region.

Section -D

(Probable Interview Questions based on September 2023 Current Affairs)

Mock Transcript

Mock Chairman

Q. India has been progressing in the space sector as was evident in the recent missions like Chandrayaan and Aditya L1. But do you think that the space goals of India have any trade-off with its welfare goals?

Mock Member 1

Q. To what extent do you think can India progress towards electric mobility given its existing battery storage system?

Mock Member 2

Q. How do you assess India's G20 presidentship? Is it mere symbolism or was there any substantial achievement?

Mock Member 3

Q. Are you in favour of using more technology or digitisation as the core solution to the problems which the Indian judicial system is facing today?

Mock Member 4

Q. What according to you describes India's population composition best – a youthful nation or a gradually ageing nation?