



WEEKLY CURRENT AFFAIRS

JANUARY, 2023

Week-4

22-31 Jan., 2023

★★ Useful for ★★

**CSE, ESE, PSUs, State Services Exams,
SSC and Banking Exams**

22nd JANUARY 2023

Aspirational Blocks Programme (ABP)

- **Context:** Prime Minister Narendra Modi launched the government's Aspirational Block Programme (ABP), which is aimed at improving performance of blocks lagging on various development parameters.

Key Highlights

- The Programme was announced in the Union Budget 2022-23.
- It is aimed at improving performance of blocks lagging on various development parameters.
- It will initially cover 500 districts across 31 states and Union Territories.
- Over half of these blocks are located in six states – Uttar Pradesh, Bihar, Madhya Pradesh, Jharkhand, Odisha and West Bengal.
- The ABP is based on the Aspirational District Programme (ADP).
- The Aspirational Districts Programme (ADP) was launched in 2018 which aims to quickly and effectively transform 112 most under-developed districts across the country.
- The broad contours of the programme are Convergence (of Central & State Schemes), Collaboration (of Central, State level Nodal Officers & District Collectors), and Competition among districts through monthly delta ranking; all driven by a mass movement.
- With States as the main drivers, this program focuses on the strength of each district, identifying low-hanging fruits for immediate improvement and measuring progress by ranking districts on a monthly basis.
- The ranking is based on the incremental progress made across 49 Key Performance Indicators (KPIs) under 5 broad socio-economic themes - Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development and Infrastructure.

- The Government is committed to raising the living standards of its citizens and ensuring inclusive growth for all – “SabkaSaathSabkaVikasaurSabkaVishwas”.

Groningen Gas Field

- **Context:** The Netherlands wants to shut down operations of Europe's largest gas field, Groningen.

Key Highlights

- The decision of shutdown is taken in backdrop as the operations are "very dangerous" to continue and further gas extraction poses the risk of causing increased seismic activity in the region.
- The Netherlands aims to close the earthquake-prone Groningen gas field by 1 October, however, the Europe gas shortage in winter might delay the plans altogether till October 2024.
- In Netherlands' northeast, the Groningen gas field is close to the German border and has felt about 100 tremors annually since the 1980s.
- The gas excavation was increased during summers after Russian sanctions but due to the increased risk of earthquakes, the annual output has been reduced to 2.8 bcm. It is potentially dangerous to take production beyond 5bcm.
- Opened in 1963, Groningen, pumped out over 50 bcm at its peak nearly a decade ago.
- Netherlands instructed gas operator NAM, a joint venture of Royal Dutch Shell and ExxonMobil, to reduce production in 2013.
- In 2018, the Netherlands announced the field would close however the plan has since been delayed.

Sri Lankan Constitution

- **Context:** External Affairs Minister S Jaishankar in his visit to Sri Lanka said that India considers the full implementation of the 13th Amendment in Sri Lanka "critical" for achieving reconciliation with the minority Tamil community.

Key Highlights

- India has been pressing Sri Lanka to implement the 13th Amendment, which was brought in after the India-Sri Lanka agreement of 1987.
- The 13A provides for the devolution of power to the Tamil community.
- Full implementation of the 13th Amendment to Sri Lanka's Constitution will facilitate unity among all the communities in the island nation so that they could live as one.
- Sri Lanka has had a long history of failed negotiations to end the Tamil claim of discrimination by allowing some form of political autonomy.
- An Indian effort in 1987 that created the system of a joint provincial council for the Tamil-dominated north and east faltered as the Tamils claimed it fell short of full autonomy.
- Tamils say that not enough power had been devolved to the provincial councils to make them meaningful.
- The Tamils put forward their demand for autonomy since gaining independence from Britain in 1948 which from the mid-70s turned into a bloody armed conflict.
- The Sri Lankan government has been aggressive against Tamilian groups following its war with the Liberation Tigers of Tamil Eelam (LTTE).
- The LTTE ran a military campaign for a separate Tamil homeland in the northern and eastern provinces of the island nation for nearly 30 years before its collapse in 2009 after the Sri Lankan Army killed its supreme leader VelupillaiPrabhakaran.

23rd JANUARY 2023

Electric Vehicles 2023 Roadmap

- **Context:** India's Electric Vehicle future shines bright with ambitious government targets and advancements in technology.

Key Highlights

- India has set an ambitious goal to become a leader in the electric vehicle market by 2030 with the

government laying out a comprehensive roadmap to achieve this goal, which includes several initiatives and policies to accelerate the adoption of electric vehicles in the country.

- One of the key initiatives is the Faster Adoption and Manufacturing of Hybrid and Electric vehicles (FAME) scheme, which provides subsidies to customers who purchase electric vehicles.
- The government has also set a target to achieve 30% electric vehicle penetration in the country by 2030.
- In this regard, the government is also taking steps for development of domestic manufacturing capabilities for electric vehicles and their components.

World Economic Forum 2023

- **Context:** The World Economic Forum (WEF) Annual Meeting 2023 was held in Davos, Switzerland.

Key Highlights

- As per the Center for Economics and Business Research (CEBR), India will become the third \$10 trillion economy by 2035.
- Global leaders hailed India's digital and physical infrastructure prowess and its ability to attract global investments with its policies like Product-Linked Incentives (PLI). But they also highlighted the need for reforms in land and labour markets.
- The forum and the Maharashtra Institution for Transformation (MITRA) signed a partnership to work together on the urban transformation agenda.
- The forum also launched its first thematic centre on healthcare and life sciences in Telangana.
- Telangana also signed an agreement with Allox Advance Materials Pvt Ltd for setting up a C-LFP (Lithium Iron Phosphate) active battery material production unit.
- Global Economic Outlook: Most business leaders were upbeat about the economy, with the US and the European Union (EU) seemingly beyond the risk of a recession now. However, Central banks of the major economies cautioned that concerns still remained, and would keep interest rates high to check inflation.

- China ending its Zero-Covid Policy and reopening its business has added to the positive outlook. However, this would mean a rise in its energy consumption, thereby driving up energy prices.
- The World Trade Organisation has warned the economies to be careful of friend-shoring as the big three trading powers of the United States, Europe and China pushed their new industrial policies. The term refers to the practice of relocating supply chains to countries where the risk of disruption from political chaos is low.
- Ukraine demanded more military aid to fight its war against Russia, and more financial aid to rebuild after the war.
- Everyone agreed upon the need for green energy and the need for more money to fight climate change.

About WEF Annual Meeting

- It was the 53rd edition of the Annual meeting of the WEF.
- The meeting has brought together 2,700 leaders from 130 countries including 52 heads of state/ government.
- The theme of this year was 'Cooperation in a Fragmented World' which is in the backdrop of the Russia-Ukraine war, Climate Change, and changing global political scenarios.

New Rules for Social Media Influencers

- **Context:** Ministry of consumer affairs issues new guidelines for Social Media Influencers.

Key Highlights:

- The Department of Consumer Affairs under Ministry of Consumer Affairs, Food and Public Distribution released a guide 'Endorsements Know-hows!' for celebrities, influencers and virtual influencers on social media platforms.
- The guide aims to ensure that individuals do not mislead their audiences when endorsing products or services and that they are in compliance with the Consumer

Protection Act and any associated rules or guidelines.

- These rules include publishing clear disclosures about brand associations so that there is transparency, and consumers are protected.
- Influencers who fail to comply would face hefty fines going up to Rs 50 lakh, or, in some cases could be even barred from investing in products for up to a period of six years.
- Disclosures will be required to be published when there is a "material connection" between an advertiser and a celebrity or influencer.
- Such guidelines will be applicable to all individuals who have access to an audience, as well as those who have the power to influence audience decisions.
- In case the endorsement is through a picture, it should be superimposed over the picture so that the viewers can notice it. If the endorsement is through a video, it should be placed in the video and not just in the description. In case of a live stream, it should be displayed as a ticker throughout.

24th JANUARY 2023

Great Nicobar Plan

- **Context:** The Constitutional Conduct Group, which includes nearly 100 former civil servants, has written to president Droupdi Murmu protesting the government's push for a mega infrastructure project in the Great Nicobar island.

Key Highlights

- The Union Environment Ministry gave an in-principle (Stage 1) clearance for the diversion of 130.75 sq. km. of forest in Great Nicobar Island for a Rs.72,000 crore project.
- The project includes a trans-shipment port, an airport, a power plant and a greenfield township.
- The project implementation agency is the Andaman & Nicobar Islands Integrated Development Corporation (ANIIDCO).
- The area is nearly 15% of the thickly forested Great Nicobar Island, which is spread over 900 sq. km.

- This is one of the largest, single forest diversions in recent times, and nearly a quarter of all the forest land diverted in the past three years across the country.
- The project envisages a compensatory afforestation programme to balance the estimated 8.5 lakh trees that could be cut, the new trees will be planted in faraway Haryana.
- The Forest Clearance and the Environmental Clearance are independent approvals and follow separate processes.
- The Standing Committee of the National Board for Wildlife denotified the Galathea Bay Wildlife Sanctuary to free it as the port site. The environment ministry declared a “zero extent” eco-sensitive zone for the Galathea National Park, allowing forest land along its south and south-eastern boundary to be made available for the project.
- The project is spread over more than 160 sq km of land. At least 130 sq km of this is primary forest on the ecologically rich island, which was declared a biosphere reserve in 1989 and included in UNESCO’s Man and Biosphere Program in 2013.

About Andaman and Nicobar Islands

- The Island chain sits on the mouth of Malacca Straits and Ten Degree Channel, through which trillion-US dollar worth trade passes through to southeast and north Asia, bisects little Andaman and Car Nicobar Islands.
- The southernmost tip of the island chain is mere 237 kilometers from Banda Aceh of Indonesia and hence dominates the sea lanes to Sunda and Lombok Straits, the two ingress routes into contested South China Sea.
- Container terminal at Campbell Bay is proposed to be constructed for replenishment of cargo ships bound for straits of Malacca. Today, the same cargo ships must wait at Colombo port for their turn to enter Malacca Straits.
- The plan would expand the military footprint of India into Southeast Asia and beyond.
- Besides being a military asset, the island chain provides maximum opportunities for eco-tourism and sea sports

while keeping tribal areas out of bounds for the visitors. For that, the islands must have its own power generation units and not depend on diesel generators.

INS Vagir

- **Context:** INS Vagir, the fifth submarine of the Kalvari Class submarines, was commissioned into the Indian Navy.

Key highlights

- Indian Navy’s fifth stealth Scorpene class Submarine INS Vagir was commissioned into the Indian Navy.
- The Navy has commissioned four Scorpenes, INS Kalvari, INS Khanderi, INS Karanj and INS Vela, till now. INS Vagir is the fifth one.
- Six Scorpene Class submarines are being built in India by the Mazagon Dock Shipbuilders Limited (MDL) Mumbai, under collaboration with M/s Naval Group, France.
- INS Vagir would form part of the Western Naval Command’s Submarine fleet and would be another potent part of the Command’s arsenal.
- The submarine will boost the Indian Navy’s capability to further India’s maritime interests in deterring the enemy, and conducting Intelligence, Surveillance and Reconnaissance (ISR) to provide decisive blow in the times of crisis.
- Vagir was launched under Project 75 (P75).
- The Scorpene Submarines are extremely potent platforms, they have advanced stealth features and are also equipped with both long range guided torpedoes as well as anti-ship missiles.
- These submarines have a state of the art SONAR suite and sensor suite permitting outstanding operational capabilities.

About Project 75

- Under Project 75-India (P-75I), the Navy will build six conventional diesel-electric submarines that would be bigger than the under-construction Scorpene-class submarines being built at the Mazagon Dockyards Limited in Mumbai under Project 75.

- In 1997, Gol approved a 30- year of building submarine which included the construction of 24 submarines indigenously by 2030.
- The submarine building plan had a separate series of submarine building lines with code names Project 75 and Project 75I.
- Out of 24 submarines to be built in India, 18 will be conventional submarines and 6 will be nuclear-powered submarines
- India's current arsenal consists of 14 conventional submarines.
- Of the 14 conventional submarines India currently possesses, including the Scorpene, only half are operational at any given point in time.
- The virus is estimated to kill 200,000 persons globally every year, with most deaths occurring among those below the age of five years and those over the age of 65 years.
- The virus is capable of surviving low temperatures, and outbreaks tend to be more common during the winter and in colder countries hence, it is sometimes referred to as "winter vomiting disease".

Tethered Drone System

- **Context:** The Army has initiated the process to acquire three niche technologies to sharpen its combat edge, including 130 tethered drone systems for surveillance purposes for a long duration and 100 robotic mules for logistics requirements in far-flung border areas.

25th JANUARY, 2023

Norovirus

- **Context:** Recently, Norovirus cases have been detected in Kerala.

Key Highlights

- Norovirus illness is often called by other names, such as food poisoning and stomach flu and "stomach bug."
- Noroviruses can cause food poisoning, as can other germs and chemicals.
- Norovirus illness is not related to the flu (influenza). Though they share some of the same symptoms, the flu is a respiratory illness caused by influenza virus.
- Cases of norovirus are not as common in India as in many other places.
- The infection has been reported in previous years as well, mainly from Southern India, and especially from Kerala

About Virus

- The virus has been circulating among humans for over 50 years and is thought to be one of the primary causes of gastroenteritis (inflammation of the stomach and intestines).

Key Highlights

- Tethered drone system comprises drones that come with a ground-based tether station and can be used for surveillance of targets beyond the line of sight for a prolonged period.
- They can also be launched in an untethered mode for a certain duration to confirm inputs.
- Each tethered drone system will comprise two aerial vehicles with combined Electro-Optic/Infrared Payloads, one remote video terminal and generator set, one battery charger, one spare battery per drone, and a modular carrying case for the system.
- The systems are required to have a minimum of 60 percent indigenous content and will be procured under the 'Buy India' category.
- These drones will have an advantage over others in the Army's Inventory due to an enhanced surveillance capability over an extended period of time.
- "Longer flight duration for constant surveillance, even for targets beyond the line of sight, with little risk of getting jammed will aid the troops on ground by arming them with the correct intel and target acquisition

TROPEX 2023

- **Context:** The 2023 edition of Indian Navy's major maritime exercise Theatre Level Operational Readiness Exercise (TROPEX), being conducted in the Indian Ocean Region.

Key Highlights

- This operational level exercise is conducted biennially and witnesses participation not only by all Indian Navy units but also of Indian Army, Indian Air Force and Coast Guard assets.
- The first exercise of maritime surveillance was held in January 2019. It is also called the biggest war game of the Indian Navy.
- TROPEX 23 is being conducted over a duration of three months from Jan – Mar 23.
- As part of the exercise, all surface combatants of the Indian Navy including Destroyers, Frigates, Corvettes as well as submarines and aircraft are put through complex maritime operational deployments to validate and refine the Navy's Concept of Operations including operational logistics and interoperability with other Services

India: A prospective renewable power

- **Context:** The recent data by the Global Solar Power Tracker and the Global Wind Power Tracker rank India among the top seven countries in terms of prospective renewable power.

Key Highlights:

- India plans to add 76 gigawatts (GW) of utility-scale solar and wind power by 2025 which could save up to \$19.5 billion a year (over 15 lakh crore) caused due to the burning of coal.
- India plans to add an additional 420 GW of wind and solar power by 2030, which would increase the annual savings from avoiding coal power to more than \$58 billion, with total savings reaching \$368 billion by 2030.

- India accounts for 5 per cent of all prospective utility-scale solar power globally, trailing only China, the U.S. and Australia.
- India placed 17th globally in prospective wind power capacity.
- China has the most prospective renewable power currently at 387,258 MW, followed by Australia, Brazil, the United States, Vietnam, Greece, South Korea, Taiwan, and Japan.
- Annual savings in India can skyrocket if the coal to clean switch matches the country's ambitions.
- India will be richer and cleaner by quitting coal. Costs for solar and wind power continue to plummet, and compared to volatile fossil fuel prices, renewable present a far better option for building new energy infrastructure.

26th JANUARY 2023

Food Processing Project in Jammu and Kashmir

- **Context:** The Jammu and Kashmir government has launched an ambitious project targeted to revolutionize the food processing sector and transform the lives of farmers in the UT.

Key Highlights

- The "UT Level Food Processing Programme for Development of Clusters for Specific Products of J&K" is aRs 879.75 crore initiative that aims to maximize farmer income and minimize post-harvest losses.
- This comprehensive project has been designed to increase the competitiveness of seven identified products across categories in terms of cost, quality, branding, and sustainability within five years.
- The government is investing in value addition, logistics, marketing and branding of various agricultural, horticultural and livestock products to achieve this goal.

- The project will focus on developing 17 districts in J&K with establishment of processing and marketing infrastructure, providing growth and development opportunities to stakeholders, and facilitating suitable economies of scale in production and post-harvest activities.
- The government has allocated a budget of Rs 879.75 crore for the project including a grant-in-aid of Rs 293.25 crore (33.33 percent) and a debt-equity of Rs 586.50 crore to be raised by entrepreneurs.
- The project shall create 7030 direct jobs and lead to establishment of 34 enterprises with expected revenue generation to the tune of Rs 1,436.04 crore every year.
- The EU has pledged 1 million for the Fisheries Funding Mechanism which forms part of the World Trade Organization (WTO) Agreement on Fisheries Subsidies.
- It will provide grants to developing and least developed countries so they can benefit from technical assistance and capacity-building to implement the WTO Agreement on Fisheries Subsidies.

India's stand over fishing subsidies

- India has one of the lowest fisheries subsidies despite such a large population (\$15 annually per fish family).
- India's fisheries sector primarily depends on several millions of small-scale and traditional fishers.
- Therefore, those WTO Members who have provided huge subsidies (\$75,000 annually) in the past, and engaged in large-scale industrial fishing, which is responsible for the depletion of fish stocks, should take more obligations to prohibit subsidies based on the 'polluter pay principle' and 'common but differentiated responsibilities'.

WTO Agreement on Fisheries Subsidies

- **Context:** Switzerland became the first WTO member to formally submit its acceptance of the WTO's new Agreement on Fisheries Subsidies.

Key Highlights

- The agreement was adopted by consensus at the WTO's 12th Ministerial Conference (MC12) held in Geneva on 12-17 June 2022.
- The Agreement sets new binding, multilateral rules to curb harmful subsidies, which are a key factor in the widespread depletion of the world's fish stocks.
- The Agreement prohibits subsidies to illegal, unreported and unregulated (IUU) fishing, and bans subsidies for fishing overfished stocks and for fishing on the unregulated high seas.
- Under the Special and Differential Treatment (S&DT), Developing Countries and Least Developed Countries (LDCs) have been allowed a transition period of two years from the date of entry into force of this Agreement.
- The Agreement also prohibits providing subsidies for fishing on high seas, which are outside the jurisdiction of coastal countries and Regional Fisheries Management Organizations/ Arrangements.
- Acceptances from two-thirds of WTO members are needed for the Agreement to come into effect.

BharOS

- **Context:** The Indian Institute of Technology, Madras (IIT) has developed BharOS which is set to benefit 100 crore (one billion) smartphone users across the country.

Key Highlights

- BharOS is developed by the IIT Madras-incubated company JandK Operations Private Limited.
- Funded by the Department of Science and Technology (DST), the indigenous mobile operating system wants to cater to the approximately 100 crore mobile phone users in India.
- BharOS is an AOSP (Android Open Source Project) based operating system.
- Unlike Android, it does not have default Google apps or services, which implies that users will not be forced to opt for applications that they are unfamiliar with or do not trust.

- Developed by the IIT-Madras, the free and open-source operating system (OS) will be used in government and public systems.
- This was in line with the project's aim to reduce the reliance on foreign OS in smartphones and contribute significantly to 'Atmanirbhar Bharat'.
- In terms of technicalities, it is quite similar to the Android OS but without any Google services which let users decide which apps they wish to install on their device.
- It essentially has one key difference which is its No Default Apps (NDA) feature. It will give users more control, freedom, and flexibility to choose apps that cater to their needs.
- Similar to Android, the BharOS also offers "Native Over The Air" (NOTA) updates which means software updates will automatically get downloaded and installed on the device.
- In addition to NDA, the mobile operating system also gives its users access to trusted apps from company-specific Private App Store Services (PASS) which provides access to a curated list of apps that have been thoroughly vetted and have met certain security and privacy standards of organizations.
- Reports suggest that BharOS will be available on a range of devices including laptops, phones, as well as desktops, however, it is still being developed and its release date has not been announced yet.
- The current version of BharOS comes with third-party apps like DuckDuckGo and Signal as default browsers and messaging apps. Additionally, since there are no pre-installed apps and users can sideload any app of their choice which could potentially compromise the device's security and make it vulnerable to hacking.

27th JANUARY, 2023

iNCOVACC (BBV154)

- **Context:** Bharat Biotech International Limited (BBIL) launched iNCOVACC (BBV154), the world's first intranasal vaccine for COVID-19.

Key Highlights:

- iNCOVACC is now available on CoWIN, and priced at INR 800 for private markets and INR 325 for supplies to Govt of India and State Governments.
- It got approval from the Central Drugs Standard Control Organization (CDSCO) for iNCOVACC to be administered for primary series and as heterologous booster doses.
- As the country marked its 74th Republic Day, Union Health Minister Dr Mansukh Mandaviya and Union Science and Technology Minister Jitendra Singh launched Bharat Biotech's first India-made nasal COVID-19 vaccine, iNCOVACC.
- Product development and clinical trials for Incovacc were funded in part by the Government of India, through the Department of Biotechnology's, Covid Suraksha Program.
- iNCOVACC is a recombinant replication-deficient adenovirus vectored vaccine with a pre-fusion stabilized spike protein.
- As needleless vaccination, Bharat Biotech's iNCOVACC will be the world's first such booster dose. India will now have more options when it comes to third doses or precautionary doses

Aditya-L1: India to launch Mission to study Sun

- **Context:** Aditya-L1, which is India's first dedicated scientific mission to study the Sun, to be launched by June or July.

Key Highlights:

- Aditya L1 is the first space-based Indian mission to study the Sun from a halo orbit around the Lagrangian point 1 (L 1) of the Sun-Earth system.
- This mission with seven payloads on board to observe the photosphere, chromosphere and the outermost layers of the Sun (the corona) will provide greater advantage of observing the solar activities and its effect on space weather.

- Satellite placed in a halo orbit around the L1 of the Sun-Earth system has the major advantage of continuously viewing the Sun without any occultation/eclipses, the mission was revised to Aditya-L1, and it would now be inserted in a halo orbit around the L1, which is 1.5 million km from the Earth towards the Sun.
- The seven payloads are: Visual Emission Line Coronagraph (VELC), Solar Ultraviolet Imaging Telescope, Aditya Solar Wind Particle Experiment, Plasma Analyser Package for Aditya, Solar Low Energy X-ray Spectrometer, High Energy L1 Orbiting X-ray Spectrometer, and Magnetometer
- The Suez Canal connects the Mediterranean Sea with the Red Sea. It is one of the world's biggest trade routes. As of now, the trade route is essential to keep alive around 12 percent of the global trade that passes through it each day.

28th JANUARY, 2023

Monument Mitra Scheme

- **Context:** The government will hand over around 1,000 monuments under the control of the Archaeological Survey of India to the private sector for their upkeep under the Monument Mitra Scheme.

Abdel Fattah El-Sisi: Chief Guest at the 74th Republic Day Parade

- **Context:** India has invited Egypt as a special guest for the G-20 summit which shows our age-old relationship. The President of Egypt, Abdel Fattah El-Sisi, was the chief guest at the 74th Republic Day parade.

Key Highlights:

- India and Egypt signed five MoUs covering culture, cooperation on youth matters, cyber security, information and technology (IT) and public broadcasting.
- They reaffirmed their commitment to multilateralism, the principles of the United Nations Charter, international law, the founding values of the Non-Aligned Movement, and respect for the sovereignty and territorial integrity of all states.
- They agreed to "initiate new engagements to intensify military-to-military engagements" and planned more joint exercises between the armed forces of the two countries.
- They agreed to fight terrorism in all forms, "including cross-border terrorism" and intensify consultation between their respective National Security Councils.
- They have expressed exploring the possibility of land allocation to Indian Industries at the Suez Canal Economic Zone.

Key Highlights

- Corporate entities will take over these monuments as part of their Corporate Social Responsibility. Under the scheme, monument amenities will be revamped by the private sector.
- The government has set the target to hand over 500 sites under the revamped Monument Mitra Scheme by the end of AzadiKaAmritMahotsav on 15 August 2023
- Monument Mitra Scheme had been started some years back under the Ministry of Tourism. Now the Ministry of Tourism has transferred the scheme to the Ministry of Culture in respect of the monuments under the Archaeological Survey of India, the AS.
- Around 1,000 monuments across the country to the private sector for their upkeep and maintenance.
- These companies will revamp these monuments in terms of amenities, experience, tourism, etc.
- The government is also preparing a digital museum, on a G20 Orchestra, on a book of poems, on exhibitions to bring the 5000 years old Indian culture in front of G20 delegates.

Visible Emission Line Coronagraph (VELC)

- **Context:** The Indian Institute of Astrophysics (IIA) handed over the Visible Emission Line Coronagraph (VELC) -- the largest payload to be carried on board the Aditya-L1, to the Indian Space Research Organisation (ISRO).

Key Highlights

- The VELC was built at IIA's Centre for Research and Education in Science and Technology (CREST) campus in Hoskote and now that the payload has been officially handed over, ISRO will conduct further testing and will proceed to integrate it with the Aditya-L1 spacecraft.
- It is the largest payload that would fly on the Aditya-L1 mission. It is an internally occulted solar coronagraph capable of simultaneous imaging, spectroscopy and spectro-polarimetry close to the solar limb.
- Both imaging and spectroscopic observations obtained by VELC payload are key to study the diagnostic parameters of solar corona and dynamics as well as origin of the coronal mass ejections and magnetic field measurements of the solar corona.
- Aditya-L1 carries seven payloads to observe the photosphere, chromosphere, and the outermost layers of the Sun (the corona) using electromagnetic and particle detectors.
- The satellite carries additional six payloads — SUIT, the solar ultraviolet imaging telescope, ASPEX (Aditya Solar Wind Particle Experiment), PAPA (Plasma Analyser Package for Aditya), SoLEXS (Solar Low Energy X-ray Spectrometer), HELIOS (High Energy L1 Orbiting X-ray spectrometer) and Magnetometer.

Complete Transition to Trade-Plus-One' (T+1) Settlement Cycle

- **Context:** India becomes the second country in the world after China to start Trade-plus-one' (T+1) settlement cycle in top listed securities.

Key Highlights

- T+1 (trade plus one) means that trade-related settlements will be cleared within a day of the actual transactions.
- Earlier, trades on the Indian exchanges were settled in two working days after the transaction took place(T+2).

- The first batch of securities transitioned to T+1 Settlement was rolled out in February, 2022. Thereafter, every month, a batch of around 500 securities transitioned to T+1 Settlement.
- From now, all securities i.e, equity shares, including SME shares, exchange-traded funds (ETFs), real estate investment trusts (REITs), infrastructure investment trusts (InvITs), sovereign gold bond (SGB), government bonds, and corporate bonds trading in the equity segment will now be settled only on T+1 basis.
- T+1 settlement system will allow the cycle of money to move faster without waiting for an extra day.
- Globally most stock exchanges in developed as well as emerging markets follow the T+2 settlement system.
- Until 2001, stock markets had a weekly settlement system.
- The markets then moved to a rolling settlement system of T+3, and then to T+2 in 2003.
- Foreign investors were against SEBI's T+1 proposal. In 2020, SEBI had deferred the plan to T+1 settlement system following opposition from foreign investors.
- **Among the issues raised by Foreign investors were:**
 - Time zone difference
 - Information flow process
 - Foreign exchange problems

29th JANUARY, 2023

National Technical Textiles Mission

- **Context:** The Ministry of Textiles cleared 15 R&D projects worth around INR 32.25 crores across key strategic areas under the National Technical Textiles Mission.

Key Highlights

- 15 R&D projects were cleared such as Specialty fibre, Protective textiles, High-Performance Textiles, Geotextiles, Medical Textiles, Sustainable Textiles, and Textiles for Building Materials.

- Among these 15 R&D projects, 7 Projects of Specialty Fibres, 2 from protective Textiles, 2 from High Performance Textiles, 1 from Geotextiles, 1 from Medical Textiles, 1 from Sustainable Textile, 1 from Textiles for Building Materials were approved.
- National Technical Textiles Mission (NTTM) aims to position the country as a global leader in Technical Textiles.
- National Technical Textiles Mission (NTTM) has been approved with a four-year implementation period from FY 2020-21 to 2023-24.
- Technical Textiles are the textiles that are valued for their functionality and usability instead of their aesthetics.
- These are futuristic and niche segments of textiles, which are used for various applications ranging from agriculture, roads, railway tracks, sportswear, health on one end to bullet proof jackets, fireproof jackets, high altitude combat gear and space applications on another end of spectrum. Technical textiles are textiles materials and products manufactured primarily for technical performance and functional properties rather than aesthetic characteristics."

Immune Imprinting

- **Context:** Recent studies have shown that a phenomenon in our bodies, called immune imprinting, might be making new boosters far less effective than expected.

Key Highlights

- Two papers, published earlier in January, 2023 in the New England Journal of Medicine (NEJM), pointed out that bivalent boosters made to counter both the Omicron strains and the original Covid-19 strain don't generate significantly greater antibody responses than an additional dose of the original mRNA vaccines.
- The observed ineffectiveness of the bivalent or variant-specific boosters might be due to immune imprinting, scientists of both studies concluded.
- In the study it was observed that the bivalent boosters "did not elicit a discernibly superior virus-neutralizing

peak antibody response as compared with boosting with the original monovalent vaccines" across all coronavirus strains tested.

About Immune Imprinting

- Immune imprinting is a tendency of the body to repeat its immune response based on the first variant it encountered through infection or vaccination — when it comes across a newer or slightly different variant of the same pathogen.
- Over the years, scientists have realized that imprinting acts as a database for the immune system, helping it put up a better response to repeat infections. After our body is exposed to a virus for the first time, it produces memory B cells that circulate in the bloodstream and quickly produce antibodies whenever the same strain of the virus infects again.
- The problem occurs when a similar, not identical, variant of the virus is encountered by the body. In such cases, the immune system, rather than generating new B cells, activates memory B cells, which in turn produce "antibodies that bind to features found in both the old and new strains, known as cross-reactive antibodies".
- Although these cross-reactive antibodies do offer some protection against the new strain, they aren't as effective as the ones produced by the B cells when the body first came across the original virus.

30th JANUARY, 2023

NidhiAapkeNikat 2.0 Programme

- **Context:** Employees' Provident Fund Organisation (EPFO) has launched a massive district outreach program in all the districts of the country through a revamped NidhiAapkeNikat program.

Key Highlights

- The aim of this program is to reach all the districts of the country on the same day i.e. 27th of every month. EPFO organized camps in 685 districts of the country.

- In the year 2015, BhavishyaNidhiAdalat was rechristened as NidhiAapkeNikat and in the year 2019, the outreach of the NidhiAapkeNikat Program was further improved by inviting participation of trade unions. In the year 2021, for grievances redressal of pensioners, an exclusive platform monthly Pension Adalat was initiated.
- The NidhiAapkeNikat 2.0 will not be only grievance redressal platform and information exchange network for the employers and the employees but also a platform for exchange of information with the district level authorities of various State and Central Government departments.

Bharat Parv

- **Context:** The six-day mega event “Bharat Parv” event is organized by the Government of India in front of Red Fort, Delhi from 26th to 31st January 2023, as part of the Republic Day Celebrations.

Key Highlights

- Ministry of Tourism has been designated as the nodal Ministry for the event, the highlights of which will include showcasing of the best Republic Day Parade tableaux at the venue, cultural performances by the Zonal Cultural Centres as well as cultural troupes from States/ UTs, a pan – India Food Court and a pan – India Crafts Bazaar with 65 handicraft stalls.
- **Major components:** The event had a Food Festival, Handicraft mela, folk and tribal dance performances, Performances by cultural troupes, a Display of Republic Day Tableaux, illumination of Red Fort, etc.
- Branding and promotion of DekhoApnaDesh, Ek Bharat Shrestha Bharat, G20 and Mission LIFE would be undertaken during the even

Khelo India Youth Games 2022

- **Context:** Fifth Khelo India Youth Games 2022 to begin in Madhya Pradesh

Key Highlights

- The fifth edition of the Khelo India Youth Games is to start from January 31 to February 11. The State Government of Madhya Pradesh is to host the event.
- For the first time, Kayaking and Canoeing are introduced in the event.
- To be held in eight cities namely Maheshwar, Balaghat, Jabalpur, Gwalior, Ujjain, Indore, and Bhopal in MP
- The Khelo India Youth Games was started in 2018 on the advice of Prime Minister Narendra Modi. At that time the name of these games was Khelo India School Games
- The Government of India conducts the Khelo India Youth Games every year to hunt talents from different parts of India. The sports event is seen as the best gateway for Indian athletes to enter international events and bring pride to the nations.
- Ministry of Youth Affairs and Sports has launched a special mobile application for the Khelo India Youth Games 2022.
- Through this App, the participating athletes, coaches, support staff, and officials from all states participating in the Games can get all information about the Games.

SAMEER

- **Context:** SAMEER, India's premier R&D Institute of Ministry of Electronics and IT (MeitY) signed a memorandum of understanding with Siemens Healthineers that will contribute towards the development of new, improved and innovative technologies for advancing healthcare and diagnostic access in India.

Key Highlights

- Welcoming the strategic agreement, the Minister of State for Electronics & Information Technology and Skill Development & Entrepreneurship, said it will make available low-cost MRIs as part of Prime Minister's vision of providing quality, and affordable healthcare and diagnostic access for every Indian.

- Digital India Programme launched by Prime Minister in 2015 has paved way for India to move from being a consumer of technology to a producer of technology, devices, and products.
- SAMEER and Siemens Healthineers in healthcare technologies particularly in Magnetic Resonance Imaging (MRI) and Linear Accelerators (LINAC), will pursue joint activities that will improve access to MRI in India.
- SAMEER has been pursuing R&D in the advanced Linear accelerators for Cancer Therapy and Magnetic Resonance Imaging systems for diagnostics.
- The partnership will help in creating local industry access for Siemens Healthineers, and in turn, SAMEER will get access to next-generation research in advanced healthcare technologies. These initiatives will enable India's health mission towards deploying healthcare technologies for early diagnostics and treatment to save lives across the country.

About SAMEER:

- SAMEER, which is the acronym for Society for Applied Microwave Electronics Engineering & Research, specializes in RF Microwaves Radar and Communication Systems, E3 testing and Medical Electronics a strategic partnership.
- Currently, SAMEER is developing IMRI (Indigenous Magnetic Resonance Imaging) Technology under the Sushrut MRI (Indian MRI) system.

31st JANUARY, 2023

National Logistics Portal–Marine

- **Context:** The Ministry of Ports, Shipping and Waterways launched the national logistics portal–marine (NLP-M), which is a single-window platform aimed at bringing all trade stakeholders together and reducing the cost of logistics through real-time mapping and provisioning.

Key Highlights

- NLP will be a single window for all trade processes of the logistics sector spread across the country covering all modes of transport in the waterways, roadways, and airways along with an E-marketplace to provide a seamless end-to-end logistic service coverage.
- The platform aims to minimize regulatory complexities by centralizing all necessary documentation, compliance certifications, and formal procedures necessary for the EXIM trade.
- The commerce ministry had also launched a similar single window portal for establishing businesses in 2021.
- The NLP-M is based on four core tenets — carrier, cargo, banking and finance, and regulatory bodies and Participating Government Agencies (PGAs).
- The United Nations Conference on Trade and Development (UNCTAD) said digitisation in trade can help eliminate many logistics obstacles.
- The portal will now replace the port community system (PCS) being used by ports for logistics mapping.
- NLP-M has been developed by Portal Infosystems, with Ernst & Young as the project management consulting firm.
- The platform is a step forward towards achieving the goals envisaged in the PM Gati-Shakti National Master Plan, which aims to synergise logistics and eliminate duplication of efforts.

ChatGPT

- **Context:** As per sources China's biggest search company Baidu expected to launch a ChatGPT-style program.

Key Highlights

- Users will be able to obtain conversational search results from the tool, similar to the well-known platform of OpenAI.

- On an ongoing, billion-dollar drive to shift beyond online marketing to more advanced technology, Baidu has invested enormous amounts of money in Artificial Intelligence.
- Their future ChatGPT replica product will be based on its Ernie platform, a sizable machine-learning system that has been built on information over many decades.
- ERNIE stands for Electronic Random Number Indicator Equipment. It is a hardware random number generator.
- ChatGPT is an AI based chatbot by OpenAI developed based on Reinforce Learning through Human Feedback (RLHF).
- Microsoft reportedly held talks to invest \$10bn in OpenAI and also intends to bring a Chat-GPT powered search feature to its search engine Bing.

Global Trans-Fat Elimination Report

- **Context:** World Health Organization recently released a report on “Global Trans – Fat Elimination”.

Key Highlights

- The health organization said the artificially produced form of fat is responsible for half a million early deaths each year.
- Products containing trans-fat are commonly found in baked goods and cooking oils.
- In 2020, the WHO said more than 58 countries have introduced laws to protect people from artificial trans-fat. But, it said, more than 100 countries should remove them from their food supplies.
- The health agency reported that two-thirds of the deaths that it blames on trans-fat happened in 15 countries. Of these countries, Canada, Latvia, Slovenia, and the United States have set limits on or banned artificial trans-fat.
- But many countries have yet to take action. In Asia, the countries are Azerbaijan, Bangladesh, Bhutan, Nepal, Pakistan, India, Iran, and South Korea. Others include Ecuador, Mexico and Egypt.
- Natural trans-fat forms in the gut of some animals and foods made from these animals such as milk and meat products.
- Artificial trans-fat, also called trans fatty acids, is created through an industrial process that adds hydrogen to vegetable oils. Food makers use this lower-cost oil so food will stay fresh longer.

