MADE EASY

WEEKLY CURRENT AFFAIRS

MAY, 2024

Week-3

15-21 May, 2024

★★ *Useful for* ★★

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

15th MAY, 2024

Smart Cities Mission (SCM)

- **Context:** The Smart Cities Mission (SCM), a flagship programme of the current government has taken a back seat in this year's list of poll promises and achievements

Key Highlights:

- The term 'Smart City' has been widely used since 2009, after the global financial crash, to describe new cities with advanced ICT and communication networks.
- **The SCM had two main aspects:**
  - (a) Area-based development consisting of three components — redevelopment (city renewal), retrofitting (city improvement), and green field projects (city extension)
  - (b) Pan-city solutions based on ICT-It comprises of some 6 categories that include e-governance, waste management, water management, energy management, urban mobility, and skill development.
- Around Rs. 2 lakh crore was allocated for the mission, with public-private partnerships (PPP) as an important driver.
- A business-style approach to governance was taken by using Special Purpose Vehicles (SPVs). These were led by government officials or representatives from multinational corporations.

Exercise SHAKTI

- **Context:** The 7th edition of India- France Joint Military Exercise SHAKTI commenced at Umroi, in Meghalaya.

Key Highlights:

- Exercise "Shakti" is a biennial event conducted alternatively in India and France.
- The last edition took place in France in 2021.
- The joint exercise will focus on operations in the semi-urban and mountainous terrain.

Other exercises between India and France:

1. Exercise Garuda: Indian Air Force & French Air Force
2. Exercise Varuna: Indian Navy & French Navy
3. Exercise Desert Knight: It is conducted between the Indian Air Force (IAF), French Air and Space Force (FASF) and United Arab Emirates (UAE) Air Force.

Nairobi Declaration

- **Context:** African presidents have endorsed the Nairobi Declaration on fertiliser and soil health, committing to prioritise domestic fertiliser production and triple it in the next 10 years to boost agricultural production.

Key Highlights:

- The declaration has a raft of recommendations, pledges and demands believed to have boosted Africa's bargaining power on international platforms.
- It highlights green investment opportunities in Africa's emerging blue and green economies.
- It also urges world leaders to back a proposed "carbon tax on fossil fuel trade, maritime transport and aviation".
- While calling the international community to order, the declaration wants them to honour the annual climate finance pledge of $100bn they made, as a matter of urgency.
- With many African countries having defaulted on loans from developed countries, the declaration proposes debt relief interventions.
- It recommends extending the debt repayment period and instituting a 10-year grace period to allow the borrowed funds to serve intended development goals.

16th MAY, 2024

La Nina

- **Context:** As per the Australia's weather bureau there are early signs that a La Nina weather event may form in the Pacific Ocean later this year.

Key Highlights:

- La Nina means Little Girl in Spanish. La Niña is also sometimes called El Viejo, anti-El Niño, or simply "a cold event."
- La Niña is a weather phenomenon that occurs in the Pacific Ocean. It is the counterpart of El Niño, and both are part of the larger El Niño-Southern Oscillation (ENSO) cycle.
- The trade winds become stronger than usual, pushing more warmer waters towards the Indonesian coast, and making the eastern Pacific Ocean colder than normal.

'Sangam: Digital Twin' Initiative

- **Context:** Recently, the Department of Telecommunications (DoT) announced the participants for 'Stage 1' of the 'Sangam: Digital Twin with AI-Driven Insights Initiative'.

Key Highlights:

- It is a technology that offers a solution by creating virtual replicas of physical assets, allowing for real-time monitoring, simulation, and analysis for experimental iterations and feedback loop to adapt to the changes for achieving the best outcomes.
- It is a Proof of Concept (PoC) distributed in two stages to be conducted in one of the major cities of India.
- It symbolises a collaborative leap towards reshaping infrastructure planning and design, combining the prowess of 5G, IoT, AI, AR/VR, AI native 6G, Digital Twin, and next-gen computational technologies with the collective intelligence of public entities, infrastructure planners, tech giants, startups, and academia to break the silos and engage in a whole-of-nation approach.
- **First Stage:** It is exploratory for clarity of horizon and creative exploration to unleash potential.
- **Second Stage:** It is for practical demonstration of specific use cases generating a future blueprint that may serve as a roadmap to scale and replicate successful strategies in future infrastructure projects through collaboration.

Digital Competition Bill, 2024

- **Context:** India proposed Digital Competition Bill, 2024 to prevent big tech companies like Google, Facebook, and Amazon from engaging in anti-competitive practices, similar to the EU's Digital Markets Act.

Key Highlights:

- Big tech companies have a history of anti-competitive behavior. For instance, Google was fined Rs 1.337 crore for its conduct in the Android ecosystem.
- The dominance of a few companies creates high barriers for new entrants. This limits innovation to within big tech firms.
- The bill aims to lower these barriers and foster competition. This can lead to more innovation outside the big tech companies.
- Smaller businesses struggle to compete with the market dominance of big tech. The bill aims to create a more level playing field.

PREFIRE Polar Mission

- **Context:** NASA will soon launch 2 satellites under PREFIRE polar mission. PREFIRE stands for Polar Radiant Energy in the Far-InfraRed Experiment.

Key Highlights:

- The mission will be aimed at filling the knowledge gap about two of the most remote regions on Earth — the Arctic and Antarctic.
- It will measure the amount of far-infrared radiation (heat) emitted from two of the coldest, most remote regions on the planet, into space.
- It will find out how atmospheric water vapor and clouds influence the amount that escapes to space.
- PREFIRE is composed of two small CubeSats outfitted with specialized miniature heat sensors.
- They will be launched with the help of Electron launch vehicle, which is equipped with the technology proven on Mars.

18th MAY, 2024

Bharat Parva Celebration

- **Context:** Secretary of the Ministry of Information and Broadcasting has recently hosted the inaugural Bharat Parva event at the ongoing Cannes Film Festival.

Key Highlights:

- The event was organized at 77th Cannes Film Festival, by NFDC in association with FICCI under the aegis of the Ministry of Information and Broadcasting, Government of India.
- The event celebrated India's diverse culture, cuisine, handicrafts, and cinema on the French Riviera.
- It was marked by the celebration of cinema, culture, and artistic unity. This has showcased India's soft power on the international platform.
- The participation of renowned Indian actors underscored the diverse and vibrant essence of Indian cinema and its increasing influence on the international platform.

Open Network for Digital Commerce (ONDC)

- **Context:** Recently, the Department for Promotion of Industry and Internal Trade (DPIIT) organised the 'ONDC Startup Mahotsav' in collaboration with the Open Network for Digital Commerce (ONDC) and Startup India.

Key Highlights:

- It is a network based on open protocol that enables local commerce across various segments such as mobility, grocery, food order and delivery, hotel booking, and travel, among others.
- It allows these services to be discovered and engaged by any network-enabled application.
- It aims to democratise and revolutionise the e-commerce landscape in the country.

- It recognises the unique opportunity to increase e-retail penetration from the existing 4.3% to its maximum potential.
- It facilitates the rapid adoption of e-commerce, along with the boosts and strengthens the growth of startups in India.

South Asian Association for Regional Cooperation (SAARC)

- **Context:** The secretary general of SAARC, has met senior Indian officials to discuss the status of regional cooperation and assess the working of institutions under the grouping.

Key Highlights:

- SAARC was established in 1985.
- It was set up in Kathmandu, Nepal, in 1987.
- It aims to accelerate the process of economic and social development in its member states through increased intra-regional cooperation.
- SAARC has eight member countries: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri-Lanka.

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JAXA's LUPEX mission

- **Context:** As per the Japan Aerospace Exploration Agency (JAXA) The India-Japan partnership for their joint moon mission, Lunar Polar Exploration Mission (LUPEX), is likely to take flight in a few years.

Key Highlights:

- LUPEX marks JAXA's first attempt to send a large rover to the moon.
- The mission's primary objective is to explore the lunar surface and search for subsurface water.
- It will also investigate its quantity, distribution on the lunar surface and below ground, and form, such as the level of mixing with dry regolith, the layer of loose unconsolidated rock and dust that sits atop a layer of bedrock.

- The Japanese space agency is responsible for the lunar rover, the Indian Space Research Organisation (ISRO) is handling the lander that will carry the rover.
- The mission will also carry observation instruments from US' National Aeronautics and Space Administration (NASA) and the European Space Agency (ESA), further enhancing its scientific capabilities.

National Savings Certificate (NSC)

- **Context:** Prime Minister Narendra Modi disclosed his investments in the National Savings Certificate (NSC) scheme.

Key Highlights:

- The NSC is a fixed-income investment scheme introduced by the Government of India. It is designed to encourage investment and tax savings, especially for low- to mid-income investors.
- NSCs can be purchased at any post office. They can be bought in an individual's name, for a minor, or jointly with another adult.
- Only individual Indian citizens who are residents of India. There is no age restriction for purchasing NSC. Hindu Undivided Families (HUFs), trusts, and private and public limited companies cannot invest.

20th MAY, 2024

Bond Buyback

- **Context:** The Reserve Bank of India (RBI) has addressed the tight liquidity in the banking system by significantly lowering the government's treasury bill sales and introducing a new set of bonds for the Centre's buyback operations.

Key Highlights:

- It is a financial operation where the government uses its cash reserves to prematurely pay back a portion of its outstanding debt through bonds. It is also known as government bond buyback.

- Bond buybacks are used to manage the government's debt more effectively by reducing the burden of scheduled repayments.
- The government can lower its interest expenses through bond buybacks. Purchasing its own bonds boosts their demand, raises their prices, and lowers their yields, resulting in cheaper borrowing costs.
- Banks are significant holders of government bonds. They receive cash from the government in exchange for the bonds they sell, which increases liquidity in the banking system.
- This influx of cash can be vital during periods when banks experience liquidity shortages, helping stabilize the financial system.
- India's sovereign bond market has seen notable activity concerning bond buybacks.
- The Reserve Bank of India (RBI) carried out a bond buyback, accepting Rs. 12,582.98 crore in bids from a total offer of Rs. 1 lakh crore.
- Banks sought higher prices (meaning lower yields) for their bonds than the RBI was willing to accept.
- RBI's cautious stance was aimed at avoiding a significant impact on short-term bond yields and signaling potential changes in monetary policy.

IMD Issues Red Alert for Heat Waves

- **Context:** IMD announced the onset of monsoon over the south Andaman Sea and the Nicobar Islands, while it also warned of a 'heat wave to severe heat wave' over northwest India.

Key Highlights:

- A red warning implies that local agencies need to take action to prevent extreme heat-related emergencies.
- A Heat Wave is a period of abnormally high temperatures, more than the normal maximum temperature that occurs during the summer season in the North-Western parts of India.
- Heat Waves typically occur between March and June, and in some rare cases even extend till July.

- Heat wave is considered if the maximum temperature of a station reaches at least 40°C or more for Plains and at least 30°C or more for Hilly regions.
- The health impacts of Heat Waves typically involve dehydration, heat cramps, heat exhaustion and/or heat stroke.

RoseTTAFold: An AI Tool in Drug Development

- **Context:** The Introduction of Artificial Intelligence (AI) tools like RoseTTAFold has greatly accelerated the process of drug development offering new possibilities for rapid advancements.

Key Highlights:

- It is a software tool that uses deep learning to quickly and accurately predict protein structures based on limited information.
- The software is built on a "three-track" neural network that analyzes protein sequences, interactions between amino acids, and potential three-dimensional structures simultaneously.
- It was developed by researchers at the University of Washington, U.S.
- It utilizes generative diffusion-based architectures which is a type of AI model to predict structural complexes.
- It employs deep learning techniques to quickly and accurately predict protein structures from limited data.
- It is capable of predicting not only static protein structures but also protein-protein interactions.
- It can predict interactions and structures involving combinations of protein, DNA, and RNA.
- The tool significantly reduces the time required to determine protein structures. This process can otherwise take years of laboratory work using traditional methods.

21ˢᵗ MAY, 2024

RBI's Approach to Controlling Inflation

- **Context:** The challenges and debates around the Reserve Bank of India's (RBI) approach to controlling inflation through its interest rate policy. It examines the effectiveness of the current inflation-targeting framework and suggests reconsidering the targeted indices and their calculations.

Key Highlights:

- In 2020-21 and 2021-22, the Reserve Bank of India (RBI) kept interest rates low. However, by mid-2021, inflation started rising, which the RBI initially ignored, labeling it transitory.
- Then, in May 2022, the RBI dramatically increased the repo rate from 4% to 6.5% by February 2023 and has maintained that level since.
- High real interest rates are currently seen as too restrictive for economic growth.
- Experts argue that these rates discourage new investments, which is vital for sustaining economic momentum.
- There is speculation in the market about when the RBI will reduce these rates, indicating widespread concern about their impact.
- The debate focuses on whether the high rates have already achieved their purpose of controlling inflation and whether it is time for a reduction.
- The RBI should consider reducing interest rates as the current high rates may have already achieved their purpose of controlling inflation.
- There should be a reevaluation of the inflation-targeting framework, particularly examining the effectiveness of the CPI as the sole index. Other indices like the Wholesale Price Index (WPI) and GDP deflator could provide additional insights.
- Transparency should be improved regarding the RBI's decision-making processes and the factors influencing these decisions, especially concerning any reports submitted on failing to meet inflation targets, to foster greater accountability and public trust.

Project Astra

- **Context:** Recently, Google showcased an early version of Project Astra at its annual developer conference.

Key Highlights:

- It is Google's initiative to develop AI that understands and responds using text, voice, and visual inputs. It is designed for devices like smartphones and smart glasses.
- This technology enables users to interact with their environment by capturing information through their device's camera. It is similar to asking a question about something they see or hear.
- The main aim is to facilitate real-time information exchange and interaction through wearable technology.
- The Google AI Assistant within Project Astra can retrieve and provide information from both the internet and real-world scenes captured by the device's camera.
- The AI is designed to learn from interactions and the user's environment, enhancing its effectiveness as a personal assistant.

Antarctic Treaty Consultative Meeting (ATCM 46)

- **Context:** India is hosting the 46th session of the Antarctic Treaty Consultative Meeting (ATCM 46), also referred to as the Antarctic Parliament, from May 20-30 in Kochi.

Key Highlights:

- 46th Antarctic Treaty Consultative Meeting (ATCM 46) is also referred to as the Antarctic Parliament. It is to be hosted from May 20-30 at Kochi, India.
- The National Centre for Polar and Ocean Research, Goa has organised the meeting under the auspices of the Ministry of Earth Sciences (MoES). India last hosted the ATCM in New Delhi in 2007.
- Participation: Representatives from all 56 member countries of the Antarctic Treaty.

About Antarctic Treaty

- It is an international agreement that governs activities in Antarctica. It was signed on December 1, 1959, and entered into force on June 23, 1961.
- The treaty designates Antarctica as a scientific preserve and ensures that it remains exclusively for peaceful purposes.
- The Antarctic Treaty designates Antarctica as a neutral, demilitarized zone to be used solely for peaceful purposes.
- It was initially signed by 12 countries. It now includes 56 countries, with India joining in 1983.