

**ECONOMY****1. T+0 and instant settlement cycle**

- Context: The Securities and Exchange Board of India (SEBI) is at the forefront of revolutionizing settlement cycles in the secondary markets for the equity cash segment.
- By proposing a paradigm shift to T+0 (same day) settlement and an optional instant settlement cycle, SEBI aims to align equity trading with contemporary investor preferences while leveraging popular instant payment methods like the Unified Payment Interface (UPI).

T in Settlement Cycles:

- The "T" in settlement cycles denotes the day on which a transaction or trade occurs, representing the transaction date.
- The settlement cycle, expressed as "T+n," indicates the number of days after the transaction date (T) by which the trade settlement concludes.

Evolution of Settlement Cycles:

- Over the years, SEBI has played a pivotal role in streamlining settlement cycles.
- In 2002, the settlement cycle was reduced from T+5 to T+3.
- Subsequently, in 2003, it was further shortened to T+2. In the most recent development, the settlement of funds and securities transitioned to the T+1 cycle, fully implemented by January 2023.

SEBI's Vision for New Settlement Cycles: A Phased Approach

- Phase 1: T+0 Settlement Cycle
  - SEBI envisions an optional T+0 settlement cycle for trades until 1:30 PM, with the goal of settling funds and securities on the same trading day by 4:30 PM.
- Phase 2: Instant Settlement Cycle
  - This phase introduces an optional immediate trade-by-trade settlement, encompassing both funds and securities, with trading permitted until 3:30 PM.
- Rollout Strategy:
  - SEBI proposes the initial rollout of the T+0 settlement for the top 500 listed equity shares in three tranches (200, 200, 100) based on market capitalization. This strategic approach aligns with the dynamic changes observed in the Indian securities market, characterized by increasing volumes, values, and participants.

Benefits of the Proposed Settlement Cycles:

- Clients:

The new settlement cycles enable faster pay-outs of funds against securities for sellers and vice versa, providing enhanced flexibility and responsiveness to investor needs.

- Securities Market Ecosystem:

The acceleration of pay-outs is expected to significantly contribute to the efficiency and liquidity of the securities market ecosystem, reflecting SEBI's commitment to fostering a robust and dynamic financial landscape.

**2. Centre hikes copra MSP by Rs 250-300 per quintal for 2024**

- Context: The Cabinet Committee on Economic Affairs, headed by the Prime Minister, has sanctioned the Minimum Support Prices (MSPs) for Copra for the upcoming 2024 season.

MSP Announcement for 2024 Season: Nurturing Farmer Income

- Fair Average Quality of Milling Copra: Rs.11,160 per Quintal.
- Ball Copra: Rs.12,000 per Quintal

Usage of Copra

- Milling Copra: Oil Extraction
  - Milling copra finds its primary use in the extraction of oil, playing a crucial role in various industrial applications.
  - Kerala and Tamil Nadu are major producers
- Ball/Edible Copra: Dry Fruit and Religious Use
  - Ball copra, on the other hand, serves a dual purpose, being consumed as a dry fruit and utilized in religious ceremonies.
  - Karnataka is the major producer.

Understanding Minimum Support Price (MSP)

- Minimum Support Price, is the minimum price set by the government for crops deemed remunerative to farmers, providing them with economic support.
- Government agencies procure crops at MSP whenever they engage in procurement activities, reinforcing the economic viability of farming.

**MSP for Various Crops:**

- The Commission for Agricultural Costs & Prices (CACP) plays a pivotal role in recommending MSPs for 23 mandated crops, alongside fair and remunerative prices (FRP) for sugarcane.
- The recommendations put forth by CACP receive approval from the Cabinet Committee on Economic Affairs (CCEA), solidifying the government's commitment to agricultural welfare.
- List of Crops Covered by MSP includes
  - Cereals- Paddy, wheat, barley, jowar, bajra, maize and ragi
  - Pulses- Gram, arhar/tur, moong, urad and lentil
  - Oilseed- Groundnut, rapeseed/mustard, soyabean, sunflower seed, sesamum, safflower seed and niger seed
  - commercial crops- Raw cotton, Raw jute, Copra, Sugarcane (Fair and remunerative price)

**ENVIRONMENT****1. Pesticide Poisoning**

- Context: Recent years have witnessed a distressing trend in Maharashtra, a region susceptible to droughts and crop failures.
- Pesticide poisoning has emerged as a lethal threat, claiming the lives of numerous farmers and farm workers. Notably, Yavatmal district has reported 20 farmer deaths attributed to pesticide poisoning since 2017, with many others suffering from various health complications.

**Understanding Pesticides: Types and Risks**

- Pesticides, encompassing both chemical and biological substances, are designed to prevent, destroy, or control damage from pests.
- With applications in both agricultural and non-agricultural domains, these substances, when misused, overused, or sold illegally, pose significant risks to human health and the environment.

**Types of Pesticides: A Diverse Arsenal**

- Insecticides: Chemicals protecting plants from insects and pests fall under this category.
- Fungicides: Designed to control the spread of fungal diseases in plants.
- Herbicides: Chemicals targeting the growth of weeds in cultivation areas.
- Bio-Pesticides: Derived from animals, plants, bacteria, etc., these offer a biological alternative.
- Others: Encompassing plant growth regulators, nematicides, rodenticides, and fumigants.

**Pesticide Poisoning: A Silent Threat**

- The term Pesticide Poisoning refers to the adverse effects of pesticide exposure on humans or animals, manifesting in various health issues.
- Classifications:
  - Acute Poisoning: Resulting from a high-dose exposure in a short period, leading to immediate health consequences.
  - Chronic Poisoning: Caused by prolonged exposure to low doses, resulting in long-term damage to organs and bodily systems.
- Statistics and Global Recognition:
  - The World Health Organization (WHO) identifies pesticide poisoning as a significant cause of death among agricultural workers globally.
- Government Action in 2023
  - The government, recognizing the severity of the issue, has banned three additional insecticides in 2023: Dicofol, Dinocap, and Methomyl, adding to the list that already included monocrotophos.

**Regulating Pesticides in India: The Legislative Landscape**

- Legal Framework
  - Insecticides Act, 1968: Governs the registration, manufacture, and sale of pesticides in India.
  - Insecticides Rules, 1971: Supplement the Act, providing detailed guidelines for regulation.
- Administration:
  - Administered by the Department of Agriculture and Farmers Welfare under the Ministry of Agriculture and Farmers Welfare.

**Issues regarding use of Pesticides**

- Effects on Farmers:
  - Symptoms: Chronic low-level pesticide exposure is linked to various nervous system symptoms, including headache, fatigue, dizziness, tension, anger, depression, impaired memory, Parkinson's disease, and Alzheimer's disease.
- Effects on Consumers:

- Biomagnification: Pesticides, by moving through the environment and entering soil or water systems, accumulate in aquatic animals, plants, and humans through a process known as Biomagnification.
- Effects on Agriculture:
  - Contributions: Decades of pesticide use contribute significantly to the current ecological, economic, and existential crisis in the Indian agriculture sector.
- Regulatory Issues:
  - Legislation: The Insecticides Act, 1968, a central act, governs education and research related to insecticides, creating regulatory challenges. Over 100 pesticides still approved for use in India are banned in other countries.

#### Way Forward

- Regulatory Reforms:
  - Enforcement: Strictly enforce regulations to curb illegal sale and misuse of pesticides.
  - Penalties: Implement penalties for violations of pesticide usage guidelines.
- Government Support:
  - Financial Assistance: Provide financial support to farmers for adopting safer and sustainable agricultural practices, potentially through subsidies for organic farming, integrated pest management, or safer pesticides.
- Community Awareness Programs:
  - Education: Conduct community-level awareness campaigns to educate people about the risks associated with pesticide use.
  - Community Involvement: Involve local communities in monitoring and reporting cases of misuse or poisoning.
- Compensation Mechanism:
  - Establishment: Set up a compensation mechanism for victims of pesticide poisoning.
  - Efficiency: Ensure a swift and transparent process for filing claims and receiving compensation for medical expenses and economic losses.

## **2. India's Black Tigers**

- Context: The Indian government disclosed to the Rajya Sabha the existence of a distinct group of tigers known as Black Tigers, residing exclusively in Odisha's Similipal Tiger Reserve.
- This rare color variant of the Bengal Tiger, though not a distinct species, captures attention due to its unique coat coloration stemming from a genetic mutation.

#### Understanding Black Tigers

- Genetic Mutation: The distinct coat color and patterning of Black Tigers result from a single mutation in the Transmembrane Aminopeptidase Q (Taqppe) gene, giving rise to pseudo-melanism.
- Not a Separate Species: Black Tigers are not a separate species but rather a rare color variant of the Bengal Tiger, making them unique in appearance.

#### Similipal Tiger Reserve: A Haven for Tigers

- Establishment: Designated as a tiger reserve in 1956, Similipal has been an integral part of Project Tiger since 1973.
- Biosphere Reserve: Acknowledging its ecological importance, Similipal was declared a biosphere reserve in 1994.
- UNESCO World Network: Similipal is a proud member of the UNESCO World Network of Biosphere Reserves, contributing to global biodiversity conservation.
- Mayurbhanj Elephant Reserve: Similipal is a vital component of the Similipal-Kuldiha-Hadgarh Elephant Reserve, known as the Mayurbhanj Elephant Reserve.

#### Wildlife Abundance in Similipal

- Rich Fauna: Similipal boasts a diverse array of wildlife, including tigers, elephants, various bird species, and amphibians.
- Two Tribal Communities: The reserve is not only a wildlife haven but also home to two indigenous tribes, the Erenga Kharias and Mankirdias, actively engaging in traditional agricultural practices.

#### The Mystery of Black Tigers

- Genetic Basis: The occurrence of Black Tigers in Similipal is attributed to the geographic isolation of the region, leading to inbreeding among genetically related individuals.
- Inbreeding Implications: The consequences of inbreeding are profound, with isolated populations being prone to extinction over relatively short periods, raising concerns for tiger conservation efforts.

## **POLITY**

### Tribunals

- Context: In a recent legal development, the Supreme Court addressed the limitations of tribunals, particularly in the case of Union of India (UoI) & Ors. v. AIR Commodore NK Sharma (2023), emphasizing that tribunals cannot compel the government to formulate policies.
- The Supreme Court's ruling in this case clarified several key points regarding the authority and boundaries of tribunals, particularly the Armed Forces Tribunal (AFT):
  - No Policy Directives: Tribunals, including the AFT, lack the authority to direct the government to create specific policies. The formulation of policies remains within the exclusive domain of the executive.
  - Judicial Constraints: Despite possessing powers akin to a civil court, the AFT does not possess the overarching authority of the Supreme Court or the High Courts. Moreover, High Courts, acting under Article 226 of the Constitution, cannot mandate policy creation by the government.
  - Article 226 Powers: Article 226 grants High Courts the authority to file lawsuits against government entities in case of violations of citizens' rights. However, this authority does not extend to directing the government to create specific policies.
  - Government Prerogative: The establishment and sanctioning of policies related to defense personnel services or regularization fall solely within the prerogative of the government.
  - Tribunal Constraints: A tribunal, functioning within the framework of its governing legislation, lacks the power to mandate policy creation, underscoring the separation of powers.

### Tribunals

- Tribunals, as quasi-judicial institutions, play a crucial role in resolving administrative or tax-related disputes, undertaking functions such as adjudication, decision-making, and reviewing administrative actions.

### Constitutional Provisions: Establishing Legal Foundations

- Incorporation in the Constitution: Tribunals were introduced into the Indian Constitution through the 42nd Amendment Act of 1976.
- Article 323-A: This constitutional provision deals specifically with Administrative Tribunals, granting the power to establish tribunals for public service matters.
- Article 323-B: It extends the scope to tribunals for other matters, providing authority to both Parliament and state legislatures for their establishment.
- Distinct Aspects: Article 323 A focuses on public service matters, while Article 323 B covers a range of subjects, allowing for a hierarchy of tribunals.
- Article 262: The Constitution assigns a role to the Central government in adjudicating inter-state river conflicts among regional governments.

### Different Tribunals in India: Varied Roles and Responsibilities

- Administrative Tribunals: Specialized Bodies for Public Service Disputes
  - Instituted under the Administrative Tribunals Act, 1985, they address disputes related to recruitment and terms of service for individuals in public posts under Union and State governance.
  - The Central Administrative Tribunal (CAT), along with state-specific and joint tribunals, fulfills the role of specialized quasi-judicial entities.
- Water Disputes Tribunal: Resolving Inter-State River Conflicts
  - ISRWD Act, 1956: Enacted by Parliament, this legislation establishes various Water Disputes Tribunals to address conflicts related to inter-state rivers.
  - Standalone Tribunal: The Inter-State River Water Disputes (Amendment) Bill, 2019 introduces a standalone tribunal to streamline the resolution process for water disputes.
- Armed Forces Tribunal (AFT): Ensuring Military Justice
  - Establishment: Formed under the Armed Forces Tribunal Act, 2007, the AFT adjudicates disputes and complaints concerning commission, appointments, and conditions of service for Armed Forces personnel.
  - Composition: Judicial Members, including retired High Court Judges, and Administrative Members, retired Armed Forces personnel, contribute to its composition.
- National Green Tribunal (NGT): Preserving Environmental Harmony
  - Formation: Established under the National Green Tribunal Act, 2010, the NGT expedites resolutions for environmental disputes, comprising judges and environmental specialists.
- Income Tax Appellate Tribunal: Addressing Tax Disputes
  - Section 252 of the Income Tax Act, 1961 empowers the Central Government to constitute an Appellate Tribunal, featuring Judicial Members and Accountant Members.

## PRELIMS

### 1. FEAST Software



- The Vikram Sarabhai Space Centre (VSSC) of the Indian Space Research Organisation (ISRO) has introduced a sophisticated analysis tool, FEAST.
- It is designed to conduct Finite Element Analysis (FEA) for a diverse range of structures, including rockets, aircraft, satellites, and buildings.

About FEAST

- FEAST, an acronym for Finite Element Analysis of Structures, represents a cutting-edge FEA software developed by the VSSC.
- FEA is a computerized method employed for predicting how structures or components respond to real-world forces, encompassing structural loads, thermal conditions, and various physical effects encountered during operational conditions.

**2. Smart Lander for Investigating Moon (SLIM) Mission**

- The Japan Aerospace Exploration Agency (JAXA) proudly announced the successful entry of its "Smart Lander for Investigating Moon" (SLIM) into lunar orbit, marking a significant achievement in lunar exploration.

What is SLIM?

- SLIM is an experimental mission orchestrated to demonstrate precise and accurate lunar landings.
- Launched by JAXA in September 2023, SLIM embarked on its lunar exploration journey alongside XRISM, a next-generation X-ray space telescope, aboard an H-2A rocket.
- As part of its mission, SLIM is set to deploy two small rovers named Lunar Excursion Vehicle (LEV) 1 and 2, contributing to the study of the lunar surface, collection of temperature and radiation data, and exploration of the moon's mantle.
- Scheduled for a soft landing on the lunar surface in January, SLIM aims to touch down within a 100-meter radius of its designated point. The chosen site is near the Shioli Crater, positioned at 13.3° S and 25.2° E.
- SLIM incorporates crushable, 3D-printed aluminum lattice landing legs, strategically designed to absorb the impact of touchdown and ensure proper orientation on the lunar surface.

**ANSWER WRITING**

**"Citizen participation is key to the success of e-governance initiatives in rural India." Comment. (Answer in 150 words)**

In recent times, the government is focusing on e-governance to catalyse rural development. It is important to set the agenda of e-governance in rural areas, since India is predominantly a rural country with two-third population and 70% workforce residing in the rural areas. Further, rural economy constitutes nearly 50% of the National Income. In this context, the government has taken several initiatives such as e-Panchayat, e-Gram, e-Choupal, e-Sanjeevani, Bhoomi, e-Sewa, etc., which have added significant value to the governance process.

However, the success of any e-governance initiative is based on citizen participation and engagement. It is required due to the democratic setup and diversity of India. Also, it is essential in all public policies, especially in e-governance designed for rural areas, in the following ways:

- Citizen participation ensures that citizens are treated as valued customers in public service delivery, as it ensures that programmes and policies are designed after understanding social-cultural factors, affordability as well as other expectations of the people.
- It will reduce the conflicts and confusion with regard to the policies/schemes and make it more coherent since it is people-driven. Local people can state their needs and the government can make them aware of the technological alternatives available to them in order to find the best fit for the community.
  - o The apprehensions of impact of digitisation on repetitive jobs in rural areas can be minimised by making the involved members aware of the opportunities.
  - o It would reduce the trust deficit between the government and the people.
- Citizens can be the most effective partners in improving the quality and timely delivery of services by proper and timely feedback.
- Involving citizens would empower certain people as "Digital Champions", which would then provide thrust to the e-governance agenda, as association of community members would increase the accessibility and adoption rates of e-governance services through peer learning.
- It makes citizens more accountable and responsible in the formulation and implementation of public policies by developing a sense of belongingness and ownership.
- It will help in improving the position of marginalized and vulnerable groups that are often neglected, since their voice would also be heard in the process.
- It will help in developing long-term sustainable e-governance and outcome-focused initiatives owing to superior monitoring by the people, as the results and sustainability aspect would directly impact the citizens themselves.

Interestingly, rural India has a 20% higher presence of Internet users than urban areas in the country. Moreover, growth in Internet users in rural India has also been significantly higher than in urban centres since 2019. Thus, the government's focus to bring e-governance in rural areas has come at an opportune time. The higher the citizen participation, the better is the overall governance and its effect on the socio-economic outcome and well-being..

**MCQs**

- Which of the following statements is incorrect about the liquidity Trap ?
  - Interest rates are so low that most people do not invest in bonds.
  - The speculative money demand function is infinitely elastic in this situation.
  - The expansionary monetary policy fails to stimulate economic growth.
  - High personal spending is witnessed in the economy.**

- Consider the following statements
  - The Currency Deposit Ratio is the proportion of the total deposits commercial banks keep as reserves.
  - The Reserve Deposit Ratio is the ratio of money held by the public in currency to that held in bank deposits.

Which of the above statements is/are correct?

- 1 Only
- 2 Only
- Both**
- None

- Consider the following statements context of the Cash Reserve Ratio
  - A high Cash Reserve Ratio decreases the value of the money multiplier.
  - Banks get interest on the money kept with the RBI under the Cash reserve ratio requirements.
  - The Cash Reserve Ratio can be maintained either in gold or cash.

How many above statements is/are correct?

- Only one
- Only two**
- All the three
- None

- Consider the following statements with respect to financial markets
  - They provide liquidity to financial assets.
  - They are classified on the basis of the maturity of financial instruments traded in them.

Which of the above statements is/are correct?

- 1 Only
- 2 Only
- Both**
- None

- Which one of the following statements is correct regarding Primary Markets?
  - It deals with only debt instruments.
  - It deals with the trading of existing shares only.
  - The prices in the Primary markets are determined by demand and supply for the securities.
  - It deals with new securities being issued for the first time.**

- Consider the following steps taken by the Government of India to create a conducive environment for sustainable energy growth:

- There is a waiver of Inter-State Transmission (ISTS) charges for electricity generated from solar and wind for a fixed duration.
- The limit of open access has been reduced to 100 kW, paving the way for small consumers to purchase Renewable Energy.
- For Renewable Energy procured beyond the obligation, tradable Renewable Energy Certificates can be issued.

How many above statements is/are correct?

- Only one
- Only two
- All the three**
- None

- Consider the following statements with reference to Prix Versailles,:

- It is announced each year at UNESCO.
- It is announced in memory of the signing of the Treaty of Versailles.

Which of the above statements is/are correct?

- 1 Only**
- 2 Only
- Both
- None

- Consider the following statements with reference to the Project PRAYAS:

- It was launched to commemorate the International Migrants Day.
- The project will be assisted by the International Organisation for Migration (IOM) Development Fund.

Which of the above statements is/are correct?

- 1 Only
- 2 Only
- Both**
- None

- 'National Mathematics Day' is celebrated every year to commemorate who among the following mathematicians?

- Aryabhata
- Satyendranath Bose
- Srinivasa Ramanujan**
- Brahmagupta

- Consider the following statements regarding Indian Ocean Rim Association (IORA).

- All the countries bordering Indian Ocean are members of Indian Ocean Rim Association.
- All the BIMSTEC countries are members of Indian Ocean Rim Association.
- The goal of Indian Ocean Rim Association is to strength regional cooperation and sustainable development within the Indian Ocean Region.

How many above statements is/are correct?

- Only one**
- Only two
- All the three
- None