

PRELIMS MANTRA – 4 (16/02/2025 & 17/02/2025)

- **'Status of Devolution to Panchayats in States – An Indicative Evidence-Based Ranking' (2024)** released by Centre. States/UTs were ranked according to overall panchayat DI and six key dimensions of framework, functions, finances, functionaries, capacity enhancement, and accountability. **Union Ministry of Panchayati Raj and Indian Institute of Public Administration, New Delhi, prepared report. Karnataka ranks first** with an overall index score of 72.23 followed by Kerala (70.59), Tamil Nadu (68.38), and Maharashtra (61.44).
- **Autonomous Systems Industry Alliance (ASIA):** India and U.S. are scaling up **cooperation in underwater domain awareness (UDA)** with a new initiative, Autonomous Systems Industry Alliance (ASIA), announced during PM's recent visit to U.S. The alliance, aimed at scaling up industry partnerships and production in Indo-Pacific region, has identified a range of UDA technologies for co-production in India.
- **Typhoid:** It is a **bacterial infection** that affects intestines and sometimes blood stream, **caused by Salmonella typhi bacterium**. Infection is spread by **consumption of contaminated food or water, contact with faeces or urine of an infected person or sexual contact**. Treatment includes use of antibiotics such as chloramphenicol, ampicillin, and ciprofloxacin.
- **Minimum Selling Price:** With a view to protect interests of farmers, concept of Minimum Selling Price (MSP) of sugar was **introduced in 2018 so that industry may get at least minimum cost of production of sugar**, to enable them to clear cane price dues of farmers. Under **Essential Commodities Act, 1955, Government has notified Sugar Price (Control) Order, 2018**. Under provisions of said order, Government will fix Minimum Selling Price (MSP). MSP of sugar has been fixed considering components of Fair & Remunerative Price (FRP) of sugarcane and minimum conversion cost of most efficient mills. **State Advised Prices (SAP) are announced by key sugarcane producing states which are generally higher than FRP**. Fair and remunerative price (FRP) is minimum price at which rate sugarcane is to be purchased by sugar mills from farmers. **FRP is determined on recommendation of Commission for Agricultural Costs and Prices (CACP) and are announced by Cabinet Committee on Economic Affairs**, which is chaired by Prime Minister.
- **Loggerhead turtle** can learn and remember magnetic signature of an area and does a 'turtle dance' when in a location that they associate with food, a study in Nature reports.
- **Quiescence: Flightless Antarctic midge (Belgica antarctica)** is only known insect native to Antarctica that **can survive extreme climate (Extremophile)**. It is found that midge deals with seasons during its two-year life cycle by undergoing quiescence in its first year and obligate diapause in its second. **Quiescence is a form of dormancy in immediate response to adverse conditions**, and when conditions improve, organism becomes active again. Quiescence enables a swift transition between active and inactive lifestyles, making it possible to maximally exploit periods when temperatures exceed a certain threshold.
- **Fagli festival:** It is celebrated to **mark the end of winter, in Himachal Pradesh's Kullu district**.
- **Deoch-Pachami coal mining project in West Bengal's Birbhum district:** It is being touted as **largest coal block in India and second-largest coal block in world**, with an estimated reserve of 1,240 million tonnes (MT) of coal and 2,675 MT of basalt. West Bengal Power Development Corporation Ltd. (WBPDCL) is executing agency.
- **Indian Ocean Conference:** India, along with Singapore and Oman, is hosting 8th Indian Ocean Conference (IOC) in Muscat, organised by India Foundation. Theme for this year of Conference is **Voyages to New Horizons of Maritime Partnership**. Indian Ocean Conference was **started by India Foundation in 2016 at Singapore**, with participation from 30 countries.
- **Diversity, Equity, and Inclusion (DEI):** It refers to a wide range of principles and practices aimed at enriching a space by making sure all groups of people are represented (diversity), provided with measures to ensure equality by repairing past harms (equity), and given the support they need to thrive alongside their peers (inclusion).
- **F-35 (fifth generation fighter aircraft (FGFA) of U.S.):** It is a **tri-service, multinational, single-seat, single-engine strike fighter aircraft**. It has three variants - F-35A conventional take-off and landing for Air Force, F-35B short take-off/vertical landing for Marine Corps, and F-35C aircraft carrier variant for Navy & Marine Corps. **Su-57 is FGFA of Russia**.
- **Cook Islands signs agreement for closer relations with China.** Self-governing Cook Islands (Pacific Ocean), a country of 17,000 people, has a **"free association" relationship with New Zealand, which provides budgetary assistance as well as helping on foreign affairs and defence**.
- **TrailGuard AI: AI-enabled cameras in Similipal Tiger Reserve (STR)** to reduce poaching. STR is situated in **Mayurbhanj District**. Recognised as part of the **World Network of Biosphere Reserves by UNESCO in 2009**. It is the **only place in the world home to melanistic tigers**. Rivers like Budhabalanga, Salandi and many tributaries of Baitarani River flows through STR. The local people have the **unique tradition of ritual mass hunting called Akhand Shikar**.
- **Aadi Mahotsav-2025:** Flagship initiative of Tribal Co-operative Marketing Development Federation of India Limited (TRIFED) under Ministry of Tribal Affairs, was inaugurated by President.

- **Exercise Komodo:** Indian Navy platforms INS Shardul and Long-Range Maritime Surveillance P8I aircraft are in **Bali, Indonesia**, to participate in **International Fleet Review (IFR) 2025**, a prestigious multinational naval event, scheduled from 15 Feb to 22 Feb 25. Following IFR 25, both INS Shardul and P8I will participate in **Exercise Komodo**, a multilateral naval exercise aimed at enhancing maritime interoperability and regional security cooperation.
- **Prime Minister Dhan-Dhaanya Krishi Yojana (PMDKY):** Announced in Union Budget 2025-26. It will cover 100 districts based on three broad parameters: low productivity, moderate crop intensity, and below-average credit parameters. program has the following five objectives: Enhancing agricultural productivity; Adopting crop diversification and sustainable agriculture practices; Augmenting post-harvest storage at the panchayat and block level; Improving irrigation facilities; and Facilitating availability of long-term and short-term credit.
- **Transforming Relationship Utilizing Strategic Technology (TRUST) initiative:** India and United States have launched a bilateral initiative for cooperation in the recovery and processing of critical minerals, including lithium and rare earth elements (REEs). Two countries will reduce barriers to technology transfer, address export controls, and enhance high tech commerce. **India joined US-led Minerals Security Finance Network (MSFN) in September 2024 and Minerals Security Partnership (MSP) in 2023.**

Applications of REEs and Critical Minerals	
•	Neodymium, praseodymium, and samarium are crucial for high-performance magnets used in missiles, fighter jets, and radars.
•	Lithium, cobalt, and nickel power are used in advanced batteries for energy storage and electric vehicles.
•	Gallium and indium are key in semiconductors and AI hardware.
•	REEs like europium and terbium enhance biotech imaging and medical diagnostics.
•	Rare earth magnets are vital for wind turbines
•	Space technology depends on heat-resistant alloys and lightweight materials like scandium.

PRACTICE MCQs

Q.1 The 'TRUST' initiative has been launched recently between India and which of the following countries?

- a) Russia
- b) Israel
- c) The United States
- d) France

Answer: C

Q2. Exercise Komodo is multilateral naval exercise hosted by which of the following countries?

- a) Cambodia
- b) Vietnam
- c) Thailand
- d) Indonesia

Answer: D

Q3. Consider the following statements about Minimum Selling Price:

1. It is the minimum price at which sugarcane is to be purchased by its mills from farmers.
2. It is decided by the Central Government under Sugar Price (Control) Order, 2018.

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

Q4. Consider the following statements:

1. Indian Ocean Conference was started by India Foundation in 2016 at Singapore.
2. India, along with Singapore and Oman hosted 8th Indian Ocean Conference (IOC) in Muscat, Oman in 2025.
3. Theme for this year of Conference is Voyages to New Horizons of Maritime Partnership.

How many statements given above are correct?

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

Answer: C

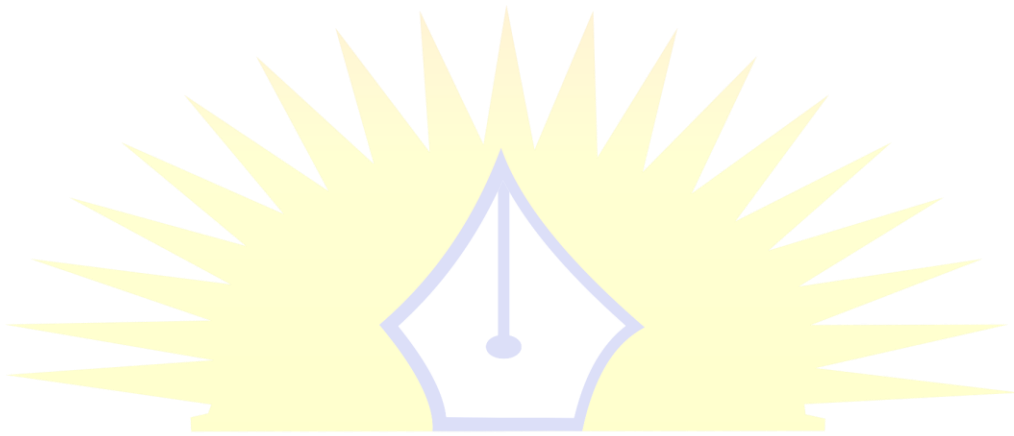
Q5. Consider the following statements:

1. F-35 is fifth generation fighter aircraft of Russia.
2. At present, India does not have fifth generation fighter aircraft in its Air Force.

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



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