

DEFENCE

❖ **The INS Mormugao and its capabilities**

- **CONTEXT: In a boost to the country's maritime capabilities, INS Mormugao has officially joined the Indian Navy's fleet, marking a significant milestone for indigenous military expedition.**
- The warship 'Yard 12705', named after the Goan port city of Mormugao, is the second of the four Visakhapatnam-class destroyers being built under the Indian Navy Project 15B, or P15B.
- The destroyer has multi-dimensional combat capabilities which include surface-to-surface missiles, surface-to-air missiles and modern surveillance radar.
- **What is Project 15B?**
- Project 15 was launched in the 1990s to add guided missile destroyers to the inventory of the Indian Navy.
- The project was named 'Delhi class'. It was followed by Project 15A or Kolkata class which primarily focused on advanced technology and equipment in surface ships.
- Project 15B or the Visakhapatnam class is a follow-on class of weapon-intensive Project 15A destroyers. The project was launched in January 2011 to incorporate advanced design concepts such as state-of-the-art weapons and sensors, advanced stealth features and a high degree of automation for "improved survivability, sea keeping, stealth and manoeuvrability".
- The lead ship of Project 15B, INS Visakhapatnam, was the first of the class to be commissioned. Besides INS Mormugao, the other two destroyers are expected to be commissioned between 2023 and 2025.
- **What are the capabilities of INS Mormugao?**
- Regarded as "one of the most potent warships to have been constructed in the country", the destroyer is 163 metres long, 17 metres wide and displaces 7,400 tonnes when fully loaded.
- The ship is propelled by four gas turbines in a combined gas and gas (COGAG) configuration. The propulsion system allows the ship to achieve a speed of more than 30 knots (50km/h) and a maximum range of 4,000 nautical miles. It can accommodate a crew of about 300 personnel.
- INS Mormugao's firepower comprises BrahMos surface-to-surface missiles (SSM), Barak-8 surface-to-air (SAM) missiles for a long range of shore and sea-based targets and a 76mm super rapid gun mount.
- The ship is armed with RBU-6000 anti-submarine rocket launchers and 533mm torpedo launchers.
- It is also equipped to carry and operate multi-role helicopters. Its enhanced stealth features ensure a reduced Radar Cross Section or radar signature.
- It is automated with sophisticated digital networks such as the Gigabyte Ethernet-based Ship Data Network (GESDN), the Combat Management System (CMS), Automatic Power Management System (APMS), Integrated Platform Management System (IPMS) and Ship Data Network (SDN).
- While the CMS performs threat evaluation and resource allocation based on the tactical picture compiled and ammunition available onboard, APMS controls power management.
- IPMS is used to control and monitor machinery and auxiliaries and the SDN is the 'information highway for data' from sensors and weapons. The ship has multiple fire zones, battle damage control systems, distributional power systems to enhance survivability in emergencies and a total atmospheric control system to protect the crew against nuclear, biological and chemical threats.
- Built with over 75% indigenous content, the commissioning of INS Mormugao is a shot in the arm for India's self-reliance efforts and crucial for the 15-year Indian Naval Indigenisation Plan (INIP) 2015-2030 implemented in 2014 for indigenous development of its resources, equipment and to make the nation self-reliant in defence technology.
- **What is the strategic importance?**
- While India's interests are closely tied to the Indian Ocean, China has been rapidly expanding its naval footprint in the region.
- Amid growing Chinese strategic interests, India renewed its focus on bolstering its maritime capabilities in the region to counter the threat.
- The COVID-19 pandemic, the situation in the Middle East, Afghanistan and now Ukraine. It directly or indirectly impacts every country in one way or another. Economic, political and trade relations between countries are constantly evolving. In this era of globalisation, almost all nations are dependent on each other in the field of trade. Hence, rule-based freedom of navigation, security of sea lanes etc. have become more important than ever for stability and economic progress of the world.
- The addition of a technologically advanced stealth warship to the naval inventory provides a strategic advantage to India and adds to the combat capabilities of the armed forces. Besides surface operations, guided missile destroyers are capable of engaging in anti-aircraft and anti-submarine warfare.

POLITY

❖ **Amendments to the Co-operative Societies Act**

- **CONTEXT: Recently Lok Sabha referred the Multi-State Co-operative Societies (Amendment) Bill 2022 to a joint committee of Parliament.**
- The Bill was introduced on December 7, when Opposition members argued that it seeks to "take away" state governments' rights, and demanded that it be sent to the standing committee.

- The Bill is aimed at overhauling the existing law, which was enacted 20 years ago.
- The Multi-State Co-operative Societies (Amendment) Bill, 2022, piloted by Home and Cooperation Minister Amit Shah, was introduced by his deputy, BL Verma, in Lok Sabha.
- The existing law—the Multi-State Co-operative Societies Act, 2002, was enacted by the then Atal Bihari Vajpayee government.
- At that time, Cooperation was a department under the Ministry of Agriculture. However, on July 6, 2021, the government carved out a separate Cooperation Ministry and Amit Shah became the first Cooperation Minister of the country. Soon after taking charge of the Ministry, he announced the bringing in of a new National Cooperative Policy.
- The Statement of Objects and Reasons of the Bill said, “The Multi-State Co-operative Societies Act, 2002 (the Act) was enacted to consolidate and amend the law relating to co-operative societies, with objects not confined to one State and serving the interests of members in more than one State, to facilitate the voluntary formation and democratic functioning of co-operatives as people’s institutions based on self-help and mutual aid and to enable them to promote their economic and social betterment and to provide functional autonomy and for matters connected therewith or incidental thereto.”
- Part IXB was inserted in the Constitution, vide the Constitution (Ninety-seventh Amendment) Act, 2011. In view of insertion of the Part, it has become imperative to amend the Act. Further, developments over the years also necessitated required changes in the Act so as to strengthen the co-operative movement in the multi-State co-operative societies.
- **New rules for merger**
 - The Bill provides for the merger of “any co-operative society” into an existing multi-state co-operative society. Any co-operative society may, by a resolution passed by majority of not less than two-thirds of the members present and voting at a general meeting of such society, decide to merge into an existing multi-State co-operative society.
 - At present, only multi-state cooperative societies can amalgamate themselves and form a new multi-state co-operative society.
- **Co-operative Election Authority**
 - The Bill seeks to establish a “Co-operative Election Authority”, with a view to bring “electoral reforms” in the co-operative sector. As per the proposed amendment, the authority shall consist of a Chairperson, a Vice-Chairperson and members not exceeding three to be appointed by the Centre.
- **Who can be appointed the chairperson of the authority?**
 - As per the proposed amendments, a person shall not be qualified for appointment as Chairperson of the Authority unless he has held the post of Additional Secretary to the Government of India or equivalent rank
 - Vice-Chairperson of the Authority unless he held the post of Joint Secretary to the Government of India or equivalent rank
 - Member unless he fulfils such qualification and experience as may be prescribed.
 - The Chairperson, Vice-Chairperson or Member of the Authority will hold office for three years or until they attain the age of 65 years, whichever is earlier, and they shall be eligible for re-appointment, according to the proposed Section 45(4).
- **What was the Constitution (Ninety Seventh Amendment) Act, 2011?**
 - Through the 97th constitutional amendment, Part IXB (The Co-Operative Societies) was inserted in the Constitution. The right to form cooperative societies was included as Right to Freedom under article 19 (1), Part-3 of the Constitution.
 - In addition to this, Article 43-B (Promotion of Cooperation societies) was also inserted as one of the Directive Principles of State Policy under Part 4 of the Constitution of India.
- **Stricter punishments**
 - Clause 37 of the Bill seeks to amend section 104 of the Act to increase the amount of penalty for certain offences.
 - According to the proposed sub section (6) of the Section 104 of the principal Act “Where the board of directors or officers of the multi-State co-operative society receive any unlawful gains while transacting matters related to such society or utilise any assets of the society for personal unlawful gains, such directors or officers concerned shall be punishable with imprisonment for a term which shall not be less than one month but which may extend to one year or with fine which shall not be less than five thousand rupees but may extend to one lakh rupees or with both and the proceeds of such unlawful gains shall be recovered from them and deposited in such manner as may be prescribed.
- **Ombudsman to have powers like Civil Court**
 - The government has proposed to insert a new Chapter IXA relating to “redressal of complaints”. Under this new chapter, the government has proposed to appoint one or more “Co-operative Ombudsman” with a territorial jurisdiction for inquiring into the complaints made by the members. For this, a new section 85 will be added in the law.
 - According to the proposed section 85 A (1) the complaints can be “made by any member of the multi-state co-operative societies regarding their deposits, equitable benefits of society’s functioning or any other issue affecting the individual rights of the concerned member, in such manner, as may be prescribed.

- According to the proposed amendments, the Co-operative Ombudsman shall, on receipt of a complaint, complete the process of inquiry and adjudicate within three months. The Ombudsman may issue necessary directions to the society during the course of inquiry and the society shall be bound to comply with the same within a period of one month.
- As per the proposed provisions, a multi-state co-operative society can appeal an Ombudsman decision within one month before the Central Registrar, who shall decide on it within 45 days. The Central Registrar may entertain the appeal after the expiry of a month if he is satisfied that the society was prevented by sufficient cause from preferring the appeal in time.
- The Co-operative Ombudsman will have powers of civil court in summoning and examination.
- **Fund for revival of sick co-operative societies**
- The Bill also seeks to insert a new section 63A in the principal Act, relating to “establishment of the Co-operative Rehabilitation, Reconstruction and Development Fund” for revival of “sick multi-State co-operative societies”.
- It also proposes to insert a new section 70A relating to “concurrent audit” for multi-state co-operative societies having an annual turnover or deposit of more than the amount as determined by the Central Government.
- **Cooperative Information Officer**
- The Centre has also proposed to make provisions for “appointment of a Co-operative Information Officer” to provide information relating to affairs and management of the multi-state co-operative society to the members of such society.
- **Cooperative societies are state subjects**
- Some of the Opposition’s objections to the Centre’s Bill were based on the fact that cooperative societies are a state subject.
- The subject ‘cooperative societies’ is mentioned in the entry 32 of the State List under the Seventh Schedule of the Constitution.
- “Incorporation, regulation and winding up of corporations, other than those specified in List I, and universities; unincorporated trading, literary, scientific, religious and other societies and associations; co-operative societies,” reads entry 32 of the State List.
- Besides, Entry 43 of the Central List under the Seventh Schedule of the Constitution also makes clear that co-operative societies do not come in the Centre’s domain.
- “Incorporation, regulation and winding up of trading corporations, including banking, insurance and financial corporations, but not including co-operative societies,” states the entry 43 of the Central List.

PRELIMS

1. Samudrayaan Mission

➤ **CONTEXT:** Minister of State (Independent Charge) Earth Sciences Dr Jitendra Singh said that Samudrayaan mission is aimed at sending three personnel to 6000-metre depth in a vehicle called ‘MATSYA 6000’ for the exploration of deep sea resources like minerals. In a written reply to a question in Lok Sabha that the mission is expected to be realised by year 2026.

- A part of the Deep Ocean Mission.
- Announced by: the National Institute of Ocean Technology (NIOT) in tandem with ISRO's Gaganyaan mission.
- Aim: To develop a self-propelled manned submersible to carry 3 human beings to a water depth of 6000 meters in the ocean with a suite of scientific sensors and tools for deep ocean exploration.
- It will send them in a manned submersible vehicle called MATSYA 6000 for deep underwater studies.
- Constructed by: the National Institute of Ocean Technology (NIOT) and the Ministry of Earth Sciences (MoES).
- Timeline: 5 years for the period 2020-2021 to 2025-2026.
- India joined the elite group of countries that have specialist technology and vehicles to conduct subsea missions, including the United States, Russia, France, Japan, and China.

➤ **Significance**

- Deep-ocean exploration for resources: MATSYA 6000 will help the Ministry of Earth Sciences (MoES) conduct deep-ocean exploration for resources such as gas hydrates, and polymetallic manganese nodules, hydro-thermal sulphides, and cobalt crusts, which are found at depths of 1000 to 5500 metres.
- High Endurance: The submersible was designed with 12-hour operational endurance and emergency endurance systems that can last up to 96 hours. It can crawl for 72 hours on the seabed at a depth of 6 km.
- Growth Opportunities: The Mission will open up greater opportunities for growth in the areas of clean energy, drinking water, and the blue economy.

➤ **Deep Ocean Mission**

- By the Ministry of Earth Sciences (MoES)
- It seeks to investigate the deep ocean for resources, develop deep-sea technology for long-term ocean resource management, and support the Indian government's Blue Economy Initiatives.

2. India Semiconductor Mission (ISM)

➤ **CONTEXT:** Minister of State for Electronics and Information Technology, Shri Rajeev Chandrasekhar in a written reply to a question in Lok Sabha gave information about the mission.

- The ISM was launched in 2021 with a total financial outlay of Rs76,000 crore under the aegis of the Ministry of Electronics and IT (MeitY).
- It is part of the comprehensive program for the development of sustainable semiconductor and display ecosystem in the country.
- The programme aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystem.
- Envisioned to be led by global experts in the Semiconductor and Display industry, ISM will serve as the nodal agency for efficient, coherent and smooth implementation of the schemes.
- **Objectives of ISM:**
 - Formulate a comprehensive long-term strategy for developing sustainable semiconductors and display manufacturing facilities and semiconductor design eco-system in the country in consultation with the Government ministries / departments / agencies, industry, and academia.
 - Facilitate the adoption of secure microelectronics and developing trusted semiconductor supply chain, including raw materials, specialty chemicals, gases, and manufacturing equipment.
 - Enable a multi-fold growth of Indian semiconductor design industry by providing requisite support in the form of Electronic Design Automation (EDA) tools, foundry services and other suitable mechanisms for early-stage startups.
 - Promote and facilitate indigenous Intellectual Property (IP) generation.
 - Encourage, enable and incentivize Transfer of Technologies (ToT).
 - Establish suitable mechanisms to harness economies of scale in Indian semiconductor and display industry.
 - Enable cutting-edge research in semiconductors and display industry including evolutionary and revolutionary technologies through grants, global collaborations and other mechanisms in academia / research institutions, industry, and through establishing Centres of Excellence (CoEs).
 - Enable collaborations and partnership programs with national and international agencies, industries and institutions for catalyzing collaborative research, commercialization and skill development.
- **Schemes have been introduced under the aforesaid programme:**
 - **Modified Scheme for setting up of Semiconductor Fabs in India:** for attracting large investments for setting up semiconductor wafer fabrication facilities in the country to strengthen the electronics manufacturing ecosystem and help establish a trusted value chain. The Scheme extends a fiscal support of 50% of the project cost on pari-passu basis for setting up of Silicon CMOS based Semiconductor Fab in India.
 - **Modified Scheme for setting up of Display Fabs in India:** for attracting large investments for manufacturing TFT LCD or AMOLED based display panels in the country to strengthen the electronics manufacturing ecosystem. Scheme extends fiscal support of 50% of Project Cost on pari-passu basis for setting up of Display Fabs in India.
 - **Modified Scheme for setting up of Compound Semiconductors / Silicon Photonics / Sensors Fab / Discrete Semiconductors Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / OSAT facilities in India:** shall extend a fiscal support of 50% of the Capital Expenditure on Pari-passu basis for setting up of Compound Semiconductors / Silicon Photonics (SiPh) / Sensors (including MEMS) Fab/ Discrete Semiconductor Fab and Semiconductor ATMP / OSAT facilities in India.
 - **Semicon India Future Design: Design Linked Incentive (DLI) Scheme** offers financial incentives, design infrastructure support across various stages of development and deployment of semiconductor design for Integrated Circuits (ICs), Chipsets, System on Chips (SoCs), Systems & IP Cores and semiconductor linked design.
- 3. **SAMARTH Initiative**
 - **CONTEXT:** The Union Minister of State for Textiles, Smt. Darshana Jardosh in a written reply to a question in Lok Sabha shared that under SAMARTH scheme more than 13,235 artisans have been trained in the last three years
 - Samarth Scheme is the flagship skill development scheme of the ministry of textiles which is a continuation of the integrated Skill Development Scheme under the 12th Five Year Plan. Also known as the Scheme for Capital Building in the Textile Sector (SCBTS) was introduced in 2017.
 - Spinning and weaving organized sectors are excluded under the scheme.
 - The primary objective is to train approximately 10 lakh youths
 - It is being implemented by Ministry of Textiles
 - **Objectives**
 - To make skillful youths in the textile industry.
 - To create employment in the country.
 - Skillful workers help in developing the textile and related sectors.
 - If not working in the industry, youths can also become self-employed.
 - **Features**
 - The Samarth scheme aims at providing benefits to the youth, who have the interest to start their career in the Textile industry. The Indian government will select approximately 10 lakh youths to provide training under the scheme within 2017-2020.

- The Indian government has set a budget plan for implementing the scheme within the Textile sector. Once the training will be done, then 70% of students will be recruited to the Textile industry.
- The Samarth Scheme aims at boosting the low performing textile sector so that it can gain an advantage in the export market within a few ears.

ANSWER WRITTING

Q: Highlight the features of E-Rupee. Also discuss the significance of it.

E-Rupee (₹) is a planned digital version of the Indian rupee, to be issued by the Reserve bank of India (RBI) as a central bank digital currency (CBDC). It was first proposed in 2017 and recently launched on pilot basis offered by some private and public banks in few major cities.

Features of E-Rupee

- It is a legal tender issued by the RBI in digital form. It is the same as the fiat currency and is exchangeable one-to-one with the fiat currency.
- It would appear as liability on a central bank's balance sheet.
- E-rupee will be in the form of a digital token representing a claim on the central bank and will effectively function as the digital equivalent of a banknote that can be transferred electronically from one holder to another.
- E-rupees will be issued in the same denominations as paper currency and coins, and will be distributed through the intermediaries, that is banks.
- Users will be able to withdraw digital tokens from banks in the same way they can currently withdraw physical cash.
- Based on usage and the functions performed by the digital rupee, and considering different levels of accessibility, the RBI has demarcated the digital rupee into two categories:
 - ✓ Retail E-rupee (₹-R): It is an electronic version of cash primarily meant for retail transactions, which can potentially be used by almost everyone, and can provide access to safe money for payment and settlements.
 - ✓ Wholesale E-Rupee (₹-W): It is designed for restricted access to select financial institutions. Financial transactions involving government securities (G-Sec) and interbank transactions could be transformed by this technology.

Significance of E-Rupee

- Cutting Cost of Maintaining Physical Currency: CBDC has the potential to reduce dependency on cash. To the extent large cash usage can be replaced by CBDCs, the cost of printing, transporting, storing and distributing currency can be reduced.
- reduce terror financing: E-Rupee will enable the RBI to track the money transactions on real-time basis which will help in reducing terror financing. Also, E-Rupee will reduce the scope of counterfeiting of currency.
- Increase the efficiency of service delivery: E-Rupee will ensure that the direct benefit transfer (DBT) scheme reach the targeted beneficiaries and reduce leakages.
- Risk reduction: E-Rupee provides the benefits of virtual currencies (cryptocurrency) along with consumer protection and avoids the risks associated with it.
- Globalisation of Payment System: E-Rupee can also enable a more real-time and cost-effective globalisation of payment systems. It could eliminate the need for an expensive network of correspondent banks to settle cross-border payments.
- Other benefits: it will Boost innovation in cross-border payments space, Foster financial inclusion, promote environment sustainability etc.

Thus, the introduction of E-Rupee has created optimism in the economic environment that will have long lasting benefits to the Indian economy and financial stability. However, E-Rupee should be accompanied by financial literacy inclusion and digital penetration to ensure high efficiency.

MCQs

1. Which of the following is/are correct about INS Mormugao?
 1. INS Mormugao is the first stealth-guided missile destroyer under Project 15B.
 2. These ships are equipped with BrahMos supersonic cruise missiles and long-range surface-to-air missiles. Which of the above statement/s is are correct?
 - a) 1 only
 - b) 2 only**
 - c) Both 1 and 2
 - d) Neither 1 nor 2
2. 'Beijing Declaration and Platform for Action', is related to which of the following
 - a) A strategy to tackle the regional terrorism, an outcome of a meeting of the Shanghai Cooperation Organization.
 - b) A plan of action for sustainable economic growth in the Asia-Pacific Region, an outcome of the deliberations of the Asia-Pacific Economic Forum.
 - c) An agenda for women's empowerment, an outcome of a World Conference convened by the United Nations.**
 - d) A strategy to combat wildlife trafficking, a declaration of the East Asia Summit.
3. SAMARTH is a flagship skill development scheme of which one of the following Ministries?
 - a) Ministry of Textiles**
 - b) Ministry of Agriculture and Farmers Welfare

- c) Ministry of Skill Development and Entrepreneurship
d) Ministry of Human Resource Development
4. With respect to India undertaking Samudrayaan in line with ISRO's Gaganyaan, consider the following statements:
1. It is a deep ocean mission to send people to ocean depth of 6000 metres.
 2. India has exclusive rights to explore polymetallic nodules (PMNs) in Central Indian Ocean.
 3. The MATSYA 6000 is a manned submersible vehicle to go for deep underwater studies.
- Select the correct option from the codes given below:
- a) 1 and 2 only b) 2 and 3 only c) 1 and 3 only **d) 1,2 and 3**
5. The 97th Constitution Amendment Act of 2011 gave a constitutional status and protection to co-operative societies. In this context, which of the following changes were made in the Constitution?
1. Right to form co-operative societies became Fundamental Right.
 2. It includes a new Directive Principle of State Policy on promotion of cooperative societies.
 3. It established a central constitution authority for overseeing matters related to cooperatives.
- Which of the above statement/s is/are not correct?
- a) 1 and 2 only b) 2 and 3 only c) 1 and 3 only d) 3 only
6. Recently Directorate General of Trade Remedies (DGTR) proposes to levy anti-dumping duty on Indonesian firm, consider the following statements regarding Anti-Dumping Duty.
1. An anti-dumping duty is a protectionist tariff that a domestic government imposes on imports that it believes are priced below fair market value.
 2. In India, Directorate General of Trade Remedies (DGTR), under the Ministry of Finance conducts anti-dumping investigations.
- Which of the above statements is/are correct?
- a) **1 only**
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2
7. National Mathematics Day is celebrated on December 22 every year to mark the birth anniversary of legendary mathematician:
- a) Aryabhata
 - b) Prasanta Chandra Mahalanobis
 - c) Brahmagupta
 - d) Srinivasa Ramanujan**
8. The term "Chilla-i-Kalaan" a local weather pattern often mentioned in news, with reference to this consider the following
1. The "Chillai Kalaan" is the forty-day period of harsh winter which begins on December 21 and ends on January 31 of next year.
 2. During this period, the weather in Kashmir continues to remain wet and cold with minimum temperatures hovering below the freezing point due to influence of western disturbances
- Which of the above statement/s is/ are not correct?
- a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2
9. With reference to New Delhi International Arbitration Centre consider the following
1. The New Delhi International Arbitration Centre (NDIAC) is an autonomous institution to conduct arbitration, mediation, and conciliation proceedings
 2. It was established renamed as India International Arbitration Centre by an act of parliament in 2019.
 3. It was declared as an Institute of National Importance by an Act of Parliament.
- Which of the above statement/s is/are correct?
- a) 1 and 2 only
b) 2 only
c) 1 and 3 only
d) 3 only
10. Which of the following is an accurate definition of the term 'import substitution'?
- a) Producing goods domestically rather than importing**
 - b) Substituting one type of goods for another
 - c) Increasing exports to balance the costs of imports
 - d) Barter system of trade in goods between nations