Project 17A and INS Taragiri

Why in News?

Recently, Mazagon Dock Shipbuilders Ltd (MDL), which is under the Ministry of Defence, launched **Taragiri**, the third stealth frigate of **Project 17A.**

What is Project 17A?

- **About:**
  - Project 17 Alpha frigates (P-17A) were launched by the Indian Navy in 2019 **to construct a series of stealth guided-missile frigates.**
  - These are currently being constructed by two companies - **Mazagon Dock Shipbuilders (MDL) and Garden Reach Shipbuilders & Engineers (GRSE).**
  - These guided-missile frigates have been constructed with a **specific stealth design,** which has **radar-absorbent coatings** and is low-observable which can make its approach undetectable for the enemies.
    - The new technology also **reduces the infrared signals of the ship.**
  - The first stealth ship launched under Project 17A was the **Nilgiri**, which was launched in 2019.
  - **Udaygiri**, **the second ship**, was launched in May 2022, and will likely be commissioned in 2024.
- **Present Status:** Further, **seven P17A Frigates are under various stages of construction** at MDL and GRSE.
- **Benefits:**
  - It provides additional benefits such as **economic development, and employment generation for Indian Shipyards**, their sub-contractors and the ancillary industry.
  - Around 75% of the orders of Project 17A have been placed on indigenous firms including MSMEs, thus reinforcing the country's quest for **Atma Nirbhar Bharat.**
    - Indigenous construction of complex frontline ships such as Stealth Frigates has catapulted the nation to a **higher pedestal in the arena of shipbuilding.**

What are the Key Highlights of Taragiri?

- Taragiri is named after a hill range in the Himalayas located at Garhwal.
- The ship has been built using an **integrated construction methodology** which involves hull block construction in different geographical locations.
- The ship will have **state-of-the-art weapons, sensors, an advanced action information system,** an integrated platform management system, world-class modular living spaces, a sophisticated power distribution system and a host of other advanced features.
- It will be fitted with a **supersonic surface-to-surface missile system.**
- The ship's air defence capability, designed to counter the threat of enemy aircraft and anti-ship cruise missiles will revolve around the vertical launch and long-range surface-to-air missile system.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. Which one of the following is the best description of 'INS Astradharini', that was in the news recently? (2016)

(a) Amphibious warfare ship
(b) Nuclear-powered submarine
(c) Torpedo launch and recovery vessel
(d) Nuclear-powered aircraft carrier

Ans: (c)

Exp:

- **INS Astradharini is an indigenously built Torpedo Launch and Recovery Vessel. It was commissioned on 6th October 2015.**
- The design of the Astradharini was a collaborative effort of Naval Science and Technological Laboratory (NSTL), Shoft Shipyard and IIT Kharagpur.
- It is an advanced replacement for Astravahini which was decommissioned on 17th July 2015.
- It has a unique design of a catamaran hull form that significantly reduces its power requirement and is built with indigenous steel.
- It can operate at high sea states and has a large deck area with Torpedo Launchers for deploying and recovering various kinds of Torpedos during the trials.
- The ship also has modern power generation and distribution, navigation and communication systems.
- 95% of the systems of the ship are of indigenous design, thus demonstrating the Navy's continued adherence to the 'Make in India' philosophy.
- INS Astradharini will be used to carry out the technical trials of underwater weapons and systems developed by NSTL, a naval systems laboratory of DRDO. **Therefore, option (c) is the correct answer.**

Source: IE