

22– 12 – 2022

News: Bengal village basks in the lustre of metal

- Nestled in the forests with a population less than 100, Lalbazar was a nondescript village until not too long ago. Today, it is not only an art hub but also moving towards becoming a centre for dokra, a metal craft popular in Bengal, all thanks to a Kolkata artist who made the place his second home four years ago.

Dhokra Sculpture

- Dhokra sculptures, a type of folk art, is an **age-old wax-casting technique also known as Lost-wax process.**
- Dhokra is an **alloy of brass, nickel and zinc which gives an antique look.**
- The oldest specimen using such technique was during Harappan Period (famous Dancing Girl of Mohenjo-daro).
- Dhokra Tradition is practiced in **Odisha, Madhya Pradesh, Chhattisgarh, Andhra Pradesh, West Bengal, Nagaland (Konyak Naga Tribe) states.**
- Its motifs are **mostly drawn from folk culture which includes animal figures like elephant, horse, gods and goddesses, containers with lids, lamp and lamp stands, intricate designs in shape of trees and branches.**

Lost-wax process

- Lost-wax process or the **cire-perdue** is a method of metal casting in which a **molten metal is poured into a mould that has been created by means of a wax model.**
- Once the mould is made, the **wax model is melted and drained away.** A **hollow core is then filled with molten metal which takes the shape of the mould.**

News: INS Mormugao inducted to Indian Navy

INS Mormugao of Project 15B

- 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 multidimensional combat capabilities which include surface to surface missiles, surface to air missiles and modern surveillance radar.**

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.

Project-15B

- Project-15B is the Destroyer series of Vishakhapatnam class of stealth guided missile destroyers constructed using indigenous steel DMR 249A.
- It is amongst the largest destroyers constructed in India.
- India’s indigenous Destroyer construction programme commenced in the late 1990s with the three Delhi class (P-15 class) warships and this was followed by three Kolkata class (P-15A) destroyers commissioned a decade later.
- Presently, under the P-15B (Visakhapatnam Class), a total of four warships are planned (Visakhapatnam, Mormugao, Imphal, and Surat).

- The Destroyers come next only to an Aircraft Carrier (INS Vikramaditya) in terms of their reach and endurance.

Features of the P-15B Ships

- These ships are equipped with BrahMos supersonic cruise missiles and long range Surface-to-Air Missiles (SAM).
- The ship has several indigenous weapons systems like medium range Surface-to-Air Missile (SAMs), indigenous torpedo tube launchers, anti-submarine indigenous rocket launchers and 76-mm super rapid gun mount.