Neptune: Anti-ship Cruise Missile

Why in News?

Recently, Ukraine claimed that it has damaged the **Russian** Black Sea **Fleet Flagship 'Moskva' by Neptune Anti-Ship Cruise Missiles.**

What is Neptune?

- The Neptune is a coastal **anti-ship cruise missile** that is capable of the **destruction of naval vessels in a range of 300 km.**

- The Missile system was inducted into the **Ukrainian Defence Forces in March 2021** after being in development for six years.
- The cruise missile was developed in haste by the military as the Russian threat to the coastal areas of Ukraine was growing rapidly since the **occupation of Crimea in 2014.**
- The design of this missile is based on a **Russian Kh-35** cruise missile which goes by the North Atlantic Treaty Organization (NATO) **name of AS-20 Kayak.**
- The cruise missile attack was **carried out using TB-2** drones as decoys along with other measures toward saturation of the cruiser's **Air Defence systems.**

What is Moskva?

- Moskva is a **guided missile cruiser** of the Russian Navy named after the city of Moscow.
    - A cruiser is a **large surface warship** built for high speed and great cruising radius, capable of not only defending its own fleet and coastlines but also threatening those of the enemy.
- The Moskva was originally commissioned as the Slava in **1983.**
    - It was **recommissioned in 2000** as the Moskva with refurbished weapon systems and electronics.
- It has a displacement of **12,490 tons.**
- It is the **flagship of the Black Sea Fleet of the Russian Navy** and carries a crew of around 500 personnel.

Key characteristics of ballistic and cruise missiles

Characteristics	Ballistic missiles	Cruise missiles
Range	From low to very high *Up to 15 000 km*	Mostly around 1 000 km *Up to 4 000 km*
Altitude	High *Easily detectable*	Low *Hard to detect*
Precision	Low – around a few hundred metres *Fit for large targets*	High – a few metres *Fit for small and mobile targets*
Speed	Up to 25 000 km/h at impact *Very hard to intercept*	Around 1 000 km/h *Possibility to intercept*

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Q. What is "Terminal High Altitude Area Defense (THAAD)", sometimes seen in the news? (2018)

(a) An Israeli radar system
(b) India's indigenous anti-missile programme
(c) An American anti-missile system
(d) A defence collaboration between Japan and South Korea.

Ans: (c)

- **Terminal High Altitude Area Defence (THAAD)** is an American anti-missile system designed to intercept and destroy short and medium-range ballistic missiles during their "terminal" phase of flight when they are falling towards the target.

Source: IE