



Pralay Missile

Why in News?

Recently, the Ministry of Defense has procured indigenous **Short-Range Ballistic Surface-to-Surface (SRBM) Missile [Pralay](#)**, giving Indian military the **heft to its war-fighting capabilities**.

What is Pralay?

▪ About:

- Pralay' is **India's first conventional quasi-ballistic missile** and is an answer to any conventional missile attack from northern or western borders.
 - A quasi-ballistic missile **has a low trajectory, and while it is largely ballistic, it can maneuver in flight.**
 - Ballistic missiles are initially powered by a rocket or series of rockets in stages, **but then follow an unpowered trajectory that arches upwards before descending to reach its intended target** at high speed.
- The missile has been developed in a way that it is **able to defeat the interceptor missiles** and also has the ability to change its path after covering a certain range mid-air.

▪ Features:

- It is powered with a solid propellant rocket motor and many new technologies.
- The missile guidance system includes state-of-the-art navigation system and integrated avionics.
- It can be compared to **China's Dong Feng 12 and the Russian Iskander missile** that has been used in the **[ongoing war with Ukraine](#).**
- It is capable of **carrying a conventional warhead of about 350 kg to 700 kg**, which gives it a deadly punitive capability.
- It can carry a **high explosive preformed fragmentation warhead**, penetration-cum-blast (PCB) and runaway denial penetration submunition (RDPS).

▪ Range:

- The missile has a range of 150-500 kilometre and can be launched from a mobile launcher.
- Pralay will be the **longest-range surface-to-surface missile in the inventory of the Army.**
 - The Army also has the [BrahMos supersonic cruise missile](#) in its arsenal, with a stated range of 290-plus kilometres.
- **Significance:**
 - It is India's **first tactical quasi-ballistic missile** and will give the armed forces the capability to hit enemy positions and key installations in actual battlefield areas.
 - Pralay, along with the BrahMos supersonic cruise missile, **will form the crux of India's planned Rocket Force.**
 - It will completely **change the tactical battlefield dynamics** and India will have two conventional missiles with long range.
 - The BrahMos will be a **cruise option and this one will be the ballistic option.**

Ballistic Missile vs Cruise Missile	
Ballistic Missile	Cruise Missile
▪ Travel in projectile motion and trajectory depends on gravity, air resistance and Coriolis Force.	▪ Comparatively follows a straight trajectory of motion.
▪ Leave the earth's atmosphere and re enter it.	▪ The flight path is within the earth's atmosphere.
▪ Long-range missiles (300 km to 12,000 km)	▪ Short range missiles (range upto 1000 km)
▪ E.g. Prithvi I, Prithvi II, Agni I, Agni II and Dhanush missiles.	▪ E.g. BrahMos missiles

UPSC Civil Services Examination Previous Year Question (PYQ)

Q. With reference to Agni-IV Missile, which of the following statements is/are correct? (2014)

1. It is a surface-to-surface missile.
2. It is fuelled by liquid propellant only.
3. It can deliver one-tonne nuclear warheads about 7500 km away.

Select the correct answer using the code given below:

- (a) 1 only
 (b) 2 and 3 only
 (c) 1 and 3 only
 (d) 1, 2 and 3

Ans: (a)

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