

Laser-Guided Anti-Tank Guided Missiles (ATGMs)

August 5, 2022

In news– Recently, DRDO has successfully test fired indigenously developed laser-guided ATGMs

About laser-guided ATGMs-

- The all-indigenous Laser Guided ATGM **employs a tandem High Explosive Anti-Tank (HEAT) warhead to defeat Explosive Reactive Armour (ERA)** protected armoured vehicles.
- The **term tandem refers to the missiles** using more than one detonation in order to effectively penetrate the protective armours of the adversary tanks.
- The ATGM has been developed with multi-platform launch capability and is currently undergoing technical evaluation trials from the 120 mm rifled gun of MBT Arjun.
- It has the capacity of defeating armoured vehicles which use ERA, which are specially designed armour plates that can counter the impact of the attack projectile.
- It has the capability to defeat the protected armoured vehicles in ranges from 1.5 to 5 kilometre.
- **Laser Guided ATGM was developed by two Pune based facilities of the DRDO's Armament and Combat Engineering (ACE) Cluster**, the Armament Research and Development Establishment (ARDE) and High Energy Materials Research Laboratory (HEMRL), in association with Instruments Research and Development Establishment (IRDE), Dehradun.

Other anti-tank missile technologies developed by DRDO-

- **Nag is a third-generation fire-and-forget missile** developed for mechanized formations to engage heavily fortified enemy tanks.

- The Nag missile is launched from a modified infantry combat vehicle, called the Nag missile carrier or Namica.
- MPATGM stands for **Man-Portable Anti-Tank Guided Missile (ATGM)** which has a range of 2.5 kilometers, with fire-and-forget and top attack capabilities for infantry use.
- **SANT is a smart Stand-off Anti-Tank Missile** being developed for launch from the Mi-35 Helicopter for the Air Force's anti-tank operations.
- ATGM for **MBT Arjun is a laser-guided**, precision-guided munition which is launched from the 120mm rifled gun of the Arjun tank to engage and defeat Explosive Reactive Armour-protected armoured targets.