



Directed Energy Weapons (DEW)

Published On: 24-12-2025

Subject Preference: GS III (S&T | Defence Indigenization)

- **The News:** Apollo Micro Systems received Technology Transfer (ToT) from DRDO to manufacture subsystems for Laser-based DEWs.
- **Basics:** DEWs use focused energy (lasers, microwaves) to disable or destroy targets like drones and missiles at the speed of light.
- **Strategic Autonomy & Defense Context:**
- **Asymmetric Warfare:** Crucial for countering **Drone Swarms** where traditional ammunition is too expensive or slow.
- **Indigenization:** The ToT involves the **Centre for High Energy Systems and Sciences (CHESS)** and **IRDE**, marking a shift toward involving the private sector in "high-tech" hard-kill and soft-kill defense systems.