



Mains Practice Question

Q. What is ASAT? Examine its strategic importance and issues associated with it. (250 words)

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Approach

- Describe ASAT in brief.
- Describe its strategic importance.
- Immediate and long term issues associated with ASAT.

Answer

- ASAT (Anti-Satellite missile) is the technological capability to hit and destroy satellites in space through missiles launched from the ground.
- India launched a missile from Balasore in Odisha that struck a predetermined redundant Indian satellite that was orbiting at a distance of 300 km from the Earth's surface.
- The test made India the fourth country in the world after the US, Russia and China to acquire the strategic capability to shoot down enemy satellites.

Strategic Importance:

- Satellites are extremely **critical infrastructure** of any country. A large number of crucial applications like navigation systems, communication networks, broadcasting, banking systems, stock markets, weather forecasting, disaster management, land and ocean mapping and monitoring and military applications are satellite based. Destroying a satellite would render these applications useless thus gaining strategic advantage.
- India is faced with **adversarial neighborhood**, having capability to destroy satellite will ensure India has enough deterrent to our space based asset more so since China already has this capability.

Issues related with launch

- **Threat of Space Debris Collision:** Immediate danger of collision to other satellites, new satellite launch vehicles and ISS from the debris of destroyed satellite as collision was planned in at altitude of 300 Km in LEO (low earth orbit) which has telecommunication and earth observation satellites and also the International Space Station.

- **Weaponization of space:**

- Threat of arms race in space especially from China and Pakistan. However India's stand is clear and it supported UNGA resolution 69/32 on '**No First Placement of Weapons on Outer Space**'.
- Equally, India supports the substantive consideration of the issue of **Prevention of an Arms Race in Outer Space (PAROS)** in the Conference on Disarmament where it has been on the agenda since 1982.
- India is a signatory to **1967 Outer Space Treaty**, and ratified it in 1982. The Outer Space Treaty prohibits only weapons of mass destruction in outer space, not ordinary weapons.

Conclusion:

- The capability achieved through the Anti-Satellite missile test provides credible deterrence against threats to our growing space-based assets from long range missiles.
- ASAT will thus provide India strategic advantage in its defense and offence capabilities.

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