# Defence & Security · GS - III

**Assess how the growing use of unmanned aerial systems is transforming the character of modern warfare and challenging conventional air-defence capabilities.**

| EXAM YEAR | PAPER | SUBJECT |
|---|---|---|
| DAILY PRACTICE 24/11/2026 | GS - III | Defence & Security |

| MARKS | WORD LIMIT |
|---|---|
| 15 | ~250 words |

## Answer Hint

**Drone warfare, asymmetric warfare, low-cost weapons, swarm technology, air-defence saturation, electronic warfare, counter-UAS systems**

## Model Answer

### Introduction

Unmanned aerial systems (UAS) have transformed modern warfare by enabling relatively inexpensive surveillance, precision strikes and coordinated attacks. Their expanding use has challenged traditional air-defence doctrines.

### Transformation of Warfare

1. **Asymmetric capabilities:** Low-cost drones allow relatively weaker actors to target high-value military infrastructure without deploying conventional aircraft.
2. **Surveillance and intelligence:** Persistent aerial monitoring improves battlefield awareness, target identification and operational planning.
3. **Swarm attacks:** Coordinated drones can approach simultaneously from different directions, potentially overwhelming conventional interception systems.

4. **Strategic infrastructure threats:** Airports, energy facilities, military bases and communication networks are increasingly vulnerable to aerial attacks.
5. **Reduced operational costs:** Unmanned platforms can perform dangerous missions without directly risking pilots.

## Challenges to Conventional Defence

1. Small drones are difficult to detect through conventional radar systems.
2. Interception using expensive missiles against inexpensive drones creates an economic imbalance.
3. Electronic warfare may disrupt navigation and communication but cannot counter every autonomous system.

## Way Forward

1. Develop layered counter-UAS systems integrating radar, electro-optical sensors and radio-frequency detection.
2. Expand electronic warfare, directed-energy weapons and cost-effective interception technologies.
3. Strengthen protection of critical infrastructure and inter-agency coordination.
4. Establish clear operational doctrines and international norms governing military drone use.

## Conclusion

Drone warfare is reshaping the balance between offensive and defensive capabilities. Modern military preparedness requires integrated, adaptable and economically sustainable counter-drone systems.