Defence & Security · GS - III

Examine the role of advanced integrated air defence systems in modern warfare. Discuss their strategic significance and the challenges involved in countering evolving aerial threats.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 05/11/2026	GS - III	Defence & Security

MARKS	WORD LIMIT
10	~150 words

Answer Hint

Integrated air defence, surface-to-air missiles, ballistic missiles, manoeuvring targets, radar technology, automation, electronic warfare, saturation attacks, strategic deterrence

Model Answer

Introduction

Modern warfare increasingly involves ballistic missiles, cruise missiles, drones and manoeuvring aerial threats. Integrated air defence systems aim to detect, track and intercept these threats through coordinated technologies.

Strategic Significance

Layered air defence combines surveillance radars, command networks and different missile systems to protect military installations, cities and critical infrastructure. Advanced radar and automated decision-making improve threat identification and response time. Such systems can strengthen deterrence by increasing the difficulty of successful aerial attacks.

Major Challenges

Hypersonic and manoeuvring missiles complicate interception by changing their trajectories. Electronic warfare can disrupt radar and communication networks. Saturation attacks involving large numbers of drones and missiles

may overwhelm defensive systems. High procurement and maintenance costs also create operational challenges.

Way Forward

Countries should strengthen multi-layered defence, sensor integration, indigenous research, cyber resilience and joint training. International cooperation and crisis communication can reduce escalation risks.

Conclusion

Advanced air defence systems are important instruments of national security, but their effectiveness depends on technological integration, operational readiness and continuous adaptation.

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