Defence & Security · GS - III

Examine the significance of drones, artificial intelligence, long-range precision weapons and indigenous production in modernising the Indian Air Force.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 01/11/2026	GS - III	Defence & Security

MARKS	WORD LIMIT
10	~150 words

Answer Hint

Changing security environment; unmanned systems; artificial intelligence; precision warfare; defence indigenisation; strategic autonomy

Model Answer

Introduction

Modern air warfare increasingly relies on networked systems, rapid intelligence processing, precision strikes and unmanned platforms. The Indian Air Force must adapt to evolving threats while maintaining operational readiness.

Key Modernisation Priorities

Drones and Unmanned Systems: These can improve surveillance, reconnaissance and operational flexibility while reducing risks to personnel in selected missions.

Artificial Intelligence: AI can support intelligence analysis, predictive maintenance, logistics and decision-making. Human oversight remains essential, particularly in high-stakes targeting decisions.

Long-Range Precision Weapons: These extend operational reach and enable engagement of strategically important targets from greater distances, subject to operational and legal constraints.

Indigenous Defence Production: Domestic research and manufacturing can reduce import dependence, improve maintenance support and strengthen technological self-reliance.

Challenges and Way Forward

Modernisation requires sustained funding, skilled personnel, cybersecurity, interoperability and rigorous testing. Greater collaboration among the armed forces, research institutions and Indian industry can accelerate innovation.

Conclusion

A technologically advanced and self-reliant Air Force is vital for credible deterrence and national security. Modernisation must combine indigenous capability, operational effectiveness and responsible use of emerging technologies.

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