Geography · GS - I

Astro-tourism offers an opportunity to diversify India's tourism economy while promoting scientific awareness. Examine its potential and discuss the ecological and infrastructural challenges associated with developing dark-sky destinations.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 13/11/2026	GS - I	Geography

MARKS	WORD LIMIT
10	~150 words

Answer Hint

Dark-sky tourism, geographical advantages, Hanle and Spiti, scientific temper, rural livelihoods, tourism diversification, light pollution, fragile mountain ecosystems, carrying capacity, sustainable infrastructure, community participation.

Model Answer

Introduction

Astro-tourism involves travelling to locations with favourable dark-sky conditions to observe celestial objects and astronomical phenomena. India's high-altitude and relatively low-light-pollution regions offer significant potential for this emerging tourism segment.

Economic and Scientific Potential

Destinations such as Hanle, Spiti and Sariska can attract domestic and international visitors. Astro-tourism can diversify rural livelihoods, generate local employment and encourage homestays and community-based enterprises. It also promotes scientific temper and public interest in astronomy.

Ecological and Infrastructural Challenges

Unregulated tourism can increase waste generation, water consumption and pressure on fragile ecosystems. Artificial lighting may degrade dark-sky conditions and disturb wildlife. Remote destinations also face limitations in transport, accommodation, communication and emergency healthcare.

Way Forward

India should develop dark-sky conservation zones, regulate artificial lighting, assess tourism carrying capacity and promote local participation. Scientific institutions and tourism authorities can collaborate on responsible visitor experiences.

Conclusion

Astro-tourism can combine economic development with scientific awareness, provided it follows ecological safeguards and community-centred planning.

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