

WRAP Exams · wrapexams.com

Prelims PYQ, Mains model answers, and copy evaluation. Write to the desk for this paper, a doubt, or the AI waitlist.

ask@wrapexams.com · +91 85951 84903 · wrapexams.com

Q43

The experiment will employ a trio of spacecraft flying in formation in the shape of an equilateral triangle that has sides one million kilometers long, with lasers shining between the craft." The experiment in question refers to (a) Voyager-2 (b) New Horizons (c) LISA Pathfinder (d) Evolved LISA Official key: D.

UPSC Civil Services Prelims 2020 · General Studies · 2 marks · Science and Technology
Science, technology, space, defence, IT - Prelims GS Paper I.

Explanation

(a)

Voyager-2. A single fly-by probe, not a million-km triangle.

(b)

New Horizons. Pluto fly-by.

(c)

LISA Pathfinder. A single technology demonstrator at L1, not the triangle.

(d) Official key

Evolved **LISA**. Three spacecraft, equilateral triangle ~1 million km, laser interferometry for millihertz gravitational waves.

Summary

Official key is (d) eLISA / **LISA**. The million-kilometre laser triangle is the space-based gravitational-wave observatory. Pathfinder tested hardware; Voyager and New Horizons are planetary probes.

Related possible facts

These can be asked in a future Prelims paper.

LISA

ESA-NASA; adopted in the 2020s as a large mission.

LISA Pathfinder

2015-17; drag-free test mass.

rs-long-with-lasers-shining-between-the-craft-the-experiment-in-question/ · ask@wrapexams.com · wrapexams.com

WRAP Exams