

JEE MAIN GRAVITATION — EARTH SATELLITES AND ORBITAL VELOCITY — PYQS

Max. Marks: 4

Questions: 1

Section A (MCQ) — 1 question

Q.1 Given below are two statements :

Statement-I: A satellite is moving around earth in the orbit very close to the earth surface. The time period of revolution of satellite depends upon the density of earth.

Statement-II: The time period of revolution of the satellite is $T = 2\pi\sqrt{\frac{R_e}{g}}$ (for satellite very close to the earth surface), where R_e is radius of earth and g is acceleration due to gravity.

In the light of the above statements, choose the correct answer from the options given below :

[JEE Main 2026 (Online) 22nd January Evening Shift]

- (1) Statement-I is true but Statement-II is false
- (2) Statement-I is false but Statement-II is true
- (3) Both Statement-I and Statement-II are true
- (4) Both Statement-I and Statement-II are false

Scan or tap for the
full solution



ANSWER KEY

Ques.	1													
Ans.	3													