

Class 11 Physics Chapter 8 Gravitation MCQs

1. Newton's law of universal gravitation force is given by

- (a) $F=Gm_1m_2/r^4$
- (b) $F=Gm_1m_2/r^2$
- (c) $F=Gm_1+m_2/r^2$
- (d) $F=Gm_1-m_2r^2$

2. Which law describes the orbits of planets around the sun?

- (a) Newton's law
- (b) Faraday's law
- (c) Kepler's law
- (d) Kirchoff's Law

3. The sum of kinetic and potential energy is when a missile is launched with a velocity less than the escape velocity.

- (a) 0
- (b) Negative
- (c) Positive
- (d) None of the option

4. if the distance between the earth and the sun gets doubled, what would be the duration of the year?

- (a) 365 days
- (b) 366 days
- (c) 730 days
- (d) 1032 days

5. What would be the maximum height reached by the body if the body is projected vertically from the surface of the earth of radius R with a velocity equal to half of the escape velocity?

- (a) 2+R
- (b) R
- (c) R/2
- (d) R/3

6. In a manned satellite, people experience no gravity and it is known as

- (a) Gravity-weight
- (b) Gravitational weight
- (c) Weightlessness
- (d) Less-weight gravity

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7. Dimensional formula for gravitational intensity is

- (a) LT²
- (b) LT⁻²
- (c) LT
- (d) LT⁻⁴

8. Gravitational force on a particle inside a spherical shell is

- (a) 1
- (b) -1
- (c) 0
- (d) None of the option

9. The satellite having the same time period of revolution as that of the earth is called

- (a) Stationary satellite
- (b) Geostationary satellite
- (c) Gravitational satellite
- (d) Geo satellite

10. State true or false: The gravitational force is a conservative force.

- (a) True
- (b) False

********** Answer Key *********

1(b)	2(c)	3(b)	4(d)	5(d)
6(c)	7(b)	8(c)	9(b)	10(a)