

Correct answers for the CBT class IX.

Month September.

Chapter Gravitation.

Q1. What happens to the velocity of the stone when it reaches the maximum height?

Ans It becomes Zero.

Q.2 What is the magnitude of the buoyant force acting on the stone?

Ans. One fourth.

Q.3 If the distance between two objects is doubled, the gravitational force becomes:

Ans. Acceleration.

Q.5 What is the velocity of the ball just before it hits the ground?

Ans. 39.6 m/s.

Q.6 Time taken by the ball to reach the ground is:

Ans. 4 seconds.

Q.7 What is the weight of the object on the Moon?

Ans. 10 Newton

Q.8 What will happen if the same metallic ball is immersed in oil instead of water?

Ans. Buoyant force will be less.

Q.9 **Assertion(A)** : Gravitational force between two objects increases as the distance between them increases.

**Reason(R)** : Gravitational force is inversely proportional to the square of the distance between two objects.

Ans. D A is false but R is true.

Q.10 **Assertion(A)** : The value of acceleration due to gravity decreases with height above the Earth's surface.

**Reason(R)** : Acceleration due to gravity is inversely proportional to the square of the distance from the Earth's center.

Ans. A Assertion and Reason both are true and Reason is correct explanation of Assertion.