

**SER (2021-22)**

**GRADE: IX**

**SUBJECT: PHYSICS**

**Duration: 30 mins.**

**Maximum Marks: 10**

1. What causes a body to fall on Earth?
  - a. acceleration
  - b. velocity
  - c. gravity
  - d. mass
2. The product of mass and velocity is called?
  - a. acceleration
  - b. momentum
  - c. force
  - d. work
3. Which of the following is the correct value of acceleration due to gravity at the equator of Earth?
  - a. 9.6
  - b. 9.7
  - c. 9.8
  - d. 9.9
4. An increase in mass kept in the pan increased the.....of the pan.
  - a. weight
  - b. volume
  - c. time
  - d. area
5. What caused the trolley to move?
  - a. force
  - b. friction
  - c. acceleration
  - d. velocity
6. An increase in the mass of an object will .....its acceleration(keeping the force acting constant).
  - a. increase

- b. decrease
- c. not change
- d. first increase and then decrease.

7. Consider the mass of 1 brick to be 100 gms. how much force will be required to pick 10 such bricks individually?

- a. 0.98 N
- b. 9.8 N
- c. 98 N
- d. 980 N

8. The SI Unit of Force is.....

- a.  $\text{kg}^2\text{m/s}^2$
- b.  $\text{kgm/s}^2$
- c.  $\text{kgm}^2/\text{s}^2$
- d.  $\text{kg}^2\text{m}^2/\text{s}^2$

9. What was the effect of increasing mass in the pan on the velocity of the trolley?

- a. it increased
- b. it decreased
- c. it remained the same
- d. the trolley did not move at all.

10. What is the correct formulation of the Second Law of Motion?

- a.  $F = mv$
- b.  $F = ms$
- c.  $F = ma$
- d.  $F = mu$