Name : _____ Grade/Year : _____ Subject :   Physics

School's Name : _____ Date : _____ Marks obtained : [   ]

Choose the correct answer from 4 options and circle the correct one.

1. The momentum of an object is the product of mass and

   A. Mass
   B. Velocity
   C. Acceleration
   D. Distance

2. Which has a greater momentum a truck or a car moving with same speed?

   A. truck
   B. Car
   C. zero Momentum
   D. time

3. Applying a constant force for a longer time increases the change in.

   A. mass
   B. Gravity
   C. Momentum
   D. Time

4. The change in momentum of an object is equal to

   A. Gravity
   B. Impulse
   C. Time
   D. Force

5. When a car A hits with a stationary car B, the momentum before the collision of car A is equal to the momentum after the collision of.

   A. car A
   B. Car B
   C. Car A and B
   D. none of the answers

6. The product of force and time of impact is called

   A. momentum
   B. Velocity
   C. Impulse
   D. Conservation

7. The momentum of a 500 g cricket ball moving at 30 m/s is

   A. 12.2 m/s
   B. 15.0 m/s
   C. 9.2 m/s
   D. 10.2 m/s

8. A 99kg rugby player moving 12 m/s collides with a stationary player of 130 Kg and fall together. What speed will the rugby players have after collision?

   A. 12.2m/s
   B. 0 m/s
   C. 9.2 m/s
   D. 5.2 m/s

9. A 40,000 kg airplane travelling on the runway at a speed of 70 m/s and comes to rest in 5.0 minutes. What is the force exerted on the airplane to bring it stationary?

   A. 9330 N
   B. 9500
   C. 6000 N
   D. 4,667 N

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Choose the correct answer from 4 options and circle the correct one.

10. A 0.5 kg trolley is pushed at a velocity of 1.2 m/s into a stationery trolley of mass 1.5 kg. The two trolleys stick to each other after the collision. Calculate the velocity of both trolleys after the impact.

   A. 3.0 m/s
   B. 0.6 m/s
   C. 0.3 m/s
   D. 6.0 m/s

11. An object of mass 1000 kg moving at a velocity of 5 m/s on a level surface, collides with and becomes attached to, a stationary object of mass 1500 kg. Calculate the velocity of the two moving objects after the collision.

   A. 1500.0 m/s
   B. 0.2 m/s
   C. 100.0 m/s
   D. 2.0 m/s

12. An object of mass 1000 kg is moving at a velocity of 5m/s on a level surface, collides with a stationary object of mass 1500 kg. After the collision the first object moves with a velocity of 4 m/s, calculate the velocity of the object having mass 1500 kg.

   A. 70.0 m/s
   B. 0.70 m/s
   C. 0.07 m/s
   D. 0.14 m/s