

1 The force acting on a body is 100N, calculate the mass of the body ($g=10\text{m/s}^2$)

A. 0.1 kg B. 10 g C. 10 kg ☒ D. 0.001kg

2 Which of the following is the dimension for pressure

A. MLT

B. MLT^{-2}

C. $\text{ML}^{-1}\text{T}^{-2}$ ☒

D. ML^{-2}T^2

3 The dimension for work and energy is

A. ML^2T^{-3}

B. MLT^{-1}

C. ML^2T^{-2} ☒

D. ML^{-3}

4 The dimension for power is

A. ML^2T^{-3} ☒ B. ML^4T^{-1} C. MLT^{-2} D. MLT^{-3}

5 A quantity which requires magnitude and direction to be specified is

A. Distance B. Mass C. Displacement ☒ D. Temperature

6 I Electric potential II Torque III Kinetic energy IV Momentum. Which of the following are vectors?

A. I and II B. I and III C. II and III D. II and IV ☒

7 The pair of scalar quantities are

A. Volume and thrust

B. Thrust and weight

C. Mass and luminous intensity

D. A and C

8 Which of the following is not a vector quantity

A. Altitude ☒

B. Weight

C. Displacement

D. Acceleration


9 A ball is thrown vertically into the air with an initial velocity. What's the greatest height reached

A $U/2g$ B. $3U^2/2g$ C. U^2/g D. $U^2/2g$ ☒

10 *A body will continue to be in state of rest or uniform motion until an external force is applied* this represents which law

A. Newton's law of energy

B. Conservation of motion

- C. Newton's first law of motion 
- D. Amonton's law