

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.  $\text{MLT}$
- B.  $\text{MLT}^{-2}$
- C.  $\text{ML}^{-1}\text{T}^{-2}$
- D.  $\text{ML}^{-2}\text{T}^2$

3 The dimension for work and energy is

- A.  $\text{ML}^2\text{T}^{-3}$
- B.  $\text{MLT}^{-1}$
- C.  $\text{ML}^2\text{T}^{-2}$
- D.  $\text{ML}^{-3}$

4 The dimension for power is

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

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