Physical quantities are

quantities such as degrees, radians and steradians

quantities such as length, mass, time, electric current, thermodynamic temperature, amount of substance, and luminous intensity

**quantities such as pounds, dollars and rupees**

//quantities such as kilos, pounds and gallons//

Which of the following pairs has the same dimensions?

specific heat and latent heat

lmpulse and momentum

**surface tension and force**

moment of lnertia and torque

The dimensions of kinetic energy is

[M2L2T]

**[ML2T]**

[ML2T-2]

[ML2T-1]

A force F is given by F = at + bt3, where t is time. What are the dimensions of a and b?

[ MLT-1] and [MLT0]

[MLT-3] and [ML2T4]

**[MLT-4] and [MLT1]**

[MLT-3] and [MLT-4]

The atmospheric pressure is 106 dyne/cm². What is its value in SI unit?

105 newton/m²

106 newton/m²

**104 newton/m²**

103 newton/m²

In a system of units if force (F), acceleration and time (T) are taken as fundamentals units then the dimensional formula of energy is

[FA2T]

**[FAT2]**

[FA2T]

[FAT]

If force (F), work (W) and velocity (v) are taken as fundamental quantities. What is the dimensional formula of time (T)?

[WFv]

[WFv-1]

**[W-1F-1v]**

[WF-1v-1]

The dimensions of kinetic energy is same as that of

force

**pressure**

work

momentum

Which of the following groups have different dimensions?

Potential difference, EMF, voltage

Pressure, stress, Youngs modulus

**Heat, energy, work done**

Dipole moment, electric flux, electric field

10. [ML-1T-2] is the dimensional formula of

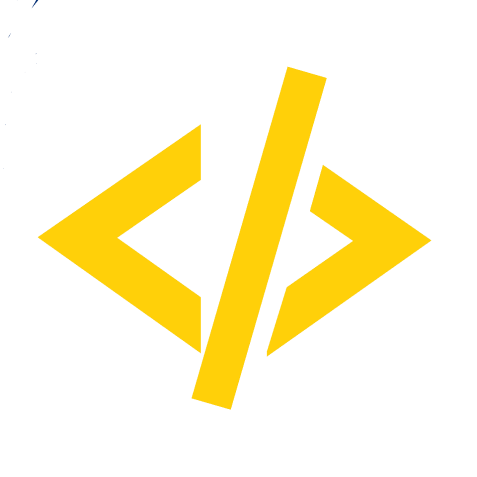
magnetic induction

**self-inductance**

electric potential

electric field

These is a demo question for images as option of mcqs?

Figure1: 

**Figure 2:** 

Figure 3:

Figure 4: 