STEPPING STONE SCHOOL (HIGH)

CLASS :8

Subject: physics **Date :- 20 . 06 .2020**
Topic:- **Time:-**

Worksheet No.:

ANSWERS

WORKSHEET NO :- 10 (ANSWERS)

Ans. 1) The force acting per unit area of a body is known as pressure

If P = pressure
A = surface area
F. =. Force

Then

$$\text{Pressure} = \frac{\text{Force}}{\text{Area}} \quad \text{or.} \quad P = \frac{F}{A}$$

Ans. 2) The S. I unit of pressure is pascal p(pa)

Pascal = When a force of one newton acts on a surface area of one square metre then the pressure is known as one pascal.

Ans. 3) The factors effecting pressure are

- The magnitude of force acting on the body
- The surface area of the body

Ans. 4) If surface area remains constant the pressure is directly proportional to the magnitude of force acting on the body. If force increases then pressure increases and if force decreases then pressure decreases.

Ans. 5) If the force acting on a body remains constant then pressure acting on a body is inversely proportional to the surface area of the body. If surface area Increases then the pressure decreases and if surface area decreases then pressure increases.

Work sheet :-12 (ANSWERS)

Ans. 1) The factors effecting potential energy are

1) *The mass of the body*
2) *Acceleration due to gravity*

Ans. 2) *Gravitational potential energy – The energy possessed by a body when it is placed at a certain height above the earth surface is known as Gravitational potential energy.*

Gravitational potential energy = mgh

Elastic potential energy – The energy possessed by a body in its deformed state is known as elastic potential energy.

Elastic potential energy = mgh

Ans. 3) Factors on which kinetic energy depends are

1) *The mass of the body*
2) *The velocity of the body*