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SUBJECT:- PHYSICS

CLASS:- IXTH

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SUBJECT TEACHER:- MR. NEEL NIRANJAN

CHAPTER 4. (WORK, ENERGY & POWER)(BASED ON NCERT PATTERN)

Potential Energy:-

The energy possessed by a body due to its position or shape is called its potential energy.
For Example:

- Water stored in a dam has large amount of potential energy due to its height above the ground.
- A stretched rubber band possesses potential energy due to its distorted shape.

Types of Potential Energy:-

On the basis of position and change in shape of object, potential energy is of two type:

1. Gravitational Potential Energy:

It is the energy possessed by a body due to its position above the ground.

2. Elastic Potential Energy:

It is the energy possessed by a body due to its change in shape.

Expression for Potential Energy

The potential energy (E_p) is equal to the work done over an object of mass ' m ' to raise it by a height ' h '.

Thus, $E_p = mgh$,

where g = acceleration due to gravity (m/s^2)

m = mass (KG)

h = height in (m)

