ODM EDUCATIONAL GROUP
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ENERGY

CHAPTER NO.4

SUB: PHYSICS

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LEARNING OUTCOMES

Students will be able to:

- Define kinetic energy.
- Express kinetic energy in proper units.
- Solve simple problems based on kinetic energy.
- Define potential energy.
- Define gravitational potential energy.
- Solve problems based on gravitational potential energy.
- Describe energy transformation in daily life situation .
- Distinguish between energy and power.

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POINTS TO BE COVERED

- Numerical problems based on energy and power:

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INTRODUCTION

Formulae used:

$W = F \times S.$

Potential energy = mgh.

Kinetic energy = ½ mv2.

$P = W/t.$

$W = P \times t.$

SOLVE

1. A force of 200N moves a body through a distance of 2m in the direction in the direction of force. Calculate the work done by the force.
2. A machine moves a load of 520N by a distance 5.2 m vertically up. Calculate the work done by the machine.

3. A coolie raises a box of mass 50kg to a vertical height of 3m. Calculate the work done by the coolie if force of gravity on 1 kg mass is 10 N.
4. What is the potential energy of a stone of mass 10kg that is lifted to a height of 8m if g = 10Nkg-1.

HOME ASSIGNMENT

- Exercise: B: 11,12,13,14

THANKING YOU

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