A

1 A man going up has Potential energy and kinetic energy both.

Ans True

2 A gum bottle lying on a table has no energy

Ans False

3 In an electric fan, electrical energy changes into the mechanical energy

Ans True

4 Potential energy changes into kinetic energy when it is put

to use.

Ans True

5 False

6 False

7 True

2a mechanical

b Chemical

c Potential

d Energy

e Potential

f kinetic

g light

h Joule

i Potential energy and kinetic

3a Running Water - kinetic energy

b Burning - heat energy

c Energy - Joule

d Sound energy - Vibrations

e Nuclear energy - atom bomb

4a Mechanical energy changes into heat energy.

b kinetic energy

c chemical energy

1 Define the term energy.

Ans Energy is the capacity of doing work.

2 State the unit of energy and define it.

Ans The unit of energy is Joule.

Joule = 1 Newton X 1 Metre

3 Name five different forms of energy are:

Ans The different forms of energy are:

i Mechanical energy

ii Heat energy

iii Light energy

iv Chemical energy

v Sound energy

vi Magnetic energy

vii Electrical energy

viii Atomic energy or nuclear energy

8 Two bodies A and B of masses 10 kg and 20 kg respectively are at the same height above the ground. Which of the two has the greater Potential energy ?

Ans The Body B having mass 20 kg has the greater Potential energy. This can be explained as follows :

P.E. = mgh.

For both the bodies gravity and height are same So the body with greater mass possesses greater Potential energy.

Q A bucket full of water kept on second floor has the greater Potential energy. This can be explained as follows:

P.E. = mgh

Mass of both bucket and the gravitational force are same, So the body at the greater height will Possess more Potential energy.