

LEVEL -7

FINAL TERM REVISION WORKSHEET -1

TOPIC : CHAPTER -1-WORK AND ENERGY

(BOOK 3)

ANSWERS

I. MULTIPLE CHOICE QUESTIONS

1. What is the unit of energy?
 - a. Decibel
 - b. Hertz
 - c. Joule
 - d. Ohm

2. What is gravitational field strength (g) on Earth?
 - a. 1 N/kg
 - b. 10 N/kg
 - c. 100 N/kg
 - d. 1000 N/kg

3. An iPad converts electrical energy into
 - a. Light energy, thermal energy and kinetic energy.
 - b. Light energy, sound energy and kinetic energy.
 - c. Sound energy, light energy and thermal energy.
 - d. Sound energy, thermal energy and kinetic energy.

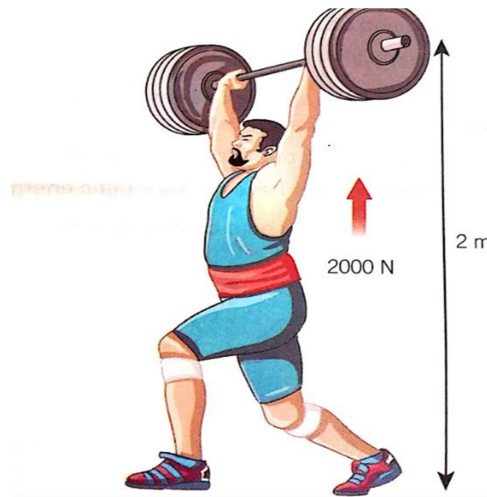
II. TRUE OR FALSE

4. No energy is used when work is done : **FALSE**
5. Any object lifted above the ground has gravitational potential energy (GPE) : **TRUE**

III. DEFINE

6. Law of conservation of energy :
Energy cannot be made or destroyed, but it can change from one form to another.
7. Elastic potential energy :
Energy stored in an object when deformed by being pulled or pushed. e.g. a stretched coil spring or elastic band.
8. Kinetic energy :
The energy an object has due to its motion or movement. It depends both on mass and its velocity. Heavier the mass more K.E object has, Also the faster an object moves the more K.E it has.
9. Nuclear energy:
Energy contained in the nucleus of an atom to hold its protons close together.

IV. The diagram shows a weight lifter lifting some weight.



i. Where does the weightlifter get the energy from to lift the weights?
The food he has eaten is stored in the form of chemical energy in his muscles.

ii. How much work is the weightlifter doing in lifting the weights?
Work done = force x distance
= 2000 N x 2 m
= 4000 Joule

iii. What type of energy do the weights have in the position shown in the diagram?
Gravitational Potential Energy (GPE)

iv. Suppose the weight lifter suddenly drops the weights. What type of energy will the weights have

- As they fall to the ground?
Kinetic energy
- When they hit the ground?
Thermal energy

