

KINETIC AND POTENTIAL ENERGY

GCSE PHYSICS

Q: Answer the following questions.

1. Define elastic potential energy. Give its formula. [2 Marks]

2. Define gravitational potential energy. Give its formula. Describe 3 factors affecting it [3 Marks]

3. An object weighing 500 N hits the ground with a speed of 20 m/s. What would be the kinetic energy of that object when it hits the ground?[3 Marks]

4. How do changes in mass and velocity of an object affect its K.E.? [2 Marks]

5. An apple is dropped from a tree. Describe the energy changes during its flight and the instant it touches the surface of earth. [4 Marks]

6. How does air resistance affect the falling objects? [1 Mark]

7. What are the units of energy and gravitational field strength? [2 Marks]

8. An object of mass 300 Kg is dropped from a height of 500 meters. Assume there is no air resistance and all of GPE changes into KE.

Complete the following table [6 Marks]

Height	K.E.	G.P.E.	velocity
500 meters			
300 meters			
0 meter			

Total Marks: [23]

THE END