MODEL ENTRANCE TEST PAPER

SUBJECT: PHYSICS

GRADE: 8

TOTAL MARKS: 10

I. Fill in the blanks: **[3 Marks]**

1. Force = mass × ……
2. 1MJ = ……J
3. Density = $\frac{Mass}{\quad}$
4. Pressure = $\frac{\quad}{Area}$
5. SI unit of time is ……
6. If the mass is 6kg and the volume is $3m^3$, then the density is …….. Kg/m3.

II. Choose the correct answer: **[2 Marks]**

1. $\frac{\text{Useful energy output}}{\text{total energy input}}$ Is

   (a) Efficiency (b) force

   (c) Length (d) none of the above

2. Kinetic energy is given by

   (a) Mgh (b) ½ mv^2

   (c) Mass × acceleration (d) none of the above

3. S.I. unit of acceleration is

   (a) Kelvin (b) m/s

   (c) Ms^{-2} (d) Newton

4. Work done = Force × ….

(a) Distance moved (b) acceleration

(c) Time (d) mass

5. Mass = Volume × ……

(a) Density (b) Acceleration

(c) Force (d) Velocity

6. Which of the following is an insulator?

(a) Glass (b) Copper

(c) Silver (d) Iron

7. Acceleration = …..

(a) Force ÷ mass (b) mass ÷ force

(c) Mass × Force (d) None of these

8. S.I. Unit of force is

(a) Kg (b) m/s^2

(c) Newton (d) Pa

III. Distinguish between speed and velocity. **[1 Mark]**

IV. Define the following: **[2 Marks]**

(a) Vector quantity (b) Convection

V. Explain the following: **[2 Marks]**

(a) If a bottle was filled with a liquid tightly sealed and then heated, what might happen?

(b) Two thin blankets are usually warmer than one thick one.