MODEL ACTIVITY TASKS
CLASS – XI
PHYSICS

Chapter : Physical World and Mesurement, Kinematics

Write the answers to the questions given below :

1. When an electric current flows through a wire , the heat produced is found to depend on the current, the resistance and the time. From dimension, establish an expression for the heat produced**.**

2. A physical quantity P is related to four variables a, b, c and d as follows **:** $p = \frac{a^3 b^3}{\sqrt{cd}}$**.** The percentage errors in a, b, c and d are 1%, 3%, 2% and 4% respectively. What is the error in the quantity P ?

3. A body moving in a straight line with uniform acceleration describes three successive equal distances in time intervals t_1 , t_2 and t_3 respectively. Show that $\frac{1}{t_1} - \frac{1}{t_2} + \frac{1}{t_3} = \frac{3}{t_1 + t_2 + t_3}$.

4. Can the magnitude of the vector $\vec{A} - \vec{B}$ be the same as that of the vector $\vec{A} + \vec{B}$?

Students will write answers to these activity tasks in subject specific exercise books at home, and submit the exercise books to respective subject teachers after schools reopen. Under no circumstance, students will go out of home.