## MODEL ACTIVITY TASKS CLASS – XI PHYSICS

## **Chapter: Physical World and Mesurement, Kinematics**

## Write the answers to the questions given below:

- 1. If the displacement of a particle in the t-th second is  $S_t = u + \frac{a}{2}(2t 1)$ , find the dimension of  $S_t$  from your observation.
- 2. If the resultant of two forces is equal in magnitude to one of them and is perpendicular to it in direction, find the other.
- 3. A particle moves in a circular path with uniform speed of 5 m/s. Find the acceleration of the particle when it moves from one end of a diameter to its other end in 3 s.
- 4. If the resistance is given by the equation  $R = \frac{V}{I}$  where  $V = (100 \pm 4) \text{ V}$  and  $I = (10 \pm 0.2) \text{ A}$  find the percentage error in R.