MODEL ACTIVITY TASKS CLASS – XII PHYSICS

Chapter: Electrostatics

Write the answers to the questions given below:

- 1. Sixty four small drops of water of 4 mm radius and of the same charge coalesce to form a large drop. Compare the surface charge density of a small drop with that of the large one.
- 2. Determine the surface charge density in SI unit.
- 3. If 6.25×10^{18} electrons are removed from a glass rod, what will be the amount of the positive charge in the glass rod?
- 4. Two particles are kept in air at a distance of 5 cm from each other. How should a charge of 10 esu be distributed between these two particles so that the repulsive force between them is maximised? Find the repulsive force.