Problem 7) Two small equally charged identical conducting balls are suspended from long threads from the same point. The charges and masses of the balls are such that they are in equilibrium. The distance between them is $a = (108)^{1/3}$ cm (the length of the threads L >> a) .One of the ball is discharged. After sometime both balls comes to rest in equilibrium. What will be the distance b (in cm) between the balls when equilibrium is restored?

- 1) 2
- 2) 3
- 3) 4
- 4) 1

Ans) 2