

Physics

1- What is electrostatic Shielding?

2- A capacitor is connected to a battery. If we move its plates further apart, work will be done against the electrostatic attraction between the plates. What will be the effect on the energy of the capacitor?

3- Two statements

Statement I: A small metallic sphere is placed at the center of a large charged spherical shell and two are connected by a wire. The charge will not flow from outer sphere to inner sphere

Statement II: A charged conductor is placed inside the hollow conductor and two are connected by the wire. The whole charge will flow on the outer surface of the outer conductor

(a) Both the statement I and II are correct

(b) Statement I is correct only

(c) Statement II is correct only

(d) Both the statement is true

4- Superposition principle can not be applied to these quantities in electrostatics

(a) Electrostatic energy

(b) Electric Field

(c) Electric Potential

(d) Electric force

Maths

(1) Solve questions number 7,8,9 exercise 3.4

(2) Solve example number 27 on page number 98.

(3) Solve questions number 3,4,5 miscellaneous exercise 3.

(4) Solve any two questions based on Determinant of one and two order.

(5) Write the sample space when a die is thrown two times.