



NOIDA PUBLIC SCHOOL
A-78, Sector-23, Noida
Affiliation No.2130200
Session : 2023 - 2024
CLASS – XII A (PHYSICS)
PT-1 WORKSHEET -1



- Q1. Write down SI unit of (i) electric field (ii) electric potential ?
- Q2. State Gauss's theorem. Does electric flux through a closed surface depend on shape and size of closed surface?
- Q3. Charge flowing through a conductor is given by $q = 5t^2 + 6t - 10$ coulomb. Calculate current flowing at (i) $t = 2$ second (ii) $t = 5$ second?
- Q4. The electric potential at centre of a charged sphere is 10 volt. What will be electric potential at (i) at surface (ii) at a distance $r/3$ from centre?
- Q5. Ten cells each of emf E and internal resistance r are connected in series. But by mistake two cells are wrongly connected. What will be net emf and internal resistance of whole assembly?
- Q6. Draw graph to show how resistance of a (i) good conductor (ii) semiconductor vary with temperature?
- Q7. Write down expression for electric field and electric potential of an electric dipole ?
- Q8. State Wheatstone bridge principle. Write down any three applications of it ?
- Q9. What will be the nature of electrostatic force between two point charges if
(i) $q_1 q_2 < 0$ (ii) $q_1 q_2 > 0$ (iii) $q_1 q_2 = 0$
- Q10. Define capacitance of a capacitor.
You are given n capacitors each of capacitance c are first connected in series and then in parallel. Find the ratio of net capacitance in series and parallel so obtained.?