

SOBTIS PUBLIC SCHOOL

GREEN PARK, BAREILLY

PHYSICS

WORK SHEET

CLASS-XII

- Q.1** State coulombs law in electrostatics. Name and define the unit of charge.
- Q.2** What is meant by electrostatic induction? Explain with the help of diagram.
- Q.3** Calculate the electric field strength required to just support a water drop of mass 10^{-3} kg and having a charge 1.6×10^{-19} C.
- Q.4** Two point charges $q_1=0.4$ C and $q_2=0.2$ C are placed 0.1m apart. Calculate the electric field.
- Q.5** Derive an expression for the electric field at any point on the axial line of an electric dipole.
- Q.6** State and prove Gauss theorem.
- Q.7** Deduce the coulombs law from Gauss law.
- Q.8** Obtain the electric field due to a long thin wire of uniform linear charge density.
- Q.9** What do you mean by quantization of electric charge.
- Q.10** What is a capacitor? Define capacitance of the capacitor. On what factors does it depends.