Doon Public School

A Senior Secondary School
Sector- 21, Panchkula. Ph: 0172- 2590514

Assignment– 1 **Subject: Physics** **Class: XII**
Date: 23-05-2018

INSTRUCTIONS:

- **Do the given assignment in your assignment note book.**

Q.No.1 Draw the equipotential surface for a uniform electric field.

Q.No.2 the middle point of a conductor is earthed and their ends are maintained at a potential difference of 220v. What is the potential at the two ends and the middle point.

Q.No.3 Using Gauss theorem is electrostatic drive for an expression. For elective field intensity at appoint due to two parallel sheets of charge densities, σ and $-\sigma$.

Q.No.4 A point charge of 10^{-8}c is situated at the origin of co-ordinate. Find the potential difference between the points a (4,4,2) and b(1,2,2).

Q.No.5 Deduce the coulomb's law from gauss theorem.

Q.No.6. Establish the relation between electric field and potential difference.

Q.No.7 If the electric field is given by $(6\hat{i}+4\hat{j}+4\hat{k})$. Calculate the electric flux through a surface of area 20 units lying in Y-Z plane.