

DELHI PUBLIC SCHOOL, JAMMU

HALF YEARLY ASSIGNMENT(2019-20)

ASSIGNMENT : PHYSICS

SUB: PHYSICS

CLASS :12TH

Q1 Give the principal of capacitor. And find expression for capacitance of parallel plate capacitor when the dielectric slab of thickness t is introduced between them?

Q2 What is electrostatic shielding and potential gradient?

Q3 State and prove gauss theorem? Using this law find electric field intensity due to infinite sheet of charge?

Q4 Define drifts velocity and mobility of charge carrier?

Q5 Define current density and find its relation with electric field?

Q6 What are non linear conductors and explain GaAs Graphs for positive and negative resistance?

Q7 State the principal of potentiometer? How it is used to find the internal resistance of the cell?

Q8 State the amperes circuital law? And using this law find the magnetic field due to a current carrying solenoid?

Q9 How a galvanometer is converted into voltmeter and ammeter?

Q10 Derive an expression for the Power in RLC circuit and also define power factor of the circuit?

Q11 State the principle of transformer? State its various losses and its efficiency?

Q12 What is the origin of the displacement current ? Derive an expression for the displacement current?

Q13 State the principle of A.C generator? Mention its use in industrial application?

Q14 Define Quality factor. State its relation with resistance ?

Q15 Draw the graph between angular frequency and current, reactance with frequency?