DELHI PUBLIC SCHOOL, JAMMU
ASSIGNMENT
SESSION (2017-18)

CLASS: X
SUBJECT: PHYSICS
Topics: Electricity, Magnetic effects of electric current

Q1. Define Maxwell's right hand thumb rule.

Q2. What are Conductors and insulators? Why only Conductors conduct electricity.

Q3. Define magnetic force. Also give factors affecting magnetic force.

Q4. What is the S.I unit of magnetic field intensity? Give mathematical relation for magnetic field.

Q5. Define Joules heating effect and derive expression for it.

Q6. a) Define rheostat.

b) Draw the circuit symbol for rheostat.

c) Give the Function of rheostat.

d) Find the current flowing in the circuit if a rheostat offers a resistance of 30 ohms across a potential of 6v?

e) Name the device which measures current.

Q7. Calculate the no. of electrons in 2 C of charge.

Q8.Why do we prefer parallel wiring in household circuits?

Q9. What are the factors affecting resistance?

Q10.Define electric power . Also give its commercial unit.

DELHI PUBLIC SCHOOL, JAMMU
ASSIGNMENT
SESSION (2017-18)

CLASS: X
SUBJECT: PHYSICS

Topics: Electricity, Magnetic effects of electric current

Q1.List two sources of magnetic fields

Q2.Define resistance. How many 176 ohm resistors in parallel are required to carry 5 A on a 220 Volt line?

Q3. Which uses more energy, 200 W refrigerator in 6h or two 100 W bulbs in 10 hour? Justify it.

Q4. Define electromagnets and give two applications of electromagnets.

Q5.Define electric power . A 2000W air conditioner operates for 8 hr per day . Calculate the cost to operate it for the month of July at Rs.4/-per kwh.

Q6.a)Define Flemings left hand and right hand rule.

b)Explain an activity to show that a current carrying conductor experiences the magnetic force when placed in a magnetic field.

Q7. What is the function of Galvanometer in the circuit?

Q8. Find equivalent resistance in parallel combination of three resistors.

Q9. What conclusions can we draw from ohms law?

Q10 . What is the effect of temperature on resistance?