Bindhu (PGT Physics).

Assignment:

1. Two resistors R_1 and R_2 are connected in a) a series combination b) a parallel combination and the combination is connected to a battery of 6V
   1) In which case will the potential difference across R_1 and R_2 be same.
   2) In which case will the current through R_1 and R_2 be the same

2) Two conducting wires of same material, equal in length and equal diameter are first connected in series and then in parallel. Compare the equivalent resistance in each case.

3) Two metallic wires A and B are connected in parallel wire A has length l and radius r, wire B has a length $2l$ and radius $2r$. Compare the ratio of the total resistance of parallel combination and the resistance of wire A? (both the wires are made of the same material)

4) How does the increase in temperature affect the resistance of a) conductor b) insulator

5) Name the device used for the to change the resistance of a circuit

6) What does the slope of a V-I graph represent.

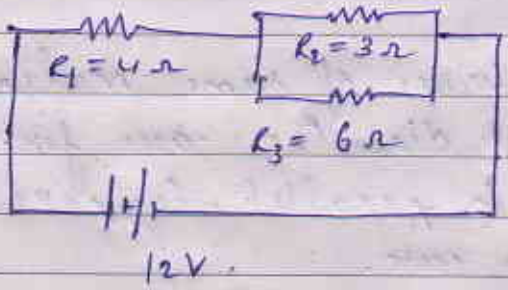
7) Define one ohm.

8) What is electrical resistivity? How does it depend on temperature? What is its S.I unit?

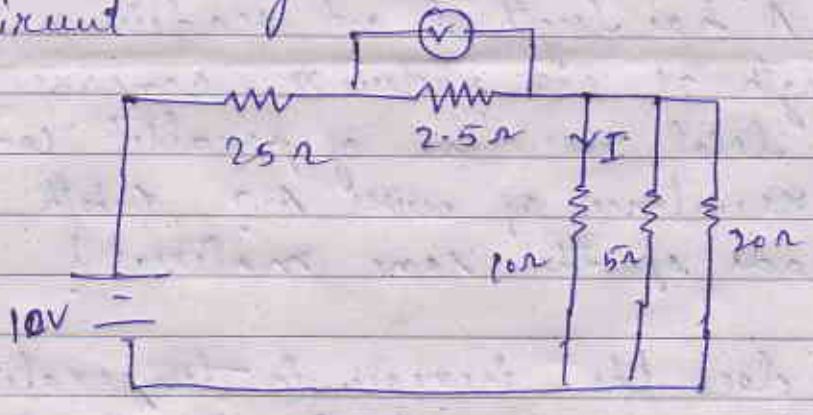
to form the sides of a rhombus ABCD. Calculate the total resistance and total current if a battery of 5V is connected across A and C.

10) What is the difference between resistance and resistivity.

11) In the given circuit find i) total current. ii) total resistance. 3) voltage across R_1.



12) Find the voltage V and current I in the given circuit



13) Forty electric bulbs are connected in series with the main of 220 V. After one bulb is fused. a) what will happen to the remaining bulbs.

~~b) one again reconnected~~

b) If the remaining bulbs are one again connected in series. across the same main what will be the effect on illumination.?

14) NCERT exercise question Pg 221.
1, 3, 7, 8, 13, 16, 18.