3rd Term - Revision Exercises

(1)   **Factors affecting the resistance of a conductor**

When this factor is increased Resistance ………………	When this factor is increased Resistance ………………	When this factor is changed Resistance ……………………
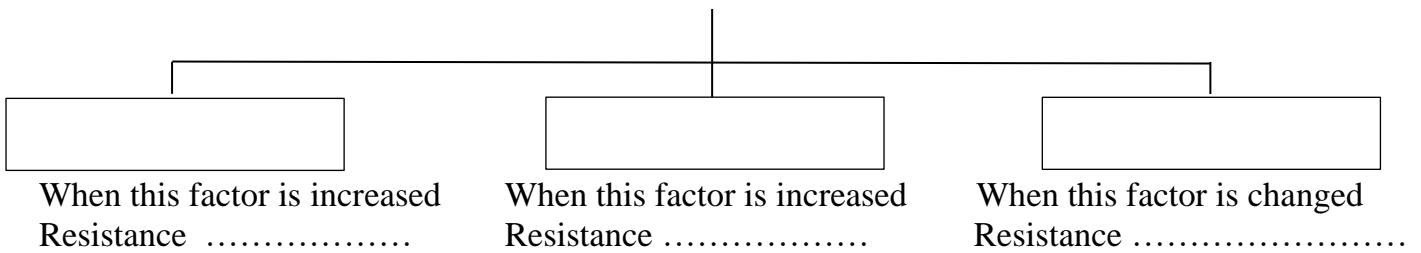
(Material composition of the conductor, increases, decreases, changes, Length of the conductor, Area of cross section of the conductor)

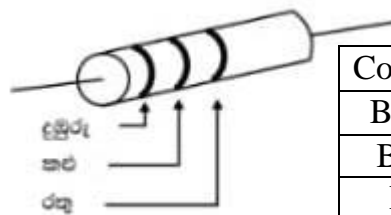(2)   Types of the resistors

A	B	C
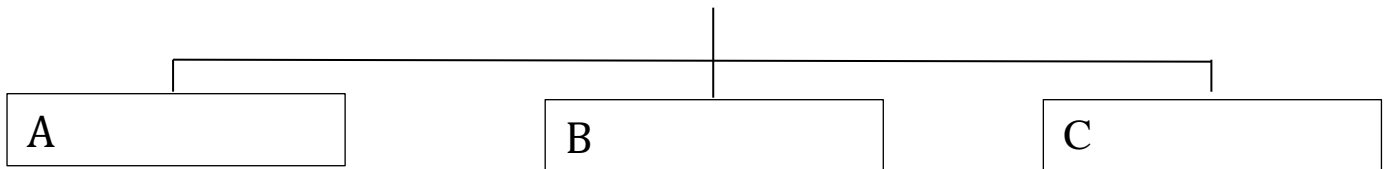
(3) Fill in the table

Resistor	Standard symbol

(4) Find the resistance of this.

Colour	cord
Brown	1
Black	0
Red	2

(5) The………………… passing through a conductor is proportional to the ………………… across it when the ………………………….. of that conductor is constant. This is known as Ohm's Law. (current, potential difference, temperature)

(6)

$$\frac{\boxed{}}{\boxed{}} = \text{a constant} \qquad (V , I)$$

(7). The constant given above is the resistance of the conductor. It is named by**......** letter and the unit of resistance is **……………..** **........................** is used to measure the resistance.
(Ohm Ω, R, Ohm meter, Ammeter, I, Ampere)

(8) V (V)
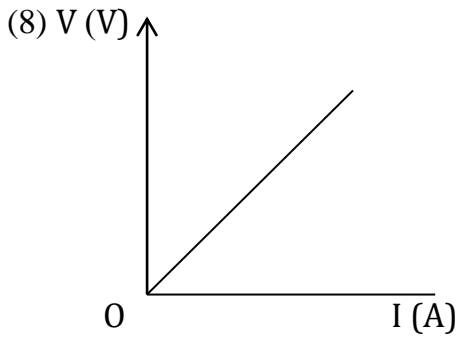
The gradient the above graph gives the value of ………………………………

(resistance (R), potential difference (V), current (I))

(9) Solve the given problems using Ohm's Law.

   (i)   The resistance of a Nichrome wire coil is 12 Ω. Find out the current flows through it when it is connected to 5V electric supply.

   (ii)   0.5A current flows through a bulb which is connected to 1.5V electric cell. Calculate the resistance of the bulb.

 (10) Fill in the blanks.

(potential difference, electro motive force, positive, Volt, negative, electrons)

The electric pressure which cause to push the …………………………….. from …………… terminal to the …………… terminal of an electric source is known as ……………………………. The unit of this is ………………… The force which cause to push the electrons to an external circuit is known as …………………………………….

(11)Fill in the blanks considering the factors needed for flowing of current in a circuit.

   (i) For pumping the charges there should be an external …………………..
       (a circuit, electric source)

   (ii) The circuit should be ……………… to connect the positive terminal to the negative terminal. (closed, open)

   (iii) There should be a .... between the positive terminal and the negative terminal. (charge, potential difference)