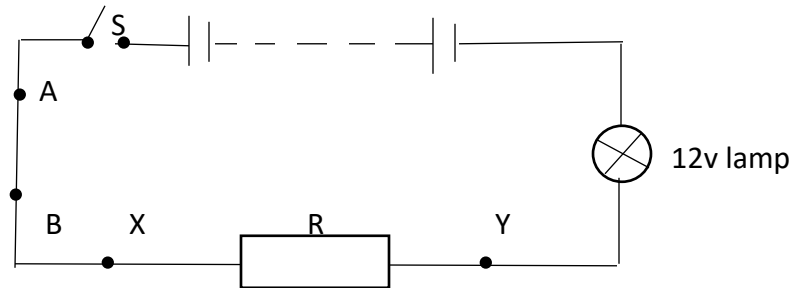


Physics

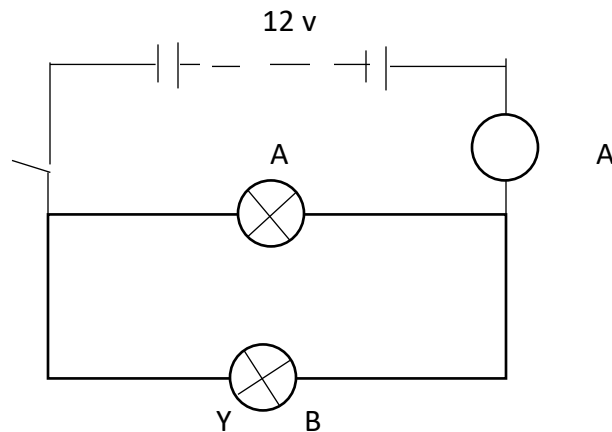
Topic Test 5

- Calculate the resistance of a coil of wire through which a current of 3 A flows due to a potential difference of 12 V.
- In the circuit shown in the figure below the 12 V lamp glows when switch S is closed.



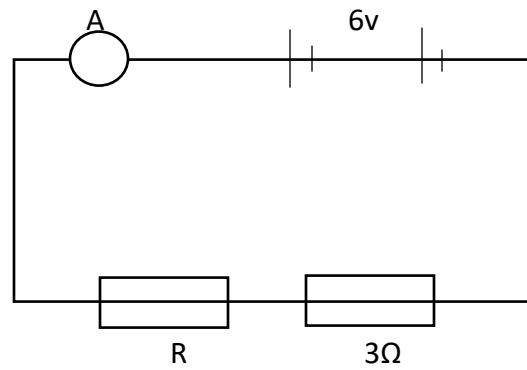
What happens to the brightness of the lamp when another identical resistor R is connected between:

- Points A and B?
 - Points X and Y? Give a reason.
- The figure shows a battery with e.m.f of 12 V supplying power to two identical lamps.



The Current in lamp B is 5 A. Calculate the:

- Total current supplied by the battery when both lamps are on.
 - Current in lamp A.
 - Resistance of lamp A.
- The figure below shows a battery of e.m.f 6V supplying current to two fixed resistors



5. When the current is switched on, the ammeter reads 0.5 A. Calculate the value of the unknown resistor R.
6. List two factors that affect the resistance of a conductor.