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Q1. No, they are wired in parallel.

Q2. All the other bulbs also stop glowing.

Q3. All the other bulbs keep glowing.

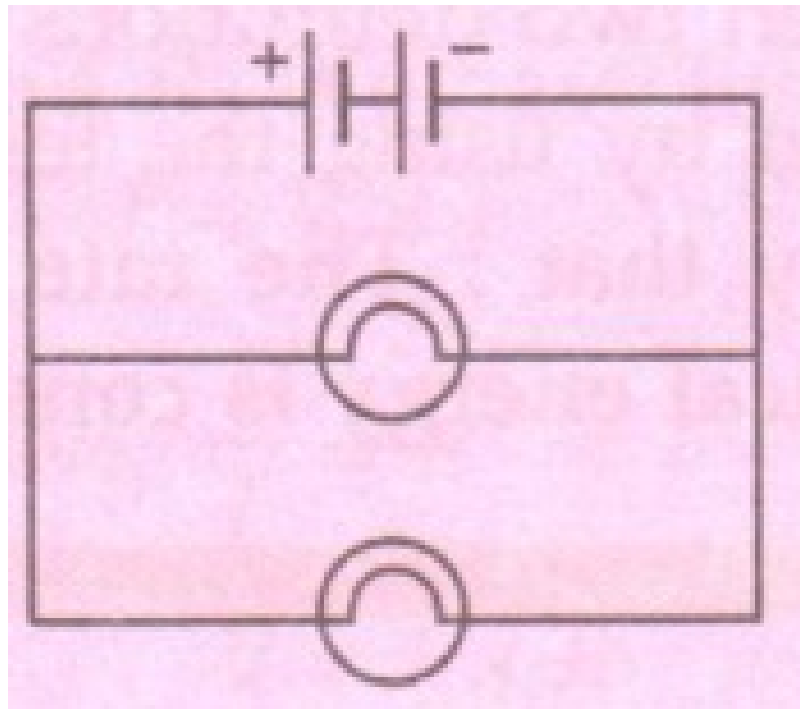
Q4.

(a) Series

(b) Parallel

Q5.

The two lamps (of 4V each) should be arranged in parallel with the two 2V cells.



Q6.

A series arrangement is not used for connecting domestic electrical appliances in a circuit because if one electrical appliance stops working due to some defect, then all other appliance also stop working as the whole circuit is broken.

Q7.

Different electrical appliances in a domestic circuit are connected in parallel because of the following advantages:

(i) If one electrical appliance stops working due to some defect, then all other appliances keep working properly.

(ii) Each electrical appliance has its own switch due to which it can be turned on or turned off independently, without affecting other appliances.

(iii) Each electrical appliance gets the same voltage as that of the power supply line.

Q8.

(a) Parallel circuit

(b) Parallel circuit

(c) Series circuit

(d) Series circuit.

Q9.

(a) circuit (ii)

- (b) circuit (iii)
- (c) circuit (iii)

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Q10.

Parallel arrangement because if one electrical bulb stops glowing due to some defect the other will keep glowing.

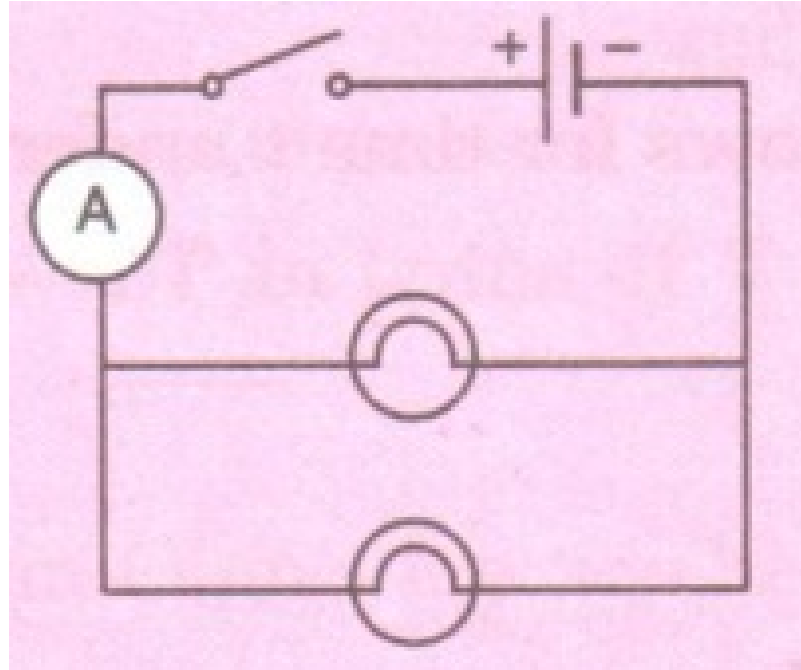
Parallel arrangement takes more current from the battery due to its lesser equivalent resistance.

(a) Parallel circuits - Because if one electrical appliance stops working due to some defect, then all other appliances in the circuit will keep working properly.

(b) All the other lamps stop glowing.

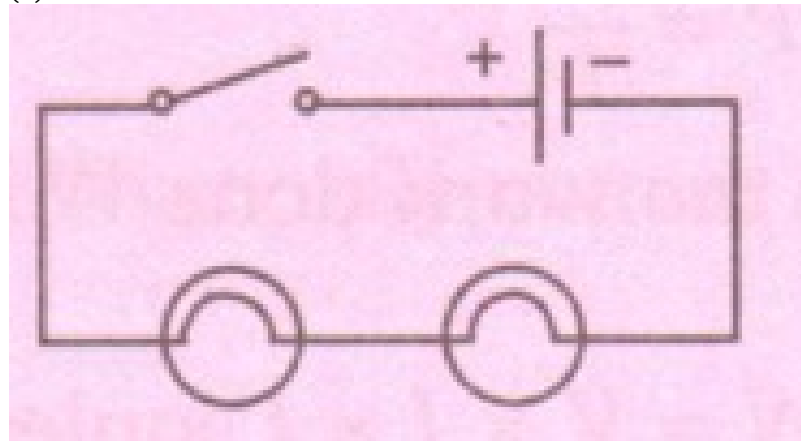
(c) All lamps are connected in series.

(d)



Q14.

(a)



(b) The brightness of the lamps can be changed by connecting the lamps in parallel.

Q15.

(a) C will be the brightest. Voltage will be distributed equally between A and B, so they will have equal brightness but lesser than that of C.

(b) A gets the same voltage as before, so its brightness remains the same.

(c) If B burns out, A will also stop glowing because it is connected in series with B. However, brightness of C remains the same.

Q16.

The brightness of two lamps arranged in parallel is much more

those arranged in series.

Q17.

(a) In case of series connection, if filament of one lamp breaks, the other will stop glowing.

(b) In case of parallel connection, if filament of one lamp breaks, the other will keep glowing.

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(a) Turn the switch to right side so as the resistance decreases.

(b) Turn the switch to the left side so as the resistance increases.

***** END *****