

Physics

Worksheet 6: 19/07/2020

Class - X

CHAPTER 11: CURRENT ELECTRICITY

Instructions:

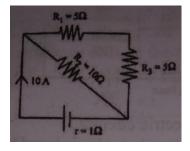
- ✓ Watch the uploaded video classes from School's Website/YouTube channel.
- ✓ For becoming more clear about the basics, watch more than once, if needed.

(Questions given in this worksheet are important questions for all exams)

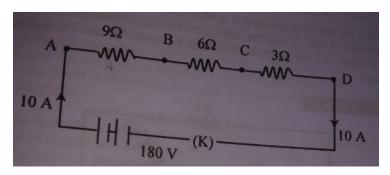
Creative Questions

(Solve yourself)

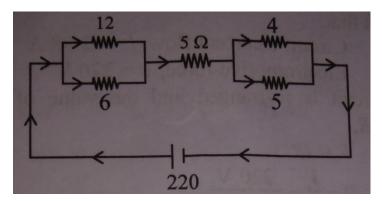
1. Observe the following figure carefully and answer the questions.



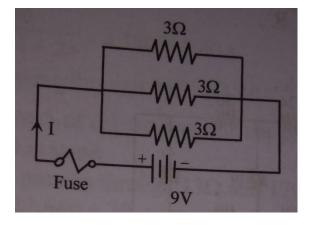
- a) Determine the difference between E and V. (Where E and V represents usual symbol.)
- b) Is it possible to get double electric current by rearranging the resistors? Explain with mathematical logic.
- 2. Observe the following figure carefully and answer the questions.



- a) Determine the potential difference of point A and Point B of the cell.
- b) Explain using mathematical explanation, what will happen to the flow of current if all the resistors are connected in a parallel manner by keeping the voltage fixed.
- **3.** Observe the following figure carefully and answer the questions.



- a) Determine the equivalent resistance of the above circuit.
- b) How are the resistances of the circuit of stem rearranged so that the flow of current will be 12.98A? Draw the circuit by analyzing mathematically.
- **4.** Observe the following figure carefully and answer the questions.



- a) Calculate equivalent resistance of above circuit.
- b) Without changing the value of resistance to get 2A current in the circuit, how the resistances will be rearranged? Explain with diagram.