

Physics

Worksheet 4: 12/07/2020

Class - X

CHAPTER 11: CURRENT ELECTRICITY

Instructions:

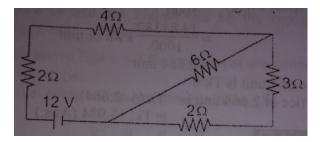
- ✓ Watch the uploaded video classes from School's Website/YouTube channel.
- ✓ For becoming more clear about the basics, watch more than once, if needed.

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

Creative Questions

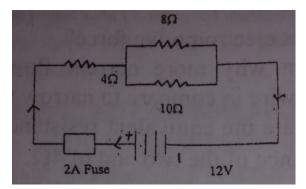
(Solve yourself)

- 1. Alvi uses a bulb of 220V-100W during his study for 3 hours daily. His brother Alif uses a table lamp of 220V-40W for 4 hours daily. The cost of each unit of electrical energy is 3.5 taka.
 - a) Determine the current of the lamp used by Alif.
 - b) Who is more economical, Alvi or Alif (considering money)? Analyze with mathematical arguments.
- 2. Observe the following figure carefully and answer to the given questions.



- a) Calculate the equivalent resistance and potential difference of the two ends of 4Ω .
- b) What amount of money is to pay as electric bill for one month if the given circuit run 6 hours per day? (Price per unit Tk. 6, 1 month = 30 days).





- a) Calculate the equivalent resistance of the circuit.
- b) If all resistances in the stem are connected in parallel, will the fuse be burnt for produced electricity? Explain.