

**Physics****Worksheet 7 : 23/09/2020****Class - X****CHAPTER 12 : MAGNETIC EFFECTS OF CURRENT****Instructions:**

- ✓ Watch the uploaded video class from school's website/YouTube channel.
- ✓ For becoming more clear about the basics, watch more than once, if needed.
- ✓ Contact me in case of any difficulties in understanding.

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

Creative Questions

(Solve Yourself)

- 1.** If 500V , 100 turns and 1A current are available in the primary coil of a transformer then 2.5A current is available in the secondary coil.
 - a) Determine the voltage in the secondary coil.
 - b) Is it possible to drive an electric motor which power is 1HP with the help of the transformer mentioned in the stem? Prove it by the mathematical analysis.

- 2.** The number of turns of primary and secondary coil in a transformer are 500 and 2000 respectively. The voltage of the secondary coil is 880V. 4A current is passing through the primary coil.
 - a) Determine the voltage in the primary coil and current in the secondary coil of the given transformer.
 - b) Is it possible to operate an electric motor of 1KW connected with the secondary coil? Explain mathematically.