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Firstly revise the study materials sent previously then attempt to answer the following questions –

- 1 What is a transformer ?
- 2 What is the principle of a transformer?
- 3 What do you mean by transformer ratio?
- 4 A transformer steps up 220 V to 2200 V. What is its transformer ratio?
- 5 Why is the core of a transformer laminated?
- 6 Why can't transformer be used to step up d. c. voltage?
- 7 What is the T.ratio of a (i) step up transformer (ii) step down transformer?
- 8 What are various energy losses that occur in a transformer?

9 A transformer has 300 secondary turns and 400 primary turns. If the secondary voltage is 300 V calculate the primary voltage.

10 Sketch the graph showing the variation of inductive reactance with frequency of the applied voltage.

11 The r. m. s. value of alternating voltage is 180 V. What is its peak value?

12 What is the impedance of LCR circuit in series at the electric resonance?

13 How can an LCR circuit be made purely resistor?

14 Name one device through which power consumed in an a. c. circuit is zero.

15 What is power consumed in a purely capacitive a. c. circuit?



