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Class 12 Subject Physics(Unit 04) Date 11 07 2020

VSAQ from Alternating Currents –

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

- 1 What is the frequency of D. C.?
- 2 What is the frequency of household supply of a. c. in India?
- 3 What is average value of a. c. over a complete cycle?
- 4 The peak value of a. c. is 20 A. What is its r. m. s. value?
- 5 Which value of a. c. is measured by a. c. ammeter?
- 6 The electric main in house are marked 220V, 50 Hz. Write down the equation for instantaneous voltage.
- 7 What is the unit of resistance?
- 8 What is the reactance of an inductor in a d. c. circuit?
- 9 At very high frequency of a. c., a capacitor behaves as a conductor. Why?

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?

