

12th Physics**Unit – 4 model question paper-2022****Total marks: 30****I. One mark questions:****1 x 5 = 5**

1. The unit of magnetic flux is.....
2. The SI unit of mutual inductance is.....
3. The maximum value of the induced emf is.....
4. The dimensional formula of impedance
5. The unit of inductive reactance is

II. Answer any three questions**2 x 3 = 6**

6. What is efficiency of an ideal transformer?
7. How will you define Q factor?
8. What is lenz's law?
9. State Fleming's Right hand rule?

III. Answer any three questions**3 x 3 = 9**

10. What are the applications of eddy currents?
11. What are LC oscillations?
12. Mention the various energy losses in a transformer (any three)?
13. What are the step up and step down transformer?

VI. Answer any two questions**5 x 2 = 10**

14. Explain the construction and working of a single phase Ac generator with necessary diagram

(Or)

Discuss the Ac circuit containing only an inductor.

15. Derive an expression for phase angle between the applied voltage and current in a series RLC circuit.

(Or)

Discuss the production induced emf by changing relative orientation of the coil with the magnetic field

All the Best

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