

Electromagnetic Induction Questions



Here are 30 "Fill in the blanks" questions on the topic of Electromagnetic Induction for Class 12 Physics:

1. Electromagnetic induction was discovered by _____.
2. The unit of magnetic flux is _____.
3. Faraday's law of electromagnetic induction states that the induced emf is directly proportional to the rate of change of _____.
4. Lenz's law states that the direction of induced current opposes the _____ that caused it.
5. The device that converts mechanical energy to electrical energy is known as _____.
6. The SI unit of inductance is _____.
7. A coil with inductance opposes changes in _____.
8. Mutual inductance occurs when two coils are placed such that the _____ produced by one coil induces an emf in the other coil.
9. The induced emf due to a changing magnetic flux is given by the equation _____.
10. A transformer works on the principle of _____.
11. An alternating current is one that _____ periodically.
12. Eddy currents are produced when a _____ conductor is exposed to a changing magnetic field.
13. The self-inductance of a coil is defined as the emf induced in the coil when there is a change in _____.
14. A current-carrying conductor placed in a magnetic field experiences a _____.
15. The core of a transformer is usually made of _____.
16. In an ideal transformer, the power output is _____ to the power input.
17. The right-hand rule helps to determine the _____ of induced current.
18. The number of turns in the coil and the rate of change of magnetic flux determine the magnitude of the _____.
19. The unit of magnetic field strength is _____.
20. The phenomenon of inducing a current in a coil by varying the current in another coil is called _____.
21. When the number of turns in a coil is doubled, the induced emf will _____.
22. The force between two parallel current-carrying conductors is _____ proportional to the distance between them.
23. The phenomenon of eddy currents can be reduced by _____.
24. A galvanometer can be converted into a voltmeter by adding a _____ in series.
25. Fleming's right-hand rule is used to find the direction of _____.
26. The emf induced in a coil is _____ to the rate of change of magnetic flux through the coil.
27. The direction of the induced current can be determined by applying _____.
28. In a step-up transformer, the number of turns in the secondary coil is _____ than the primary coil.
29. The magnetic flux linkage is the product of _____ and the number of turns in the coil.
30. A magnetic field can be produced by a _____ moving charge.

For more detailed discussions and to access solutions to electromagnetic induction problems, you can explore the following educational video resources:

