

# Quiz

1. What is a magnetic field?
2. What is the source of a magnetic field?
3. What is magnetic flux?
4. What is permeability?
5. What is relative permeability?
6. What is the origin of magnetic moments in materials?
7. What are the different kinds of magnetism?
8. How is electron configuration related to magnetism?
9. What is ferrimagnetism? How is it different from ferromagnetism?
10. Explain the origin of ferrimagnetism taking the example of  $\text{Fe}_3\text{O}_4$
11. What is antiferromagnetism?
12. What is a magnetic domain?
13. What is magnetic susceptibility?
14. Why do ferromagnets reach saturation on application of a magnetic field of sufficient strength?
15. Why does a residual magnetism remains even at  $H = 0$  during magnetic reversal in ferromagnets?
16. What is Coercevity?
17. What is meant by hard and soft magnets?
18. Which parameter decides the magnetic hardness?
19. Give examples of soft and hard magnets.
20. What is initial permeability? How is it related to magnetization?
21. Why should soft magnets for transformer core application be free of defects and impurities?
22. Why the magnetism is lost when ferromagnets are heated above a certain temperature?
23. What is magnetic anisotropy? What are hard and soft axis of magnetization?
24. What is superconductivity?
25. What is BCS theory of superconductivity?
26. What is High-temperature superconductor?
27. What is Meissner effect?
28. What is Type I and Type II superconductors?