



Practice test
Chapter: - 13th
Magnetic Effects of Electric Current

- Q1: Which of the following correctly describes the magnetic field near a long straight wire?
- (a) The field consists of straight lines perpendicular to the wire.
 - (b) The field consists of straight lines parallel to the wire.
 - (c) The field consists of radial lines originating from the wire.
 - (d) The field consists of concentric circles centred on the wire.
- Q2: The shape of magnetic field lines is
- (a) Straight lines
 - (b) Curved
 - (c) Triangular.
 - (d) Closed curves
- Q3: The direction of magnetic field in a straight conductor carrying current is de by
- (a) Fleming's left-hand rule
 - (b) Right hand thumb rule
 - (c) Fleming's right-hand rule
 - (d) None of these.
- Q4: At the time of short circuit, the current in the circuit
- (a) reduces substantially.
 - (b) does not change.
 - (c) increases heavily.
 - (d) vary continuously.

Q5: Imagine that you are sitting in a chamber with your back to one wall. An electron beam, moving horizontally from back wall towards the front wall, is deflected by a strong magnetic field to your left side. What is the direction of magnetic field?

Q6: When does an electric short circuit occur?

Q7: How does a solenoid behave like a magnet? Can you determine the north and south poles of a current-carrying solenoid with the help of a bar magnet? Explain.

Q8: Write the few uses of electromagnet.

Q9: How will you prove that current passing through a copper wire produces magnetic field around it?

Q10: An electric oven of 2 kW power rating is operated in a domestic electric circuit (220 V) that has a current rating of 5 A. What result do you expect? Explain.