

Q.1 The magnetic field inside a long straight solenoid carrying current:

- a) is zero
- b) decreases as we move towards its ends
- c) Increases as we move towards its end
- d) is the same at all points

Q.2 A stream of positively charged particles (alpha particles) moving towards west is deflected towards north by a magnetic field the direction of magnetic field is:

- a) Towards south
- b) towards east
- c) Downward
- d) upward

Q.3 In an electric motor, the direction of current in the coil changes once in each:

- a) Two rotations
- b) one rotation
- c) Half rotation
- d) one fourth rotation

Q.4 A rectangular coil of copper wire is rotated in a magnetic field. The direction of induced current changes in each:

- a) Two revolutions
- b) one revolution
- c) Half revolution
- d) one fourth revolution

Q.5 Name the rule which gives the direction of induced current.

Q.6 Explain the principle of electric generator.

Q.7 Name the device which converts mechanical energy into electric energy.

Q.8 What type of generator is used at power stations?

Q.9 Name the device used for producing electric current.

Q.10 When does an electric short circuit occur?

Q.11 State and explain Maxwell's right hand thumb rule.

Q.12 Name the scientist who discovered the magnetic effect of current.

Q.13 What is a solenoid?

Q.14 What is an electromagnet? How does it differ from a permanent magnet?

Q.15 Name five devices where a permanent magnet is used.

Q.16 What is Maxwell's corkscrew rule? For what purpose is it used?

