

Practice Assignment, M.C.Q's CHAPTER-9 [Electromagnetism]

Q1. Which of the following can be formed around an electric current passing through a conducting wire.

- (a) magnetic field
- (b) Black hole
- (c) electric field
- (d) All of these

Ans (a) Magnetic field

Q2: → The magnetic field line give the direction of :-

- (a) South-North
- (b) A-Compass-Needle
- (c) A-Bar magnet
- (d) Magnetic field

Ans (magnetic field(d))

Q3: → Which parameter can be detected with the Compass Needle?

- (a) Current
- (b) Magnetic field
- (c) Electric field
- (d) Gravitational field.

Ans (b) Magnetic field.

Q4: → The Compass needle rests in which of the following directions in the presence of magnetic field?

- (a) In the direction of flow of current.
- (b) Parallel and in opposite direction of magnetic field.
- (c) Perpendicular to magnetic field.
- (d) Parallel and in the same direction of magnetic field.

Ans (d) Parallel and in the same direction of magnetic field.

Q5: → Which of the following is correct regarding neutral point?

It is a point where,

- (a) magnetic field due to current and the earth magnetic

Page-2  
field is equal and opposite.

- (b) The sum of magnetic field due to Current and Earth's magnetic field is zero  
(c) Both (a) and (b)  
(d) None of these

Ans (b) The sum of magnetic field due to Current and Earth's magnetic field is zero. (a) two magnetic fields are equal & oppo

Q6:→ A coil wound around a piece of soft iron becomes electromagnet only when current flows in the circuit.

- (a) the circuit is open (b) A magnetic compass is present in the vicinity  
(c) A galvanometer is connected in the circuit  
(d) a current flows in the circuit

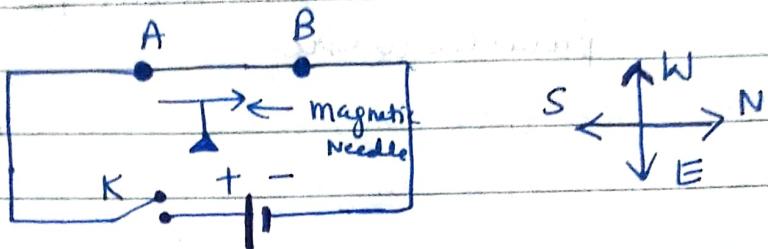
Ans (d) Current flows in the circuit.

Q7:→ If the strength of the current flowing through a wire is increased then the strength of magnetic field produced by it is :—

- (a) decreases (b) increases (c) remains the same  
(d) first decrease then increase

Ans (b) increases

Q8: → A Conductor AB is kept along North-South direction of earth above a magnetic needle as shown in fig. When the Key K is closed, then



- (a) the needle will not show any deflection.
- (b) the needle will deflect towards East.
- (c) The needle will turn in the opposite direction i.e towards South.
- (d) the needle will deflect towards West

Ans (b) The needle will deflect towards East

Q9: → Which of the following is correct regarding electromagnet?

- (a) It is a temporary strong magnet
- (b) A piece of soft iron is used.
- (c) It is an artificial magnet
- (d) All of the above.

Ans (d) All of the above.

Q10: → In which of the following cases an electromagnet is used?

- (a) Electric guitar
- (b) Electric bulb
- (c) Electric bell
- (d) All of these

Ans (c) Electric bell.

Page 4

Q11 → The true statement for the magnetic field near a long straight wire : →

- (a) The field consists of straight lines parallel to wire.
  - (b) The field consists of straight lines perpendicular to wire.
  - (c) The field consists of radial lines originating from the wire.
  - (d) The field consists of concentric circles centred on the wire.

Ans (d) The field consists of concentric circles centered on the wire.

Q12: + The strength of magnetic field of a solenoid does not depend upon : →

- (a) Current through it (b) Number of turns of the coil  
(c) Core of the coil (d) Area of the coil.

Ans The area of the coil (d)

Q13: A soft iron Bar is introduced inside a current carrying solenoid. The magnetic field inside the solenoid.

- (a) no change (b) will decrease (c) will increase (d) uncertain

Ans (c) will increase