1. What does an electric current carrying wire behaves like? (1)
2. How to define field lines? (1)
3. What do you meant by solenoid? (1)
4. What do you understand by electromagnet? (1)
5. Draw the magnetic field lines due to current through circular loop. (1)
6. State the properties of magnetic field lines? (1)
7. State the similarity between solenoid and bar magnet. Also a difference between solenoid and coil? (2)
8. Explain Fleming's left hand rule. (2)
9. What is electric fuse? What material is used for fuse wire? (2)
10. There are some differences between electric motor and generator. State them. (2)
11. Give any two features of magnetic field due to current carrying solenoid coil. (2)
12. Describe an activity to show that a magnetic field is produced by an electric current flowing a circular coil of wire. (4)
1. Name the type of current. (a) used in household supply (b) given in cell**(CBSE (CCE) 2011)**
2. Name the physical quantities of electromagnetic induction. **(CBSE (CCE) 2012)**
3. Give one application of electromagnetic induction. **(CBSE (CCE) 2012)**
4. Name any two appliances which are based on the application of heating effect of electric current. **(AI**
5. What constitutes the field of a magnet? **(DELHI 2006)**
6. A compass needle is placed near a current carrying wire. State your observation for the following cases, and give reason for the same in each case.
a. Magnitude of electric current in the wire is increased
b. The compass needle is displayed away from the wire. **(CBSE (CCE) 2012)**
7. Explain the role of fuse in series with any electrical appliance in an electric circuit. Why should a fuse with defined rating for an electric circuit not be replaced by one with a larger rating? **(CBSE (CCE) 2011)**
8. What is meant by the term frequency of an alternating current? What is the value in India? Why is an alternating current considered to be advantageous over direct current for long range transmission of electric energy? **(CBSE SAMPLE PAPER 2009)**
9. What is an electromagnet? Draw a circuit diagram to show how a soft iron piece can be transformed into electromagnet. **(DELHI 2008)**
10. With the help of neat diagram describe how you can generate induced current in the circuit. **(DELHI 2006C)**
11. a. Mention effect of electric current on which the working of an electrical fuse is based.
b. Draw a schematic labeled diagram of a domestic circuit which has a provision of a main base, meter, one light bulb and a socket.
c. Explain the term overloading of an electric circuit. **(CBSE (CCE) 2012)**
12. a. Describe an activity to demonstrate the pattern of magnetic field lines around a straight conductor carrying current.
b. State the rule to find the direction of magnetic field associated with a current carrying conductor?
c. What is the shape of a current carrying conductor whose magnetic field pattern
1. The MCB of a Rupa's room is tripped and keeps on tripping again and again. If it is a domestic circuit, what could be the reason of this phenomenon?
2. State any three appliances that function on Fleming's left hand rule.
3. What is the need to convert Dynamo into alternating current?
4. Find the applications of solenoid.
5. Difference between short circuiting and overloading.
6. Show an activity to demonstrate the direction of the magnetic field generated around a current carrying conductor.
7. What is a fuse? What material is used for make fuse wire?
8. State the properties of magnetic lines of force.
9. Name two safety measures commonly used in electric circuits and appliances.
10. What is the direction of magnetic field in bar magnet?

1. What should be the core of an electromagnet?

a. soft iron

b. hard iron

c. rusted iron

d. none of above

2. Who has stated the Right hand Thumb Rule?

a. Orsted b. Fleming c. Einstein d. Maxwell

3. In all the electrical appliances, the switches are put in the

a. live wire b. earth wire c. neutral wire d. all of above

4. What is the condition of an electromagnetic induction?

a. there must be a relative motion between the coil of wire and galvanometer

b. there must be a relative motion between the galvanometer and a magnet

c. there must be a relative motion between galvanometer and generator

d. there must be a relative motion between the coil of wire and a magnet

5. No force acts on a current carrying conductor when it is placed-

a. perpendicular to the magnetic field

b. parallel to the magnetic field

c. far away from the magnetic field

d. inside a magnetic field

6. What is that instrument which can detect the presence of electric current in a circuit?

a. galvanometer b. motor c. generator

d. none of above

7. Which device produces the electric current?

a. generator

b. galvanometer

c. ammeter

d. motor e.

8. What is electromagnetic induction?

a. the process of charging a body

b. The process of rotating a coil of an electric motor.

c. producing induced current in a coil due to relative motion between a magnet and the coil

d. The process of generating magnetic field due to a current passing through a coil.

9. What happens to the current in short circuit?

a. reduces substantially

b. .does not change

c. increases heavily

d. vary continuously

10. An alpha particle is diverted towards west is deflected towards north by a field. The field is magnetic. What will be the direction of field?

a. Towards south

b. towards east

c. downward

d. upward

ANSWERS

1. A
2. D
3. C
4. D
5. B
6. A 7. A 8. B 9. C 10. C