

# SUMMATIVE ASSESSMENT

VERY SHORT ANSWER TYPE QUESTIONS

[1 MARK]

## Previous Years' Questions

1. Name the type of current :  
(a) Used in household supply  
(b) given by a cell

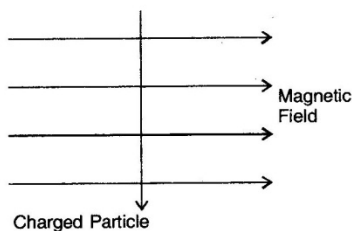
[CBSE(CCE) 2012]

2. State the direction of magnetic field in the following case-

[CBSE(CCE) 2012]



3. Give one application of electromagnetic induction.  
[CBSE(CCE) 2012]
4. Name the physical quantities which are indicated by the direction of thumb and forefinger in the Fleming's right hand rule ?  
[CBSE(CCE) 2012]
5. A charged particle enters at right angles into a uniform magnetic field as shown. What should be the nature of charge on the particle if it begins to move in a direction pointing vertically out of the page due to its interaction with the magnetic field ?  
[HOTS, Delhi 2010]



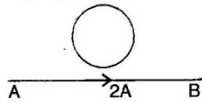
6. Name any two appliances which are based on the application of heating effect of electric current. [AI 2009C]
7. What constitutes the field of a magnet? [Delhi 2006]
8. How can you show that the magnetic field produced by a given electric current in the wire decreases as the distance from the wire increases? [AI 2006]
9. How will you use a solenoid to magnetise a steel bar? [Foreign 2006]

### Important Questions

10. State the value of potential difference between the live wire and the neutral wire in our country.
11. A magnetic needle deflects when it's brought near a current carrying conductor. Why?
12. Suggest one way of discriminating a wire carrying current from a wire carrying no current.
13. Name the device which is used to draw magnetic field lines.
14. Name a device that uses current carrying conductor and magnetic field.
15. In domestic electric circuit, with which wire we connect a fuse?
16. Name the device used to prevent damage to the electrical appliances and the domestic circuit due to overloading.
17. An electron does not suffer any deflection while passing through a region of uniform magnetic field. What is the direction of magnetic field?
18. State the observation made by Oersted on the basis of his experiment with current carrying conductors.
19. State the effect of a magnetic field on the path of a moving charged particle.
20. What is the frequency of A.C. used in India? How many times does it change its direction in one second?
21. State the conclusions that can be drawn from the observation that a current carrying wire deflects a magnetic needle placed near it.
22. What is direction of magnetic field lines inside a bar magnet?
23. A magnet AB is broken into two pieces. What is the polarity of A, B, C and D?



24. Can a 5A fuse be used in wire carrying 15 A current? Why?
25. A d.c. current of 2A is flowing through a conductor AB. Will the current induce in the circular wire of radius 1m? [HOTS]

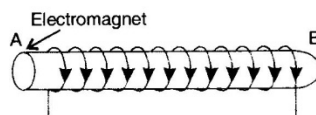


26. The diagram shows a beam of electrons about to enter a magnetic field. The direction of the field is into the page. [HOTS]



What will be the direction of the deflection, if any, as the beam passes through the field?

27. The diagram shows a coil of wire wound on a soft iron core forming an electromagnet. A current is passed through the coil in the direction indicated by the arrows. Mark the N and S poles produced in the iron core.



28. An electron beam is moving vertically upwards. If it passes through a magnetic field which is directed from south to north in a horizontal plane, then in which direction the beam will deflect?
29. The magnetic force on a moving proton acts towards north in a horizontal plane. If the proton is moving vertically upwards then what will be the direction of magnetic field? [HOTS]
30. A charged particle moves in a clockwise direction in a magnetic field which is perpendicular to plane of paper directed downwards. What is the nature of charged particle? [HOTS]
31. What will be the polarity of one end of a solenoid if the current appears to be flowing anticlockwise in it?
32. Suppose a coil is placed in a changing magnetic field and the circuit is not closed. Will the current induce in the coil?

### NCERT Questions

33. What is the principle of an electric motor?
34. What is the role of the split rings in an electric motor?
35. State the principle of an electric generator.
36. Name some sources of direct current.
37. Which sources produce alternating current?
38. Name two safety measures commonly used in electric circuits and appliances.
39. 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.

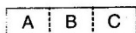
- (b) The field consists of straight lines parallel to the wire.  
 (c) The field consists of radial lines originating from the wire.  
 (d) The field consists of concentric circles centred on the wire.
40. Choose the correct option :  
 A rectangular coil of copper wire is rotated in a magnetic field. The direction of the induced current changes once in each  
 (a) two revolutions (b) one revolution  
 (c) half revolution (d) one-fourth revolution
41. The phenomenon of electromagnetic induction is  
 (a) the process of charging a body.  
 (b) the process of generating magnetic field due to a current passing through a coil.  
 (c) producing induced current in a coil due to relative motion between a magnet and a coil.  
 (d) the process of rotating a coil of an electric motor.
42. The device for producing electric current is called a  
 (a) generator (b) galvanometer  
 (c) ammeter (d) motor.
43. The essential difference between an AC generator and a DC generator is that  
 (a) AC generator has an electromagnet while a DC generator has permanent magnet.  
 (b) DC generator will generate a higher voltage.  
 (c) AC generator will generate a higher voltage.  
 (d) AC generator has slip rings while the DC generator has a called commutator split ring.
44. At the time of short circuit, the current in the circuit  
 (a) reduces substantially (b) does not change  
 (c) increases heavily (d) vary continuously.
45. Choose the correct option :  
 The magnetic field inside a long straight solenoid carrying current  
 (a) is zero  
 (b) decreases as we move towards its end  
 (c) increases as we move towards its end  
 (d) is the same at all points.
46. A positively charged particle (alpha-particle) projected towards west is deflected towards north by a magnetic field. The direction of magnetic field is  
 [CBSE (CCE)2012]  
 (a) towards north (b) towards east  
 (c) downward (d) upward

### SHORT ANSWER TYPE QUESTIONS(I)

[2 MARKS]

### Previous Years' Questions

1. The given magnet is divided into three parts A, B, and C.



Name the parts where the strength of the magnetic field is : (i) maximum (ii) minimum

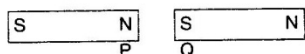
How will density of magnetic field lines differ at these parts. [CBSE(CCE) 2012]

2. 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 displaced away from the wire.

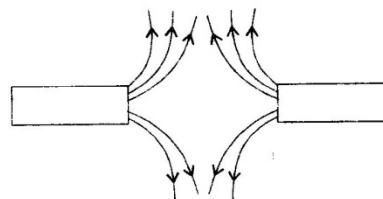
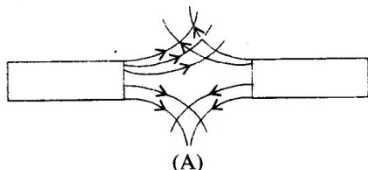
[CBSE(CCE) 2012]

3. (a) Two magnets are lying side by side as shown below. Draw magnetic field line between poles P and Q.



- (b) What does the degree of closeness of magnetic field lines near the poles signify? [CBSE(CCE) 2012]

4. Magnetic field lines of two magnets are shown in fig A and fig B.



(B)

Select the figure that represents the correct pattern of field lines. Give reasons for your answer. Also name the poles of the magnets facing each other.

[CBSE(CCE) 2012]

5. Insulation cover of which colour is conventionally used for earth wire ? Why is an earth wire connected to metallic parts of appliances ? [CBSE (CCE) 2011]

6. Identify the poles of the magnet in the given figure (1) and (2).

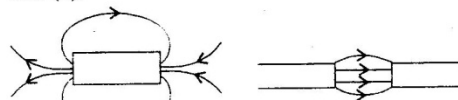


Figure (1)

Figure (2)

[CBSE (CCE) 2011]

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. The magnetic field associated with a current carrying straight conductor is in anticlockwise direction. If the conductor was held along the east-west direction, what will be the direction of current through it ? Name and state the rule applied to determine the direction of current.

[CBSE (CCE) 2011]

9. A coil of insulated wire is connected to a galvanometer. What would be seen if a bar magnet with its north pole towards one face of the coil is

- (i) moved quickly towards it,  
(ii) moved quickly away from the coil and  
(iii) placed near its one face ?

Name the phenomena involved. [HOTS, Delhi 2010]

10. Two coils A and B of insulated wires are kept close to each other. Coil A is connected to a galvanometer while coil B is connected to a battery through a key. What would happen if

- (i) a current is passed through coil B by plugging the key, and  
(ii) the current is stopped by removing the plug from the key ?

Explain your answer mentioning the name of the phenomena involved. [HOTS, Delhi 2010]

11. A student performs an experiment to study the magnetic effect of current around a current carrying straight conductor. He reports that

- (i) for a given battery, the degree of deflection of a

N-pole decreases when the compass is kept at a point farther away from the conductor.

- (ii) the direction of deflection of the north pole of a compass needle kept at a given point near the conductor remains unaffected even when the terminals of the same battery sending current in the wire are interchanged.

Which of the above observations of the student appears to be wrong and why?

[HOTS, CBSE Sample Paper 2009]

12. What is meant by the term 'frequency' of an alternating current ? What is its 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]

13. Draw the pattern of magnetic field lines in and around a long current carrying solenoid. Indicate (i) the polarity at each end and (ii) the direction of magnetic field inside the solenoid. [Delhi 2008]

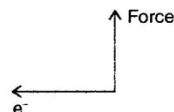
14. What is an electromagnet ? Draw a circuit diagram to show how a soft iron piece can be transformed into an electromagnet. [Delhi 2008]

15. What is meant by the term, 'magnetic field' ? Why does a compass needle show deflection when brought near a bar magnet? [NCERT, AI 2008]

16. With the help of neat diagram describe how you can generate induced current in the circuit. [Delhi 2006C]

### Important Questions

17. What is induced current ? Explain briefly two different ways to induce current in a coil.
18. How the magnetic field around a straight current-conductor is affected by
- (i) increasing the current in the conductor?  
(ii) changing the direction of flow of current in the conductor?
19. What is the purpose of the soft iron core used in making an electromagnet? How is it different from the permanent magnet?
20. The main power supply of a house is through a 5 A fuse. How many 100 W bulbs can be used in this house at the correct voltage ?
21. What happens to the force experienced by a current carrying conductor placed in a uniform magnetic field, when placed
- (i) parallel to magnetic field ?  
(ii) perpendicular to magnetic field ?
22. Give the significance of the following in a domestic circuit :
- (i) Electric meter  
(ii) Distribution box
23. With the help of Fleming's left hand rule find the direction of magnetic field in the case as shown.

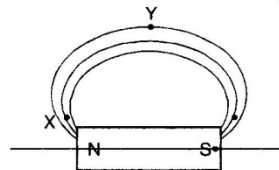


24. List four characteristic features of circuits used in residential buildings.
25. The diagram shows a piece of iron 3cm long placed near the S-pole of a magnet as shown below.



Draw the magnetic field pattern for the same.

26. Magnetic field lines are shown in the given diagram. A student makes a statement that magnetic field at X is stronger than at Y. Justify this statement. Also redraw the diagram and mark the direction of magnetic field lines.



27. List in tabular form two major differences between an electric motor and a generator.

### NCERT Questions

28. Which of the following properties of a proton can change while it moves freely in a magnetic field ? [HOTS]  
(There may be more than one correct answer)  
(a) mass (b) speed  
(c) velocity (d) momentum
29. Explain different ways to induce current in a coil.
30. 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.  
[Delhi 2009C]
31. When is the force experienced by a current carrying conductor placed in a magnetic field largest ? [AI 2009]
32. Think 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 right side. What is the direction of magnetic field ? [HOTS]
33. Two circular coils A and B are placed close to each other. If the current in the coil A is changed, will some current be induced in the coil B ? Give reason.  
[CBSE (CCE) 2011]
34. List three sources of magnetic fields.
35. Name some devices in which electric motors are used.

### SHORT ANSWER TYPE QUESTIONS(II)

[3 MARKS]

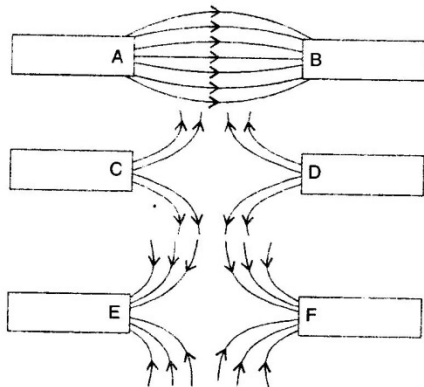
### Previous Years' Questions

1. With the help of a diagram, describe an activity to draw the magnetic field lines around a coil carrying current.  
[CBSE(CCE) 2012]
2. What is short circuiting? State one factor/condition that can lead to it. Name a device in the household that acts as a safety measure for it. State the principle of its working.  
[CBSE(CCE) 2012]
3. Write one application of each of the following :-  
(a) Right hand thumb rule  
(b) Fleming's left hand rule  
(c) Fleming's right hand rule [CBSE(CCE) 2012]
4. State one main difference between A.C and D.C. Why A.C is preferred over D.C for long range transmission of electric power ? Name one source each of D.C and A.C.  
[CBSE(CCE) 2012]
5. How will the magnetic field produced at a point due to a current carrying circular coil change if we :  
(i) increase the current flowing through the coil ?  
(ii) reverse direction of current through the coil ?  
(iii) increase the number of turns in the coil ?  
[CBSE (CCE) 2011]
6. (a) Mention the factors on which the direction of force experienced by a current carrying conductor placed in a magnetic field depend.  
(b) Under what condition is the force experienced by a current carrying conductor placed in a magnetic field maximum?  
(c) A proton beam is moving along the direction of a magnetic field. What force is acting on proton beam ? [CBSE (CCE) 2011]
7. How can a magnetic field be produced without using a magnet ? Describe an experiment to show that a magnetic field exerts a force on a current carrying conductor.  
[Foreign 2010]

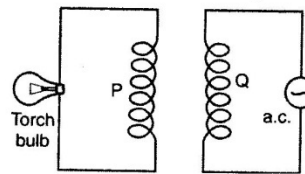
### Important Questions

8. Name the three types of wires used in household circuits. Out of these three which wire is used as a safety measure especially for those appliances that have metallic body. State the colour of insulation used for this wire. How this wire ensures the safety of the user ?
9. What is fuse? On what factor, rating of fuse wire depends? Electric supply of a house is through a 15 A fuse. When a 2000 W heater is used in this house, how many 100 W bulbs can be used simultaneously? The supply is at 220 V, and the heater and bulbs are rated for 220 V.
10. (i) What is an electromagnet?  
(ii) Name the material which can be used to make –  
(a) Permanent magnet  
(b) Temporary magnet.  
(iii) State two ways by which the strength of an electromagnet can be increased.
11. State three safety measures in using electricity.
12. Give scientific reasons.  
(i) Wires carrying electricity should not be touched when bare-footed.  
(ii) We must not use many electrical appliances simultaneously.  
(iii) Electrical switches should not be operated with wet hand.
13. What is the difference between direct current generator and alternating current generator? State the advantages of using alternating current over direct current. Give one disadvantage of alternating current.
14. State the difference between Fleming's left hand rule and Fleming's right hand rule.  
Name the electrical devices where these rules find an important application.
15. What happens to the force acting on current carrying conductor placed in magnetic field when :  
(a) Direction of magnetic field is reversed without changing the direction of current.

- (b) Direction of the current is reversed without changing the direction of magnetic field.  
 (c) Direction of both the current and the magnetic field is reversed.
16. List three major differences between bar magnet and solenoid in tabular form.
17. Three diagrams in the following figure show the magnetic field lines of force between the poles of the magnets. Identify the poles between A, B, C, D, E and F.

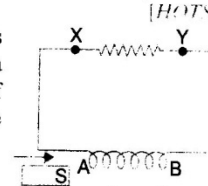


18. A coil 'P' is connected to a torch bulb and placed parallel to another coil 'Q' as shown in figure :



Explain the following observations :

- (i) bulb lights, and  
 (ii) bulb gets dimmer if the coil P is moved upwards.
19. A small valued resistance XY is connected across the ends of a coil. Predict the direction of induced current in the resistance XY when :



- (i) south pole of a magnet moves towards end A of coil.  
 (ii) south pole of a magnet moves away from end A of the coil.

### NCERT Questions

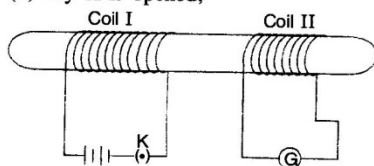
20. A current through a horizontal power line flows in east to west direction. What is the direction of magnetic field at a point directly below it and at a point directly above it ?
21. A current carrying aluminium rod AB is placed in a magnetic field. The direction of magnetic field is vertically upward. How do we think the displacement of rod AB will be affected if  
 (a) the current in the rod AB is increased.  
 (b) a stronger horseshoe magnet is used.  
 (c) length of the rod AB is increased ?
22. 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.
23. A coil of insulated copper wire is connected to a galvanometer. What will happen if a bar magnet is  
 (a) pushed into the coil  
 (b) withdrawn from inside the coil  
 (c) held stationary inside the coil
24. State the rule to determine the direction of a  
 (a) magnetic field produced around a straight conductor carrying current.  
 (b) force experienced by a current carrying straight conductor placed in a magnetic field which is perpendicular to it, and  
 (c) current induced in coil due to its rotation in a magnetic field.

### ONG ANSWER TYPE QUESTIONS

[5 MARKS]

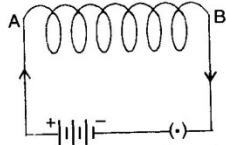
### Previous Years' Questions

1. Two coils of insulated copper wire are wound over a non-conducting cylinder as shown. Coil I has larger number of turns.  
 (i) Write your observations when,  
 (a) key K is closed;  
 (b) key K is opened;



- (ii) When the current is passed continuously through coil I.  
 Give reason for your observations.  
 (iii) Name and state the phenomenon responsible for the above observation.  
 (iv) Write the name of the rule that is used to determine the direction of current produced in the phenomena.  
 (v) Name the two coils used in this experiment.
2. (a) Mention effect of electric current on which the working of an electrical fuse is based .

- (b) Draw a schematic labelled diagram of a domestic circuit which has a provision of a main fuse, meter, one light bulb and a socket.
- (c) Explain the term overloading of an electric circuit. [CBSE(CCE) 2012]
3. Observe the figure given below and answer the following questions –

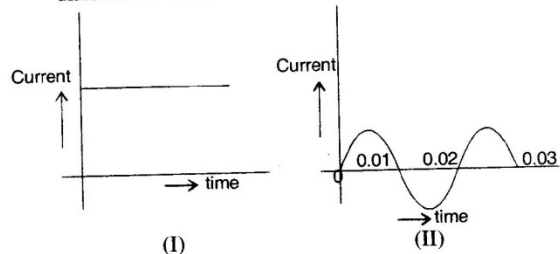


- (a) Write the special name given to the coil AB which has many circular turns of insulated copper wire.
- (b) State the nature of magnetic field inside AB when a current is passed through it.
- (c) Re-draw the diagram and sketch the pattern of magnetic field lines through and around AB.
- (d) List two factors on which the strength of the magnetic field produced by AB depends.
- (e) What is the effect of placing an iron core in the coil AB? [CBSE(CCE) 2012]
4. (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 resembles that of a bar-magnet? [CBSE (CCE) 2011]
5. (a) Consider a circular loop of wire lying in the plane of the paper. Let the current pass through the loop clockwise. With the help of a diagram explain how the direction of the magnetic field can be determined inside and outside the loop. Name the law used to find the direction of magnetic field. [NCERT, Delhi 2009]
- (b) Draw a diagram to represent a uniform magnetic field in a given region. [NCERT]
- (c) List two properties of magnetic field lines. [CBSE (CCE) 2011]

6. (i) With the help of an activity, explain the method of inducing electric current in a coil with a moving magnet. State the rule used to find the direction of electric current thus generated in the coil.
- (ii) Two circular coils P and Q are kept close to each other, of which coil P carries a current. What will you observe in Q
- (a) if current in the coil P is changed ?
- (b) if both the coils are moved in the same direction with the same speed ? Give reason.

[CBSE (CCE) 2011]

7. You are given following current-time graphs from two different sources:



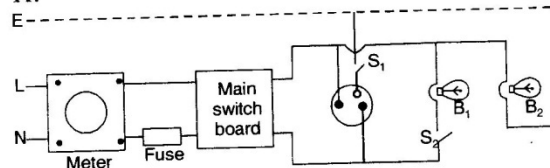
- (i) Name the type of current in two cases.
- (ii) Identify any one source for each type of these currents.
- (iii) What is the frequency of current in case II in India?
- (iv) Use above graphs to write two differences between the current in two cases.
- (v) What is the advantage of AC over DC ? [CBSE Sample Paper 2009]
8. (a) What is an electromagnet ?
- (b) List any of its two uses.
- (c) Draw a labelled diagram to show how an electromagnet is made.
- (d) What is the purpose of the soft iron core used in making an electromagnet ? [AI 2007]
9. Why is pure iron not used for making permanent magnets ? Name one material used for making permanent magnets. Describe how permanent magnets are made electrically. State two examples of electrical instruments made by using permanent magnets. [Delhi 2005]

### Important Questions

10. A student fixes a sheet of white paper on a drawing board. He place a bar magnet at the centre of it. He sprinkles some iron filings uniformly around the bar magnet. Then he taps the board gently and observes that the iron filings arrange themselves in a particular pattern.
- (a) Why do the iron filings arrange in a pattern?
- (b) What is indicated by the crowding of iron filings at the end of the magnet ?
- (c) What do the lines along which the iron filings align represent ?

- (d) Draw a neat diagram to show the magnetic field lines around a bar magnet.
- (e) Write any two properties of magnetic field lines.

11.



- (i) The figure given on previous page shows a domestic electric circuit. Study this circuit carefully. List any three errors in the circuit and justify your answer.
- (ii) Give one difference between the wires used in the element of an electric heater and in a fuse.
- (iii) List two advantages of parallel connection over series connections.

12. Draw the pattern of magnetic field lines through and around a current carrying loop of wire. Mark the direction of
- (i) electric current in the loop
- (ii) magnetic field lines.
- How would the strength of magnetic field due to current, carrying loop be affected if-
- (a) radius of the loop is reduced to half its original value?
- (b) strength of current through the loop is doubled?

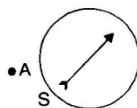
### NCERT Questions

13. Draw a labelled diagram of an electric motor. Explain its principle and working. What is the function of split rings in an electric motor ?
14. Explain the underlying principle and working of an electric generator by drawing a labelled diagram. What is the function of brushes ?

### NCERT Exemplar Problems

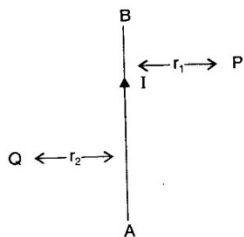
#### SHORT ANSWER TYPE QUESTIONS

1. A magnetic compass needle is placed in the plane of paper near point A as shown in figure. In which plane should a straight current carrying conductor be placed so that it passes through A and there is no change in the deflection of the compass ? Under what condition is the deflection maximum and why ? [HOTS]



2. Under what conditions permanent electromagnet is obtained if a current carrying solenoid is used ? Support your answer with the help of a labelled circuit diagram.

3. AB is a current carrying conductor in the plane of the paper as shown in figure. What are the directions of magnetic fields produced by it at points P and Q ? Given  $r_1 > r_2$ , where will the strength of the magnetic field be larger ?



[HOTS]

4. It is established that an electric current through a metallic conductor produces a magnetic field around it. Is there a similar magnetic field produced around a thin beam of moving (i) alpha particles, (ii) neutrons ? Justify your answer. [HOTS]
5. Meena draws magnetic field lines of field close to the axis of a current carrying circular loop. As she moves away from the centre of the circular loop, she observes that the lines keep on diverging. How will you explain her observation ?
6. What does the divergence of magnetic field lines near the ends of a current carrying straight solenoid indicate ?
7. Name four appliances wherein an electric motor, a rotating device that converts electrical energy to mechanical energy, is used as an important component. In what respect motors are different from generators ?
8. What is the role of the two conducting stationary brushes in a simple electric motor ?

#### LONG ANSWER TYPE QUESTIONS

9. Why does a magnetic compass needle pointing North and South in the absence of a nearby magnet get deflected when a bar magnet or a current carrying loop is brought near it. Describe some salient features of magnetic lines of field concept.
10. Explain the phenomenon of electromagnetic induction. Describe an experiment to show that a current is set up

in a closed loop when an external magnetic field passing through the loop increases or decreases.

11. Draw an appropriate schematic diagram showing common domestic circuits and discuss the importance of fuse. Why is it that a burnt out fuse should be replaced by another fuse of identical rating ?

#### VALUE BASED QUESTIONS

1. Rahul once went to a construction site along with his father. There he saw large cranes lifting heavy iron loads. After sometimes, he noticed that all the cranes were lifting

a bunch of iron rods and unloading it to other places. He was surprised and then enquired the crane man about it. The crane man then explained the use of electricity in lifting the load.



- (a) According to you, which effect of electricity is used in cranes ?
- (b) How electromagnet is formed ?
- (c) Which qualities were shown by the crane man ?
2. One day Suresh connected many household high power appliances having a current rating more than 6A to a multiplug of 6A rating. When he was about to switch them on, his elder sister shouted and asked him to remove the appliances from a single socket.
- (a) According to you, why she would not advice to connect multi-high power appliances on a single socket ?
- (b) What would have happened, if he switched them on ?
- (c) What was the value shown by his sister ?
3. Aishwarya once visited her uncle's house. Somehow she came to know about her uncle's illness and also about the neglect of MRI (Magnetic resonance imaging) due to its high cost. She then not only collected money from some of her family friends but also convinced her uncle for the test. The reports came after the test helped the doctors to treat him well. After getting well, uncle arranged the money and returned to her saying thanks. Then her uncle did a brief research about the test and found that it was expensive because of its set-up, that needs a strong magnetic fields and pulses of radio wave energy.
- (a) What were the values shown by Aishwarya and her uncle ?
- (b) How the magnetic field produced due to a circular coil depends on its radius ?
- (c) State the characteristics of magnetic field lines produce by current carrying circular coil.
4. Rajiv and Rajat were once lost in the forest. As it was a cloudy and foggy day, they had no idea of direction in which they were leading. So, Rajiv took out the magnetic compass from his bag. On seeing it, he noticed that the pointer designed to point towards North was worn off and the needle became similar at both ends. This made him broke down. Rajat consoled him and came up with an idea on seeing the flashlight and a piece of wire hanging out from Rajiv's bag. He took out the battery of flashlight and connected it with the wire. Now they came to know about the true directions.
- (a) How they identified the geographical north direction ?
- (b) What is magnetic compass ?
- (c) What according to you were the values displayed by Rajat to help Rajiv ?
5. Mr. Sharma used to park his car in the basement of his house. One day in the morning, he noticed that his basement is full of knee deep water and its walls were wet because of the hours long rain at night. When he entered the basement, he experienced a major shock. His father seeing him from outside, rushed to the main switch and switched it off and thus saved his life.
- (a) Why Mr. Sharma experienced the shock ?
- (b) What precautions Mr. Sharma should take to avoid such incidences in future ?
- (c) Which qualities were shown by Mr. Sharma's father ?