Marks: 25 Time: 30 mins

Q1. Choose the correct option- 10

1.Which of the following is an artificial magnet?

(a) Bar magnet (b) Horse-shoe magnet (c) Disc shaped magnet (d) All of these

2.Which of the following is a magnetic material?

(a) Paper (b) Iron (c) Wood (d) Stone

3.Which of the following is a non-magnetic material?

(a) Iron (b) Cobalt (c) Glass (d) Nickel

4. A bar magnet is immersed in a heap of iron filings and pulled out. The amount of iron filing clinging to the

(a) north pole is almost equal to the south pole.

(b) north pole is much more than the south pole.

(c) north pole is much less than the south pole.

(d) magnet will be same all along its length.

5. A freely-suspended bar magnet rests in:

(a) north-south direction

(b) east-west direction

(c) north-east direction

(d) any direction by chance

6.Which of the following makes use of a magnet?

(a) A shirt button (b) A screwdriver (c) A can opener (d) Refrigerator doors

7.Which of the following can be converted into a magnet?

(a) Iron (b) Wood (c) Rubber (d) Clay

8.What happens when we hit a magnet with a hammer?

(a) It gains more magnetic force

(b) It demagnetises

(c) The north and south poles change positions

(d) None of the above

9.Like poles of two magnets always
(a) repel each other
(b) attract each other
(c) sometimes repel sometimes attract each other
(d) None of the above

10.A piece of iron should be placed across the poles of horse shoe magnet
(a) to conserve its magnetic property
(b) to increase its magnetic property
(c) to demagnetise it
(d) to decrease its magnetic property

Q2. Fill in the blanks 2.5

1.On the basis of their occurrence, magnets are classified as …… and ……
2.Iron is a …… material whereas wood is a …… material.
3.Similar poles of two magnets …… one another.
4.A compass needle always points in the …… direction.
5.The attraction of a magnet is strongest at its ……
6.Magnetic poles always exist in ……
7.A …….. can be used to find directions.
8.…… is the sure test of magnetism.

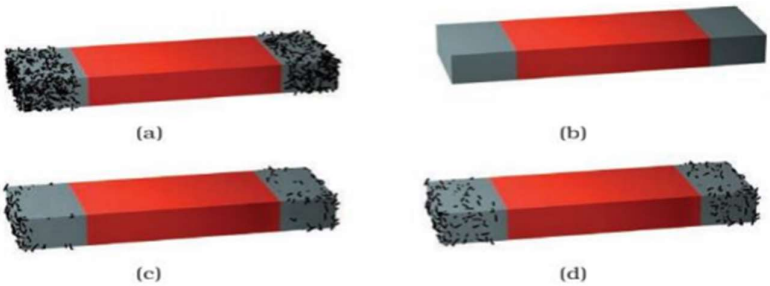
Q3.State whether True or False 5

1.It is possible to obtain an isolated south pole of a magnet.
2.Magnetite is a natural magnet.
3.Magnet was discovered by Newton.
4.A wooden material can be magnetised.
5.If we break a bar magnet into two then each piece will have two poles.
6.Heat cannot destroy magnetic properties of a magnet.
7.There is a maximum attraction in middle of a bar magnet.
8. Repulsion is a sure test of magnetism.
9.A cylindrical magnet has only one pole.
10.It is possible to obtain an isolated north pole of a magnet.

Q4. Rohan dipped a bar magnet in a heap of iron filings and pulled it out. He found that iron filings got stuck to the magnet as shown in figure:

(i) Which regions of the magnet have more iron filings sticking to it?
(ii) What are these regions called?
(iii) What happens when this magnet is suspended freely?
(iv) Name any other material which will stick to the magnet. 3.5

Q5. Four identical iron bars were dipped in a heap of iron filings one by one. Figure shows the amount of iron filings sticking to each of them.



(a) Which of the iron bars is likely to be the strongest magnet?
(b) Which of the iron bars is not a magnet?
Justify your answer. 4