Chapter -4 | Exploring Magnets

QUIZ-01

1. Which of the following is a naturally occurring magnet?
   A. Iron rod
   B. Compass needle
   C. Lodestone
   D. Bar magnet (C)

Explanation : Lodestone is a naturally occurring magnetic rock known for its magnetic properties.

2. Which material is not attracted by a magnet?
   A. Iron
   B. Cobalt
   C. Nickel
   D. Plastic (D)

Explanation : Plastic is a non-magnetic material and does not stick to magnets.

3. What do we call the ends of a magnet where most iron filings stick?
   A. Tips
   B. Points
   C. Poles
   D. Sides (C)

Explanation : The ends of a magnet where maximum attraction occurs are called poles — North and South.

4. What happens when like poles of two magnets are brought near each other?
   A. They attract B. They rotate
   C. They break D. They repel (D)

Explanation : Like poles (N-N or S-S) repel each other, while unlike poles attract.

5. What is the shape of the magnetic needle in a magnetic compass?
   A. Square B. Circular
   C. Needle-shaped D. Rectangular (C)

Explanation : The magnetic compass contains a freely rotating needle-shaped magnet.

6. Which direction does a freely suspended bar magnet always point to?
   A. East-West B. Up-Down
   C. North-South D. Diagonal (C)

Explanation : A magnet freely suspended always aligns itself along the North-South direction.

7. What does a magnetic compass help in finding?
   A. Temperature B. Pressure
   C. Directions D. Speed (C)

Explanation : A magnetic compass helps in finding directions as its needle always points north-south.

8. What is the effect of placing cardboard between a magnet and a compass needle?
   A. Increases attraction
   B. Blocks magnetic field
   C. No effect
   D. Magnet melts (C)

Explanation : Magnetic fields can pass through non-magnetic materials like cardboard, so there is no effect.

9. Which of the following shows both attraction and repulsion with magnets?
   A. Glass B. Wood
   C. Another magnet D. Cotton (C)

Explanation : Only a magnet shows both attraction and repulsion. Other materials may only be attracted.

10. What happens when a bar magnet is broken into two pieces?
    A. It loses magnetism
    B. Only one piece remains magnetic
    C. Each piece becomes a new magnet with both poles
    D. Poles disappear (C)

Explanation : When a magnet is broken, each piece still has both a North and a South pole.