

Physics (New Book) - 9th Class Physics English Medium Chapter 8 Preparation

Q1. Difference between temporary and permanent magnets.

Ans 1: Temporary magnets:- Temporary magnets are the magnets that work in the presence of magnetic field of permanent magnets. Once the magnetic field vanishes, they lose their magnetic properties.
Permanent magnets:- Permanent magnets retain their magnetic properties for ever there are either found in nature or artificially made by placing objects made of steel and some special alloys in a strong magnetic field for a sufficient time. There are many types of permanent magnetic materials. for example, cobalt, alnico and ferrite.

Q2. What are magnetic domains.

Ans 1: Magnetic domains are microscopic regions within a ferromagnetic material where atomic magnetic moments are aligned, creating a localized magnetic field. Their alignment determines the overall magnetism of the material.

Q3. Name three uses of permanent magnets.

Ans 1: DC motors and generators
Moving coil loudspeaker
Refrigerator door catchers

Q4. Name some uses of permanent magnets and electromagnets.

Ans 1: Use of permanent magnet:- Speakers, compasses, electric meters.
Use of electromagnets:- Electric bells, lifting cranes, MRI machines.

Q5. Write any two uses of electromagnets.

Ans 1: Electromagnets are used in
i. Electric bells ii. Cranes for lifting heavy iron and steel objects.

Q6. Define Magnetic materials.

Ans 1: Magnetism is a force that acts at a distance upon magnetic materials. These materials are attracted to magnets. These materials are called magnetic materials.
Example : iron, Nickel and Cobalt.

Q7. State right hand grip rule.

Ans 1: Right hand Grip rule is stated as below
"Grip the solenoid with the right hand such that fingers are curled along the direction of current in the solenoid, then the thumb points

so the N-Pole of the bar end.

Q8. Which type of magnetic field is formed by a current carrying long coil.

Ans 1: A long coil of wire carrying a current produces a magnetic field that is similar to that of a bar magnet. The field lines are concentrated inside the coil and spread out outside, resembling the field lines of a bar magnet.

Q9. How does hammering demagnetize a magnet.

Ans 1: If we beat a magnet, the domains lose their alignment and the magnet is demagnetized.

Q10. What is the south magnetic pole of a bar magnet.

Ans 1: The south magnetic pole is the end of the magnet that points towards the south.
