INTERNATIONAL INDIAN SCHOOL BURAIDAH

CLASS:12 PHYSICS WORKSHEET

LESSON: _MAGNETISM AND MATTER

- 1. The permeability of a magnetic material is 0.9983. Name the type of magnetic materials it represents.
- 2. The susceptibility of a magnetic material is 1.9×10^{-5} . Name the type of magnetic materials it represents.
- 3. The susceptibility of a magnetic material is -4.2×10^{-6} . Name the type of magnetic materials it represents.
- 4. Current flows through a circular loop. Depict the north and south pole of its equivalent magnetic dipole.
- 5. Which of the following substances are diamagnetic?
- 6. Is the steady electric current the only source of magnetic field? Justify your answer.
- 7. Relative permeability of a material, $\mu_r = 0.5$. Identify the nature of the magnetic material and write its relation to magnetic susceptibility.
- 8. Relative permeability of a material $\mu_r = 400$. Identify the nature of the magnetic material.
- 9. Relative permeability (μ_r) of a material has a value lying $1 < \mu_r < 1 + \epsilon$ (where ϵ is a small quantity). Identify the nature of the magnetic material.
- 10. In what way is the behaviour of a diamagnetic material different from that of a paramagnetic, when kept in an external magnetic field?