

## Chapter – 5

### Magnetism and Matter

#### **Magnetic field lines:**

- Q. Mention the properties of magnetic field lines. [July 2014, M 2015, M 2017]  
Q. Draw the pattern of magnetic field lines for a bar magnet. [March 2014]

#### **Magnetic dipole:**

- Q. State and explain Gauss law of magnetism. [J 16, M 17, M 18, J 19]  
Q. Prove that a current carrying solenoid is equivalent to bar magnet. [June 2017, March 2018]  
Q. Write the expression for magnetic potential energy of a dipole in a uniform magnetic field and explain the terms [March 2018]

#### **Terrestrial magnetism:**

- Q. Define declination at a place. [March 2014, March 2015, June 2015, March 2017, March 2018, March 2019, June 2019]  
Q. Define inclination at a place or magnetic dip. [March 2014, June 2015, March 2017, March 2018, March 2019]  
Q. Define horizontal component of earth's magnetic field at a place. [M 2014]  
Q. Where is magnetic dip zero on the earth's surface? [July 2016, July 2018]

#### **Magnetisation:**

- Q. Define magnetisation. [March 2016, March 2017]  
Q. Name the SI unit of magnetisation? [June 2015, March 2017]  
Q. Define magnetic susceptibility. [March 2014, March 2019]

#### **Magnetic materials:**

- Q. State and explain Curie law. [June 2015, July 2016, July 2018]

#### **Hysteresis:**

- Q. What is Hysteresis? [March 2018]  
Q. Draw hysteresis curve. Or Draw the variation of magnetic field with magnetic intensity when a ferromagnetic substance is subjected to cycle of magnetization. [March 2016]  
Q. What is retentivity and coercivity? [March 2018, July 2018, June 2019]

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