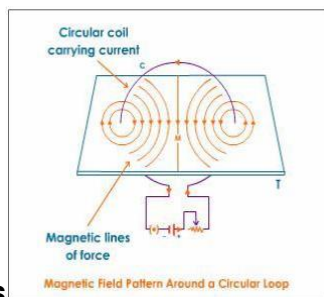


CHAPTER 2. (MAGNETIC EFFECTS OF AN ELECTRIC CURRENT) (BASED ON NCERT PATTERN)

Magnetic field produced due to circular loop

The Magnetic field produced around a circular loop is also circular. As we move away from the loop, the concentric circle becomes bigger. At the Centre, magnetic lines are parallel.



Characteristics

- The magnetic lines are circular at the points from where the current enters or leaves the coil.
- Within the space enclosed by the coil, the field lines are in the same direction.
- Near the centre of the coil, the magnetic lines are almost parallel to each other.
- At the centre of the coil, the plane of magnetic field lines is at right angles to the plane of circular coil.
- Magnetic field produced is directly proportional to the current and inversely proportional to the distance from the conductor.
- The part from where the magnetic lines enter the coil facing us is considered as south pole and the other is north pole.

Current flowing clockwise = south

Current flowing anti clockwise = north