Magnetic field Intensity at any point in the magnetic field H is defined as the force experienced by unit north pole of one weber strength at that point.
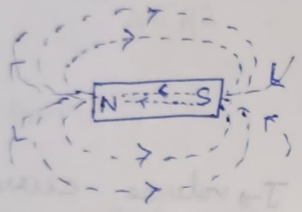
unit is Amperes/metre. or Newtons/weber.

or Ampere-turns per meter.

It is denoted as H. Its is the vector quantity.

Magnetic lines of force in a Permanent magnet

Magnetic flux and flux density:

*   The existence of magnetic field can be represented by Imaginary lines around the magnet, which are called magnetic lines of force.

The direction of such lines is always from N pole to S pole, external to the magnet. These lines of force are also called as magnetic lines of flux.

In case of magnetic flux, the poles exist in pairs only.

An isolated magnetic pole can not exist. Thus magnetic flux lines exist in the form of closed loop. Every mag. flux lines starting from north pole must end at south pole and complete the path south to north, internal to the magnet.

*   The total magnetic lines of force i.e. magnetic flux crossing a unit area in a plane at right angles to the direction of flux is called magnetic flux density. (denoted as B)
Unit: Wb/m^2 or Tesla (T). It is also a vector quantity