

 $4 \pi \times 10^{-7}$ T.m / A

 $B_{e} = \frac{\mu_{0}}{4\pi} \frac{M}{\left(r^{2} + l^{2}\right)^{3/2}}$

Equatorial

line

 $B_{e} = \frac{\mu_{0}}{4\pi} \frac{M}{r^{3}}$

magnetizing force and magnetic field due to magnetization of material is known as total

Hard Magnetic

Material

FERRO MAGNETIC

Domain formation

Magnetization is strong and in same direction

 $\mu_{r} >> 1$

Iron. Cobalt. Nickel

MATERIAL

B_m>>**B**_o

alvico.

$$B = B_0 + B_m = \mu_0 H + \mu_0 I = \mu_0 (H + I)$$
$$B = \mu_0 H \left(1 + \frac{I}{H} \right) = \mu_0 H \left(1 + \chi_m \right)$$
$$Also, \ \mu_r = (1 + \chi_m) \qquad [\because B/H = \mu_r]$$

(2) Magnetic

unitless and

Susceptibility is a

dimensionless quantity

magnetic moment and V

(3) It is a material

(4) SI Unit is A/m.

Volume.

Property

(4) SI Unit is: A/m