

$$\begin{aligned}
 F &= \frac{\mu B}{4\pi B} = \frac{1.6 \times 10^{-9} \times 3.5 \times 10^{-7}}{2 \times 11 \times 9.11 \times 10^{-31}} \\
 &= \frac{5.6 \times 10^{-16}}{3.2 \times 10^{-3}} \\
 &= 9.28 \times 10^{19} \text{ Hz}
 \end{aligned}$$

s that the magnetic flux density near a long
 proportional to the distance from the conductor
 ctor. - A constant which a current or strength is

or

6)

So

It

role

inter

qu

where q is the charge and d is the
The S.I unit is Cm^{-1}

The electric potential of a particle
moving a positive charge from infinity
at infinity is defined as zero. It is re
that electric potential is the electric
space. It is also measured in Joule

In a uniform electric field, the equ
difference

$$V = Ed$$

where, V is the potential difference

E is the electric field in st

d is the distance between t

$$= 11.23 \times 10^4 \text{ V}$$

$$= 1.12 \times 10^5 \text{ N/C}$$

$$1.12 = \frac{W}{q}$$

$$q = \frac{W}{1.12 \times 10^5} = 8.99 \times 10^{-9} \text{ C}$$

2a) The electric field is a region where electrostatic force acts on other charges, any point in space is called electric field.

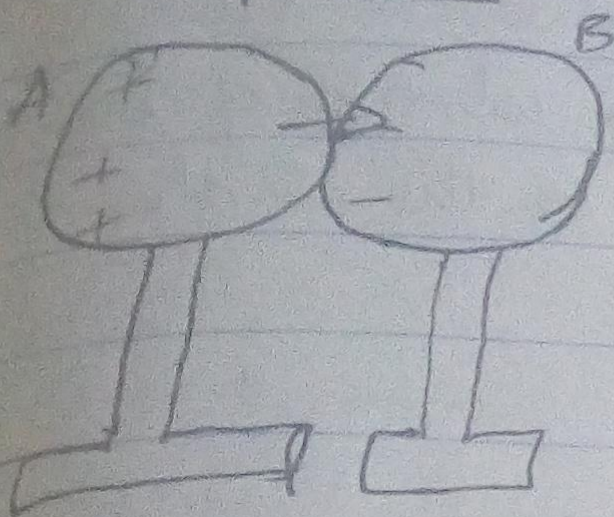
$$E = \frac{F}{q_0}$$

$$b) E = \frac{8.99 \times 10^9 \times 8 \times 10^{-9}}{(3)^2}$$

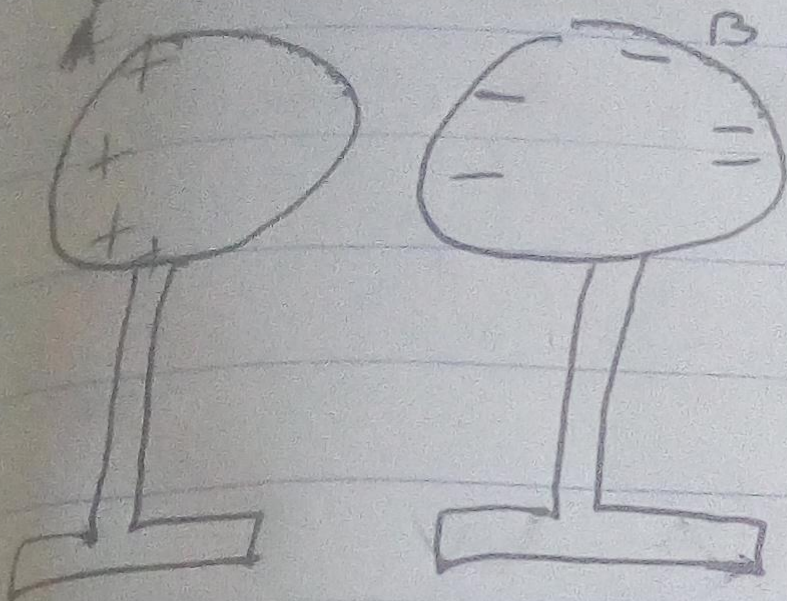
Eduard Emmanuel
19/ENG 09/077



two metal
stands



the presence
Sphere A
polarized



Sphere
insulation
opposite



The