				Date_	20
Ofen	law teles ofice of ductor."	90	117:	e)1, 1	
66 This	law tel	is the	relati	ion b/u	)
mag	snetic fie	ld and	eurer	it in a	3
000	rductor. ??			V 7 2	
	Marie Marie				Hett. o
Amperers	law can	be d	efined	as the	integral
of the o	magnetic	field (	(B) au	ound a	el electric
is direc	ely prop	Estion	al to t	he tota	el electric
curent	(I) Pous	ing the	ough	the loop	.9 }
	T.	**************************************	conducto	N. Committee	
	I		- Indian	14	9,2
		11 5	<u> </u>	-	
		2.500000	<u>}</u>	3 (0)(0)	t Applicati
		110	Nov°		
		Ln Al			10.00 108 . (I)
		TA		)	DO 701 (6)
BOH IN	ration	1/2	- 10	1000	3066
AL	ve know	That	* 40 10	2000	3300
	$\propto 2I \longrightarrow$		1 1 1 1		
"B" inv	ersly prop	and time	ral to	u , ,	0.00,000
В	0,,,	000000		Constant	7 10 1010
0	$\propto \frac{1}{\chi}$		(1)	1, 1, 1, 1, 1, 1, 2	1100 01
Combine	egn (1)	द 🕡			
B &		4 0			
2 0	- Y				
const and	- of our	n. to	~1°+		- 3
	D Prop	muon	ality neasi h	AARK	
<u> </u>		- Pern	nearsil		
	41	M.	= 41×	10-1 MP	A-1 m -1
			A STATE OF THE STA		

uncers Inu:

B = XI No

B = M. I

2 TY

Here,

L 2 DL1 + DL2 + DL3 + rer + DLn

Lo 2XY

B2XX = MOI

∠B. DL = U.I

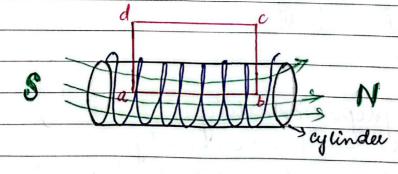
EB. DL XI

# Applications of Amperess Raws-

- (1) solenoid
- (2) Torvid

Solemoid is a long, tightly wounded coil of will and often used to generate a uniform magnetic field within the coil interior.

B = MonI



	Date20
Levisor ?	Puller Palace - P
Me use rectangular	ampère loop
abod.	de 18 milion
As we know that	
&B. DL = M. I → O	ut Into Lat
	do 10
FON Lab:	r 0 = 0
B. Lab 2 BLab cos O	M = N =
= BL cos (0)	do 1
B. Lab 2 BLab	
	in in the
FON Lbc :	
B. Lbc = BLbc cos (90)	3 0 = 90
B . L b c 2 0	
	· i) i-j
Fox Led:	
B. Led = B Led cos (	90) 70=90
B. Led 2 BLed	
neclasible, (out side the	solenvid)
B. Led 2 0	
FON Lda:	
B. Lad = BL cos(90)	7 O =
B. Lad 2 0	
FON & B. DL:-	
BEDL = B. Lab + B. Lbc + B	S.Led + B.Lda .
BEDL > BLab	
A-ALD	

Date	20
------	----

put BEDL = BLab in egn (i)

BLab z MoI

For Total turn = N BLab = M.NI

" n 2 N \* no. of tun in unit Lab length ab.

N = n Lab

BLas = Mon Las I

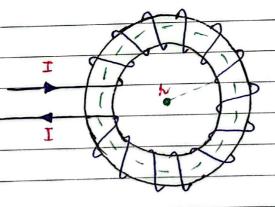
B = MonI

Toroids

A toroid can be considered as a sole noid on a everlar support. It also generates a magnetic field within its interior.

B = MONI 2 TN

Consider a torvid of hadius "h' with "N' turns of wire also suppose that current passes through the each turn is "I" and due to this current a circular magnetic field produced under some assumptions shown in figure.



Here we use Ampère Law:

2B.DL = M.I -> 0

FON & B. DL:

ALLES OF

EDL = 2Th

20

put in egn O

B2Th = M.I

B = U.I 2Th

For total no. of tun "N".

B = Mo NI 27h