6-04- 2022	losk: 5: Mik Theosy and Raphative Troston
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•	Wath Number: 03736602
	course! 2nd semester Misc ESPACE 2022.
	Task: 5: Derive the boundary conditions for the Magnetic field: Answer:
•	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	4800
	Ba Bat
	Normal component Tangential component
	we know the following maxwell's equations
	that are related to magnetic field.
	1) div 6 = 0 : 1st Marwell Equation
	2) VXH = J + dE ! 4YER MARWELL Equation
	Banday conditions for the hormal component
	of Hagnetic field:
	pield is given as follows:
	\$B. de = Satub.du = \$ (flox)
	from the 1st manual equation:
•	47011 di B = 0

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we can compute the above squatton	_(
when divis = 0	
as: dus.ov = 0	
COV DE COV	
That means:	
\$ 8.25 = Jave 2 = \$ = 0	
From the figure above, we can also compute	
the value of \$\$.03'	(
the state of the s	
S[En-Bin] = 0=0	
A tel 4,	
Byn-Bin = O	
B>n=Bin=0	
Boundary condition for Morray	
component 111	
AND DEALER AND A SERVE FIRST CO.	
Boundary condition for Tangential component!	
for this, are will use the 4th maxwell	
Equation:	
TXH=J+dt	
J=0 called dereity is zero	
to the given situation]	
Now, from the House,	(

taking a closed loop integral over a finite 6 length 4 for field it is same as taking surface integral over \$x# Here: \$ 4.00 = 10x4.03 from the above equation we know that VXH= J+ 05 1 300 300 1 $\forall xH = \partial E$ as these no charge flow in the given Hera: JOXH.03 - J 22 -03 = 21 E.03 C. No varying Electric they ment they sied] 6 Herai. JOXA.03 =0 NOW: WE Know that B = WH where is magnetic permeability cox different medium. NOW: \$ 47.22 =0 1 \$ \$. 20 = 0 (

	from the figure we can compute	-0
	क्षेत्री वर	
	The same and the same	
	Bit 1 + Bindu-Bx4-Bindu =0	
	as du \approx o	
	\$5.00 : Bit 1-82t 1 = 0	
	as the pureability is different	
	in these two medlen;	
		_
	11 gg.gr = T Bity - T Bity = 0	
	The second secon	
	Brt d - B2t d 20	
	V. L. D. I	
-	Bit _B2t =0	
	Boundary condition	
	for the surgerities compared	
	of the magnetic field.	-
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	and the appropriate services and the second services and	
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	k pin	L
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