

All Programs Semester I CAT II - January 2022

Answer uploading Template

Enrolment / Admission No. of Student	215C3E1010662	Name of Course	BEEF
Name of Student	Shiram Divival	Course Code	BEEUTT 1003
Program	Biteon CSE	Date of Examination	18.01.22
Semester	15+	Time	2:00 to 3:40pm
Student shall start	Shiran		

Student shall start writing from below:

1) Avo

MMF: It Stands for magnetomolium force (mmf)
the Coroner flowing in som electric Circust
is alue to the oristance of electromotive
force Similarly magnetemative force (aux)
lis dequined to labour the magnetic
func in the magnetic Court. It to
udenated ely tm
D fm = NI sampere - twoms (A+)
Beluctoner - It is addined on ita. That
magneter ture our to
Teleproperty to the state of th
Wagnetic Jun 1 alall 1
Mr. geometry and Composition of an object
D X=J F
R = 1
HO ArA
ANT

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	***************************************	wh		100	- 5		
			Io =	5 amp			
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3) Ans. fur presistive Circuit	
i	
VE=Undivided & R	
MACAGINE .	
\\\ - \\\ - \\\	
Vt = Vm smwt	
Onms law	
at = Vt	
- Vnsinut	
· wow form	
VIX V = Vm since t	
i(t) = Insmut	
haser digram	
V5 T5	

peracu:-
Pt = Vt Xit
- Vmsinwt X Imsinwt
= VmIm Sin2 wt
Parent = 12, T = 2114
Paverage = Vm Im Sun2wt
2.11
2-1/
= (Vm Im (1- (052Wt)
$= \frac{2\pi}{Vm Im(1-cos2wt)}$ $= \frac{2\pi}{2} \frac{dwt}{dwt}$
2 T
- Vm Im
2
= Vm × Im
- V _m × I _m
- Vrms · Irms

		^			
(4	Pa-a				
	, , , , , , , , , , , , , , , , , , ,	122 3 RAC = 1	5-3-2		
		311			
		KBC.5.18-3-2			
	Ra =	RAB+ RAC	9 C		
		6.2+x15-5 6.2+x0.3+16	5.5	32	3.003125
	R _b =	RAG. RAG. RAG	oc + Rac		
		= 6-2 × 10	- 3	63.86	<u>- 1.9.95</u> 62
	Rc =	RAC- ROC RAB+ ROC+RA			
		15.5 × 10.3 6.2 + 10.3 + 15.	<u>159.</u>	65 . 4:	38 90625
		FRa = 3.0	0.212.5		
		ND	*************		

Scholars are required to upload the answer in this template only on LMS. Answers uploaded other than this template will not be evaluated.

2) Aro. If is not political beauties on Surveyed Ithere the troubling Surveyed in any I bravest is the algebraic Sum of all the Surveyed that would be forcedured in it when each Sowice acts glane while all the Others undefended Sowices are preplaced ley their internal stearing Vs = 10 Requ = 23.59 Tt = V = 23.59 Req = 23.57 T = 23.59
is the algebraic Sum of all the Currents what would be forcedured in it when each Sowice acts plan while all the Ethers undependent Sowices are oreplaced by their internal stesistance Vs = 10 Vs = 15 Rega = 23.59 Tt = V = 23.59 Tt = V = 23.57 Tt = V = 23.57 Top = 15 X 2.357 IGD = 15 X 2.357
each Sowice varts plane while all the Others independed Sowias: vare oreplaced Lly their internal stesisland V5 = 10 Requ = 23.59 Tt = V = 23.59 Req = 23.57 T = V = 23.57 T = 2.359 A T = V = 23.57 T = 2.359 A T = V = 23.57 T = 2.359 A
Others indipendent Sources: vare oreplaced thy their internal stesisland. $V_5 = 10$ $V_6 = 15$ $V_8 = 15$ V
$V_{5} = 10$ $V_{5} = 15$ $R_{equ} = 23.59$ $R_{eq} = 23.59$ $R_{equ} = 23.59$ $R_{$
Req = 23.59 $T + = V = 23.57$ $R = 10$ $T + = V = 23.57$ $T = 2.359 A$ $R = 15$ $T = 15$
$= 2.359 A$ $= 2.359 A$ $= 1.5 \times 2.357$ $= 1.5 \times 2.357$
IBD ₁ = 15 x 2.357
15-1-2-0
- 1.01
$I_{BD_2} = 15 \times 1.57$
15+20 - 0.67
$I_{BD} = I_{B+} + I_{BD2}$
A B 1:63A
#10-D \$20-2 \$10-2
15V Page 6 of 10

6) Ans.	A linear network lonsisting of a no. 1
	woltage Sources & Tresistances Can be replaced
	My ran requirement network having a single
	livolent Source (In) & in Dingle Votesisland (RN).
	T MAT T MATERIAL TO A
	R ₃
	ZR2 I ZR DINZRNIZ RL
	TV
	Nov-
	Nortons equivalent Great
	II = INX RN
	* Stehe Los HI:
	* Steps for Aldining Norton's equivalent Circuit
	De la
	P. 121 & R3
	TV R25 ILSR1 =) 127 IL
	6
	Т. т
	IL = IN X RN D
	$R_N + R_L$
	Stept !- find land on the Source Short the land
	$R' = R_1 + R_2 + R_3$
	$R = R_1 + R_2 R_3$
	$R_2 + R_2$

$R' \in R_1(R_0 + R_0) + R_0R_0$
5 15
$R' = R_1 R_2 + R_1 R_3 + R_2 R_3$ $R_2 + R_3$
K27F3
Step2!- find Downer Luvorent (1)
Step 2! - find Source Luverent (I)
I' = E I Ro + Ra
I'= <u>E1R2+R3</u> / from Q. R1R2+R1R3+R2R9 @
Step 3 find Norton's Coverent (In) In = I'R2 R2+R3
$T_{N1} = T^{1}R_{2}$
-1 Tal = - (D
R.R. + R.Ra + R.R.
Otep 4) find Norten Desistance (RN) then the loop
throninals A&B. Also disconnect the Coll.
RI RS A
₹ R2
$RN = R_3 + R_1R_2$
R1+ R2 (5)
YIN]
FRN ILE RL
JM = CD
£12

of 10

* Difference Nortonis & therenins
the Premi
Downer whom as therening theorem uses in
Source whom as therening ahorems week
Nottage Source:
2) therening theorem was a presister St
2) therein theorem uses a tresister in Serie with mortonis theorem uses a tresister Soi in possible with the Source.
3) Nortons theorem is actually a derivation
3) Nortons theorem is actually a derivation of the thereins theorem
4) the morton's & otherwise & tresistance
ary ogral in magnitude.
