Date ..... Tutorial - 3 state & capacitor quickly charges to prov. During this interval of time v across the our diode (short-unrent eqv) & Vo = 0. goes to of state ( open-unt) & vo V; +Vc = 20+20 = 40 V. total surings Vo = total suring of v. OV starting w/ v; =-20 v - the diode is our's

e apartor quickly charges up to - 15 V + . DV

v; = +20 v e supply are astilize

across the capacites puring this time interval

vo a across on' diode & SV empply & when vi smitthes to the + 200 level the diede becomes off' + V=V+Vc= S5V. +35V 40 V Suing, Spiral

0 ~
3 % a) 2 = RC= 5.6ms.
3 2 a) 2 = KC= 5.6 ms.
resolations and it says his laids is in the one
(b) 50 = 28ms >> T=1=6.5ms. 2 56:1.
I is witness of Significant the acc
and I don't west of the state of the
(c) the bulse of U.
Diode on 1111211
Diode on 1 1, 13V capacitor charges to 10 +2-0-7=11.3V
again and a so the solution of
-110 [ . 120 b 12:
- re pulse og vi
Dide of & V=-10V-113V=-21.3V
Vo I
100
-1·3b
is clasting wi vi=-20v the diede in our
10. THE JOLL TELIST HAVING SOTIONS
Vi e 1 rol e m white are relitive
arners the capacion prising this time intered
& (a) In the absence of Zener diade
The state of the s
V, = 9V. CV = 16V & dvode non
V = 9V. < V = 16V & dvode non conducting
II = In= romA.
WI T = OMA
$I_{L} = I_{R} - fom A.$ $w   I_{L} = 0 m A$ $v_{L} = 0 9V -$
V 2- V2-

	Date
12	(b) du the absence of Zener duode $V_1 = 13.62  \text{V}.$
10	V, = 13.62 V.
-	3) V <sub>1</sub> 7V <sub>2</sub> , Zener diode ou
•	-: 4V = 10V 5 2 4 4 = 10 V 4:-
13	=: N = 10V 3 + 1/2 = 10 V + 0 T 00 1000 11
3	
~	IR = VR /R = 10/220 = 45:45 mg.
	10.10011
3	31 = V/R_ = 10/470 =21:28m/411
-	A CONTRACT OF CONT
-	- I - I = 24.17m #
	0) ( 0) ( 1) ( 1) ( 1) ( 1) ( 1) ( 1) (
3	(C) 1/2 = 900mW = V_7 = (10V)/2.
-	Tz= 40mA1.111 (-80)
3	10101 - 5 4
	Jmax = JR - J = 45.45mH-40-5.45mH
B	Trax Ks 2max
8	R, = V2 3 = 1884.86 Sch
R	A 10 1 0 10 0 in the Spill of the soulting
All	WH HE WAS ONE OTHOO
The same	Large R. Geducis T, & porces more of I to
To	ngy thu Zener divote
	11100
	(d) In absence & Zener drode
The same	(d) In observe & Zener drode V - 10 V = RLX20
TAL.	R 1220'
Op.	R, 8 2201
3	Spiral