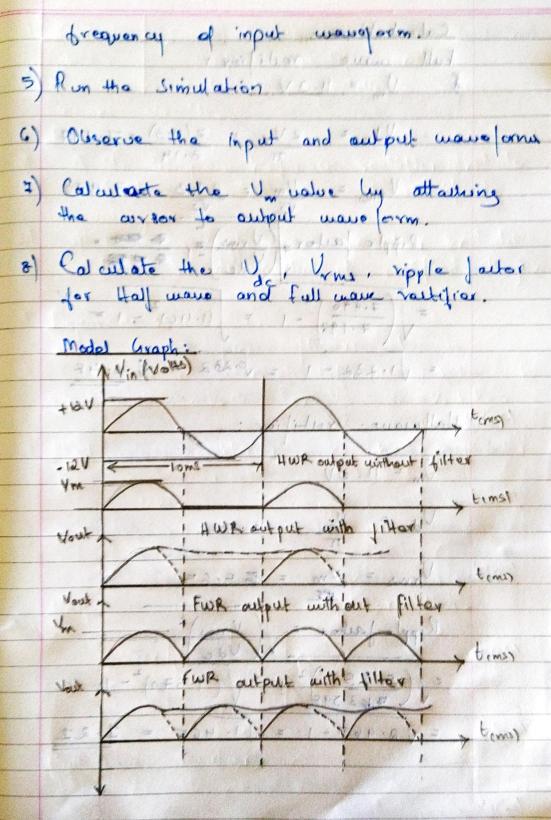


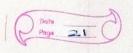
	Expno: 5	Title:		AND STATE OF	
	Data:	Halla	ave restil	ier and	
	12-11-2021	fulle	one reril	ilier	
			Wire Try	No.	
	Dim:		Barrier de	(16)	
	i) To S lind voltage	etup a l	rall wave	rectifies a	nd to
	Linds	the de	· value	of recipi	lasi
	voltage				
	2) To se	top a lu	lly ave r	celifier or	nd to
	Lind	the dc	value of	restrict on	voltage.
			NAME OF THE PARTY	U,	
	Upparatus:			1	
		LT spice	_ softwar	e +001	
	0:iv N:-	TABLES STORY		Constant O	
	Civalit Dia	)		erabosor 9	
J.	Half waire	Toillin	· dinovine	ent cont	(1)
to	www.anib	- Winner	ont of	outode to	
	el morde	16 -410	vi di	of verials	
lues	SHOO DOOL ONE	2.	No Brok!	yor allow	
				. 9304/1	
		MARINE IN STREET	16 16000	RESULTATIVES	
المو	Hall wave!	restifier	with cape	riby filter	-/2
		→ N°		distiple.	
	12V	2) (100)	T BRL		,
the	100HS	1 300	Stoken	S OF ON	<u>(f</u>
ed 21	word Hele	- 400		in the luminest	
94	orabile, wh	relilier	02 02016	21241350E	
	full water	I STHILLISM	- 3/8/10/19	CLEAN ON	
		owit	note or	4 4,12	P.1.0
,	- Prikove 12	93147			1.11.9

How is the first of the second of the sould restifier with corporator litter 100 Hz Diover Rx 100 Hz Many 1 Suppose of times Procedure: 1) Draw the incust in LT spice 3 hematic as shown in the circuit diagram as chown in the circuit diagram for both religion circult with and without 2) Apply values to all the claments in the 3) Go to Simulate talo, select tab edit simulation command, select transions andlysis since we have to observe the waveforms with respect to time. 4) Select the stop time according to the





```
Calculations: They to remove
    TT 3.14
 12 V Thu = 00 0 Vm U= 13:3 = 107:990 /E
= \frac{3.990}{7.191} - 1 = \frac{1.110}{1.110} - 1 = \frac{1}{1.110}
      = 1.232-1 = 10.232 = $ 0.48
    Halfarane rollifier:
     Um = 11.3V
     Vdc = Vm = 3.592
    Vrms = Vm = $5.65
      Ripple Jactor = (Vrms)2
      = \( \left( \frac{5.65}{3.598} \right)^2 - \right = \( \left( \frac{1.570}{1.570} \right)^2 - \right[ \]
     =\sqrt{2.465-1}=\sqrt{1.465}=1.21
```



Comparison of theoretical with simulated

	Theoretical	Simulated
Rippla   autor	Value	udue
HWR	1.21	1.21
FWR	0.48	0.48

the half wave and full mans relified outputs are simulated successfully in evencer:

i) the theoretical value of ripple is same as simulated value.

2) The theoretical value of ripple Latter for full mare restifier à same as simulated value.

3) the amplitude of the rectified output is reduced when the capacitor is connected to the resistor. Hence the ripple factor can be reduced.

Informace:

The theoretical value of in the Rame as the simulated value and hence verified cuccessfully.

Student Signature: S.P. Ashwatth

(Name: Ashwath Suresh Babu Piriya)