Code No: 124A B

JAWAH RLAD NEHRU TECHNOLOGICAD UNIVERSITY HYDERABAD

B. Tech II Year II Semester Examinations, May - 2017

Section 1		ELECTRONIC CIRCUITS		
e e e		(Electrical and Electronics Engineering)	- A MANAGE	
-A/	Time	3 Hours / Max. Mar	ks: 75	
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	Note:	This question paper contains two parts A and B.		
		Part A is compulsory which carries 25 marks. Answer all questions in Part A		
		Part B consists of 5 Units. Answer any one full question from ea	ch unit.	3.33
X		Each question carries 10 marks and may have a, b, c as sub questions.		
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$-\Delta \cdot \angle \triangle$	\wedge	A A PART-A A A A A A A A A A A A A A A A A A A	$A \nearrow A$	
	. /		(25 Marks)	
•Z — Northwest E	1.a)	Which configuration in BJT provides the Current gain?	[2]	
	b)	How amplifiers are classified according to the type of transistor configuration	20.0	
	c)	What the term f_{β} indicates at high frequency?	[2]	
	(d)	What is Frequency Distortion?	[3]	
	e)	Distinguish between comparators and clipping circuits.	[2]	
	(t)	What are the applications of Schmitt trigger?	[3]	
<i>-</i> /A:(g)/_\	Explain the operation of Heat sinks.	<u> [2]</u>	
/ ///	h)	Why RC circuits are commonly used compared to RL circuits?	/ [3] \	
	i)	How does diode acts as a switch?	[2]	
	, j)	Name the technologies which use bipolar transistors.	[3]	
A. A.		To a Maring of the profile carries 25 months. Answer of Equession of the carries PART-B		
		the control of the co		
A server	•		(50 Marks)	
	2.	Draw the circuit of an emitter follower, and derive the expressions for A ₁ , A	7 3 3	
	/	terms of CE parameters.	/_[1 ₀]	ě
	2	OR	1	
		Determine the effect of negative feedback on the input and output imped		
		Voltage-Series feedback amplifier. Show the circuit schematic diagram.	[10]	
	4.a)	When the term I indicates at high frequency? Draw the ideal and actual frequency response curves of single stage amplifier		
			F	
$\Delta 72$	b)/\	Write a short note on Design of High frequency Amplifiers.	\\\\(5+5\)	
	5.a)	Draw and explain the FET high frequency model.		. /
		Write a short note on Low frequency response of BJT amplifiers.	[5+5]	
	U)	write a short note on Low nequency response or But amplitiers.	[5+5]	
	6.a)	With help of neat circuit diagram and waveforms, explain the working of	a collector	
		coupled Monostable multivibrator.	a concetor	
		Why commutating capacitors are used in Multivibrators?	[7+3]	
$\mathcal{M}^{\mathcal{M}}$		Community community capacitors are used in interviorators.	A' 74	
-	7.a) I	Draw a circuit using diodes to transmit that part of a sine wave which lies be	tween AV	/
The Secret 3		and -7V.	UNY OUT ATTEMPT (
		With the help of a neat diagram, explain the working of an emitter-couple	ed clinner	
	10 <i>)</i> , 1	The the holp of a heat diagram, explain the working of an ellitter-coupli	[5+5]	
		and the reput may be a negative feedback on the reput may expect to	[2,2]	
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Z Z Single		temperat	ture.			Y V Sound's	[5+5]	ı
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