SANT GADGE BABA AMARAVATI UNIVERSITY, AMARAVATI.
SUMMER EXAMINATION-2020
H.V.P.M.'s College of Engineering and Technology, Amravati.
Department of Electronics and Telecommunication
Bachelor of Engineering Semester IV.

Subject : Analog Electronics – 1 **Subject code : 4ET3**

Instructions:-

i) Solve any two questions.

ii) ii) All questions carry equal marks.

Que 1	**a)**	Explain any one linear wave shaping circuit.	2 credit pts
	b)	Explain with waveforms the Transister as a switch.	2 credit pts
	c)	Explain the internal block diagram of OPAMP.	2 credit pts
	d)	What is an Integrator ? Explain with circuit diagram.	2 credit pts
	e)	What is Schmitt trigger, Explain with circuit diagram.	1 credit pts
	f)	Explain the application of PLL as AM detector.	1 credit pts
Que 2	a)	Explain RC Low pass filter.	2 credit pts
	b)	Explain with the Characteristics FET as a switch.	2 credit pts
	c)	Explain the constant current source circuit of OPAMP.	2 credit pts
	d)	what is Differentiator , Explain with circuit diagram.	2 credit pts
	e)	Explain with circuit diagram the Peak detector circuit using OPAMP.	1 credit pts
	f)	Draw & Explain the block diagram of PLL.	1 credit pts
Que 3	a)	Explain clamping circuit using diode with waveforms.	2 credit pts
	b)	Explain the collector coupled monostable multivibrator.	2 credit pts
	c)	Explain the different frequency compensation methods f OPAMP.	2 credit pts
	d)	What is Instrumentation amplifier, Explain?.	2 credit pts
	e)	Explain the first order LPF butterworth filter using OPAMP.	1 credit pts
	f)	Explain the application of PLL as FM detector.	1 credit pts

Que 4	a)	Explain the Analysis of Clipping circuit using diode.	2 credit pts
	b)	Explain with diagram collector coupled Astabe multivibrator.	2 credit pts
	c)	What is Offset nulling? Explain its importance.	2 credit pts
	d)	Explain the RC phase shift oscillator ckt,	2 credit pts
	e).	Explain Astable multivibratorusing OPAMP with circuit diagram.	1 credit pts
	f)	Define & Explain the Lock range, Capture range of PLL.	1 credit pts

BEST OF LUCK

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