Code No: **R31026**   # R10 | **Set No. 1** |

III B.Tech I Semester Supplementary Examinations, May - 2017
LINEAR & DIGITAL IC APPLICATION
(Electrical and Electronics Engineering)

Time: 3 hours   **Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks
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1	a)	Explain about DC analysis of single input balanced output configuration.	[8M]
	b)	Explain about Level transistor and also its importance.	[7M]
2	a)	Explain the terms (i) input and output offset voltages and currents ii) slew rate	[8M]
	b)	Draw the block diagram of Op-amp and explain function of each block.	[7M]
3	a)	Explain the application of Op-amp (i) V to I and I to V converters (ii) Square wave generations.	[8M]
	b)	Draw the instrumentation amplifier and explain its operation.	[7M]
4	a)	Draw the functional block diagram of 555 timer and explain its operation.	[8M]
	b)	Draw the 565 PLL block diagram and explain its operation.	[7M]
5	a)	Draw the weighted resister DAC and explain its operation.	[8M]
	b)	Design a band pass filter and draw its output responses.	[7M]
6	a)	Draw and explain about the Binary Adder- Subtractor in detail.	[8M]
	b)	Draw the two bit comparator circuit and explain its operation.	[7M]
7	a)	Draw the excitation and conversions of T flip flop to D flip flop and explain its operation.	[8M]
	b)	Draw the Ring counter and explain its operation.	[7M]
8	a)	Draw and explain about static RAM Internal structure	[7M]
	b)	Briefly list out the comparisons of PROM, PLA and PAL.	[8M]

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