

BHAI GURDAS INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Computer Science Engineering

LESSON PLAN

Subject Name: - Analog Circuits

Subject Code: - BTEC-401-18

Year: - 2nd

Semester: - 6TH

Lecture No.	Unit	Date/Week	Topic	Teaching Aids	Reference
L-1	UNIT 1	Week 1	Diode Circuits	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-2	UNIT 1		Amplifiers types	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-3	UNIT 1		Voltage amplifier, current amplifier	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-4	UNIT 1	Week 2	trans-conductance amplifier and trans-resistance amplifier	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-5	UNIT 1		biasing schemes for BJT and FET amplifiers	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-6	UNIT 1		biasing schemes for BJT and FET amplifiers	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-7	UNIT 1	Week 3	bias stability; transistor configurations	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-8	UNIT 1		transistor configurations	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-9	UNIT 1		transistor configurations	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-10	UNIT 1	Week 4	small-signal analysis; low-frequency transistor models	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-11	UNIT 1		amplifier analysis	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-12	UNIT 1		amplifier analysis	BLACK BOARD &	J Millman& C Halkias &

				PPT	INTERNET
L-13	UNIT 1	Week 5	amplifier design procedure	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-14	UNIT 1		Revision		
L-15	UNIT 1		low frequency analysis of multistage amplifiers	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-16	UNIT 1	Week 6	High frequency transistor models	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-17	UNIT 1		High frequency transistor models	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-18	UNIT 1		High frequency transistor models	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-19	UNIT 1	Week 7	Revision	BLACK BOARD & PPT	
L-20	Unit 2	Week 7	Feedback topologies:	BLACK BOARD & PPT	J Millman & A Grabel & INTERNET
L-21	Unit 2		Voltage series, current series	BLACK BOARD & PPT	J Millman & A Grabel & INTERNET
L-22	Unit 2	Week 8	voltage shunt and current shunt feedback	BLACK BOARD & PPT	J Millman & A Grabel & INTERNET
L-23	Unit 2		effect of feedback on gain	BLACK BOARD & PPT	J Millman & A Grabel & INTERNET
L-24	Unit 2		effect of feedback on bandwidth, input & output impedances	BLACK BOARD & PPT	J Millman & A Grabel & INTERNET
L-25	Unit 2	Week 9	concept of stability, gain margin and phase margin	BLACK BOARD & PPT	J Millman & A Grabel & INTERNET
L-26	Unit 2			BLACK BOARD & PPT	
L-27	Unit 3	Week 9	Oscillators Introduction, Barkhausen criterion	BLACK BOARD & PPT	A Ramakant, Gayakwad & INTERNET
L-28	Unit 3	Week 10	Types of Oscillators, RC-phase shif	BLACK BOARD & PPT	A Ramakant, Gayakwad & INTERNET

L-29	Unit 3		Wien bridge, Hartley, Colpitts,	BLACK BOARD & PPT	A Ramakant, Gayakwad & INTERNET
L-30	Unit 3		Clapp oscillators and Non-sinusoidal oscillators.	BLACK BOARD & PPT	A Ramakant, Gayakwad & INTERNET
L-31	Unit 3	Week 11	Revision	BLACK BOARD & PPT	
L-32	Unit 4	Week 11	Power Amplifiers	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-33	Unit 4		Class A, B, AB and C power amplifiers	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-34	Unit 4	Week 12	their efficiency and distortions	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-35	Unit 4		frequency response: single stage	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-36	Unit 4		multistage amplifiers and cascade amplifier	BLACK BOARD & PPT	J Millman& C Halkias & INTERNET
L-37			Revision		
L-38			Revision		
L-39			Revision		
L-40			Revision		

Recommended Books

1. J Millman & A Grabel, Microelectronics, McGraw Hill
2. J Millman& C Halkias, Integrated Electronics, Tata McGraw Hill
3. A Ramakant, Gayakwad, Op-Amps And Linear Integrated Circuits, PHI
4. P Horowitz & W Hill, The Art of Electronics, Cambridge University Press
5. AS Sedra & KC Smith, Microelectronic Circuits, Saunder's College Publishing