

Bhoj Reddy Engineering College for Women: Hyderabad

Department of Electronics and Communication Engineering

Lesson plan of faculty member for the academic year 2017–18

Class: II B Tech

Branch-Section: EEE

Semester: I

Subject: Electronics Circuits

Lectures per week: 3+1 (Tutorial)

Lecture Number	Topics to be covered	Date (s)
UNIT – I: Single Stage Amplifiers		
1	Introduction to Single Stage Amplifier, Classification of Amplifiers	12 July 2017
2	Distortion in Amplifiers , Analysis of CE Amplifiers	13 July 2017
3	Analysis of CB Amplifiers	14 July 2017
4	Illustrative Problems	15 July 2017
5	Comparison of CE, CB, CC Amplifiers Low frequency Analysis	19 July 2017
6	Low frequency response of BJT Amplifiers	20 July 2017
7	Low frequency response of FET Amplifiers	21 July 2017
8	Illustrative Problems	22 July 2017
9	High Frequency response of BJT amplifiers,	26 July 2017
10	Square Wave Testing, Miller Effect Capacitance	27 July 2017
UNIT-II: Feedback Amplifiers		
11	Concept of feedback Amplifiers, Effect of Feedback on Amplifier characteristics	28 July 2017
12	General Characteristics of Negative Feedback Amplifier Illustrative Problems	29 July 2017
13	Voltage series Feedback Configurations	2 August 2017
14	Current series Feedback Configurations	3 August 2017
15	Voltage shunt Feedback Configurations	4 August 2017
16	Illustrative Problems	5 August 2017
17	Current Shunt Feedback Configurations	9 August 2017
18	Oscillators: Conditions for Oscillations, Generalized analysis of LC Oscillators	10 August 2017
19	Frequency and Amplitude Stability of Oscillators	11 August 2017
20	Illustrative Problems	12 August 2017
21	Hartley Oscillators	16 August 2017
22	Colpitt's Oscillators	17 August 2017
23	Quartz Oscillators	18 August 2017
24	Illustrative Problems	19 August 2017
25	Wein Bridge Oscillators	23 August 2017
26	RC –Phase Shift Oscillators	24 August 2017
UNIT-III: Large Signal Amplifiers		
27	Introduction to Large Signal Amplifiers	26 August 2017
28	Illustrative Problems	30 August 2017
29	Maximum Efficiency of Class –A Amplifier	31 August 2017
30	Transformer Coupled Amplifier	1 September 2017
31	Push Pull Class-B Power Amplifier	9 September 2017
32	Illustrative Problems	13 September 2017
33	Complimentary Symmetry Class-B Power Amplifier	14 September 2017
34	Phase Inverters Transistor Power Dissipation	15 September 2017
35	Thermal Runway	16 September 2017
36	Illustrative Problems	21 September 2017
37	Heat Sinks	22 September 2017
UNIT- IV: Wave Shaping		
38	High Pass RC Circuits, Response for Sinusoidal, Step, Pulse and	23 September 2017

	Ramp Inputs	
39	Low Pass RC Circuits, Response for Sinusoidal, Step, Pulse and Ramp Inputs	4 October2017
40	Illustrative Problems	5 October2017
41	Diode Clippers, Clipping at Two Independent Levels	6 October2017
42	Transistor Clippers, Transfer Characteristics of Clippers	7 October2017
43	Comparators, Clamping Operation	11 October2017
44	Illustrative Problems	12 October2017
45	Clamping Circuits using Diode with different inputs	13October2017
46	Clamping Circuit Theorem	14 October2017
47	Practical Clamping Circuits	19 October2017
UNIT- V: Switching Characteristics of Devices		
48	Diode as a Switch, Piecewise Linear Diode Characteristics	20 October2017
49	Transistor as a Switch, Breakdown Voltage Consideration of Transistor	21 October2017
50	Design of Transistor Switch	25 October2017
51	Transistor Switching Times	26 October2017
52	Multivibrators Analysis and Design of Bistable Multivibrators	27 October2017
53	Monostable Multivibrators	28 October2017
54	Astable Multivibrators	1 November2017
55	Schmitt Trigger using Transistors	2 November2017
56	Discussion of Previous Question Papers	3 November2017

Text books:

1. Robert L Boylestead and Louis Nashelsky, "Electronic Devices and circuit theory", Pearson, Tenth edition 2009
2. S. Salivahanan, N. Suresh Kumar and A. Vallava Raj, "Electronic Devices and circuits", TMH, 2nd Edition 2008.
3. David A. Bell, "Solid state Pulse Circuits", PHI ,4th Edition 2007.

Name and signature of the faculty: Ms Nikhat Parvin ----

Name and signature of Head of the Department: Ms N Shribala ----