



P.B.SIDDHARTHA COLLEGE OF ARTS & SCIENCE: VIJAYAWADA – 520010

Teaching Plan 2010 – 11 Monsoon Semester

DEPARTMENT OF ELECTRONICS

TITLE: ELECTRONICS DEVICES & CIRCUITS-I

Class Work Commences: 14/06/2010

Last Instructional Day: / /2010

Class: II B.Sc (MECs)

Course Code: ELE 033

Lecturer: K.SAMBA SIVA RAO

S.N O	SUB TOPICS	DATE PROPOSED	DATE COMPLETED	ASSIGNMENT	SEMINAR
1	Introduction to Amplification in ac domain				
2	B.J.T transistor modeling				
3	Parameters of transistor				
4	Re-model of Common emitter				
5	Re-model of CB,CC				
6	Hybrid Model Parameters			Assignment-1	
7	Graphical determination of hybrid parameters				
8	Problems				
9	Common Emitter Fixed bias configuration				
10	Voltage-divider configuration				
11	Common Emitter follower configuration				
12	Common base configuration				
13	Complete hybrid model				
14	Problems				
15	J-FET small signal analysis				
16	J-FET fixed bias & self bias				
17	J-FET Voltage-				

	divider configuration				
18	Source-follower configuration				Seminar-1
19	MOS- FET configuration			Assignment-2	
20	Common –gate configuration				
21	Problems				
22	B.J.T &F.E.T large signal Amp				
23	Logarithms and décibels				
24	General frequency considérations				
25	Low frequency analysis-Bode plot				
26	Low frequency response-B.J.T				
27	Low frequency response –F.E.T			Assignment-3	
28	Miller Effect capacitance				
29	High frequency Response-B.J.T				
30	Multi stage frequency Effects				Seminar-2
31	Darlington Connection				
32	Differential Amplifier circuit				
		I-Internal			
33	Introduction on feedback				
34	Types of Feedback				
35	Voltage and current feedback				
36	Practical Feedback circuits				
37	Feedback Amplifier-Phase&frequency				
38	Introduction on Oscillator operation			Assignment-4	

39	Phase-shift Oscillator				
40	Wein-bridge Oscillator				Seminar-3
41	Tuned Oscillator circuit				
42	Hartley Oscillator				
43	Colpits Oscillator				
44	Crystal Oscillator				
45	Uni-junction Oscillator			Assignment-5	
46	Problems				
47	problems				
48	Introduction on Amplifiers				
49	Amplifiers types				
50	Transformer coupled Class-A Amplifier				
51	Class-A Amplifier				
52	Class-B Amplifier				
53	Class-B Amplifier circuits				
54	Amplifier distortion				Seminar-4
55	Power transistor				
56	Heat sinking				
57	Class-c & Class-D Amplifier			Assignment-6	
58	Series fed Class-A Amplifier				
59	Problems				
		II- INTERNAL			



P.B.SIDDHARTHA COLLEGE OF ARTS & SCIENCE: VIJAYAWADA – 520010

Teaching Plan 2010 – 11 Monsoon Semester

DEPARTMENT OF ELECTRONICS

TITLE: MICROPROCESSOR

Class Work Commences: 14/06/2010

Last Instructional Day: / /2010

Class: III B.Sc (MECs)

Course Code: ELE 065

Lecturer: K.SAMBA SIVA RAO

S.NO	SUB TOPICS	DATE PROPOSED	DATE COMPLETED	ASSIGNMENT	SEMINAR
1	Introduction on 8085 Architecture				
2	Organization of a typical Microcomputer				
3	Memory, Input/Output				
4	Large computer to a single chip Micro controller				
5	Block diagram of 8085MP				
6	Block diagram of 8085MP				
7	Pin description				
8	Instruction set				
9	Instruction set			Assignment-1	
10	Instruction format				
11	Addressing modes				
12	Introduction on 8086 Architecture				
13	CPU Arch				
14	Internal operation				
15	Machine Language				
16	Instructions				Seminar-1
17	Instruction				

	Execution timing				
18	Data transfer INS(8085)				
19	Arithmetic In			Assignment-2	
20	Branch Instruction				
21	Loop INS				
22	Flag Manipulation				
23	Logical Instruction				
24	Shift & Rotate Instruction				
25	Data transfer instruction (8086)				
26	Arithmetic Instruction			Assignment-3	
27	Logical Instruction				
28	Shift and Rotate Instruction				
29	Programmes				Seminar-2
30	Programmes				
		I-INTERNAL			
31	Introduction on Modular programming				
32	Linking and Relocation				
33	Stack procedures				
34	Interrupts				
35	Interrupts routine				
36	System bus structure				
37	Basic 8086 configuration				
38	Minimum mode				
39	Maximum mode			Assignment-4	
40	Interrupt priority Management				

41	Introduction on I/O Interface				
42	Serial communication				
43	Parallel Communication			Assignment-5	
44	Programmable timers				
45	Keyboard and display				
46	DMA controllers				Seminar-3
47	DMA controllers				
48	Intel 80286 microprocessor				
49	Intel 80286 microprocessor				
50	Intel 80386 microprocessor				
51	Intel 80386 Microprocessor			Assignment-6	
52	Intel 80486 Microprocessor				
54	Intel 80486 Microprocessor				
		II-INTERNAL			
56	Programmes				
57	Programmes			Assignment-7	
58	Programmes				Seminar-4
59	Programmes				