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Subject : EDC
Sem : 3rd ECE

Week	Lecture	Name of topic	Experiment
1st	1st	Need for multistage amplifier Gain of multistage amplifier	Plot the frequency response of two stage RC coupled amplifier and calculate the bandwidth and compare it with single stage amplifier
	2nd	Different types of multistage amplifier like RC coupled and their frequency response	
	3rd	Transformer coupled and their frequency response	
2nd	4th	Direct coupled, and their frequency response	To measure the gain of push-pull amplifier at 1KHz
	5th	Difference between voltage and power amplifiers, Importance of impedance matching in amplifiers	
	6th	Class A, Class B, Class AB, and Class C amplifiers, collector efficiency and Distortion in class A,B,C.	
3rd	7th	Heat dissipation curve and importance of heat sinks.	To measure the voltage gain of emitter follower circuit and plot its frequency response
	8th	Single ended power amplifiers, Graphical method of calculation (without derivation) of output power;	
	9th	Push-pull amplifier, and complementary symmetry push-pull amplifier.	
4th	10th	Basic principles and types of feedback	Revision and Viva
	11th	Derivation of expression for gain of an amplifier employing feedback	
	12th	Effect of feedback (negative) on gain, stability ,distortion and bandwidth of an amplifier	
5th	13th	RC coupled amplifier with emitter bypass capacitor.	Plot the frequency response curve of Hartley and Colpitt's Oscillator
	14th	Emitter follower amplifier and its application.	
	15th	Revision	
6th	16th	Revision	Plot the frequency response curve of phase shift and Wein bridge Oscillator
	17th	Sessional Test	
	18th	Use of positive feedback Barkhausen criterion for oscillations	
7th	19th	Different oscillator circuits-tuned collector, Hartley,	Use of IC 555 as monostable multivibrator and observe the output for different values of RC
	20th	Colpitts, phase shift,	
	21st	Wien's bridge, Crystal oscillator	

8th	22nd	Revision	Revision and Viva
	23rd	Series and parallel resonant circuits and bandwidth of resonant circuits	
	24th	Single and double tuned voltage amplifiers and their frequency response characteristics	
9th	25th	Working principle of transistor as switch Concept of multi-vibrator: astable, mono-stable,	Use of IC 555 as astable multivibrator and observe the output at different duty cycles
	26th	Bi-stable multi-vibrator and their applications.	
	27th	Block diagram of IC555 and its working and applications	
10th	28th	IC555 as mono-stable multi-vibrator	To use IC 741 (op-amplifier) as i) Inverter, ii) Adder, iii) Subtractor iv) Integrator
	29th	IC 555 as stable multi-vibrator and bi-stable multi-vibrator	
	30th	Revision	
11th	31st	Sessional test	
	32nd	Operational amplifier	
	33rd	Characteristics of an ideal operational amplifier and its block diagram	
12th	34th	IC-741 and its pin configuration Definition of differential voltage gain, CMRR, PSRR,	Revision and viva-voce
	35th	Slew rate and input offset current.	
	36th	Operational amplifier as an inverter, scale changer,	
13th	37th	Operational amplifier as adder and subtractor,	To realize positive and negative fixed voltage DC power supply using three terminal voltage regulator IC (7805, 7812, 7905)
	38th	Operational amplifier as differentiator, and integrator	
	39th	Revision	
14th	40th	Revision	Revision and viva-voce
	41st	Concept of DC power supply. Line and load regulation	
	42nd	Concept of fixed voltage, IC regulators (like 7805, 7905),	
15th	43rd	variable voltage regulator like (IC 723)	Revision and viva-voce
	44th	Revision	
	45th	Sessional test	
16th	46th	Revision	Revision and viva-voce
	47th	Revision	
	48th	Revision	