

Specimen of lesson Plan

Name of the Faculty : Smt. Shalini Garg
Discipline : Electronics and Communication
Semester : 3rd
Subject : Network Filter and Transmission line
Lesson Plan Duration : Aug-2019-Nov 2019
Work Load (Lecture/ Practical) per week (in hours): 03 HOURS (Lecture) 3(P)

Week	Theory		Practical day	Topic
	Lecturer	Topic Covered		
1st week	1st	* Introduction to Two Port network	1st	To measure Characteristic impedance of Symmetrical T and π Network
		Basic concepts of * Symmetrical and Asymmetrical network * Balanced and Unbalanced network		
	2nd	Basic concepts of * T and π network * Ladder Network * Lattice Network * L- Network and Bridge Network		
	3rd	* Detailed study of Symmetrical T and π Network * Characteristic Impedence * propagation Constant		
2nd week	1st	Detailed study of Symmetrical T and π Network * Attenuation Constant * Phase Shift Constant * Insertion loss	2nd	To measure Characteristic impedance of asymmetrical T and π Network
	2nd	Detailed study of asymmetrical T and π Network * Iterative Impedence * Image impedance		
	3rd	Detailed study of asymmetrical T and π Network * Image transfer Constant * Iterative Transfer Constant * Half Section of T and π Network		
3rd week	1st	* Assignment * Introduction to Attenuators * Unit and Characteristics of attenuators	3rd	To measure Attenuation of T and π type Attenuator
	2nd	* Designing of simple T and π type of attenuators		
	3rd	Simple Problems		
4th week	1st	* 1st sessional	4th	File checking and Viva-voice
	2nd	* Introduction to Filter		
	3rd	use of Filter in communication		
	1st	* Types of Filters * Low Pass and High pass Filter		

5th week	2nd	* Band Pass Filter	5th	To plot a graph of Characteristic impedance and Attenuation Characteristic of proto type low Pass filter
	3rd	* Band Stop filter		
6th week	1st	* Discussion between prototype Low pass and high pass filter	6th	To plot a graph of Characteristic impedance and Attenuation Characteristic of proto type High Pass filter
	2nd	* Derivation of Cut off frequency of Low pass proto type filter		
	3rd	* Plot of Graph between Characteristic Impedence and Frequency		
7th week	1st	* Discussion repeat on Low pass Proto type Filter	7th	File checking
	2nd	* Derivation of Cut off frequency of High pass proto type filter		
	3rd	* Plot of Graph between Characteristic Impedence and Frequency		
8th week	1st	* 2nd Sessional	8th	File checking and Viva-voice
	2nd	Plot of graph between * Attenuation Vs frequency * Phase shift vs Frequency		
	3rd	Simple Problems		
9th week	1st	* Limitations of prototype Filter * need of Mderived Filter	9th	To plot a graph of Characteristic impedance and Attenuation Characteristic of proto type band Pass filter
	2nd	* Introduction to M-Derived Filter		
	3rd	* Diagram of Low Pass and High Pass Mderived Filter		
10th week	1st	* Introduction to Crystal Filter * Circuit and Properties of piezo electric Filter	10th	To Draw attenuation Characteristic of crystal filter
	2nd	* uses of piezo electric Filter * Basic Concepts of Active Filter		
	3rd	Camparison between Active and Passive Filter		
11 week	1st	Assignment	11th	To plot imdedence Characteristic of m derived low pass filter
	2nd	Sessional		
	3rd	Introducation to Transmission lines and types Applications		
	1st	Discussion of Primary and Secondary Constant		
		Discussion of		

12 week	2nd	* Characteristic Impedence * propagation Constant *Attenuation constant	12th	To plot imdedence Characteristic of m derived high pass filter
	3rd	* Phase Shift Constant * Concepts of infinite line		
13th week	1st	* Introducation to loading methods	13th	Viva-voice
	2nd	*Condition of Minimum Distortion		
	3rd	*Concepts of standing waves		
14th week	1st	*Reflection Cofficient	14th	Measurement of SWR and characteristic impedance of line
	2nd	*Relation Between SWR and reflection cofficient		
	3rd	*Transmission line equation		
15th week	1st	*Expression to find Voltage,Current, Impedence at a point on the line	15th	File checking
	2nd	*Transmiision lines at high frequency		
	3rd	* Introduction to stubs		