

# LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
1	27/6/16	unit-I MICROWAVE TRANSMISSION LINES - INTRODUCTION	1	Chalk & Dust		
2	"	micro wave Bands APPLICATION	"			
3	29/6	INTRODUCTION TO guided waves - TE modes	"			
4	"	TM, TEM modes	"			
5	30/6	wave guides - Per long wave guide	"			
6	1/7	TE/TM mode Analysis	"			
7	4/7	Expressions for fields	"			
8	"	characteristic equation and cut-off frequencies	"			
9	7/7	Dominant and higher mode modes	"			
10	8/7	mode characteristics	"			
11	11/7	cavity resonators Introduction, types	"			
12	"	unit-II wave guide components - part I mechanism	"			
13	13/7	resistor, load, wave guide attenuators	"			
14	"	wave guide phase shifters	"			
15	14/7	Scattering matrix	"			
16	15/7	wave guide multiple Junctions - E plane	"			
17	17/8	H-Plane Tees	"			
18	"	magic Tee, Hybrid Ring	"			
19	18/8	directional couplers	"			
20	19/8	Faraday Rotation, Ferroelectric components - Gyrotron	"			

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21	22/8	Isolator, Circulator	6			
22	"	microwave Tubes - Limitations of Conventional tubes	III			
23	24/8	at mw band classifications O-type tubes	"			
24	"	Two cavity Klystrons velocity modulation Process	"			
25	26/8	Bunching Process	"			
26	28/8	o/p power and efficiency	"			
27	"	multi cavity Klystron	"			
28	31/8	Reflex Klystrons	"			
29	"	mathematical theory of Bunching	"			
30	1/9	Power output efficiency	"			
31	2/9	electronic Admittance	"			
32	7/9	oscillating modes and o/p characteristics	"			
33	"	unit - In microwave tubes: HELIX TWTs: slow wave structures	IV			
34	8/9	TWT - Amplification Process	"			
35	9/9	Suppression of Oscillations	"			
36	14/9	Nature of the four Propagation	"			
37	"	Constants and gain Considerations	"			
38	15/9	m-type Tube: magnetron - Types	"			
39	16/9	8-cavity cylindrical magnetron	"			
40	19/9	Hot cut-off, Harbace Conditions	"			



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41	19/9	PI - mode operation	IV			
42	26/9	unit - V mu solid state devices Gunn diode - principle RWT theory, characteristics	V			
43	"	Avalanche Transit Time devices	"			
44	28/9	IMPATT and TRAPATT Diodes	"			
45	"	Principle of operation and characteristics	"			
46	29/9	microwave measurements description of microwave Bench	"			
47	30/9	different blocks and their features	"			
48	3/10	Precautions: micro wave power measurement	"			
49	"	Bolometer method	"			
50	14/10	measurement of Attenuation	"			
51	17/10	frequency	"			
52	19/10	VSWR and impedance	"			

9/10/22