

2013-2014, III B.CS-B, I Sem, Lec, Asst

LESSON PLAN

Period	Date (tentative)	Topic	Unit No	Teaching Methodology	Remarks	Corrective Action Upon Review
1	10-6-13	Introduction	I	Black Board		
2	10-6-13	Types of Antennas		"		
3	12-6-13	Radiation Mechanism - Single wire, 2-wire, dipole		"		
4	14-6-13	Current distribution on a thin wire antenna		"		
5	15-6-13	Antenna parameters Radiation pattern		"		
6	17-6-13	Beam width, Beam		"		
7	17-6-13	Radiation resistance, Re Beam efficiency		"		
8	17-6-13	Directivity, Gain		"		
9	21-6-13	Antenna Aperture		"		
10	22-6-13	Aperture efficiency		"		
11	24-6-13	Effective height		"		
12	24-6-13	Related problems		"		
13	26-6-13	Retarded potential	II	"		
14	26-6-13	Radiation from small electric dipole, quadrupole, magnetic dipole		"		
15	25-6-13	Current Distribution, Radiation of field component		"		
16	1-7-13	Power handled, Radiation resistance		"		
17	1-7-13	Beam width, directivity		"		
18	1-7-13	Effective area, effective height		"		
19	5-7-13	Natural Current Antennas		"		
20	6-7-13	Fields of Hertzian dipole, far field, near field, radiation pattern		"		

LESSON PLAN

Period	Date (tentative)	Topic	Unit No	Teaching Methodology	Remarks	Corrective Action Upon Review
21	8-7-13	Radiation resistance of a point electric dipole, small loop antenna	II	Black Board		
22	8-7-13	Antenna Theorem		"		
23	10-7-13	Applications of Theorem for equivalent circuit model		"		
24	12-7-13	Loop Antennas		"		
25	12-7-13	Small loop - field component		"		
26	12-7-13	Comparison of far fields of small loop		"		
27	12-7-13	Concept of short magnetic dipole		"		
28	15-7-13	D & K relations for small loops	III	"		
29	15-7-13	Antenna arrays, 2 element arrays		"		
30	17-7-13	Different cases		"		
31	17-7-13	Principle of pattern multiplication		"		
32	20-7-13	N-Element uniform linear array - Broadside, end fire		"		
33	20-7-13	Beam with increased directivity		"		
34	22-7-13	Derivation of the array factor		"		
35	24-7-13	Comparison, Comparison of scanning arrays		"		
36	24-7-13	Directivity, relation		"		
37	27-7-13	Related array problems		"		
38	29-7-13	Binomial array		"		
39	29-7-13	Effects of tapering on amplitude distribution, Design rules		"		
40	31-7-13	Introduction to Non Reciprocal Antennas	IV	"		
41	2-8-13	Travelling wave antennas - basic concepts		"		
42	3-8-13	Long wire antennas - field strength calculation of pattern		"		

2013-2014, III E.C.B., I Semster, ASD
LESSON PLAN

Period	Date (tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
41	22-13	V-antennae	IV	Black board		
42	22-13	Phonetic antennae, basic structure		"		
43	23-13	Basal body Antennae: Hairs, Antennae - Significance, Chemistry, Basic properties		"		
44	26-13	Design Characteristics for more film holes, antenna as Antenna and of different modes		"		
45	28-13	Introduction to VIB, VIB & Microbiology	V	"		
46	29-13	Process with positive elements		"		
47	31-13	Flagella - structure		"		
48	22-13	Folded dipole & their characteristics		"		
49	24-13	Reflected antennas - Flat plate, ground, reflectors		"		
50	26-13	Parabolic antennas - Geometry, Characteristics		"		
51	28-13	Types of feeds		"		
52	30-13	F/D Ratio, Spillover, Back loss		"		
53	31-13	Aperture Efficiency, Off-axis feeds		"		
54	02-14	Collimating feeds		"		
55	04-14	Horn antennas - Types	VI	"		
56	07-14	Optimum Horn, Design of physical horn		"		
57	09-14	Leaky Antennae - Geometry		"		

LESSON PLAN

Period	Date (tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
58	11-14	Rectangular, cylindrical horns & Leaky Wave	VI	Black Board		
59	13-14	Pyramidal, conical - Pattern, required, Size		"		
60	15-14	Cylindrical, conical, horn & gain measurement		"		
61	17-14	Concept of propagation - Propagation Factor & type of propagation	VII	"		
62	19-14	Ground wave propagation - Choice, parameters		"		
63	21-14	Wave tilt, Field of Spherical earth curvature		"		
64	23-14	SK wave propagation - Formation of surface layer & their effects		"		
65	25-14	Mechanism of Reflection & Refraction		"		
66	27-14	Critical frequency, MUF & Skip distance at extension to find apparent earth radius	VIII	"		
67	29-14	Optimum frequency, LOS		"		
68	31-14	Virtual Height, Ionospheric absorption, Ionospheric Absorption		"		
69	03-15	Free space path loss	IX	"		
70	05-15	Free space path loss Calculations		"		
71	07-15	Space wave propagation - Mechanism		"		
72	09-15	LOS & Radio horizon		"		