

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
1	18/3/14	Review of Vector calculus				
2	"	Review of Coordinate Systems				
3	19/3	"				
4	21/3	<u>ELECTROSTATICS</u> Coulomb's law (Force)	I			
5	24/3	\vec{E} electric field intensity → point charge	"			
6	25/3	\vec{E} due to line charge	"			
7	"	\vec{E} due to surface charge	"			
8	26/3	\vec{E} due to volume charge	"			
9	28/3	Electric flux density (D)	"			
10	1/4	Gauss law & applications	"			
11	"	Electric potential Relation b/w E & V	"			
12	2/4	Maxwell's first equation	"			
13	4/4	Energy density, problems	"			
14	7/4	Connection of conductors in series Dielectric const, (non isotropic) homogeneous medium	"			
15	9/4	Continuity equation	"			
16	15/4	Relaxation time Poisson & Laplace equation	"			
17	"	parallel plate capacitance Coaxial capacitance	"			
18	16/4	Spherical capacitance problems	"			
19	21/4	<u>MAGNETOSTATICS</u> Biot-Savart's law	II			
20	22/4	Ampere's circuit law & apps	"			

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
21	22/4	Magnetic flux density (B) & Ampere's law	4			
22	23/4	Magnetic scalar & Vector potentials	"			
23	25/4	Force due to magnetic field	4			
24	23/4	Ampere's force law	4			
25	27/4	Inductances of magnetic circuit - problems	4			
26	11	MAXWELL eq (dynamic field) Faraday's law of TFE emf	III			
27	30/4	The causality of ampere's law displacement current density	4			
28	2/5	Maxwell's equations	4			
29	2/5	Boundary conditions for static fields	4			
30	3/6	Boundary conditions for magnetic fields	11			
31	11	EM wave ch-I Wave equations	IV			
32	4/6	uniform plane waves	4			
33	6/6	Scattered waves	4			
34	11/6	Wave propagation in different media	4			
35	13/6	Conductors, dielectrics	4			
36	16/6	Wave propagation characteristics	4			
37	17/6	Polarization problems	4			
38	11	EM wave ch-II Reflection & Refraction	V			
39	18/6	normal incidence case	"			
40	20/6	oblique incidence case	"			

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
41	23/6	T & R at boundaries	1			
42	24/6	Obio, Ocritical, Total internal reflections	1			
43	"	Surface impedance Polarization	1			
44	25/6	Power loss Problems	1			
45	27/6	<u>Guided waves</u> parallel plane waveguide	<u>VII</u>			
46	30/6	TE waves	1			
47	1/7	TM waves	1			
48	"	TEM waves	1			
49	2/7	Characteristics of TE, TM, TEM waves	1			
50	4/7	problems	1			
51	7/7	<u>TL-L</u> types of T-L	<u>VII</u>			
52	8/7	parameters of T-L	1			
53	"	T-L examples	1			
54	9/7	Primary & Secondary Constants Characteristic Impedance	1			
55	11/7	Propagation Constant	1			
56	14/7	Phase & Group velocities	1			
57	15/7	Finite & infinite line concepts	1			
58	"	Lossless/Low loss characteristics	1			
59	16/7	Attenuation of resistors	1			
60	18/7	Losses, problems	1			

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Upon Rev
61	24/7	7.1-11 Input impedances	VIII			
62	22/7	OC & SC lines	11			
63	"	f.v.s.w.r., D.H.F. lines	11			
64	23/7	$\lambda/4$, $\lambda/2$, $\lambda/8$ lines	11			
65	25/7	Smith chart calculations & app's	11			
66	30/7	Single stub matching	11			
67	1/8	Double stub matching problems	11			