

(AY-2014-15) (I Sem)

R.S.

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No	Teaching Methodology	Remarks	Corrective Action Upon Review
		Unit - I:				
1	16.6.14	Introduction to radars	2	CR		
2	17.6.14	Radar block diagram	2	"		
3	17.6.14	Radar equation	2	"		
4	19.6.14	Review & Radar concepts I	"	"		
5	20.6.14	Radar frequencies & spectrum	I	"		
6	23.6.14	Applications of Radar	I	"		
7	24.6.14	Related problems	I	"		
		Unit - II:				
8	24.6.14	Prediction of range performance min detectable signal	II	CR		
9	26.6.14	Rx noise and SNR	II	"		
10	27.6.14	Alignment of radar pulses	II	"		
11	30.6.14	Radar cross section of Targets	II	"		
12	1.7.14	Transmitter power	II	"		
13	1.7.14	PRF and range ambiguity	II	"		
14	3.7.14	System losses	II	"		
15	4.7.14	related problems	II	"		
		Unit - III:				
16	7.7.14	CW radar block diagram	III	CR		
17	8.7.14	Doppler effect and Indication for Tx & Rx	III	"		

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18	8-7-14	Non-zero IF Receiver Rx B.W. requirements	<u>III</u>	C.R.		
19	10-7-14	Application of CW radar	<u>III</u>	"		
20	11-7-14	FM-CW radar block-diagram	<u>III</u>	"		
21	14-7-14	Range & doppler measurement	<u>III</u>	"		
22	15-7-14	Characteristics	<u>III</u>	"		
23	15-7-14	FM-CW limiter	<u>III</u>	"		
24	17-7-14	Measurement error	<u>III</u>	"		
25	18-7-14	Multiple frequency CW radar	<u>III</u>	"		
		Unit - IV :				
26	21-7-14	Introduction to MTI radar	<u>IV</u>	C.R.		
27	22-7-14	with power amplifier TX and	<u>IV</u>	"		
28	22-7-14	power oscillator TX delay line canceller	<u>IV</u>	"		
29	24-7-14	Filter characteristics	<u>IV</u>	"		
30	25-7-14	Clutter rejection, double cancellation	<u>IV</u>	"		
31	25-7-14	Staggered PRFS. Range gated doppler filter	<u>IV</u>	"		
32	29-7-14	MTI radar parameter Limitations.	<u>IV</u>	"		
33	29-7-14	Non-coherent MTI and	<u>IV</u>	"		
34	31-7-14	MTI Vs Pulse doppler radar	<u>IV</u>	"		

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		unit - <u>IV</u> :				
35	04.8.14	Tracking with radar	<u>IV</u>	CR		
36	07.8.14	Sequential lobing, aimed scan	<u>IV</u>	"		
37	08.8.14	monopulse Tracking radar amplitude comparison	<u>IV</u>	"		
38	11.8.14	phase comparison monopulse	<u>IV</u>	"		
39	12.8.14	Target reflection characteristics and angular accuracy	<u>IV</u>	"		
40	13.8.14	Tracking in range	<u>IV</u>	"		
41	14.8.14	Acquisition and scanning patterns	<u>IV</u>	"		
42	15.8.14	Comparison of Trackers	<u>IV</u>	"		
		unit - <u>VI</u> :				
43	21.8.14	Radar Antenna parameters	<u>VI</u>	CR		
44	22.8.14	Reflector antennas	<u>VI</u>	"		
45	23.8.14	Lens antennas	<u>VI</u>	"		
46	24.8.14	Corrugated - tapered antenna pattern	<u>VI</u>	"		
47	25.8.14	Electrically steered phased array antennas	<u>VI</u>	"		
48	26.8.14	phase shifters	<u>VI</u>	"		
49	1.9.14	frequency-scan arrays	<u>VI</u>	"		
50	2.9.14	Radiators for phased arrays	<u>VI</u>	"		
51	2.9.14	Architectures for phased arrays	<u>VI</u>	"		

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Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
		Unit - VII:				
S2	4.9.14	Detection of narrow bands in noise	VII	CR		
S3	5.9.14	Matched filter Rx response characteristics	VII	"		
S4	8.9.14	and its derivation	VII	"		
S5	9.9.14	Correlation detector	VII	"		
S6	9.9.14	detector characteristics & Detection criterion	VII	"		
S7	11.9.14	Automatic detection	VII	"		
S8	12.9.14	control of false Alarm v.to Receiver	VII	"		
		Unit - VIII:				
S9	15.9.14	noise figure and noise temp	VIII	CR		
C0	16.9.14	Displays - types	VIII	"		
C1	16.9.14	Duplexers - branch type & balanced type	VIII	"		
C2	18.9.14	circulators as duplexers	VIII	"		
C3	19.9.14	phased array antennas - basic concept	VIII	"		
C4	20.9.14	Beam steering & beam width changes	VIII	"		
C5	22.9.14	Series & parallel feeds	VIII	"		
C6	24.9.14	Applications	VIII	"		
C7	25.9.14	Advantages and Limitations	VIII	"		

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