Subject Code

No. of Lecture Hrs/Week

Written by Administrator Saturday, 07 November 2009 05:27 -

: 04

Exam Hours	: 03

Total	no. of Lecture Hrs.	: 52

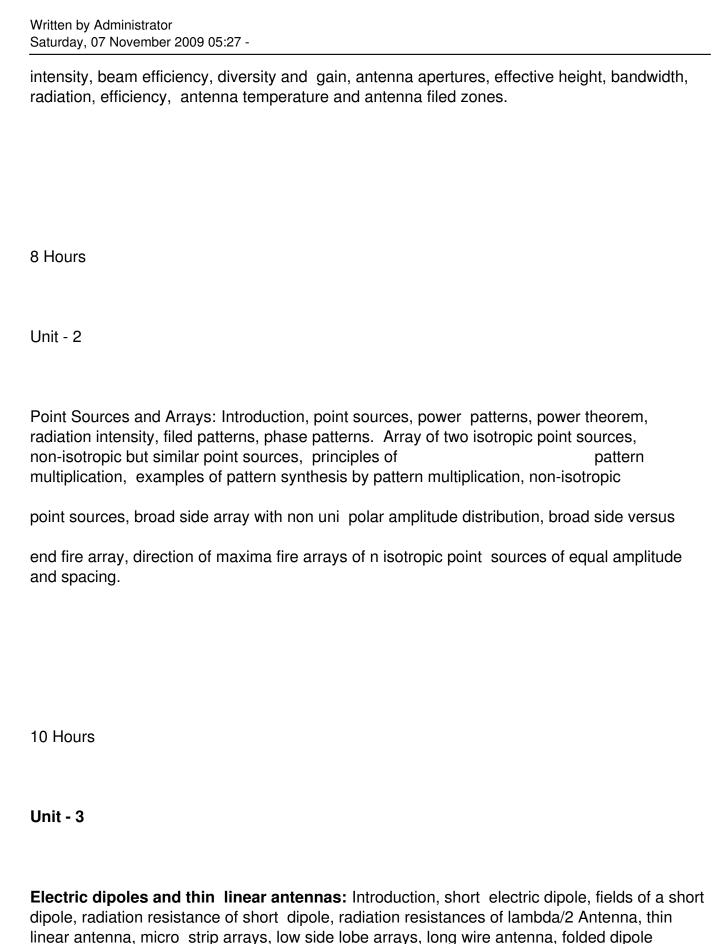
Exam Marks	. 100
Exam Mans	. 100

# **PART - A**

Unit - 1

Antenna Basics: Introduction, basic Antenna parameters, patterns, beam area, radiation

antennas.



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6 Hours

PART - B

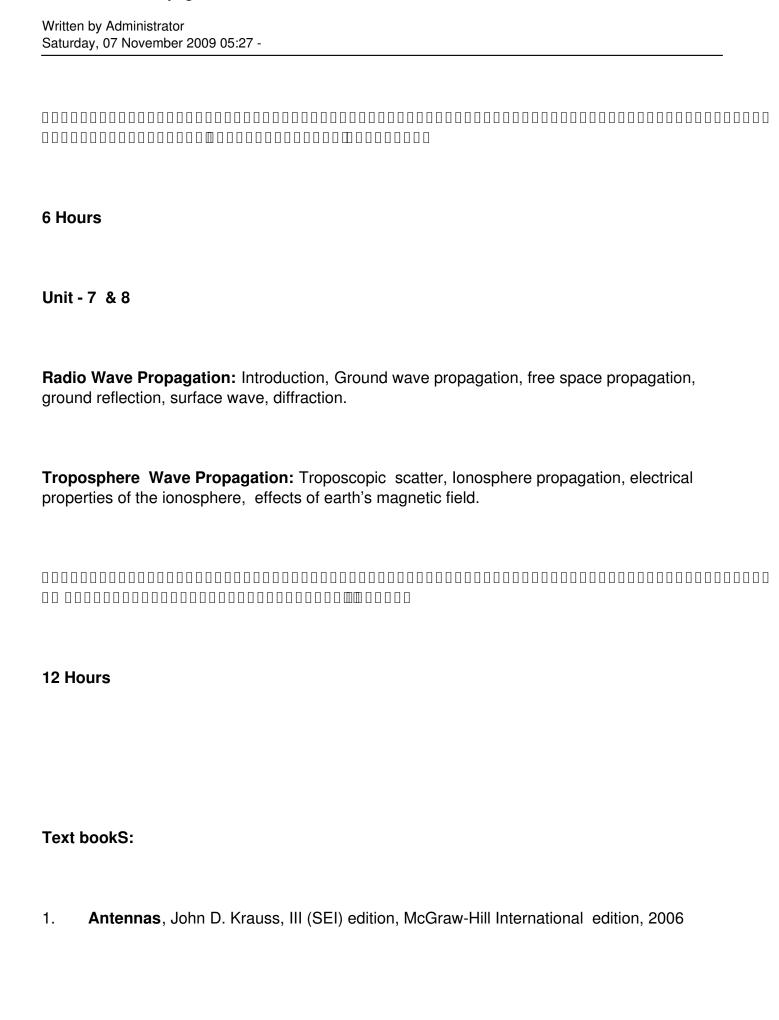
Unit - 4 & 5

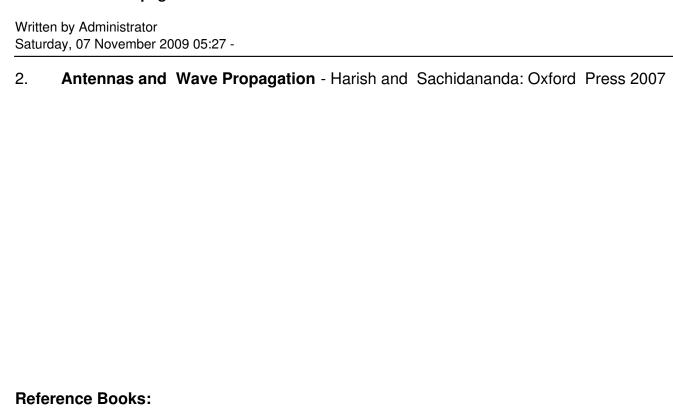
**Loop, slot, patch and horn antenna:** Introduction, small loop, comparison of far fields of small loop and short dipole, loop antenna general case, far field patterns of circular loop, radiation resistance, directivity, slot antenna, Balinet's principle and complementary antennas, impedance of complementary and slot antennas, patch antennas, horn antennas, rectangular horn antennas.

10 Hours

Unit - 6

**Antenna Types:** Helical Antenna, Yagi-Uda array, corner reflectors, parabolic reflectors, log periodic antenna, lens antenna, antenna for special applications – sleeve antenna, turnstile antenna, omni directional antennas, antennas for satellite antennas for ground penetrating radars, embedded antennas, ultra wide band antennas, plasma antenna.





- 1. Antenna Theory Analysis and Design C A Balanis, 2<sup>nd</sup> ED, John Wiley, 1997
- 2. **Antennas and Propagation for Wireless Communication Systems** Sineon R Saunders, John Wiley, 2003.
- 3. **Antennas and wave propagation -** G S N Raju: Pearson Education 2005