# Lesson Plan

Name of faculty: Ms. Seema Subject: CS

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| Week | Lecture Day | Theory | Practical | Topic |
| Ist | 1 | Classification of transmitters | 1st | To observe the waveforms at different stage of a AM transmitter. |
| 2 | AM transmitters |
| 3 | Reactance FET |
| 2nd | 4 | Armstrong FM transmitters |
| 5 | Super heterodyne AM receiver |
| 6 | Sensitivity, Selectivity |
| 3rd | 7 | Fidelity,S/N Ratio | 2nd | To observe the waveforms at different stage of a Radio Receiver. |
| 8 | Image Rejaction Ratio |
| 9 | Revision/Test |
| 4th | 10 | ISI standards |
| 11 | Intermediate frequency (IF) |
| 12 | FM receiver |
| 5th | 13 | Need for limiting and de-emphasis |
| 14 | Communication receivers | 3rd | To align AM broadcast radio receiver. |
| 15 | Broadcast receivers |
| 6th | 16 | Electromagnetic spectrum |
| 17 | Radiation of electromagnetic energy |
| 18 | Polarization of EM Waves |
| 7th | 19 | Revision/Test | 4th | To identify and study the various types of antennas used indifferent frequency ranges. |
| 20 | Point source, Gain directivity |
| 21 | Aperture, Effective area |
| 8th | 22 | Radiation pattern, beam width | 5th | To plot the radiation |
|  | 23 | Radiation resistance, Loss resistance |  | pattern of a directional and Omni directional antenna. |
| 24 | Half wave dipole, medium wave (mast) antenna, folded dipole |
| 9th | 25 | Patch, loop antenna, yagi and ferrite rod antenna |
| 26 | Broad-side and end fire arrays |
| 27 | Rhombic antenna and dish antenna |
| 10th | 28 | Different modes of wave propagation | 6th | To plot the variation of field strength of a radiated wave, with distance from a transmitting antenna. |
| 29 | Ground wave propagation |
| 30 | Revision/Test |
|  | 31 | Space wave communication |

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| 11th | 32 | Concept of effective earth radius range |  |  |
| 33 | Duct propagation |
| 12th | 34 | sky wave propagation | 7th | Installation of Dish Antenna for best reception. |
| 35 | Virtual height, critical frequency |
| 36 | Skins distance, maximum usable frequency |
| 13th | 37 | Multiple hop propagation |
| 38 | PCM |
| 39 | DPCM |
| 14th | 40 | DELTA Modulation | 8th | To observe waveforms at input and output of ASK and FSK modulators. |
| 41 | ASK, FSK |
| 42 | PSK |
| 15th | 43 | QPSK |
| 44 | Spread spectrum techniques |
| 45 | Frequency hopping technique |