LESSON PLAN

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| Period | Date(tentative) | Topic | Unit no | Teaching methodology |
| 1 | 27-11-17 | Review of coordinate systems |  | Class room teaching |
| 2 |
| 3 | 28-11-17 | Vector calculus |
| ELECTROSTATICS | | | | |
| 4 | 29-11-17 | Coulombs’ law | I | Class room teaching |
| 5 | 30-11-17 | Different charge distributions( , |
| 6 | 4-12-17 | Electric field intensity due to |
| 7 | Electric field intensity due to |
| 8 | 5-12-17 | Electric field intensity due to |
| 9 | 6-12-17 | Electric flux density |
| 10 | 7-12-17 | Gauss law |
| 11 | 11-12-17 | Electric potential ,  Relation between E & V |
| 12 | Maxwell two equations for E-fields |
| 13 | 12-12-17 | Energy density |
| 14 | 14-12-17 | Convection and conduction currents |
| 15 | 18-12-17 | Dielectric constant, Isotropic, homogeneous dielectrics |
| 16 | Continuity equation, relaxation time |
| 17 | 19-12-17 | Poisson’s & Laplace equations |
| 18 | 21-12-17 | Parallel plate Capacitance |
| 19 | 1-1-18 | Coaxial, Spherical Capacitance |
| 20 | Problems, assignment-1 |

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| Period | Date (tentative) | Topic | | Unit no | | Teaching methodology |
| MAGNETO STATICS | | | | | | |
| 21 | 2-1-18 | Biot-savart law | | II | | Class room teaching |
| 22 | 4-1-18 | Ampere’s circuital law & applications | |
| 23 | 8-1-18 | Magnetic flux density | |
| 24 | Maxwell two equations for H-fields | |
| 25 | 9-1-18 | Magnetic scalar& vector potentials | |
| 26 | 11-1-18 | Forces due to magnetic fields , Ampere’s force law | |
| 27 | 18-1-18 | Inductances & magnetic energy | |
| MAXWELL’S EQUATIONS | | | | | | |
| 28 | 29-1-18 | Faraday’s law & transformer emf | | III | | Class room teaching |
| 29 | Inconsistency of ampere’s law, displacement current density | |
| 30 | 30-1-18 | Maxwell equations-diff forms &word statements | |
| 31 | 1-2-18 | Boundary conditions dielectric-dielectric | |
| 32 | 5-2-18 |
| 33 | 5-2-18 | Boundary conditions dielectric-conductor | |
| 34 | 6-2-18 |
| 35 | 8-2-18 | Problems | |
| EM WAVE CHARACTERISTICS | | | | | | |
| 36 | 12-2-18 | Wave equations for conducting and perfect dielectric | | IV | | Class room teaching |
| 37 |
| 38 | 13-2-18 | Uniform plane waves  Definition  All relations b/w E and H,  Sinusoidal variations | |
| 39 | 15-2-18 |
| 40 | 19-2-18 |
| 41 | 19-2-18 | Wave propagation in conducting ,lossless media | |
| 42 | 20-2-18 | Conductors and dielectrics characterisation | |
| 43 | 22-2-18 | Wave propagation in good conductors , good dielectrics | |
| 44 | 26-2-18 | Polarization, Problems | |
| 45 | Reflection and refraction of plane waves NORMAL incidence | |
| 46 | 27-2-18 |
| 47 | 1-3-18 | Reflection and refraction of plane waves OBLIQUE incidence | |
| 48 | 5-3-18 |
| 49 | Brewster angle, critical angle  Total internal reflection, surface impedance | |
| 50 | 6-3-18 | Poynting vector ,poynting theorem | |
| TRANSMISSION LINES | | | | | | |
| 51 | 8-3-18 | Types, parameters, primary & secondary constants | V | | Class room teaching | |
| 52 | 12-3-18 | T Line equations |
| 53 | Zo , Vp ,Vg ,propagation consts |
| 54 | 13-3-18 | Infinite,lossless,lowloss lines |
| 55 | 15-3-18 | Distortion,loading , problems |
| 56 |  | Zi , SC&OC Lines ,reflection coefficient |
| 57 |  | VSWR,UHF lines |
| 58 |  | λ/4, λ/2, λ/8 lines –impedance transformations |
| 59 |  | Smith chart-single & double stub matching |
| 60 |  | problems |