

UNIT V ELECTROMAGNETIC WAVES

1. Discuss about linear and circular polarization.
2. Describe about reflection of plane waves by a perfect dielectric.
3. Discuss about the propagation of plane waves in free space and in a homogeneous material.
4. Describe about the propagation of plane waves in lossy dielectrics.
5. Explain about the propagation of EM waves in good conductor.
6. Derive the expression for the attenuation constant, phase constant and intrinsic impedance for a uniform plane wave in a good conductor.
7. Briefly explain about the wave incident (1) Normally on a perfect dielectric (2) Obliquely to the surface of perfect insulator.
8. Derive the general Wave Equation.
9. Derive the equation for plane waves in
 - (1) Free Space.
 - (2) Homogeneous material.
 - (3) Conducting medium.