



Sheet (1)

1. Define antenna, and State different types of antenna.
2. A horizontal infinitesimal electric dipole of constant current I_0 is placed symmetrically about the origin and directed along the x-axis. Derive the far-zone fields radiated by the dipole.
3. Repeat Problem 2 for a horizontal infinitesimal electric dipole directed along the y-axis.
4. An infinitesimal electric dipole is centered at the origin and lies on the x-y plane along a line which is at an angle of 45° with respect to the x-axis. Find the far-zone electric and magnetic fields radiated. The answer should be a function of spherical coordinates.

(REPORT)

1. Describe radiation mechanism for single wire and two wires antenna.
2. Why the infinitesimal electric dipole is not a practical antenna.

Good Luck

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