EE 8391 Electromagnetic Theory

Important 2mark questions

Unit I

1. State the condition for the vector F to be solenoidal.
2. What are the sources of electric field and magnetic field?
3. Convert the given point $(2, \frac{\pi}{2}, \frac{\pi}{2})$ in Spherical coordinates into Cartesian coordinates.

Unit II

1. Why water has much greater dielectric constant than mica?
2. What are the significant physical differences between Poisson's and Laplace's equation?
3. Evaluate the capacitance of a single isolated sphere of 1.5 m diameter in free space.

Unit III

1. State Gauss law for magnetic field.
2. State the conservative property of electric field.
3. Write down the steps to calculate inductance of various shapes.

Unit IV

1. What is main effect of eddy current?
2. What is the effect of permittivity on the force between two charges?
3. Compare field theory with circuit theory.

Unit V

1. Calculate the characteristic impedance of free space.
2. Mention the properties of uniform plane wave.
3. Define Poynting vector.