

**EE 8402 Transmission and Distribution**

**Important 13mark questions**

**Unit I**

1. Draw and explain the structure of typical electrical power system with various voltage levels.
2. Explain the structure of electric power system in detail.

**Unit II**

1. Derive an expression for capacitance of a three-phase unsymmetrically spaced overhead line.
2. Derive the expression for calculating the internal and external flux linkages for a conductor carrying current. Use these expressions to derive the equation for the inductance of a single phase transmission line.

**Unit III**

1. Draw the phasor diagram of a short transmission line and derive an expression for voltage regulation and transmission efficiency.
2. What are the different methods available for Voltage Control and explain any one method?

**Unit IV**

1. What are the different types of testing of Insulators? Explain any one method.
2. With neat diagram, explain the various methods of grading of underground cables.

**Unit V**

1. Describe about the various methods of neutral grounding in detail.
2. Explain the key points to be considered for tower spotting. Also list the basic types of tower based on circuits used.