I. Plane Waves
   A. Time-harmonic fields and phasors
   B. Electromagnetic waves
      1. Plane waves
      2. Propagation constant
      3. Velocity and direction of propagation
      4. Wavelength
      5. Wave impedance
      6. Polarization
   C. Wave propagation in good conductors/skin depth
   D. Skin effect
   E. Poynting vector/power density
   F. Plane wave reflection and transmission at a dielectric interface
      1. Reflection/transmission coefficients
      2. Standing wave ratio
      3. Total fields

II. Transmission Lines
   A. Transmission line modes
   B. Transmission line equations
   C. Characteristic impedance
   D. Lossy and lossless transmission lines
   E. Distortionless transmission line
   F. Transmission line circuits
      1. Voltage and current
      2. Input impedance
      3. Reflection coefficient
      4. Standing wave ratio
   G. Smith chart
   H. Matching networks
      1. Quarter-wave transformer
      2. Single-stub tuner
   I. Power flow on a lossless transmission line
   J. Transients on transmission lines

- You are allowed (1) 8.5"x11" formula sheet.
- Differential operator formulas will be provided.
- **Non-trivial** integration formulas will be provided