

ENEE 610 Fall 2002  
Final Exam Study Points

1. The exam will be open book, open notes (notebooks will be due at the end of the exam)
2. There will be three multipart questions, one based upon the class note and textbook material and two based upon papers presented.
3. Two questions will be associated with the papers presented by (everyone will answer both questions):
  - a) Kasahara, Tadashi
  - b) Jain, Adarsh K
4. Other topics to study
  - a) Semistate equations - setting up
  - b) Scattering matrix & relation to admittance
  - c) RC synthesis.
  - d) Properties of passive circuits - positive-real conditions.
  - e) Solution of Riccati equations, see example 6.4-3 of text.
  - f) Equations for regions of operation of NMOS transistors.
  - g) e) and f) changed into first order linear differential equation; know solutions with constant input, time constant, and time & amplitude normalizations.