All of the following are possible on Quiz 3. However, not all will be addressed on the quiz. Some of the topics will be combined.

Recommended Solved Problems to Review. For 2002 & 2003 refer to Quiz 3. for 1999, 2000 & 2001 refer to Quiz 2. In addition, the questions on Quiz 3 for Spring 2005 are also good.

- 1. Multiple Choice
 - a. Spring 2003 (1 iv), (1 v)
 - b. Fall 2002 (*1 i-iii*)
 - c. Spring 2001 (*1 c, d, f*)
- 2. Boundary Conditions
 - a. Spring 1999 (*1 a*)
 - b. Spring 2000 (2 *b*)
 - c. Spring 2001 (2 *b*)
- 3. Ampere's Law
 - a. Spring 2003 (2 ii), (3)
 - b. Fall 2002 Simple Ampere's Law and Ampere's Law Problems (not numbered)
 - c. Spring 1999 (*3*)
 - d. Spring 2000 (*3*)
- 4. Self Inductance
 - a. Fall 2002 Flux, Inductance, and Energy Problem
 - b. Spring 1999 (*1 c*)
 - c. Spring 2000 (*3*)
- 5. Forces
 - a. Spring 2003 (*2 i*)
 - b. Spring 1999 (1 d)
- 6. Faraday's Law
 - a. Spring 2003 (2 vi)
 - b. Fall 2002 Measurements Problem
 - c. Fall 2002 Faraday's Law Problem
 - d. Spring 1999 (1 b)
 - e. Spring 1999 (4)
 - f. Spring 2001 (2 a)
- 7. Magnetic Circuits
 - a. Spring 2003 (2 *v*)
 - b. Fall 2002 (*1 i*)
 - c. Spring 1999 (2)

There will be one longer problem on plane waves. As you can tell from past quizzes, this problem is most likely to be on plane waves incident normally on material boundaries.

- 8. Uniform Plane Waves in Lossless Media
 - a. This is not addressed in very many long questions
- 9. Uniform Plane Waves in Lossy Media
 - a. Fall 2001 Test 3 (page 12 and 13)
 - b. This is not addressed in very many long questions
- 10. Plane Waves Normally Incident on Material Boundaries
 - a. Spring 2001 Quiz 3 (9)
 - b. Fall 2000 Quiz 3 (4)
 - c. Spring 1998 Final Exam (4)
 - d. Spring 2005 Homework 8 (11 & 12)
 - e. Spring 2001 Final Exam (5)
 - f. Spring 2004 Homework 8 (Waves Question)