

PHYSICS 633

**Home Work Assignment # 6**

05/02/2008

Due: Thursday, May 8, 2008

All problem numbers are from the text book by Griffiths.

• **Time Dependent Perturbation Theory**

1) Problem 9.1.

(Use hydrogen atom wavefunctions from Tables 4.3 and 4.7).

2) Problem 9.2

3) Problem 9.7 (Actually, the problem of Rabi oscillations in a driven two-level system was solved in class. The notation used here is different, and doing this problem again will help you see the connection with the approach used in the text book).