ECO202, Spring 1997, Quiz 2, Prof. Bill Even
Second half of Chapter 7 and Chapter 17.

Directions: Put all answers on the attached answer sheet. Questions are worth 1 point unless indicated otherwise.

To answer the next 3 questions, consider the following investment opportunity. You can purchase a machine today for $60,000. You can lease the machine for $20,000 per year for each of the next 3 years. At the end of the 3 years, you can sell the machine for $10,000. Your first payment will come at the end of the first year. The expected inflation rate is zero.

1. What is the NPV of this investment if the interest rate is 0%? (round your answer to the nearest dollar)

2. (2 points) What is the NPV of this investment if the interest rate is 10%? (round your answer to the nearest dollar)

3. The internal rate of return on this project is (above, below) 10%.

4. Investment in a project will generate a profit if the internal rate of return on the investment is
   a. less than zero.
   b. greater than zero.
   c. greater than the interest rate.
   d. less than the interest rate.

5. The two major components of loan demand are:
   a. saving and investment.
   b. saving and the budget deficit.
   c. investment and the budget deficit.
   d. investment and government spending.

6. Loan supply is the same as:
   a. investment.
   b. saving.
   c. government spending.
   d. the government budget deficit.

To answer the next 2 questions, suppose that there is an increase in federal government spending without any change in the level of taxes.

7. This will cause the federal government’s budget deficit to (increase, decrease, not change).

8. The loan supply curve will (shift right, shift left, not change) and the loan demand curve will (shift right, shift left, not change).

9. The above changes in loan supply and demand will cause interest rates to (rise, fall) and private investment to (rise, fall).
10. Which of the following would cause the equilibrium interest rate to fall and private investment to rise?
   a. consumers become convinced that their incomes will be higher next year than they previously believed.
   b. consumers become convinced that their incomes will be lower next year than they previously believed.
   c. a technological innovation that makes new investment projects profitable.
   d. a decrease in government spending without any change in taxes.

11. (2 points) Consider a one year bond with a coupon rate of 6 percent, and a maturity value of $10,000. What is the effective yield on this bond if the selling price today is $9,800? (give your answer to the nearest one-tenth of a percent -- e.g. 6.2%).

12. (2 points) Consider a 3 year zero coupon bond with a maturity value of $10,000. What is the effective yield on this bond if the selling price today is $9,000? (Give your answer to the nearest one-tenth of a percent.)

13. If a bond sells for less than 100% of its maturity value, then its yield is (greater than, less than) the coupon rate.

14. (2 points) Suppose that a one year bond has a coupon rate of 10 percent, a maturity value of $10,000 and sells for $9,500. If there is a 5% percent chance that the bond issuer will default on the bond, what is the expected yield on this bond? (Give your answer to the nearest one-tenth of a percent.)

15. To best diversify risk, one should invest in assets whose returns are
   a. positively correlated.
   b. negatively correlated.
   c. not correlated.

16. (2 points) Suppose that the yield on one year bonds is currently 6%. If it is expected that one year bond rates will be 8 percent next year and 6 percent the year after that, the yield on two year bonds should currently be _____ and the yield on three year bonds should currently be _____.

17. If the yield curve slopes down (i.e. yields fall as term rises), then financial markets must believe that short term interest rates will (rise, fall) in the future.

18. The theory that stock prices immediately reflect all publicly available information about a stock is referred to as _______.

19. The “fundamental value” of a stock represents the expected present value of all future _______.

20. If you expect that the price of wheat will fall over the next month, it would be wise to (buy, sell) futures in wheat.
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<td>1</td>
<td>$10,000</td>
<td>*11</td>
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<tr>
<td>2</td>
<td>-2750</td>
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<td>6</td>
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<td>7</td>
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