ECO202, Spring 1998, Prof. Bill Even

Quiz 2, Chapters 17 and 8.
Your Name (please print) ________________________________

Directions: Place all answers in the answer sheet provided at the end of the quiz. No credit will be given for answers placed elsewhere. LEAVE YOUR ANSWER SHEET ATTACHED TO THE QUIZ.

1. (2 points) Consider a one year bond with a coupon rate of 9 percent, and a maturity value of $10,000. What is the effective yield on this bond if the selling price today is $10,500? (give your answer to the nearest one-tenth of a percent -- e.g. 6.2%).

2. (2 points) Consider a 5 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 $8,000? (Give your answer to the nearest one-tenth of a percent.)

3. (2 points) Suppose that a one year bond has a coupon rate of 18 percent, a maturity value of $10,000 and sells for $10,200. If there is a 10% 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.)

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

5. Holding the coupon rate constant, as the price of a bond increases its effective yield (increases, decreases).

Recently it was announced that some General Motors cars were produced with gas tanks that are likely to explode in a collision. Moreover, a memo was discovered indicating that GM was aware of the defect and chose not to correct it. Many legal experts believe that this revelation may cost GM large losses in law suits.

6. If stock prices reflect fundamental values, this “bad” news about GM should cause the price of the stock to
   a. rise   b. fall   c. not change.

7. If the efficient markets hypothesis is true, once this bad news about GM is made public,
   a. there would be no reason to buy or sell GM stock because the price would change to reflect the new information immediately.
   b. it would be smart to buy GM stock because its price will fall in the future.
   c. it would be smart to sell GM stock because its price will fall in the future.
   d. it would be smart to buy GM stock because its price will rise in the future.

8. If stock prices reflect fundamental values, then stock prices will decrease if:
   a. interest rates rise or expectations of future profits fall.
   b. interest rates fall or expectations of future profits fall.
   c. interest rates rise or expectations of future profits rise.
   d. interest rates fall or expectations of future profits rise.
According to the Wall Street Journal, on February 18, 1998 AT&T stock was selling for $63.75. A call option with an exercise price of $60 and an expiration date of April 1, 1998 was selling for $5.15.

9. If you paid $5.15 for this call option on February 18, the option would (on net, i.e. after subtracting what you paid for the option) be profitable if and only if the price of ATT on April 1, 1998 was:
   a. above $65.15       b. above $68.90       c. above $60.       d. below $60.

10. If you sold this call option (and collected the $5.15 for the sale), on net you would profit if and only if the price of ATT on April 1, 1998 was:
    a. above $65.15       b. above $68.90       c. below $65.15       d. below $60.

11. As the chance that ATT’s price will hit 70 by April 1, 1998 increases, we should expect to see the price of a call option on ATT to (rise, fall) and the price of a put option on IBM to (rise, fall).
    a. rise; fall       b. rise; rise       c. fall; rise       d. fall; fall.

12. If John sells a put option on ATT and Mary buys the option, it is likely that John believes ATT’s future stock price will be (higher, lower) than Mary believes. If Lisa sells a call option on IBM and Eric buys the call option, it is likely that Lisa believes IBM’s future stock price will be (higher, lower) than Eric believes.
    a. higher; higher       b. higher; lower       c. lower; higher       d. lower; lower

13. (2 points) Suppose that the yield on one year bonds is currently 6%. Assuming no risk premium for longer term bonds, if it is expected that one year bond rates will be 8% next year and 6% the year after that, the yield on two year bonds should currently be _____ and the yield on three year bonds should currently be ______.

14. In the February 18, 1998 Wall Street Journal, it was reported that the price-earnings ratio for Alarm-guard was 76 whereas it was 14 for Green-Briar. Based on this information, it is likely that financial investors believe that the earnings of Alarm-Guard has growth potential that is (greater than, less than) that for Green-Briar.

Suppose that the federal government permanently reduces defense spending by $100 billion and simultaneously cuts personal income taxes permanently by $100 billion.

15. In the short term, full employment output is fixed. Since there is a permanent reduction in taxes, in the short term, this should lead to:
    a. a $100 billion increase in saving.
    b. a $100 billion increase in consumption.
    c. a $100 billion increase in investment.
    d. all of the above.

16. Other things being the same, suppose the tax cut described in (15) was designed to increase private investment. For example, suppose all businesses that purchased equipment would have their taxes reduced by 10% of the cost of the equipment. Compared to the case where the tax cut reduces personal income taxes, in the short term, the investment tax credit should lead to:
    a. a smaller increase in consumption.
    b. a larger increase in consumption.
    c. a smaller decrease in consumption.
    d. a larger decrease in consumption.

17. Compared to a personal income tax cut, an investment tax credit would lead to (higher, lower) economic growth in the future.
    a. higher
    b. lower

18. Suppose that the federal government increases spending on defense without raising taxes. This will lead to a (higher, lower) deficit.
    a. higher.
    b. lower
19. According to the majority view, a larger deficit will lead to
   a. higher interest rates and less investment.
   b. higher interest rates and more investment.
   c. lower interest rates and less investment.
   d. lower interest rates and more investment.

20. The major difference between the minority and majority view of how a larger deficit affects the economy is that the minority view believes that a $1 increase in the deficit will lead to:
   a. a $1 increase in saving.
   b. a $1 decrease in saving.
   c. no change in saving.

21. Compared to those who hold the minority view on deficit effects, those with the majority view believe that deficits will
   a. increase interest rates more and have a smaller negative effect on future economic growth.
   b. increase interest rates less and have a smaller negative effect on future economic growth.
   c. increase interest rates more and have a larger negative effect on future economic growth.
   d. increase interest rates less and have a larger negative effect on future economic growth.
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