Econ 330 – Exam 1
Spring 2011

Name ________________________________
ID Number __________________________
Section Number _______________________

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Helpful Equations for the Sara and Tom Questions

Assume \( F = \) future value, \( P = \) present value and \( i = \) yield to maturity

\[
F = P \times (1+i)^N
\]

\[
F = P \times i
\]

\[
F = \frac{P \times i}{1 - \frac{1}{(1+i)^N}}
\]

1) Everything else held constant, if the federal government were to guarantee today that it will pay creditors if a corporation goes bankrupt in the future, the interest rate on corporate bonds will _______ and the interest rate on Treasury securities will _______.
A) increase; increase
B) decrease; decrease
C) increase; decrease
D) decrease; increase

2) Which of the following $1,000 face-value securities has the highest yield to maturity?
A) A 12 percent coupon bond selling for $1,100
B) A 12 percent coupon bond selling for $1,000
C) A 5 percent coupon bond selling for $1,000
D) A 10 percent coupon bond selling for $1,000

3) Which of the following are generally true of all bonds?
A) Prices and returns for short-term bonds are more volatile than those for longer term bonds.
B) The longer a bond’s maturity, the greater is the rate of return that occurs as a result of the increase in the interest rate.
C) Even though a bond has a substantial initial interest rate, its return can turn out to be negative if interest rates rise.
D) A fall in interest rates results in capital losses for bonds whose terms to maturity are longer than the holding period.

4) The additional incentive that the purchaser of a Treasury security requires to buy a long-term security rather than a short-term security is called the
A) tax premium.
B) term premium.
C) market premium.
D) risk premium.
5) Which of the following instruments are traded in a capital market?
   A) Banker's acceptances.
   B) Repurchase agreements.
   C) Negotiable bank CDs.
   D) U.S. Government agency securities.

6) All of the following are examples of coupon bonds except
   A) U.S. Treasury notes         B) U.S. Treasury bills
   C) U.S. Treasury bonds       D) Corporate bonds

7) What is the return on a 5 percent coupon bond that initially sells for
   $1,000 and sells for $900 next year?
   A) 10 percent               B) -5 percent
   C) -10 percent             D) 5 percent

8) Everything else held constant, if the tax-exempt status of municipal
   bonds were eliminated, then
   A) the interest rates on municipal, Treasury, and corporate bonds
      would all increase.
   B) the interest rates on municipal bonds would still be less than the
      interest rate on Treasury bonds.
   C) the interest rate on municipal bonds would exceed the rate on
      Treasury bonds.
   D) the interest rate on municipal bonds would equal the rate on
      Treasury bonds.

9) Sara decides to lend Tom $2,000 for 2 years at 8% interest rate with all
   interest and principal due at the end of the 2 years. What is the total
   amount Tom must pay Sara 2 years into the future?
   A) 3,325.17               B) 2,697.45
   C) 2,332.80             D) 2,008.80

10) Which of the following instruments are traded in a money market?
    A) Corporate bonds.
    B) U.S. Treasury bills.
    C) State and local government bonds.
    D) U.S. government agency securities.

11) According to the liquidity premium theory, a yield curve that is flat
    means that
    A) bond purchasers expect interest rates to fall in the future.
    B) the yield curve has nothing to do with expectations of bond
        purchasers.
    C) bond purchasers expect interest rates to rise in the future.
    D) bond purchasers expect interest rates to stay the same.
12) Everything else held constant, if the expected return on U.S. Treasury bonds falls from 10 to 5 percent and the expected return on GE stock rises from 7 to 8 percent, then the expected return of holding GE stock _______ relative to U.S. Treasury bonds and the demand for GE stock _______.
   
   A) rises; falls  
   B) rises; rises  
   C) falls; rises  
   D) falls; falls

13) Using the Gordon growth formula, if D₁ is $1.00, kₑ is 10% or 0.10, and g is 5% or 0.05, then the current stock price is
   
   A) $10.  
   B) $20.  
   C) $30.  
   D) $40.

14) The term structure of interest rates is
   
   A) the relationship among the term to maturity of different bonds.  
   B) the relationship among interest rates of different bonds with the same maturity.  
   C) the structure of how interest rates move over time.  
   D) the relationship among interest rates on bonds with different maturities.

15) The U.S. economy is currently going through a period of deleveraging. Deleveraging is best defined by which of the following?
   
   A) A reduction in the income to asset ratio  
   B) A reduction in the asset to income ratio  
   C) A reduction in the debt to income ratio  
   D) A reduction in the debt to net worth ratio

16) An inverted yield curve predicts that short-term interest rates
   
   A) will remain unchanged in the future.  
   B) will rise and then fall in the future.  
   C) will fall in the future.  
   D) are expected to rise in the future.

17) If $22,050 is the amount payable in two years for a $20,000 simple loan made today, the interest rate is
   
   A) 5 percent.  
   B) 10 percent.  
   C) 22 percent.  
   D) 25 percent.

18) If you expect the inflation rate to be 15 percent next year and a one-year bond has a yield to maturity of 7 percent, then the real interest rate on this bond is
   
   A) 7 percent.  
   B) 22 percent.  
   C) -15 percent.  
   D) -8 percent.

19) Tom would like to borrow $300 from Sara today. In return, Tom has agreed to pay Sara $40 forever, but will never pay back the $300. (Assume they both live forever). What is Sara's yield to maturity?
   
   A) 17.45%  
   B) 15%  
   C) 13.33%  
   D) 14.25%
20) Evidence in support of the efficient markets hypothesis includes
   A) the small–firm effect.
   B) excessive volatility.
   C) the failure of technical analysis to outperform the market.
   D) the January effect.

21) Assume Tom would like to borrow money from Sara for 3 years but can
    only afford $45 annual loan payments. If Sara agrees to lend money to
    Tom at an interest rate of 6%, how much money can Tom afford to
    borrow today?
    A) 120.29        B) 160.25        C) 140.58        D) 130.25

22) Which of the following factors is not responsible for the recent
    breakdown of the U.S. investment banking model?
    A) Excessive leverage
    B) Over capitalization
    C) The Financial Modernization Act of 1999
    D) Falling home prices

23) Economists' attempts to explain the term structure of interest rates
    A) prove that the real world is a special case that tends to get short
       shrift in theoretical models.
    B) have proved entirely unsatisfactory to date.
    C) illustrate how economists modify theories to improve them when
       they are inconsistent with the empirical evidence.
    D) illustrate how economists continue to accept theories that fail to
       explain observed behavior of interest rate movements.

24) An equal decrease in all bond interest rates
    A) increases the price of a five–year bond more than the price of a
       ten–year bond.
    B) increases the price of a ten–year bond more than the price of a
       five–year bond.
    C) decreases the price of a five–year bond more than the price of a
       ten–year bond.
    D) decreases the price of a ten–year bond more than the price of a
       five–year bond.

25) When the expected inflation rate increases, the demand for bonds
    increases; decreases; falls    B) increases; increases; rises
    decreases; decreases; falls    D) decreases; increases; rises

26) Rules used to predict movements in stock prices based on past patterns
    are, according to the efficient markets hypothesis,
    A) the most efficient rules to employ.
    B) consistent with the random walk hypothesis.
    C) profitably employed by all financial analysts.
    D) a waste of time.
27) _______ and _______ may provide an explanation for stock market bubbles.
   A) Underconfidence; social contagion
   B) Overconfidence; social isolationism
   C) Underconfidence; social isolationism
   D) Overconfidence; social contagion

28) If you expect the inflation rate to be 4 percent next year and a one year bond has a yield to maturity of 7 percent, then the real interest rate on this bond is
   A) ~3 percent.          B) ~2 percent.
   C) 3 percent.           D) 7 percent.

29) Sara decides to loan Tom $500 at a 12% interest rate for 3 years. She wants Tom to pay her back in 3 equal annual payments. What will be Tom’s annual payments?
   A) 210.56          B) 210.22           C) 245.25        D) 208.17

30) According to the liquidity premium theory of the term structure, a slightly upward sloping yield curve indicates that short-term interest rates are expected to
   A) rise in the future.
   B) remain unchanged in the future.
   C) decline moderately in the future.
   D) decline sharply in the future.

31) If gold becomes acceptable as a medium of exchange, the demand for gold will _______ and the demand for bonds will _______, everything else held constant.
   A) increase; increase
   B) decrease; decrease
   C) increase; decrease
   D) decrease; increase

32) During the past decade, the average rate of monetary growth has been 5%, and the average inflation rate has been 5%. Everything else held constant, if the Federal Reserve announces that the new rate of monetary growth will be 10%, the rational expectation forecast of the inflation rate will be
   A) 5%.
   B) between 5 and 10%.
   C) 10%.
   D) less than 5%.
   E) more than 10%.

33) In the bond market, the market equilibrium shows the market-clearing _______ and market-clearing _______.
   A) interest rate; deposit          B) interest rate; premium
   C) price; deposit                  D) price; interest rate
34) Which of the following is not an activity of Fannie Mae and Freddie Mac?
   A) Issue GSE bonds to the public
   B) Originate mortgage loans
   C) Purchase mortgages from mortgage lenders
   D) Package up and guarantee mortgages into mortgage backed securities, MBS

35) When the Treasury bond market becomes more liquid, other things equal, the demand curve for corporate bonds shifts to the _______ and the demand curve for Treasury bonds shifts to the _______.
   A) left; right     B) right; left
   C) right; right    D) left; left

36) When the interest rate on a bond is _______ the equilibrium interest rate, in the bond market there is excess _______ and the interest rate will _______.
   A) below; supply; fall  B) above; demand; rise
   C) above; supply; rise   D) above; demand; fall

37) The efficient markets hypothesis predicts that stock prices follow a "random walk." The implication of this hypothesis for investing in stocks is
   A) a "churning strategy" of buying and selling often to catch market swings.
   B) following the advice of technical analysts.
   C) a "buy and hold strategy" of holding stocks to avoid brokerage commissions.
   D) turning over your stock portfolio each month, selecting stocks by throwing darts at the stock page.

38) A change in perceived risk of a stock changes
   A) the required rate of return.
   B) the expected dividend growth rate.
   C) the expected sales price.
   D) the current dividend.

39) Bonds issued by state and local governments are called _______ bonds.
   A) corporate        B) Treasury
   C) municipal        D) commercial

40) If a $5,000 coupon bond has a coupon rate of 13 percent, then the coupon payment every year is
   A) $650.             B) $13.       C) $1,300.      D) $130.

41) Which of the following bonds are considered to be default-risk free?
   A) junk bonds  B) municipal bonds
   C) U.S. Treasury bonds   D) investment-grade bonds
42) An increase in the expected rate of inflation will ______ the expected return on bonds relative to the that on ______ assets, everything else held constant.
   A) reduce; financial       B) raise; real
   C) raise; financial        D) reduce; real

43) If the optimal forecast of the return on a security exceeds the equilibrium return, then:
   A) no unexploited profit opportunities exist.
   B) the market is myopic.
   C) the market is in equilibrium.
   D) the market is inefficient.

44) Everything else held constant, when bonds become less widely traded, and as a consequence the market becomes less liquid, the demand curve for bonds shifts to the ______ and the interest rate ______.
   A) left; rises            B) right; falls
   C) right; rises           D) left; falls

45) The government's recent takeover of Fannie Mae and Freddie Mac is such that a government agency is now managing the institutions’ day to day operations. This action is best defined by which of the following?
   A) Conservatorship        B) Receivership
   C) Credit default swap    D) Debt-for-equity swap

46) Using the one-period valuation model, assuming a year-end dividend of $1.00, an expected sales price of $100, and a required rate of return of 5%, the current price of the stock would be
   A) $110.00.        B) $101.00.        C) $100.00.        D) $96.19.

47) If a security pays $110 next year and $121 the year after that, what is its yield to maturity if it sells for $200?
   A) 9 percent              B) 10 percent
   C) 11 percent             D) 12 percent

48) Higher government deficits ______ the supply of bonds and shift the supply curve to the ______, everything else held constant.
   A) decrease; right       B) increase; right
   C) decrease; left        D) increase; left

49) Dennis notices that jackets are on sale for $99. In this case money is functioning as a ______.
   A) store of value         B) unit of account
   C) payments–system ruler D) medium of exchange

50) In a barter economy the number of prices in an economy with N goods is
    A) 2N.                   B) N(N/2).
    C) N(N/2) – 1.           D) [N(N – 1)]/2.
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1. D
2. B
3. C
4. B
5. D
6. B
7. B
8. C
9. C
10. B
11. A
12. B
13. B
14. D
15. D
16. C
17. A
18. D
19. C
20. C
21. A
22. B
23. C
24. B
25. D
26. D
27. D
28. C
29. D
30. B
31. C
32. C
33. D
34. B
35. A
36. D
37. C
38. A
39. C
40. A
41. C
42. D
43. D
44. A
45. A
46. D
47. B
48. B
49. B
50. D