***Financial Markets and Institutions, 7e* (Saunders)**

**Chapter 6 Bond Markets**

1) TIPS are a Treasury offering that protects investors from unexpected increases in inflation.

2) A callable bond is one where the issuer is required to retire a certain amount of the outstanding bonds each year to ensure that all the bond principal is paid by final maturity.

3) Treasury notes and bonds and municipal bonds are default risk free.

4) "On the run" Treasury notes and bonds are newly issued securities and "off-the-run" Treasuries are securities that have been previously issued.

5) T-notes and T-bonds are issued in minimum denominations of $100, or multiples of $100.

6) The dirty price plus accrued interest is called the clean price of the security.

7) Accrued interest owed to the bond seller increases as the next coupon payment date approaches.

8) Revenue bonds are backed by the full revenue of the municipality.

9) In a Treasury bond quote with a $1,000 face value, you find the bid is equal to 100-24 and the ask is equal to 100-26. You could buy this bond for $1,008.125.

10) An unsecured bond that has no specific collateral other than the general creditworthiness of the issuing firm is called a debenture.

11) With TIPS, the security's coupon rate is changed every six months by the inflation rate as measured by the CPI.

12) Bond ratings use a classification system to give investors an idea of the amount of default rate risk associated with the bond issue.

13) Bonds rated below Baa by Moody's or BBB by S&P are junk bonds.

14) Eurobonds are bonds denominated in the issuer's home currency, but are issued outside their home country.

15) Callable bonds have lower required yields than similar convertible bonds, ceteris paribus.

16) Capital markets are markets where securities are traded.

17) Debt securities with maturities of 1-year or less are traded in capital markets.

18) Sovereign bonds are long-term debt issued by governments of foreign countries.

19) Sovereign bonds have high risk because the repayment cannot be forced by creditors.

20) "Off-the-run" Treasury securities are considered to be more risky.

21) You buy a principal STRIP maturing in five years. The price quote per hundred of par for the STRIP is 75.75 percent. Using semiannual compounding, what is the promised yield to maturity on the STRIP?

A) 5.632 percent

B) 5.712 percent

C) 2.816 percent

D) 2.945 percent

E) 4.566 percent

22) A T-bond with a $1,000 par is quoted at 97-14 bid, 97-15 ask. The clean price for you to buy this bond is

A) $974.38.

B) $975.42.

C) $974.69.

D) $975.77.

E) None of these choices are correct.

23) The quoted ask yield on a 14-year $1,000 par T-bond with a 7 percent semiannual payment coupon and a price quote of 98-15 is

A) 7.00 percent.

B) 7.18 percent.

C) 7.30 percent.

D) 3.59 percent.

E) 3.63 percent.

24) A Treasury security in which periodic coupon interest payments can be separated from each other and from the principal payment is called a

A) STRIP.

B) T-note.

C) T-bond.

D) GO bond.

E) Revenue bond.

25) An 18-year T-bond can be stripped into how many separate securities?

A) 18

B) 19

C) 36

D) 37

E) 38

26) A life insurer owes $550,000 in eight years. To fund this outflow, the insurer wishes to buy STRIPS that mature in eight years. The STRIPS have a $5,000 face value per STRIP and pay a 6 percent APR with semiannual compounding. How much must the insurer spend now to fully fund the outflow (to the nearest dollar)?

A) $110,000

B) $342,742

C) $355,224

D) $362,355

E) $370,890

27) The ask yield on a 6 percent coupon Treasury bond maturing in eight years is 5.488 percent. If the face value is $1,000, what should be the *QUOTED* cost of the bond today (use semiannual compounding)?

A) 103-6

B) 103-7

C) 103-8

D) 103-9

E) 103-10

28) Which one of the following bonds is likely to have the highest required rate of return, ceteris paribus?

A) AAA-rated non-callable corporate bond with a sinking fund

B) AA-rated callable corporate bond with a sinking fund

C) AAA-rated callable corporate bond with a sinking fund

D) High-quality municipal bond

E) AA-rated callable corporate bond without a sinking fund

29) On July 1, 2012, you purchase a $10,000 par T-note that matures in five years. The coupon rate is 8 percent and the price quote is 98-6. The last coupon payment was May 1, 2012, and the next payment is November 1, 2012 (184 days total). The accrued interest is

A) $132.61.

B) $101.00.

C) $50.54.

D) $40.65.

E) $35.67.

30) On September 1, 2012, an investor purchases a $10,000 par T-bond that matures in 12 years. The coupon rate is 6 percent and the investor buys the bond 70 days after the last coupon payment (110 days before the next). The ask yield is 7 percent. The dirty price of the bond is

A) $9,295.45.

B) $9,300.55.

C) $9,313.75.

D) $9,321.82.

E) $9,333.24.

31) Interest income from Treasury securities is \_\_\_\_\_\_\_\_, and interest income from municipal bonds is always \_\_\_\_\_\_\_\_.

A) exempt from federal taxes; exempt from all taxes

B) taxable at the state level only; exempt from state taxes only

C) taxable at federal level only; exempt from federal taxes

D) taxable at the state level; taxed at the federal level

E) totally tax exempt; exempt from state taxes

32) An investor is in the 28 percent federal tax bracket and pays a 9 percent state tax rate and 4 percent in local income taxes. For this investor a municipal bond paying 6 percent interest is equivalent to a corporate bond paying \_\_\_\_\_\_\_\_ interest.

A) 11.79 percent

B) 10.17 percent

C) 9.08 percent

D) 9.68 percent

E) 8.47 percent

33) An investor is trying to decide between a muni paying 5.75 percent or an equivalent taxable corporate paying 8.25 percent. What is the minimum marginal tax rate the investor must have to consider buying the municipal bond?

A) 80.00 percent

B) 20.00 percent

C) 25.00 percent

D) 66.67 percent

E) 30.00 percent

34) Standard revenue bonds are

A) backed by the full taxing authority of the municipality.

B) collateralized by the earnings from a specific project.

C) bonds backed by mortgages.

D) backed by the U.S. Treasury.

E) always offered with a best efforts offering.

35) When an investment banker purchases an offering from a bond issuer and then resells it to the public, this is known as a

A) rights offering.

B) private placement.

C) firm commitment.

D) best efforts.

E) standby offering.

36) The largest type of municipal bonds outstanding is \_\_\_\_\_\_\_\_.

A) revenue bonds

B) industrial development bonds

C) Treasury STRIPS

D) convertible bonds

E) general obligation bonds

37) Which of the following is/are true about callable bonds?

I.  Must always be called at par

II. Will normally be called after interest rates drop

III. Can be called by either the bondholder or the bond issuer

IV.  Have higher required returns than non-callable bonds

A) I and II only

B) II and IV only

C) II and III only

D) I, II, and III only

E) I, II, III, and IV are true.

38) SEC Rule 144 A does which of the following?

A) Allows privately placed investments to be traded on a limited basis.

B) Allows bond issuers to call their bonds when desired.

C) Determines the limits of responsibility of bond covenants.

D) Requires that bonds traded on the NYSE bond market utilize the ABS system.

E) None of these choices are correct.

39) Convertible bonds are

I. options attached to bonds that give the bondholder the right to purchase stock at a preset price without giving up the bond.

II. bonds in which the issue matures (converts) a little each year.

III. bonds collateralized with certain types of automobiles.

IV. bonds that may be converted to a certain number of shares of stock determined by the conversion ratio.

A) I only

B) I and II only

C) I, II, and III

D) IV only

E) I and III only

40) A holder of Rainbow Funds convertible bonds with a $1,000 par and a $1,100 price can convert the bond to 25 shares of common stock. The stock is currently priced at $36 per share. By what percent does the stock price have to rise to make conversion potentially attractive?

A) 10.00 percent

B) 14.73 percent

C) 22.22 percent

D) 23.64 percent

E) 25.69 percent

41) With respect to private placements of bonds, which of the following is correct?

I. Issuers of privately placed bonds tend to be less well known than public bond issuers.

II. Interest rates on privately placed debt tend to be higher than for similar public issues.

III. Purchasers of privately placed debt have assets of at least $1 million.

IV. Once bonds have been privately placed, the original buyers must hold the bonds until maturity.

A) I only

B) I and III only

C) I, II, and III only

D) I, III, and IV only

E) I, II, III, and IV

42) Which of the following statements about Eurobonds is/are true?

I.  The issuer chooses the currency of denomination.

II.  Spreads on firm commitment offers are lower for Eurobonds than for U.S. bonds.

III. Eurobonds typically have denomination of $5,000 and $10,000.

IV. Eurobonds are bearer bonds.

A) I and II only

B) I, III, and IV only

C) II, III, and IV only

D) II and III only

E) I, II, III, and IV are true.

43) Bearer bonds are bonds

A) with coupons attached that are redeemable by whoever has the bond.

B) where the registered owner automatically receives bond payments when scheduled.

C) in which the issue matures on a series of dates.

D) issued in another currency other than the bond issuer's home currency.

E) issued in a different country other than the bond issuer's home country.

44) A T-bond with a $1,000 par is quoted at a bid of 105-7 and an ask of 105-9. If you sell the bond, you will receive

A) $1,052.81.

B) $1,052.19.

C) $1,057.22.

D) $1,059.22.

E) None of these choices are correct.

45) A T-bond with a $10,000 par is quoted at a bid of 92-11 and an ask of 92-17. If you bought the bond and then immediately sold it at the same quotes, how much money would you gain or lose (ignore commissions)?

A) $12.50

B) − $12.50

C) − $18.75

D) $18.75

E) $0.00

46) The quoted ask yield on a 30-year $1,000 par T-bond with a 6.25 percent coupon and a price quote of 106-16 is \_\_\_\_\_\_\_\_ (use semiannual compounding).

A) 2.94 percent

B) 2.90 percent

C) 5.79 percent

D) 5.87 percent

E) 4.95 percent

47) An investor buys a $10,000 par, 4.25 percent annual coupon TIPS security with three years to maturity. If inflation every six months over the investor's holding period is 2.50 percent, what is the final payment the TIPS investor will receive?

A) $10,213.00

B) $10,869.28

C) $11,822.25

D) $11,843.37

E) $12,201.11

48) A bond investor has a 99 percent chance of receiving all of her promised payments on a particular bond issue in the first year of holding the bond, but only a 98 percent chance in the second year, and a 97 percent chance in the third year and beyond. What is the cumulative default probability over the first three years she holds the bond?

A) 3.75 percent

B) 4.24 percent

C) 5.89 percent

D) 6.85 percent

E) 7.33 percent

49) You purchase a $1,000 face value convertible bond for $975. The bond can be converted into 150 shares of stock. The stock is currently priced at $5.25. At what minimum stock price would you be willing to convert?

A) $4.50

B) $5.26

C) $6.50

D) $7.10

E) $7.25

50) You purchased a five-year annual payment 6 percent coupon bond for $1,000 and you planned on holding it to maturity. However, right after you bought the bond, it was called at $1,043.29 when all interest rates fell to 5 percent and remained there for the full five years. You reinvested the money for the full five years. What was your annual compound rate of return off your original investment?

A) 6.00 percent

B) 5.89 percent

C) 5.75 percent

D) 5.23 percent

E) 5.00 percent

51) Which of the following situations would require an increase in the coupon rate for a bond selling at par?

A) The addition of a call provision

B) The addition of a convertibility option

C) The increase in the rating from BBB to AA

D) The addition of sinking fund provision

E) All of these choices are correct.

52) What ratings comprise investment-grade bonds and what ratings are used for junk bonds? What are the primary differences between the two? In particular, why are investment-grade bonds more marketable and why are junk bonds issued at all?

53) The total sale proceeds from selling the stripped components of a Treasury security can sometimes be greater than the fair present value of the Treasury security. Why might this happen?

54) What do bond rating agencies look at in setting a bond's rating?

55) A municipal bondholder buys a 5 percent coupon annual payment muni bond at a price of $4,900. The bond has a $5,000 face value. In one year she sells the bond for $4,975. The appropriate capital gains tax rate is 15 percent and her ordinary income tax rate is 28 percent. What is her after-tax rate of return?

56) What is the difference between General Obligation and Revenue bonds?

57) You are considering purchasing five-year corporate bonds as an investment. You have a choice of terms available. Which of the following terms would you find desirable, *ceteris paribus*? How does each feature affect the bond's required rate of return? Explain.

a. Call feature

b. Convertible feature

c. Warrants

d. Sinking fund

e. Debenture

58) You find the following quote for a corporate bond ($1,000 par, paying interest semiannually):

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Issuer  Name | Symbol | Coupon | Maturity | Moody's/S&P/Fitch | High | Low | Last | Change | Yield% |
| Home  Depot | HD.GF | 4.625% | Aug 2015 | Baal/BBB+/BBB+ | 98.281 | 97.362 | 97.726 | 0.286 | 5.49% |

a. What was the range of the price for the given day?

b. How many dollars would you receive from each coupon payment?

c. Approximately what risk level is implied by the bond rating?

d. What would have been the Last Price on the day before?

59) A bondholder purchased a 9 percent coupon, $1,000 par three-year bond at a 9 percent yield. Interest rates then immediately fell to 7 percent and his bond was called at a price of $1,040. He reinvested his money and earned 7 percent on the $1,040 for three years. Did the call help or hurt the bondholder? What was his three-year rate of return on his original investment?

60) An investor is holding a $1,000 par, 10-year 9 percent coupon convertible bond with a 9 percent required bond yield. The bond is convertible into 40 shares of stock. Each share is worth $30. The bond has a current market value of $1,200. If interest rates don't change, what is the maximum gain and loss on the bond?

61) You are an investment banker and one of your large U.S. corporate clients has come to you asking for help deciding on the best market in which to place a sizable issue of bonds. You could try to issue dollar-denominated bonds, or Euro- or yen-denominated bonds. You could also issue in the United States or overseas. What major factors should you consider in advising your client on where to market the issue?