Chapter 07 Student Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student ID \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_ 1. If a bond’s coupon rate exceeds its yield to maturity, the bond is selling at:

a. a discount. b. par. c. a premium.

\_\_\_\_\_\_\_\_ 2. Which one of the following bonds is the least interest rate sensitive?

a. 3-year, 6 percent coupon

b. 3-year, 0 percent coupon

c. 6-year, 6 percent coupon

d. 6-year, 0 percent coupon

\_\_\_\_\_\_\_\_ 3. A bond has a face value of $1,000, a market price of $987, and pays $37.50 in interest every six months.

What is the coupon rate?

a. 3.75 percent b. 4.50 percent c. 6.38 percent d. 7.50 percent

\_\_\_\_\_\_\_\_ 4. A 9 percent, $1,000 bond matures in 16 years, pays interest semi-annually, and has a yield-to-maturity of

9.68 percent. What is the current market price?

a. $938.47 b. $945.23 c. $1,028.60 d. $1,108.19

\_\_\_\_\_\_\_\_ 5. A 6 percent annual coupon bond has a face value of $1,000, a market price of $1,012.40, and a yield-to-

maturity of 5.87 percent. How many years is it until the bond matures?

a. 7.77 years b. 7.84 years c. 14.27 years d. 14.39 years

\_\_\_\_\_\_\_\_ 6. A bond has a $1,000 face value and a $989 market value. The bond pays interest semi-annually, has a

yield-to-maturity of 7.47 percent, and matures in 12 years. What is the current yield?

a. 6.67 percent b. 7.41 percent c. 7.47 percent d. 8.01 percent

\_\_\_\_\_\_\_\_ 7. A $1,000 bond matures in 8 years and pays interest semi-annually. The bond is selling for $994.63 and

has a yield-to-maturity of 7.49 percent. What is the coupon rate?

a. 6.70 percent b. 6.87 percent c. 7.25 percent d. 7.40 percent

\_\_\_\_\_\_\_\_ 8. Market interest rates and bond prices are:

a. unrelated. b. inversely related. c. directly related.

\_\_\_\_\_\_\_\_ 9. World Importers wants to raise $11 million by issuing 15-year, zero coupon bonds. The market requires a

7.8 percent return on similar bonds. The face value per bond will be $1,000. How many bonds must the

firm issue? Ignore all issue and transaction costs.

a. 11,000 bonds

b. 12,898 bonds

c. 34,662 bonds

d. 35,908 bonds

\_\_\_\_\_\_\_\_ 10. One year ago, you purchased a 5-year, $1,000 face value, 6 percent coupon bond for $1,012. Interest

is paid semi-annually. Today, you sold the bond at a market rate of return of 6.27 percent. What is your

total return in dollars on this investment?

a. -$21.42 b. $38.58 c. $48.00 d. $81.42

Chapter 07 Answers

1. c

2. a

3. d ($37.50 × 2) / $1,000 = .075 = 7.50 percent

4. b Enter 16×2 9.68/2 45 1,000

N I/Y PV PMT FV

Solve for -945.23

5. d Enter 5.87 -1,012.40 60 1,000

N I/Y PV PMT FV

Solve for 14.39

6. b Enter 12×2 7.47/2 -989 1,000

N I/Y PV PMT FV

Solve for 36.648

Current yield = ($36.648 × 2) / $989 = .07411 = 7.41 percent

7. d Enter 8×2 7.49/2 -994.63 1,000

N I/Y PV PMT FV

Solve for 36.998

Coupon rate = ($36.998 × 2) / $1,000 = .0740 = 7.40 percent

8. b

9. c Enter 15×2 7.8/2 1,000

N I/Y PV PMT FV

Solve for -317.346

Number of bonds needed = $11,000,000 / $317.346 = 34,662 bonds

10. b Enter 4×2 6.27/2 30 1,000

N I/Y PV PMT FV

Solve for -990.58

Total dollar return = $990.58 + $60 − $1,012 = $38.58