4.1 Measuring Interest Rates

1) If a security pays $55 in one year and $133 in three years, its present value is $150 if the interest rate is _______.
A) 5 percent
B) 10 percent
C) 12.5 percent
D) 15 percent
Answer: B
Diff: 1 Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

2) The concept of _______ is based on the common-sense notion that a dollar paid to you in the future is less valuable to you than a dollar today.
A) present value
B) future value
C) interest
D) deflation
Answer: A
Diff: 1 Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

3) The present value of an expected future payment _______ as the interest rate increases.
A) falls
B) rises
C) is constant
D) is unaffected
Answer: A
Diff: 1 Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments
4) An increase in the time to the promised future payment ________ the present value of the payment.
A) decreases
B) increases
C) has no effect on
D) is irrelevant to
Answer: A
Diff: 1 Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

5) With an interest rate of 6 percent, the present value of $100 next year is approximately ________.
A) $106
B) $100
C) $94
D) $92
Answer: C
Diff: 1 Type: MC
Skill: Applied
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6) To claim that a lottery winner who is to receive $1 million per year for twenty years has won $20 million ignores the process of ________.
A) face value
B) par value
C) deflation
D) discounting the future
Answer: D
Diff: 2 Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

7) A credit market instrument that provides the borrower with an amount of funds that must be repaid at the maturity date along with an interest payment is known as a ________.
A) simple loan
B) fixed-payment loan
C) coupon bond
D) discount bond
Answer: A
Diff: 1 Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments
8) A credit market instrument that requires the borrower to make the same payment every period until the maturity date is known as a ________.
A) simple loan
B) fixed-payment loan
C) coupon bond
D) discount bond
Answer: B  Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

9) Which of the following is true of fixed payment loans?
A) The borrower repays both the principal and interest at the maturity date.
B) Installment loans and mortgages are frequently of the fixed payment type.
C) The borrower pays interest periodically and the principal at the maturity date.
D) Commercial loans to businesses are often of this type.
Answer: B  Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

10) A fully amortized loan is another name for ________.
A) a simple loan
B) a fixed-payment loan
C) a commercial loan
D) an unsecured loan
Answer: B  Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

11) A credit market instrument that pays the owner a fixed coupon payment every year until the maturity date and then repays the face value is called a ________.
A) simple loan
B) fixed-payment loan
C) coupon bond
D) discount bond
Answer: C  Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments
12) A ________ pays the owner a fixed coupon payment every year until the maturity date, when the ________ value is repaid.
A) coupon bond; discount  
B) discount bond; discount  
C) coupon bond; face  
D) discount bond; face  
Answer: C  
Diff: 1  Type: MC  
Skill: Recall  
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

13) The ________ is the final amount that will be paid to the holder of a coupon bond.
A) discount value  
B) coupon value  
C) face value  
D) present value  
Answer: C  
Diff: 1  Type: MC  
Skill: Recall  
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

14) When talking about a coupon bond, face value and ________ mean the same thing.
A) par value  
B) coupon value  
C) amortized value  
D) discount value  
Answer: A  
Diff: 2  Type: MC  
Skill: Recall  
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

15) The dollar amount of the yearly coupon payment expressed as a percentage of the face value of the bond is called the bond's ________.
A) coupon rate  
B) maturity rate  
C) face value rate  
D) payment rate  
Answer: A  
Diff: 1  Type: MC  
Skill: Recall  
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments
16) If a $5000 coupon bond has a coupon rate of 13 percent, then the coupon payment every year is ________.
A) $650
B) $1300
C) $130
D) $13
Answer: A
Diff: 2 Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

17) An $8000 coupon bond with a $400 coupon payment every year has a coupon rate of ________.
A) 5 percent
B) 8 percent
C) 10 percent
D) 40 percent
Answer: A
Diff: 2 Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

18) All of the following are examples of coupon bonds except ________.
A) Corporate bonds
B) Treasury bills
C) Zero coupon bonds
D) Government bonds
Answer: B
Diff: 1 Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

19) A bond that is bought at a price below its face value and the face value is repaid at a maturity date is called a ________.
A) simple loan
B) fixed-payment loan
C) coupon bond
D) discount bond
Answer: D
Diff: 1 Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments
20) A ________ is bought at a price below its face value, and the ________ value is repaid at the maturity date.
A) coupon bond; discount
B) discount bond; discount
C) coupon bond; face
D) discount bond; face
Answer: D
Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

21) A discount bond ________.
A) pays the bondholder a fixed amount every period and the face value at maturity
B) pays the bondholder the face value at maturity
C) pays all interest and the face value at maturity
D) pays the face value at maturity plus any capital gain
Answer: B
Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

22) Examples of discount bonds include ________.
A) Treasury bills
B) corporate bonds
C) coupon bonds
D) municipal bonds
Answer: A
Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

23) Which of the following is true for discount bonds?
A) A discount bond is bought at par.
B) The purchaser receives the face value of the bond at the maturity date.
C) Canada bonds and notes are examples of discount bonds.
D) The purchaser receives the par value at maturity plus any capital gains.
Answer: B
Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments
24) The interest rate that equates the present value of payments received from a debt instrument with its value today is the ________.
A) simple interest rate
B) current yield
C) yield to maturity
D) real interest rate
Answer: C
Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

25) Economists consider the ________ to be the most accurate measure of interest rates.
A) simple interest rate
B) current yield
C) yield to maturity
D) real interest rate
Answer: C
Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

26) For simple loans, the simple interest rate is ________ the yield to maturity.
A) greater than
B) less than
C) equal to
D) not comparable to
Answer: C
Diff: 1  Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

27) If the amount payable in two years is $2420 for a simple loan at 10 percent interest, the loan amount is ________.
A) $1000
B) $1210
C) $2000
D) $2200
Answer: C
Diff: 2  Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments
28) For a 3-year simple loan of $10000 at 10 percent, the amount to be repaid is ________.
   A) $10030
   B) $10300
   C) $13000
   D) $13310
   Answer: D
   Diff: 2   Type: MC
   Skill: Applied
   Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the
   four different types of credit market instruments

29) If $22050 is the amount payable in two years for a $20000 simple loan made today, the
   interest rate is ________.
   A) 5 percent
   B) 10 percent
   C) 22 percent
   D) 25 percent
   Answer: A
   Diff: 2   Type: MC
   Skill: Applied
   Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the
   four different types of credit market instruments

30) 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
   Answer: B
   Diff: 2   Type: MC
   Skill: Applied
   Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the
   four different types of credit market instruments

31) The present value of a fixed-payment loan is calculated as the ________ of the present
   value of all cash flow payments.
   A) sum
   B) difference
   C) multiple
   D) log
   Answer: A
   Diff: 1   Type: MC
   Skill: Recall
   Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the
   four different types of credit market instruments
32) Which of the following is true for a coupon bond?
A) When the coupon bond is priced at its face value, the yield to maturity equals the coupon rate.
B) The price of a coupon bond and the yield to maturity are positively related.
C) The yield to maturity is greater than the coupon rate when the bond price is above the par value.
D) The yield is less than the coupon rate when the bond price is below the par value.
Answer: A
Diff: 3 Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

33) The price of a coupon bond and the yield to maturity are _______ related; that is, as the yield to maturity _______, the price of the bond ______.
A) positively; rises; rises
B) negatively; falls; falls
C) positively; rises; falls
D) negatively; rises; falls
Answer: D
Diff: 3 Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

34) The yield to maturity is _______ than the _______ rate when the bond price is _______ its face value.
A) greater; coupon; above
B) greater; coupon; below
C) greater; perpetuity; above
D) less; perpetuity; below
Answer: B
Diff: 3 Type: MC
Skill: Recall
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

35) A $10000 8 percent coupon bond that sells for $10000 has a yield to maturity of _______.
A) 8 percent
B) 10 percent
C) 12 percent
D) 14 percent
Answer: A
Diff: 2 Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments
36) Which of the following $1000 face-value securities has the highest yield to maturity?
A) A 5 percent coupon bond selling for $1000
B) A 10 percent coupon bond selling for $1000
C) A 12 percent coupon bond selling for $1000
D) A 12 percent coupon bond selling for $1100
Answer: C
Diff: 3  Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

37) Which of the following $5000 face-value securities has the highest yield-to-maturity?
A) A 6 percent coupon bond selling for $5000
B) A 6 percent coupon bond selling for $5500
C) A 10 percent coupon bond selling for $5000
D) A 12 percent coupon bond selling for $4500
Answer: D
Diff: 3  Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

38) Which of the following $1000 face-value securities has the highest yield to maturity?
A) A 5 percent coupon bond with a price of $600
B) A 5 percent coupon bond with a price of $800
C) A 5 percent coupon bond with a price of $1000
D) A 5 percent coupon bond with a price of $1200
Answer: A
Diff: 3  Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments

39) Which of the following $1000 face-value securities has the lowest yield to maturity?
A) A 5 percent coupon bond selling for $1000
B) A 10 percent coupon bond selling for $1000
C) A 15 percent coupon bond selling for $1000
D) A 15 percent coupon bond selling for $900
Answer: A
Diff: 3  Type: MC
Skill: Applied
Objective: 4.1 Calculate the present value of future cash flows and the yield to maturity of the four different types of credit market instruments