Question #1 of 37

Question ID: 1574290

If the yield curve is downward-sloping, the no-arbitrage value of a bond calculated using spot rates will be:

A) equal to the market price of the bond.

B) greater than the market price of the bond.

C) less than the market price of the bond.

Question #2 of 37

Question ID: 1574299

Given that the two-year spot rate is 5.89% and the one-year forward rate one-year from now is 6.05%, assuming annual compounding what is the one year spot rate?

A) 5.67%.

B) 5.73%.

C) 5.91%.

Question #3 of 37

Question ID: 1574277

Using the following spot rates for pricing the bond, what is the present value of a three-year security that pays a fixed annual coupon of 6%?

- Year 1: 5.0%
- Year 2: 5.5%
- Year 3: 6.0%

A) 102.46.

B) 95.07.

C) 100.10.

Question #4 of 37

Question ID: 1574272

A spot rate curve is *most accurately* described as yields to maturity for:

A) money market securities.

B) government bonds.

C) zero-coupon bonds.

Question #5 of 37

Question ID: 1574306

The following spot and forward rates currently exist in the market:

- The 1-year spot rate is 3.75%.
- The 1-year forward rate one year from today is 9.50%.
- The 1-year forward rate two years from today is 15.80%.

Given these rates and based on annual compounding, how much should an investor be willing to pay for each $100 in par value for a three-year, zero-coupon bond?

A) $76.

B) $44.

C) $33.

Question #6 of 37

Question ID: 1574284

An investor gathers the following information about a 2-year, annual-pay bond:

- Par value of $1,000
- Coupon of 4%
- 1-year spot interest rate is 2%
- 2-year spot interest rate is 5%

Using the above spot rates, the current price of the bond is *closest* to:

A) $983.

B) $1,000.

C) $1,010.

Question #7 of 37

Question ID: 1574285

Using the following spot rates, what is the price of a three-year bond with annual coupon payments of 5%?

- One-year rate: 4.78%
- Two-year rate: 5.56%
- Three-year rate: 5.98%

A) $93.27.

B) $97.47.

C) $98.87.

Question #8 of 37

Question ID: 1574295

The one-year spot rate is 6% and the one-year forward rates starting in one, two and three years respectively are 6.5%, 6.8%, and 7%. What is the four-year spot rate?

A) 6.51%.

B) 6.57%.

C) 6.58%.

Question #9 of 37

Question ID: 1574292

The six-year spot rate is 7% and the five-year spot rate is 6%. The implied one-year forward rate five years from now is *closest to:*

A) 12.0%.

B) 5.0%.

C) 6.5%.

Question #10 of 37

Question ID: 1574283

A 2-year option-free bond (par value of $10,000) has an annual coupon of 15%. An investor determines that the spot rate of year 1 is 16% and the year 2 spot rate is 17%. The bond price is *closest* to:

A) $8,401.

B) $9,694.

C) $11,122.

Question #11 of 37

Question ID: 1574293

Suppose the 3-year spot rate is 12.1% and the 2-year spot rate is 11.3%. Which of the following statements concerning forward and spot rates is *most* accurate? The 1-year:

A) forward rate one year from today is 13.7%.

B) forward rate two years from today is 13.2%.

C) forward rate two years from today is 13.7%.

Question #12 of 37

Question ID: 1574294

Given the one-year spot rate $S_1 = 0.06$ and the implied 1-year forward rates one, two, and three years from now of: ${}_1y1_y = 0.062$; ${}_2y1_y = 0.063$; ${}_3y1_y = 0.065$, what is the theoretical 4-year spot rate?

A) 6.25%.

B) 6.75%.

C) 6.00%.

Question #13 of 37

Question ID: 1576489

The term structure of yield volatility illustrates the relationship between yield volatility and:

A) Macaulay duration.

B) yield to maturity.

C) time to maturity.

Question #14 of 37

Question ID: 1574289

An investor who is calculating the arbitrage-free value of a government security should discount each cash flow using the:

A) government note yield that is specific to its maturity.

B) government spot rate that is specific to its maturity.

C) risk-free rate.

Question #15 of 37

Question ID: 1574300

The one-year spot rate is 5% and the two-year spot rate is 6.5%. What is the one-year forward rate starting one year from now?

A) 5.00%.

B) 7.87%.

C) 8.02%.

Question #16 of 37

Question ID: 1574304

An analyst collects the following information regarding spot rates:

- 1-year rate = 4%.
- 2-year rate = 5%.
- 3-year rate = 6%.
- 4-year rate = 7%.

The 2-year forward rate two years from today is *closest* to:

A) 7.02%.

B) 8.03%.

C) 9.04%.

Question #17 of 37

Question ID: 1574303

The current 4-year spot rate is 4% and the current 5-year spot rate is 5.5%. What is the 1-year forward rate in four years?

A) 9.58%.

B) 11.72%.

C) 10.14%.

Question #18 of 37

Question ID: 1574286

Assume that a callable bond's call period starts two years from now with a call price of $102.50. Also assume that the bond pays an annual coupon of 6% and the term structure is flat at 5.5%. Which of the following is the price of the bond assuming that it is called on the first call date?

A) $103.17.

B) $102.50.

C) $100.00.

Question #19 of 37

Question ID: 1574291

The six-month spot rate is 4.0% and the 1 year spot rate is 4.5%, both stated on a semiannual bond basis. The implied six-month rate six months from now, stated on a semiannual bond basis, is *closest to:*

A) 4%.

B) 5%.

C) 6%.

Question #20 of 37

Question ID: 1574279

A 3-year option-free bond (par value of $1,000) has an annual coupon of 9%. An investor determines that the spot rate of year 1 is 6%, the year 2 spot rate is 12%, and the year 3 spot rate is 13%. Using the arbitrage-free valuation approach, the bond price is *closest* to:

A) $912.

B) $968.

C) $1,080.

Question #21 of 37

Question ID: 1574280

The arbitrage-free bond valuation approach can *best* be described as the:

A) geometric average of the spot interest rates.

B) use of a series of spot interest rates that reflect the current term structure.

C) use of a single discount factor.

Question #22 of 37

Question ID: 1574282

Current spot rates are as follows:

1-Year: 6.5%

2-Year: 7.0%

3-Year: 9.2%

Which of the following statements is *most accurate*?

A) For a 3-year annual pay coupon bond, all cash flows can be discounted at 9.2% to find the bond's arbitrage-free value.

B) The yield to maturity for 3-year annual pay coupon bond can be found by taking the geometric average of the 3 spot rates.

C) For a 3-year annual pay coupon bond, the first coupon can be discounted at 6.5%, the second coupon can be discounted at 7.0%, and the third coupon plus maturity value can be discounted at 9.2% to find the bond's arbitrage-free value.

Question #23 of 37

Question ID: 1574281

A three-year annual coupon bond has a par value of $1,000 and a coupon rate of 5.5%. The spot rate for year 1 is 5.2%, the spot rate for year two is 5.5%, and the spot rate for year three is 5.7%. The value of the coupon bond is *closest to*:

A) $1,000.00.

B) $937.66.

C) $995.06.

Question #24 of 37

Question ID: 1574305

The 3-year annual spot rate is 7%, the 4-year annual spot rate is 7.5%, and the 5-year annual spot rate is 8%. The 1-year forward rate four years from now is *closest* to:

A) 7%.

B) 9%.

C) 10%.

Question #25 of 37

Question ID: 1574297

Given that the one-year spot rate is 6.05% and the two-year spot rate is 7.32%, assuming annual compounding what is the one-year forward rate starting one year from now?

A) 7.87%.

B) 8.61%.

C) 8.34%.

Question #26 of 37

Question ID: 1574273

A yield curve for coupon bonds is composed of yields on bonds with similar:

A) maturities.

B) coupon rates.

C) issuers.

Question #27 of 37

Question ID: 1574302

An investor wants to take advantage of the 5-year spot rate, currently at a level of 4.0%. Unfortunately, the investor just invested all of his funds in a 2-year bond with a yield of 3.2%. The investor contacts his broker, who tells him that in two years he can purchase a 3-year bond and end up with the same return currently offered on the 5-year bond. What 3-year forward rate beginning two years from now will allow the investor to earn a return equivalent to the 5-year spot rate?

A) 4.5%.

B) 5.6%.

C) 3.5%.

Question #28 of 37

Question ID: 1574298

If the current two-year spot rate is 6% while the one-year forward rate for one year is 5%, what is the current spot rate for one year?

A) 5.0%.

B) 5.5%.

C) 7.0%.

Question #29 of 37

Question ID: 1574278

A 2-year option-free bond (par value of $1,000) has an annual coupon of 6%. An investor determines that the spot rate for year 1 is 5% and the year 2 spot rate is 8%. The bond price is *closest* to:

A) $966.

B) $992.

C) $1,039.

Question #30 of 37

Question ID: 1574301

The 3-year spot rate is 10%, and the 4-year spot rate is 10.5%. What is the 1-year forward rate 3 years from now?

A) 10.0%.

B) 11.0%.

C) 12.0%.

Question #31 of 37

Question ID: 1574271

The Treasury spot rate yield curve is *closest* to which of the following curves?

A) Forward yield curve rate.

B) Par bond yield curve.

C) Zero-coupon bond yield curve.

Question #32 of 37

Question ID: 1574276

Assume the following government spot yield curve.

One-year rate: 5%

Two-year rate: 6%

Three-year rate: 7%

If a 3-year annual-pay government bond has a coupon of 6%, its yield to maturity is *closest* to:

A) 6.08%.

B) 6.92%.

C) 7.00%.

Question #33 of 37

Question ID: 1574275

A 10-year spot rate is *least likely* the:

A) appropriate discount rate on the year 10 cash flow for a 20-year bond.

B) yield-to-maturity on a 10-year coupon bond.

C) yield-to-maturity on a 10-year zero-coupon bond.

Question #34 of 37

Question ID: 1574287

The one-year spot rate is 7.00%. One-year forward rates are 8.15% one year from today, 10.30% two years from today, and 12.00% three years from today.

The value today of a 4-year, $1,000 par value, zero-coupon bond is *closest* to:

A) $665.

B) $700.

C) $640.

Question #35 of 37

Question ID: 1574296

Given that the 2-year spot rate is 5.76% and the 3-year spot rate is 6.11%, what is the 1-year forward rate starting two years from now?

A) 6.81%.

B) 6.97%.

C) 7.04%.

Question #36 of 37

Question ID: 1574288

A 4 percent Treasury bond has 2.5 years to maturity. Spot rates are as follows:

6 month	1 year	1.5 years	2 years	2.5 years
2%	2.5%	3%	4%	6%

The note is currently selling for $976. Determine the arbitrage profit, if any, that is possible.

A) $37.63.

B) $43.22.

C) $19.22.

Question #37 of 37

Question ID: 1574274

Which of the following statements regarding zero-coupon bonds and spot interest rates is CORRECT?

A) If the yield to maturity on a 2-year zero coupon bond is 6%, then the 2-year spot rate is 3%.

B) Price appreciation creates all of the zero-coupon bond's return.

C) Spot interest rates will never vary across the term structure.