## MULTIPLE CHOICE

- 1. A fixed-income security may be defined as:
  - a. a security that earns a fixed return
  - b. a security that makes interest and principal repayments according to a fixed schedule
  - c. a security that is sold at a fixed discount
  - d. a security that earns dividends according to a fixed schedule
  - e. a security that is sold at a fixed price

ANS: B DIF: Easy REF: 2.1 TOP: Introduction

MSC: Factual

- 2. Suppose that you bought a stock for \$40, received a dividend of \$0.50, and sold it for \$41 after 91 days. Your annualized arithmetic rate of return equals:
  - a. 5.01 percent
  - b. 10.03 percent
  - c. 15.04 percent
  - d. 16.07 percent
  - e. None of these answers are correct.

ANS: C DIF: Easy REF: 2.2 TOP: Rate of Return

MSC: Applied

- 3. Suppose that you are planning to enroll in a master's program two years in the future. The cost to enroll is \$150,000. You expect to have the following funds:
  - From your current job, you can save \$5,000 after one year and \$7,000 after two years.
  - You expect a year-end bonus of \$9,000 after one year and \$15,000 after two years.
  - Your grandparents saved money for your education in a tax-favored savings account and will give you \$18,000 after one year.
  - Your parents offer you the choice of taking \$50,000 at any time, but that amount is deducted from your inheritance. They are risk-averse investors and put money in ultra-safe government bonds giving 2 percent per year.

The borrowing and the lending rate at the bank is 4 percent per year, compounded daily. Approximating this by continuous compounding, how much money will you need to borrow when you start your master's degree education two years from today?

- a. \$39,489
- b. \$40,530
- c. \$42,489
- d. \$47,501
- e. None of these answers are correct.

ANS: B DIF: Difficult REF: 2.2 TOP: Rate of Return

MSC: Applied

- 4. The interest rate is 7 percent per year. Compute the eight-month zero-coupon bond price using a compound interest rate with monthly compounding.
  - a. \$0.9533
  - b. \$0.9540
  - c. \$0.9545

- d. \$0.9554
- e. None of these answers are correct.

ANS: C DIF: Easy REF: 2.3

TOP: Basic Interest Rates: Simple, Compound, and Continuously Compounded

MSC: Applied

- 5. The simple interest rate is 5 percent per year. What is the dollar return after nine months?
  - a. \$1.0312
  - b. \$1.0375
  - c. \$1.0381
  - d. \$1.0450
  - e. None of these answers are correct.

ANS: B DIF: Easy REF: 2.3

TOP: Basic Interest Rates: Simple, Compound, and Continuously Compounded

MSC: Applied

Use the following table, where the interest rate is 5 percent per year, compounded once a year to answer the questions that follow.

Time (in years)	Cash flow (in dollars)
0 (today)	- 105
1	7
2	9
3	106

- 6. Compute the present value of the above cash flows.
  - a. -\$3.78
  - b. \$0.53
  - c. \$1.06
  - d. \$1.40
  - e. None of these answers are correct.

ANS: D DIF: Moderate REF: 2.4

TOP: Discounting (PV) and Compounding (FV): Moving Money across Time

MSC: Applied

- 7. Compute the future value of the above cash flows in three years.
  - a. \$0.05
  - b. \$1.62
  - c. \$4.82
  - d. \$5.68
  - e. None of these answers are correct.

ANS: B DIF: Moderate REF: 2.4

TOP: Discounting (PV) and Compounding (FV): Moving Money across Time

MSC: Applied

- 8. If the price of a zero-coupon bond maturing in three years is \$0.90, what is the continuously compounded rate of return?
  - a. 0.0351
  - b. 0.0426
  - c. 0.0542
  - d. 0.0744

e. None of these answers are correct.

ANS: A DIF: Moderate REF: 2.4

TOP: Discounting (PV) and Compounding (FV): Moving Money across Time

MSC: Applied

- 9. Which of the following is NOT true about US Treasury securities?
  - a. These securities are virtually free from default risk.
  - b. They trade in a market with some of the smallest bid/ask spreads in the world.
  - c. Their interest payments are free from state and local taxes.
  - d. They have low minimum denominations and offer a spectrum of maturities that range from one day to thirty years.
  - e. They accurately reflect a company's cost of borrowing.

ANS: E DIF: Easy REF: 2.5 TOP: US Treasury Securities

MSC: Factual

- 10. A discriminatory auction of US Treasury securities:
  - a. raises more revenue than a uniform price auction
  - b. raises less revenue than a uniform price auction
  - c. raises equal revenue as a uniform price auction
  - d. may raise more or less revenues than a uniform price auction
  - e. None of these answers are correct.

ANS: D DIF: Moderate REF: 2.6

TOP: US Federal Debt Auction Markets MSC: Conceptual

- 11. What is the when-issued market with respect to US Treasuries?
  - a. It's a special kind of call market that begins a week or so before a Treasury securities auction.
  - b. It's a special kind of forward market that begins a week or so before a Treasury securities auction.
  - c. It's a special kind of futures market that begins a week or so before a Treasury securities auction.
  - d. It's a special kind of repo market that begins a week or so before a Treasury securities auction.
  - e. None of these answers are correct.

ANS: B DIF: Easy REF: 2.7

TOP: Different Ways of Investing in Treasury Securities MSC: Factual

## 12. A repo agreement:

- a. involves the sale of securities together with an agreement that the seller buys back the securities at a later date at a price that is negotiated at the time of initial sale
- b. involves the sale of securities together with an agreement that the seller buys back the securities at a later date at a price to be negotiated in the future
- c. involves the sale of securities together with an agreement that the seller will have the option to buy back the securities at a later date at a price to be negotiated in the future
- d. is an agreement that allows banks to take possession of homes that become delinquent on mortgage payments
- e. None of these answers are correct.

ANS: A DIF: Easy REF: 2.7

TOP: Different Ways of Investing in Treasury Securities MSC: Factual

- 13. US Treasury notes are:
  - a. coupon bonds that have original maturity of more than ten years up to a maximum of thirty years
  - b. coupon bonds that have original maturity of more than one year up to a maximum of ten years
  - c. coupon bonds whose interest payments fluctuate with the inflation rate
  - d. zero-coupon bonds that don't pay interest but pay back the principal at maturity
  - e. zero-coupon bonds that mature in more than ten years

ANS: B DIF: Easy REF: 2.8

TOP: Treasury Bills, Notes, Bonds, and STRIPS MSC: Factual

- 14. Using a banker's discount yield of 3 percent per year, the price of a US Treasury bill that matures in 181 days is
  - a. \$0.9750
  - b. \$0.9849
  - c. \$0.9874
  - d. \$0.9881
  - e. None of these answers are correct.

ANS: B DIF: Easy REF: 2.8

TOP: Treasury Bills, Notes, Bonds, and STRIPS MSC: Applied

- 15. Eurodollars are:
  - a. US dollar-denominated deposits held in Europe
  - b. US dollar-denominated bonds that are held outside the USA
  - c. US dollar-denominated time deposits that are held outside the United States in a foreign bank or a subsidiary of a US bank
  - d. Any time deposit denominated in a particular currency but held outside the country of the currency
  - e. None of these answers are correct.

ANS: C DIF: Moderate REF: 2.9 TOP: Libor versus Bbalibor

MSC: Factual

- 16. Bbalibor is:
  - a. the rate at which a bank with surplus funds lends to another bank for a fixed time period in the London interbank market
  - b. the rate at which a bank with surplus dollars lends to another bank for a fixed time period in the London interbank market
  - c. the rate at which a bank with a shortage of funds offers to borrow excess funds from another bank for a fixed time period in the London interbank market
  - d. a trimmed average of libor quotes computed every trading day by the British Banker's Association
  - e. None of these answers are correct.

ANS: D DIF: Easy REF: 2.9 TOP: Libor versus Bbalibor

MSC: Factual

- 17. The yield spread between Eurodollar deposits and Treasury Bill rates is called the:
  - a. BED spread
  - b. DA spread
  - c. NOB spread
  - d. TBE spread
  - e. TED spread

ANS: E MSC: Factual DIF: Easy REF: 2.9 TOP: Libor versus Bbalibor