CHAPTER 2—THE ASSET ALLOCATION DECISION

TRUE/FALSE

1. Experts suggest life insurance coverage should be seven to ten times an individual's annual salary.

   ANS: T PTS: 1

2. Term life insurance provides both a death benefit and a savings plan.

   ANS: F PTS: 1

3. Most experts recommend a cash reserve of at least one year's worth of living expenses.

   ANS: F PTS: 1

4. The spending phase occurs when investors are relatively young.

   ANS: F PTS: 1

5. The gifting phase is similar to, and may be concurrent with, the spending phase.

   ANS: T PTS: 1

6. Long-term, high-priority goals include some form of financial independence.

   ANS: T PTS: 1

7. It is not a good idea to get too specific when constructing your policy statement.

   ANS: F PTS: 1

8. Asset allocation is the process of dividing funds into different classes of assets.

   ANS: T PTS: 1

9. The typical investor's goals rarely change during his/her lifetime.

   ANS: F PTS: 1

10. Individual security selection is far more important than the asset allocation decision.

    ANS: F PTS: 1

11. Return is the only important consideration when establishing investment objectives.

    ANS: F PTS: 1

12. In constructing the portfolio, the manager should maximize the investor's risk level.

    ANS: F PTS: 1

13. Risk tolerance is exclusively a function of an individual's psychological makeup.

ANS: F PTS: 1

14. An appropriate investment objective for a typical 25-year-old investor is a low-risk strategy, such as capital preservation or current income.

ANS: F PTS: 1

15. Investment planning is complicated by the tax code.

ANS: T PTS: 1

16. Average tax rate is defined as total tax payment divided by total income.

ANS: T PTS: 1

17. The portfolio mixes of institutional investors around the world are approximately the same.

ANS: F PTS: 1

18. The ability to retire at a certain age is a typical example of a long-term, lower-priority goal.

ANS: F PTS: 1

19. It is essential that both the client and the portfolio manager agree on an appropriate benchmark portfolio.

ANS: T PTS: 1

20. An example of a unique need in an investment policy statement is related to the legal responsibilities of a fiduciary or trustee.

ANS: F PTS: 1

21. Equity allocations of pension funds in Japan and Germany are similar to those in the United States.

ANS: F PTS: 1

22. Investing 30 to 40 percent of your retirement funds in the company you work for is reasonable when they match funds.

ANS: F PTS: 1

23. The majority of a pension fund's return is explained by asset allocation.

ANS: T PTS: 1

MULTIPLE CHOICE

1. The current outlay of money to guard against a potentially large future loss is commonly known as
   a. Asset management.
   b. Portfolio management.

c. Minimizing risk.
d. Loss control.
e. Insurance.

ANS: E PTS: 1 OBJ: Multiple Choice

2. In an investment policy statement the objectives of an investor are expressed in terms of
a. risk and return
b. risk
c. return
d. time horizon
e. liquidity needs

ANS: A PTS: 1 OBJ: Multiple Choice

3. ____ phase is the stage when investors in their early-to-middle earning years attempt to accumulate assets to satisfy near-term needs, e.g., children's education or down payment on a home.
a. Accumulation
b. Spending
c. Gifting
d. Consolidation
e. Divestiture

ANS: A PTS: 1 OBJ: Multiple Choice

4. Which of the following is **not** a life cycle phase?
a. Discovery phase
b. Accumulation phase
c. Consolidation phase
d. Spending phase
e. Gifting phase

ANS: A PTS: 1 OBJ: Multiple Choice

5. Which of the following is **not** a step in the portfolio management process?
a. Develop a policy statement.
b. Study current financial and economic conditions.
c. Construct the portfolio.
d. Monitor investor's needs and market conditions.
e. Sell all assets and reinvestment proceeds at least once a year.

ANS: E PTS: 1 OBJ: Multiple Choice

6. The first step in the investment process is the development of a(n)
a. Objective statement.
b. Policy statement.
c. Financial statement.
d. Statement of cash needs.
e. Statement of cash flows.

ANS: B PTS: 1 OBJ: Multiple Choice

7. Which of the following is **not** considered to be an investment objective?
a. Capital preservation
b. Capital appreciation
c. Current income

d. Total return
e. None of the above (that is, all are considered investment objectives)

ANS: E PTS: 1 OBJ: Multiple Choice

8. ____ must be stated in terms of expected returns and risk. An investor's tolerance for risk must be established before returns objectives can be stated.
a. Investment requirements
b. Investment constraints
c. Investment rewards
d. Investment objectives
e. Investment policy

ANS: D PTS: 1 OBJ: Multiple Choice

9. ____ is an appropriate objective for investors who want their portfolio to grow in real terms, i.e., exceed the rate of inflation.
a. Capital preservation
b. Capital appreciation
c. Portfolio growth
d. Value additivity
e. Nominal preservation

ANS: B PTS: 1 OBJ: Multiple Choice

10. ____ refer(s) to the ability to convert assets to cash quickly and at a fair market price and often increase(s) as one approaches the later stages of the investment life cycle.
a. Liquidity needs
b. Time horizons
c. Liquidation values
d. Liquidation essentials
e. Capital liquidations

ANS: A PTS: 1 OBJ: Multiple Choice

11. The policy statement may include a ____ against which a portfolio's or portfolio manager's performance can be measured.
a. Milestone
b. Benchmark
c. Landmark
d. Reference point
e. Market pair

ANS: B PTS: 1 OBJ: Multiple Choice

12. Asset allocation is
a. The process of dividing funds into asset classes.
b. Concerned with returns variability.
c. Concerned with the risk associated with different assets.
d. Concerned with the relationship among investments' returns.
e. All of the above.

ANS: E PTS: 1 OBJ: Multiple Choice

13. The asset allocation decision must involve a consideration of
a. Cultural differences.

b. The objectives stated in the investor's policy statement.
c. The types of assets that are appropriate for the investor.
d. The risk associated with different investments.
e. All of the above.

ANS: E PTS: 1 OBJ: Multiple Choice

14. Research has shown that the asset allocation decision explains ____% of the variation in fund returns across all funds, and ____% of the variation in returns for a particular fund over time.
a. 90 and 100.
b. 100 and 40.
c. 90 and 40.
d. 40 and 100.
e. 40 and 90.

ANS: E PTS: 1 OBJ: Multiple Choice

15. Once the portfolio is constructed, it must be continuously
a. Rebalanced.
b. Recycled
c. Reinvested
d. Monitored.
e. Manipulated.

ANS: D PTS: 1 OBJ: Multiple Choice

16. Which of the following statements is **false**?
a. Unrealized capital gains are taxable.
b. Realized capital gains are taxable.
c. Tax-exempt investments are attractive to individuals with high tax liabilities.
d. Returns comparisons should be made on an equivalent tax basis.
e. Tax exempt investors prefer tax exempt investments.

ANS: A PTS: 1 OBJ: Multiple Choice

17. ____ gains are taxable and occur when an asset is sold for more than its basis (the value of the asset when it was purchased by the original owner, or inherited by the heirs of the original owner).
a. Realized capital
b. Income
c. Portfolio
d. Nominal
e. Real

ANS: A PTS: 1 OBJ: Multiple Choice

18. Which of the following statements is true?
a. Except for tax-exempt investors and tax-deferred accounts, annual tax payments increase investment returns.
b. The only way to maintain purchasing power over time is to invest in bonds.
c. After adjusting for taxes, long-term bonds consistently outperform stocks.
d. An asset allocation decision for a taxable portfolio that does not include a substantial commitment to common stocks may make it difficult for the portfolio to maintain real value over time.
e. None of the above

ANS: D PTS: 1 OBJ: Multiple Choice

19. Important reasons for constructing a policy statement include:
    a. Helps investors decide on realistic investment goals
    b. Create a standard by which to judge the performance of the portfolio manager
    c. Develop an instrument to judge risk
    d. Choices a and b
    e. All of the above

    ANS: D PTS: 1 OBJ: Multiple Choice

20. For an investor with a time horizon of 6 to 10 years and lower risk tolerance, an appropriate asset allocation strategy would be
    a. 100% stocks
    b. 100% cash
    c. 30% cash, 50% bonds, and 20% stocks
    d. 10% cash, 30% bonds, and 60% stocks
    e. 100% bonds

    ANS: C PTS: 1 OBJ: Multiple Choice

21. For an investor with a time horizon of 8 years and higher risk tolerance, an appropriate asset allocation strategy would be
    a. 100% stocks
    b. 100% cash
    c. 30% cash, 50% bonds, and 20% stocks
    d. 10% cash, 30% bonds, and 60% stocks
    e. 100% bonds

    ANS: D PTS: 1 OBJ: Multiple Choice

22. For an investor with a time horizon of 12 years and higher risk tolerance, an appropriate asset allocation strategy would be
    a. 100% stocks
    b. 30% cash, 50% bonds, and 20% stocks
    c. 10% cash, 30% bonds, and 60% stocks
    d. 50% bonds and 50% stocks
    e. 100% bonds

    ANS: A PTS: 1 OBJ: Multiple Choice

23. For an investor with a time horizon of 15 years and moderate risk tolerance, an appropriate asset allocation strategy would be
    a. 100% stocks
    b. 40% cash and 60% stocks
    c. 30% cash, 50% bonds, and 20% stocks
    d. 50% bonds, and 50% stocks
    e. 20% bonds, and 80% stocks

    ANS: E PTS: 1 OBJ: Multiple Choice

24. For an investor with a time horizon of 4 years and higher risk tolerance, an appropriate asset allocation strategy would be
    a. 100% cash
    b. 30% cash, 50% bonds, and 20% stocks
    c. 20% cash, 40% bonds, and 40% stocks

d. 10% cash, 40% bonds, and 50% stocks
e. 100% bonds

ANS: C PTS: 1 OBJ: Multiple Choice

25. For an investor with a time horizon of 5 years and moderate risk tolerance, an appropriate asset allocation strategy would be
a. 100% cash
b. 30% cash, 50% bonds, and 20% stocks
c. 20% cash, 40% bonds, and 40% stocks
d. 10% cash, 30% bonds, and 60% stocks
e. 100% bonds

ANS: B PTS: 1 OBJ: Multiple Choice

26. John is 55 years old has $55,000 outstanding on a mortgage and no other debt. John typically saves $5,000 in an IRA account and another $10,000 in a company pension. John is most likely in the:
a. Discovery phase
b. Accumulation phase
c. Consolidation phase
d. Spending phase
e. Gifting phase

ANS: C PTS: 1 OBJ: Multiple Choice

27. Which of the following is not a typical portfolio constraint?
a. Liquidity needs
b. Risk tolerance
c. Time horizon
d. Tax concerns
e. Legal factors

ANS: B PTS: 1 OBJ: Multiple Choice

28. Which of the following strategies seeks to increase the portfolio value by reinvesting current income in addition to capital gains?
a. Capital appreciation
b. Capital preservation
c. Return preservation
d. Current income
e. Total return

ANS: D PTS: 1 OBJ: Multiple Choice

29. Research from the 1970s to the 1990s found that over 90 percent of a fund's returns over time is explained by:
a. Market timing
b. Stock selection
c. Manager selection
d. Asset allocation
e. All of the above

ANS: D PTS: 1 OBJ: Multiple Choice

Exhibit 2.1
USE THE TAX TABLE PROVIDED BELOW FOR THE FOLLOWING PROBLEM(S)

	If Taxable Income		Then	The Tax is		
	Is Over	But Not Over		This Amount	Plus This %	Of The Excess Over
Single	$0	$7,150		0	10%	0
	$7,150	$29,050		715	15%	$7,150
	$29,050	$70,350		$4,000	25%	$29,050
	$70,350	$146,750		$14,325	28%	$70,350
	$146,750	$319,100		$35,717	33%	$146,750
	$319,100	-		$92,592.50	35%	$319,100
Married Filing Jointly	$0	$14,300		0	10%	0
	$14,300	$58,100		1430	15%	$14,300
	$58,100	$117,250		$8,000	25%	$58,100
	$117,250	$178,650		$22,787.50	28%	$117,250
	$178,650	$319,100		$39,979.50	33%	$178,650
	$319,100	-		$86,328	35%	$319,100

30. Refer to Exhibit 2.1. What is the marginal tax rate for a single individual with taxable income of $85,000?
    a. 15%
    b. 25%
    c. 28%
    d. 33%
    e. 35%

    ANS: C
    Marginal tax rate = 28%

    PTS: 1 OBJ: Multiple Choice Problem

31. Refer to Exhibit 2.1. What is the tax liability for a single individual with taxable income of $85,000?
    a. $23,800
    b. $18,427
    c. $24,958
    d. $16,867
    e. $19,650

    ANS: B
    $14,325 + 0.28($85,000 – $70,350) = $18,427 (tax bill)

    PTS: 1 OBJ: Multiple Choice Problem

32. Refer to Exhibit 2.1. What is the average tax for a single individual with taxable income of $85,000?
    a. 13.57%
    b. 15.68%
    c. 21.68%
    d. 25.74%
    e. 29.55%

    ANS: C
    $18,427/$85,000 = 21.68% (average tax rate)

    PTS: 1 OBJ: Multiple Choice Problem

33. Refer to Exhibit 2.1. What is the tax liability for a married couple filing jointly with taxable income of $125,000?
  a. $23,800
  b. $18,427
  c. $24,958
  d. $16,867
  e. $19,650

ANS: C
$22,787.50 + 0.28($125,000 – $117,250) = $24,958

PTS: 1 OBJ: Multiple Choice Problem

34. What would the equivalent taxable yield be on an investment that offers a 6 percent tax exempt yield? Assume a marginal tax rate of 28%.
  a. 0.125%
  b. 7.20%
  c. 6.48%
  d. 8.33%
  e. 32.14%

ANS: D
Equivalent taxable yield = .06/(1 – .28) = .06/.72 = 8.33%

PTS: 1 OBJ: Multiple Choice Problem

35. What would the after-tax yield be on an investment that offers a 6 percent fully taxable yield? Assume a marginal tax rate of 31%.
  a. 2.79%
  b. 6.48%
  c. 4.14%
  d. 7.20%
  e. 12.50%

ANS: C
After-tax yield = Before-tax yield (1 – Tax Rate) = 6%(1 – .31) = 4.14%

PTS: 1 OBJ: Multiple Choice Problem

36. The future value of $50,000 invested today, at the end of 10 years assuming an interest rate of 7.5% per year, with semiannual compounding, is
  a. $104,407.60
  b. $103,051.58
  c. $123,510.52
  d. $210,673.43
  e. $105,117.46

ANS: A
$FV = 50{,}000(1 + .0375)^{20} = \$104{,}407.60$

PTS: 1 OBJ: Multiple Choice Problem

37. Assume that you invest $750 at the end of each quarter for the next 20 years in a mutual fund. The annual rate of interest that you expect to earn in this account is 5.25%. The amount in the account at the end of 20 years is

a. $60,000.00
b. $105,039.84
c. $37,009.35
d. $123,510.52
e. $115,637.37

ANS: B

$$FV = 750\left(\frac{(1+.013125)^{80}-1}{.013125}\right) = \$105,039.84$$

PTS: 1 OBJ: Multiple Choice Problem

38. Assume that you invest $1250 at the end of each of the next 15 years in a mutual fund. You currently have $10,000 in the mutual fund. The annual rate of interest that you expect to earn in this account is 4.35%. The amount in the account at the end of 15 years is
a. $58,940.30
b. $28,750.00
c. $37,009.35
d. $44,630.81
e. $25,690.50

ANS: D

$$FV = 1250\left(\frac{(1+.0435)^{15}-1}{.0435}\right) + 10,000(1+.0435)^{15} = \$44,630.81$$

PTS: 1 OBJ: Multiple Choice Problem

39. Someone in the 15 percent tax bracket can earn 8 percent annually on his investments in a tax-exempt IRA account. What will be the value of a $10,000 investment after 5 years (assuming annual compounding)?
a. $ 6,805
b. $14,693
c. $15,528
d. $20,114
e. $50,000

ANS: B
$FV = 10,000(1 + .08)^5 = \$14,693$

PTS: 1 OBJ: Multiple Choice Problem

40. Suppose the 8 percent investment of the previous problem is taxable rather than tax-deferred. What will be the after-tax value of his $10,000 investment after 5 years (assuming annual compounding)?
a. $10,680
b. $11,765
c. $13,895
d. $14,693
e. $15,528

ANS: C
After-tax yield = Before-tax yield (1 – Tax rate)
= 8% (1 – .15) = 6.8%

$\$10{,}000(1 + 0.068)^5 = \$13{,}895$

PTS: 1 OBJ: Multiple Choice Problem

41. An individual in the 36% tax bracket invests $5,000 in a tax-exempt IRA. If the investment earns 10% annually, what will be the value of the IRA after five years?
   a. $6,600
   b. $6,818
   c. $7,500
   d. $8,053
   e. $10,879

   ANS: D
   The total amount is not adjusted for taxes or inflation.
   $FV = \$5{,}000(1 + 0.10)^5 = \$8{,}052.55$

   PTS: 1 OBJ: Multiple Choice Problem

42. An individual in the 15% tax bracket has $10,000 invested in a tax-exempt IRA account. If the individual earns 8% annually before taxes and inflation is 2.5% per year, what is the real value of the investment in 20 years?
   a. $23,211
   b. $28,467
   c. $29,178
   d. $37,276
   e. $46,610

   ANS: B
   The annual real return adjusted for inflation is computed as follows:
   $(1.08)/(1.025) - 1 = 5.37\%$.
   $FV = \$10{,}000(1 + 0.0537)^{20} = \$28{,}466.86$

   PTS: 1 OBJ: Multiple Choice Problem

43. An individual in the 36% tax bracket has $20,000 invested in a tax-exempt account. If the individual earns 10% annually before taxes and inflation is 3.0% per year, what is the real value of the investment in 10 years?
   a. $31,000
   b. $33,200
   c. $38,614
   d. $39,343
   e. $47,823

   ANS: C
   The annual real return adjusted for inflation is computed as follows:
   $(1.10)/(1.03) - 1 = 6.8\%$.
   $FV = \$20{,}000(1 + 0.068)^{10} = \$38{,}613.80$

   PTS: 1 OBJ: Multiple Choice Problem

44. You currently have $150,000 in an IRA designated for retirement. If you save an additional $100 at the end of every month and expect to earn an annual return of 12%, how much do you expect to have in the IRA in 10 years?
   a. $467,632

b. $518,062
c. $732,546
d. $949,328
e. $1,215,234

ANS: B

$$FV = 100\left(\frac{(1+.01)^{120}-1}{.01}\right)+150,000(1+.01)^{120} = \$518,061.90$$

PTS: 1 OBJ: Multiple Choice Problem