TRUE/FALSE

1. One of the first steps in developing a financial plan is to purchase adequate life insurance.

   ANS: T   PTS: 1

2. The cash surrender value of the life insurance policy cannot be used for retirement purpose.

   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. An investment fund, when it is registered like RRSP, will give an investor less after tax dollars at the end of an assumed 20-year time horizon.

    ANS: F   PTS: 1

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

    ANS: F   PTS: 1

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

    ANS: F   PTS: 1

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

    ANS: T   PTS: 1

21. 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

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

    ANS: F   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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

    ANS: D   PTS: 1

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

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

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

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

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

21. For an investor with a time horizon of 6 to 10 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

22. John is 55 years old has $55,000 outstanding on a mortgage and no other debt. John typically saves $5,000 in a RRSP 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

23. 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

24. 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

25. A 25 year old individual with $10,000 invested in an RRSP and an average risk tolerance should be concerned about:
    a. taxes, and should invest 70% in equities and 30% in bonds.
    b. taxes, and should invest 30% in equities and 70% in bonds.
    c. inflation, and should invest 70% in equities and 30% in bonds.
    d. inflation, and should invest 30% in equities and 70% in bonds.
    e. taxes and inflation.

    ANS: C   PTS: 1

Exhibit 2-1

USE THE TAX TABLE PROVIDED BELOW TO ANSWER THE NEXT 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	$0	$14,300		0	10%	0
Filing	$14,300	$58,100		1430	15%	$14,300
Jointly	$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

26. 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: LO2

27. 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: LO2

28. 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: LO2

29. 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: LO2

30. What would the equivalent taxable yield be on an investment that offers a 6% 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: LO2

31. What would the after-tax yield be on an investment that offers a 6% 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: LO2

32. 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: LO2

33. 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: LO2

34. 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: LO2

35. Someone in the 15% tax bracket can earn 8% annually on his investments in a tax-exempt RRSP 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: LO2

36. Someone in the 15% tax bracket can earn 8% annually on his investments in a taxable RRSP account. 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: LO2

    Exhibit 2-2

    USE THE FOLLOWING INFORMATION FOR THE NEXT PROBLEM(S)

    As part of a retirement planning exercise, you are comparing a RRSP with a taxable investment fund. The RRSP contribution is tax deductible. In both cases the contribution amount is $3,000. Your time horizon is 30 years and you expect to earn 7% per year on both accounts. Your marginal provincial and federal tax rate is 25% but you expect your marginal tax rate at retirement to be 15%.

37. Refer to Exhibit 2-2. Calculate the tax savings generated by the RRSP contribution at the time of investment.
    a. $300
    b. $750
    c. $700
    d. $100
    e. $200

    ANS: B
    Tax savings on RRSP = (3000)(0.25) = $750.

    PTS: 1   OBJ: LO2

38. Calculate the future value, at the end of 30 years, of the tax savings.
    a. $2,900.51
    b. $3,867.35
    c. $3,481.16
    d. $1,248.35
    e. $4,369.23

    ANS: C
    FV of tax savings = $750(1 + 0.0525)^{30} = $3,481.16

    0.07(1 − 0.25) = 0.0525

    PTS: 1   OBJ: LO2

39. Calculate the total after tax future value, at the end of 30 years, of the RRSP contribution and the tax savings.
    a. $21,833.43
    b. $22,836.77
    c. $22,892.41
    d. $26,317.93
    e. $19,411.25

    ANS: C
    Pre tax FV of RRSP contribution = 3000(1 + 0.07)^{30} = $22,836.77

    After tax FV of RRSP = $22,836.77(1 − 0.15) = $19,411.25

    FV of tax savings = 750(1 + 0.0525)^{30} = $3,481.16

    Total after tax = $22,892.41

    PTS: 1   OBJ: LO2

40. Calculate the total after tax future value, at the end of 30 years, of the taxable account contribution.
    a. $11,833.43
    b. $12,892.41
    c. $13,924.65
    d. $16,317.93
    e. $19,411.25

    ANS: C
    After tax FV of taxable account contribution = 3000(1 + 0.0.0525)^{30} = $13,924.65
    0.07(1 − 0.25) = 0.0525

    PTS: 1   OBJ: LO2

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

   ANS: D
   FV = $5,000(1 + 0.064)^5 = $6,818.33
   0.10(1 − 0.36) = 0.064

   PTS: 1   OBJ: LO2

42. An individual in the 15% tax bracket has $10,000 invested in a RRSP 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: LO2

43. An individual in the 36% tax bracket has $20,000 invested in a RSP. 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: LO2