2010 Level 1 Sample Exam Volume 2 answer

1. Correct answer: A
CFA Institute Standards of Professional Conduct 2010 Modular Level I, Vol. 1, pp. 76-77
Study Session 1-2-b
Distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.
A is correct because under Standard IV (C) a member would exercise reasonable supervision by establishing and implementing compliance procedures prior to the violation, which has not been done in this case.

2. Correct answer: A
CFA Institute Standards of Professional Conduct
2010 Modular Level I, Vol. 1, p. 81
Study Session 1-2-b
Distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

A is correct. When a member has reason to suspect that either secondary or third-party research or information comes from a source that lacks a sound basis, the member must refrain from relying on that information. Standard V.

3. Correct answer: C
CFA Institute Standards of Professional Conduct
2010 Modular Level I, Vol. 1, p. 85
Study Session 1-2-b
Distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

C is correct as Gifford should not make a general recommendation on a specific stock as he would not be able to address specific client investment objectives and risk tolerances with such a general statement.

4. Correct answer: A
CFA Institute Standards of Professional Conduct
2010 Modular Level I, Vol. 1, pp. 89-91
Study Session 1-2-b
Distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

A is correct. Even though the best practice is to avoid conflicts, when conflicts cannot be reasonably avoided, full disclosure should be made as required by Standard VI (A). As the stock in question has been held for many years, it may not be practical to sell it due to things like tax consequences. Since the analyst has been hired to initiate coverage of mining companies, it is unlikely that another analyst at that firm would be as competent in completing a research report on mining companies.

5. Correct answer: C
CFA Institute Standards of Professional Conduct
2010 Modular Level I, Vol. 1, pp. 94-95
Study Session 1-2-b
Distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.
C is correct as Standard VI (B) requires that investment transactions for clients and employers have priority over transactions in which members have beneficial ownership. By executing her own accounts transactions with those of the hedge fund, the analyst has violated this standard. Micro cap securities can be thinly traded and easily influenced by changes in the volume of activity, so the analyst may benefit when she combines her transactions with the funds, and she should let the fund execute its orders before she makes changes to her account.

6. Correct answer: B
CFA Institute Standards of Professional Conduct
2010 Modular Level I, Vol. 1, pp. 99-100
Study Session 1-2-b
Distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

B is correct because Standard VI (C) requires disclosure of any compensation, consideration, or benefit received from or paid to others for the recommendation of products or services. Even without cash changing hands, the arrangement provides for a quid pro quo referral of clients and should be disclosed.

7. Correct answer: B
CFA Institute Standards of Professional Conduct
2010 Modular Level I, Vol. 1, pp. 103-105,107
Study Session 1-2-b
Distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.
B is correct as the CFA program has been properly referenced while the CFA Institute and CFA Designation have been improperly referenced, in violation of Standard VII (B). CFA should be an adjective rather than a noun.

8. Correct answer: B

CFA Institute Standards of Professional Conduct
2010 Modular Level I, Vol. 1, p. 11
Study Session 1-1-a
Describe the structure of the CFA Institute Professional Conduct Program and the
process for the enforcement of the Code and Standards.
B is correct as the CFA Institute may revoke membership for violations of the Institute's
Code of Ethics.

9. Correct answer: C
CFA Institute Standards of Professional Conduct 2010 Modular Level I, Vol. 1, p. 9 Study
Session 1-1-a
Describe the structure of the CFA Institute Professional Conduct Program and the
process for the enforcement of the Code and Standards.

C is correct. Although the Board of Governors maintains oversight and responsibility for
the Professional Conduct Program, the Institute's Bylaws and Rules of Procedure form the
basic structure for enforcement of the Code and Standards.

10. Correct answer: A
"Sampling and Estimation," Richard A. Defusco, CFA, Dennis W. McLeavey, CFA, Jerald
E. Pinto, CFA, and David E. Runkle, CFA
2010 Modular Level I, Vol. 1, pp. 489-493
Study Session 3-10-j
Calculate and interpret a confidence interval for a population mean, given a normal
distribution with (1) a known population variance, (2) an unknown population variance, or
(3) an unknown variance and a large sample size.
With a sample size of 10, there are 9 degrees of freedom. The confidence interval concept
is based on a two-tailed approach. For a 95% confidence interval, 2.5% of the distribution
will be in each tail. Thus, the correct f-statistic to use is 2.262. The confidence interval is
calculated as:

$$\bar{x} \pm t_{0.025} s/\sqrt{n}$$

where x is the sample mean, s is the sample standard deviation, and n is the sample size.
In this case we have:

$$6.25 \pm 2.262 \times 12 /\sqrt{n}$$

$$6.25 \pm 2.262 \times 3.79$$
$$6.25 \pm 8.58 = -2.33 \text{ and } 14.83$$

11. Correct answer: A
"Statistical Concepts and Market Returns," Richard A. Defusco, CFA, Dennis W.
McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA 2010 Modular Level I,
Vol. 1, pp. 297-299 Study Session 2-7-e

Define, calculate and interpret measures of central tendency, including the population mean, sample mean, arithmetic mean, weighted average or mean (including a portfolio return viewed as a weighted mean), geometric mean, harmonic mean, median, and mode. Add one to each of the given returns, then multiply them together, then take the fourth root of the resulting product. 0.92 x 1.04 x 1.17 x 0.88 = 0.985121.0.985121 raised to the 0.25 power is 0.996259. Subtracting one and multiplying by 100 gives the correct geometric mean return of -0.37%.

12. Correct answer: B
"Probability Concepts," Richard A. Defusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA 2010 Modular Level I, Vol. 1, pp. 369-370 Study Session 2-8-f
Calculate and interpret (1) the joint probability of two events, (2) the probability that at least one of two events will occur, given the probability of each and the joint probability of the two events, and (3) a joint probability of any number of independent events.
$P(A \text{ or } B) = P(A) + P(B) - P(AB) = 40 + 75 - 40 = 75$

13. Correct answer: A   "Time Value of Money," Richard A. Defusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA 2010 Modular Level I, Vol. 1, pp. 212-213 Study Session 2-5-d, f   Solve time value of money problems when compounding periods are other than annual.   Draw a timeline and solve time value of money applications (for example, mortgages and savings for college tuition or retirement). Place the following values into a financial calculator: N = 60; i / y = 8 /12; PV = 30000; FV = 0; and compute PMT. Note, 5 years x 12 months per year = 60 months. The nominal rate of 3% must be divided by 12 to find the monthly periodic rate of 0.6666667%. Alternatively, using the present value of an annuity formula, solve:

$$PV = A \left[1 - \frac{1}{(1+\frac{r}{m})^{mv}} \right] \div \frac{r}{m} \quad 30000 = A \left[1 - \frac{1}{(1+\frac{0.08}{12})^{12 \cdot 5}} \right] \div \frac{0.08}{12} = A \cdot 49.318433$$

$A = 30000 / 49.318433 = 608.291829$

14. Correct answer: B
"Time Value of Money," Richard A. Defusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA 2010 Modular Level I, Vol. 1, pp. 192-193
Study Session 2-5-c
Calculate and interpret the effective annual rate, given the stated annual interest rate and the frequency of compounding.
Solve for effective annual rate using:

$$EAR = (1 + \text{periodic interest rate})^m - 1 = [1 + (0.09/365)]^{365} - 1 = 0.094162$$

15. Correct answer: C
"Hypothesis Testing," Richard A. Defusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA

2010 Modular Level I, Vol. 1, p. 526

Study Session 3-11-e

Explain and interpret the p-value as it relates to hypothesis testing.

If the p-value is less than our specified level of significance, we reject the null hypothesis.

16. Correct answer: A

"Technical Analysis," Frank K. Reilly, CFA, and Keith C. Brown, CFA

2010 Modular Level I, Vol. 1, p. 573

Study Session 3-12-a

Explain the underlying assumptions of technical analysis.

One of the assumptions of technical analysis is:

"Disregarding minor fluctuations, the prices for individual securities and the overall value of the market tend to move in trends, which persist for appreciable lengths of time.' (p. 573)

17. Correct answer: A

"Elasticity," Michael Parkin

2010 Modular Level I, Vol. 2, pp. 19, 21

Study Session 4-13-a

Calculate and interpret the elasticities of demand (price elasticity, cross elasticity, and income elasticity) and the elasticity of supply and discuss the factors that influence each measure.

The cross elasticity of demand is defined as the percentage change in quantity demanded divided by the percentage change in the price of a substitute or complement. If the cross elasticity of demand is positive, the goods are substitutes. In this case, the 4% decline in quantity of pears is divided by the 3% decline in the price of apples, which is a positive number: $-4/-3 = +1.333333$.

18. Correct answer: C

"Elasticity," Michael Parkin

2010 Modular Level I, Vol. 2, pp. 27-28

   "Markets in Action," Michael Parkin

2010 Modular Level I, Vol. 2, pp. 80-83

Study Sessions 4-13-a; 4-15-c

Calculate and interpret the elasticities of demand (price elasticity, cross elasticity, and income elasticity) and the elasticity of supply and discuss the factors that influence each measure.

Explain the impact of taxes on supply, demand, and market equilibrium, and describe tax incidence and its relation to demand and supply elasticity.

As the good exhibits neither perfectly elastic nor perfectly inelastic demand or supply (see pp. 27-28), the incidence of taxation will be shared by buyers and sellers regardless of whether the tax is placed on buyers or on sellers.

19. Correct answer: A

"Monopoly," Michael Parkin

2010 Modular Level I, Vol. 2, pp. 199-201

Study Session 5-19-d

Explain how consumer and producer surpluses are redistributed in a monopoly, including the occurrence of deadweight loss and rent seeking.

As depicted in Fig. 6 on p. 200 of the readings, a higher monopoly price will increase the monopoly's profit and also increase the deadweight loss.

20. Correct answer: B

"Money, the Price Level, and Inflation," Michael Parkin

2010 Modular Level I, Vol. 2, p. 376

"Monetary Policy," Michael Parkin

2010 Modular Level I, Vol. 2, pp. 470,477

Study Sessions 6-24-d; 6-27-a, b

Explain the goals of the U.S. Federal Reserve System (the Fed) in conducting monetary policy and how the Fed uses its policy tools to control the quantity of money, and describe the assets and liabilities on the Fed's balance sheet.

Discuss the goals of U.S. monetary policy and the Fed's means for achieving the goals, including how the Fed operationalizes those goals.

Describe how the Fed conducts monetary policy and explain the Fed's decision-making strategy, including an instrument rule, a targeting rule, open-market operations, and the market for reserves.

When the Fed purchases securities, the Fed increases the reserves held by the banking system. These increased reserves lead to a reduction in the federal funds rate and, ultimately, to a reduction in other interest rates in the economy.

21. Correct answer: A

"Markets for Factors of Production," Michael Parkin

2010 Modular Level I, Vol. 2, pp. 292-293

Study Session 5-21-h

Differentiate between economic rent and opportunity costs.

When the total income of a factor of production consists solely of economic rent, it indicates that the factor has perfectly inelastic supply. For perfectly inelastic supply, the supply curve is a vertical line.

22. Correct answer: A

"An Overview of Central Banks," Anne Dolganos Picker

2010 Modular Level I, Vol. 2, p. 501

Study Session 6-28-a, b

Identify the functions of a central bank.

Discuss monetary policy and the tools utilized by central banks to carry out monetary policy.

Most major central banks' primary monetary policy goal is to contain inflation.

23. Correct answer: C

"Financial Reporting Mechanics," Thomas R. Robinson, CFA, Jan Hendrik van Greuning, CFA, Karen O'Connor Rubsam, CFA, R. Elaine Henry, CFA, and Michael A. Broihahn, CFA

2010 Modular Level I, Vol. 3, pp. 35-36

Study Session 7-30-a

Explain the relationship of financial statement elements and accounts, and classify accounts into the financial statement elements.

Revenues are inflows of economic resources. Assets are economic resources, but not inflows. Gains are an account, not an element of the financial statements.

24. Correct answer: A

"Financial Reporting Standards," Thomas R. Robinson, CFA, Jan Hendrik van Greuning, CFA, Karen O'Connor Rubsam, CFA, R. Elaine Henry, CFA, and Michael A. Broihahn, CFA

2010 Modular Level I, Vol. 3, pp. 110-111

Study Session 7-31-d

Describe the International Financial Reporting Standards (IFRS) framework, including the qualitative characteristics of financial statements, the required reporting elements, and the constraints and assumptions in preparing financial statements.

For recognition in the financial statements, an element must have a cost or value that can be measured with reliability; certainty is not a requirement for economic benefits associated with an item to flow to or from the enterprise: all that is required is that it is probable that they will.

25. Correct answer: A

"Financial Statement Analysis: An Introduction," Thomas R. Robinson, CFA, Jan Hendrikvan Greuning, CFA, R. Elaine Henry, CFA, and Michael A. Broihahn, CFA 2010 Modular Level I, Vol. 3, p. 19

"Understanding the Balance Sheet," Thomas R. Robinson, CFA, Jan Hendrikvan Greuning, CFA, R. Elaine Henry, CFA, and Michael A. Broihahn, CFA

2010 Modular Level I, Vol. 3, pp. 201, 226

Study Sessions 7-29-d; 8-33-a, g

Discuss the objective of audits of financial statements, the types of audit reports, and the importance of effective internal controls.

Illustrate and interpret the components of the balance sheet and discuss the uses of the balance sheet in financial analysis.

List and explain the components of owners' equity.

Treasury stock is non-voting and does not receive dividends.

26. Correct answer: B

"Understanding the Cash Flow Statement/' Thomas R. Robinson, CFA, Jan Hendrikvan Greuning, CFA, R. Elaine Henry, CFA, and Michael A. Broihahn, CFA

2010 Modular Level I, Vol. 3, pp. 275-276

Study Session 8-34-d, e

Demonstrate the difference between the direct and indirect methods of presenting cash from operating activities and explain the arguments in favor of each.

Demonstrate the steps in the preparation of direct and indirect cash flow statements, including how cash flows can be computed using income statement and balance sheet data.

Net Income	$100,000
less Increase in Accounts Receivable	(12,000)
plus Increase in Accounts Payable	9,000
plus Depreciation & Amortization	8-000
Net Cash from Operations	105,000

27. Correct answer: C

Financial Analysis Techniques," Thomas R. Robinson, CFA, Jan Hendrikvan Greuning, CFA, R. Elaine Henry, CFA, and Michael A. Broihahn, CFA

2010 Modular Level I, Vol. 3, pp. 321-331

Working Capital Management," Edgar A. Norton, Jr., CFA, Kenneth L. Parkinson, and Pamela P. Peterson, CFA

2010 Modular Level I, Vol. 4, p. 101

Study Sessions 8-35-d, e; 11-46-c

Calculate, classify, and interpret activity, liquidity, solvency, profitability, and valuation ratios.

Demonstrate how ratios are related and how to evaluate a company using a combination of different ratios.

Evaluate overall working capital effectiveness of a company, using the operating and cash conversion cycles, and compare its effectiveness with other peer companies.

	Calculated Values	Comment
Cash Ratio = (Cash + Marketable Securities) / Current Liabilities		
Current Liabilities = (Cash + Marketable Securities) / Cash Ratio		
Current Liabilities	$520/0.03 = S17,333	
Current Ratio = Current Assets / Current Liabilities		
Current Ratio	$23,100 / $17,333 = 1.33	higher: increased from 1.22
DSO = 365 / (Sales / Accounts Receivable)		
DSO	365 / ($41,500 / $13,347) = 117	
DOH = 365 / (Sales / Accounts Receivable		
DOH	365/4.7 = 78	
Operating Cycle = DSO + DOH		
Operating Cycle	117 + 78 = 195	shorter: decreased from 208
Defensive Interval	(Cash + Marketable Securities + Accounts Receivable) / Daily Cash Expenditures	

	($520 + $13,347)/$277/day = 50 days	shorter: decreased from 54 days

28. Correct answer: B
"International Standards Convergence/" Thomas R. Robinson, CFA, Jan Hendrikvan
Greuning, CFA, R. Elaine Henry, CFA, and Michael A. Broihahn, CFA
2010 Modular Level I, Vol. 3, pp. 651-653
Study Session 8-43-a, b
Identify and explain the major international accounting standards for each asset and
liability category on the balance sheet and the key differences from U.S. generally
accepted accounting principles (GAAP).
Identify and explain the major international accounting standards for major revenue and
expense categories on the income statement and the key differences from U.S. GAAP.
All categories have realized gains or losses treated in the same way; they are reported on
the income statement. It is the unrealized gains and losses that are included in other
comprehensive income (in equity) for available-for-sale securities carried at market value.

29. Correct answer: A
"Inventories," Elbie Antonites, CFA, and Michael A. Broihahn, CFA
2010 Modular Level I, Vol. 3, pp. 384-385, 390-392
Study Session 9-36-f
Compute and describe the effects of the choice of inventory method on profitability,
liquidity, activity, and solvency ratios.
In periods of rising prices, FIFO results in a higher inventory value and a lower cost of
goods sold and therefore a higher net income. The higher net income increases return on
sales.
The higher reported net income also increases retained earnings, and therefore results in
a lower debt-to-equity ratio not a higher one. The combination of higher inventory and
lower cost of goods sold decreases inventory turnover (CGS/ inventory).

30. Correct answer: A
"Long-Lived Assets," R. Elaine Henry, CFA, and Elizabeth A. Gordon
2010 Modular Level I, Vol. 3, pp. 460-461
Study Session 9-37-j
Calculate and describe both the initial and long-lived effects of asset revaluations on
financial ratios.
The increase in an asset's value would increase depreciation expense and therefore
decrease ROE in future periods, not increase it. An asset revaluation that reverses a
previous downward revaluation is reported in net income in the period it is revalued.
Hence management can use upward revaluations to increase net income (and hence
meet the analysts' expectations). This one-time increase in net income would increase
ROE for the current year only.

31. Correct answer: B

"Income Taxes," Elbie Antonites, CFA, and Michael A. Broihahn, CFA
2010 Modular Level I, Vol. 3, pp. 500-501
Study Session 9-38-i
Analyze disclosures relating to deferred tax items and the effective tax rate reconciliation, and discuss how information included in these disclosures affects a company's financial statements and financial ratios.

The different treatment for tax purposes and financial reporting purposes is a temporary difference and would create a deferred tax liability. Deferred tax liabilities should be classified as debt if they are expected to reverse with subsequent tax payments. The long history of profitability implies the company will likely be paying taxes in the following years and hence an analyst could reasonably expect the temporary difference to reverse.

32. Correct answer: C
"Long-Term Liabilities and Leases," Elizabeth A. Gordon and R. Elaine Henry, CFA
2010 Modular Level I, Vol. 3, pp. 537-541, 543
Study Session 9-39-g
Determine the effects of finance and operating leases on the financial statements and ratios of the lessees and lessors.

The cash from operations is lower if the lease is classified as an operating lease, because the full lease payment is shown as an operating cash outflow. If it were classified as a financing lease, a portion of the lease payment reduces the lease liability and is therefore classified as a financing cash flow.

33. Correct answer: B
"Accounting Shenanigans on the Cash Flow Statement," Marc A. Siegel
2010 Modular Level I, Vol. 3, p. 594
Study Session 10-41
The candidate should be able to analyze and discuss the following ways to manipulate the cash flow statement:
•   stretching out payables,
•   financing of payables,
•   securitization of receivables, and
•   using stock buybacks to offset dilution of earnings.
The securitization of accounts receivables for less than book value would result in a loss on the income statement, but an increase in the cash from operations, reflecting the proceeds received.

34. Correct answer: A
"Financial Statement Analysis: Applications," Thomas R. Robinson, CFA, Jan Hendrikvan Greuning, CFA, R. Elaine Henry, CFA, and Michael A. Broihahn, CFA
2010 Modular Level I, Vol. 3, pp. 630-631
"Introduction to Price Multiples," John D. Stowe, CFA, Thomas R. Robinson, CFA, Jerald E. Pinto, CFA, and Dennis W. McLeavey, CFA
2010 Modular Level I, Vol. 5, pp. 207-212

Study Sessions 10-42-e; 14-59-b
Determine and justify appropriate analyst adjustments to a company's financial statements to facilitate comparison with another company.
Calculate and interpret P/E, P/BV, P/S and P/CF.
A company that grows primarily through acquisition will have more goodwill and other intangible assets on its balance sheet than a company with fewer acquisitions or that has grown internally. To provide for comparisons with companies that do not follow such a growth strategy, an analyst would remove all intangibles and focus on tangible book value.

35. Correct answer: A
"Cost of Capital," Yves Courtois, CFA, Gene C. Lai, and Pamela P. Peterson, CFA
2010 Modular Level I, Vol. 4, pp. 50-51
"An Introduction to Security Valuation," Frank K. Reilly, CFA, and Keith C. Brown, CFA
2010 Modular Level I, Vol. 5, pp. 134-135
Study Sessions 11-45-g; 14-56-c
Calculate and interpret the cost of noncallable, nonconvertible preferred stock.
Calculate and interpret the value of both a preferred stock and a common stock using the dividend discount model (DDM).
$r_p = D_p / P_p$ (or Dividend / Price) = ($100 x 0.095) / $103.26 = 9.2%

36. Correct answer: B
"Cost of Capital," Yves Courtois, CFA, Gene C. Lai, and Pamela P. Peterson, CFA
2010 Modular Level I, Vol. 4, pp. 52-58
Study Session 11-45-h
Calculate and interpret the cost of equity capital using the capital asset pricing model approach, the dividend discount model approach, and the bond-yield plus risk-premium approach.
The CAPM approach uses the firm's equity beta, which is computed from a market model regression of the company's stock returns against market returns.

37. Correct answer: B
"Working Capital Management," Edgar A. Norton, Jr., CFA, Kenneth L. Parkinson, and Pamela P. Peterson, CFA
2010 Modular Level I, Vol. 4, pp. 93-94
Study Session 11-46-a
Describe primary and secondary sources of liquidity and factors that influence a company's liquidity position.
Liquidating long-term assets is a secondary source of liquidity.

38. Correct answer: C
"Financial Analysis Techniques," Thomas R. Robinson, CFA, Jan Hendrik van Greuning, CFA, R. Elaine Henry, CFA, and Michael A. Broihahn, CFA
2010 Modular Level I, Vol. 3, p. 329

"Working Capital Management," Edgar A. Norton, Jr., CFA, Kenneth L. Parkinson, and Pamela P. Peterson, CFA

2010 Modular Level I, Vol. 4, pp. 95-101

Study Sessions 8-35-d; 11-46-c

Calculate, classify, and interpret activity, liquidity, solvency, profitability, and valuation ratios.

Evaluate the overall working capital effectiveness of a company, using the operating and cash conversion cycles, and compare its effectiveness with other peer companies.

The inventory turnover will increase, which means the days in inventory will reduce, which will reduce the net operating cycle (another name for the cash conversion cycle).

39. Correct answer: C

"Financial Statement Analysis," Pamela P. Peterson, CFA

2010 Modular Level I, Vol. 4, pp. 153-154,156

Study Session 11-47

The candidate should be able to demonstrate the use of pro forma income and balance sheet statements.

The expected gross profit is: €1.2 million x (1 + 10%) x (1-75%) = €0.330 million.

40. Correct answer: C

"Organization and Functioning of Securities Markets," Frank K. Reilly, CFA, and Keith C. Brown, CFA

2010 Modular Level I, Vol. 5, pp. 26-28

Study Session 13-52-g

Describe the process of buying a stock on margin, compute the rate of return on a margin transaction, define maintenance margin, and determine the stock price at which the investor would receive a margin call.

Purchase Value = $28 x 500 = $14,000;   Selling Value = $32 x 500 = $16,000;

Margin = $28 x 500 x 0.50 = $7,000;   Interest = $7,000 x 0.08 / 2 = S280;

[($16,000 - $7,000 - $280 - $50) / ($7,000 + $50)] -1 = ($8,670 / $7,050) -1 = 23.0%

41. Correct answer: A

"Security Market Indexes," Frank K. Reilly, CFA, and Keith C. Brown, CFA

2010 Modular Level I, Vol. 5, pp. 60-61

Study Session 13-53-c

State how low correlations between global markets support global investment.

Diversifying a domestic equity portfolio by incorporating international equities is most beneficial if the correlation between domestic equities and the international equities is lower.

The data in Exhibit 14 (p. 61) and the discussion in pp. 60-61 relate the diversification benefits between countries with differing correlations.

42. Correct answer: B

"Market Efficiency and Anomalies," Vijay Singal, CFA

2010 Modular Level I, Vol. 5, pp. 110-112,115-116
Study Session 13-55-c, d
Explain why an apparent anomaly may be justified and describe the common biases that distort testing for mispricings.
Explain why a mispricing may persist and why valid anomalies may not be profitable.
If investors do not change their behavior in light of new information, the resulting behavioral biases and their persistence would lead to the persistence of mispricing. For example, underreaction to earnings news can be explained by behavioral biases.

43. Correct answer: B
"Company Analysis and Stock Valuation," Frank K. Reilly, CFA, and Keith C. Brown, CFA
2010 Modular Level I, Vol. 5, pp. 176-178
Study Session 14-58-a
Differentiate between (1) a growth company and a growth stock, (2) a defensive company and a defensive stock, (3) a cyclical company and a cyclical stock, (4) a speculative company and a speculative stock, and (5) a value stock and a growth stock.
A cyclical stock will experience changes in its rates of return greater than changes in overall market rates of return; i.e., its returns are more volatile than the overall market.

44. Correct answer: C

Book value	=$50,000 + $300,000 - $125,000 = $375,000
Number of outstanding shares	=50,000-5,000 = 45,000
Book value per share	= $375,000 / 45,000 = $8.33
Price-to-book ratio	=$30 / 8.33 = 3.60

45. Correct answer: A
"Security Market Indexes," Frank K. Reilly, CFA, and Keith C. Brown, CFA
2010 Modular Level I, Vol. 5, pp. 46-50
Study Session 13-53-b
Compare and contrast major structural features of domestic and global stock indices, bond indices, and composite stock-bond indices.
An unweighted index is typically based on the arithmetic mean of percent changes in price or value for the stocks in the index.

46. Correct answer: A
"Option Markets and Contracts," Don M. Chance
2010 Modular Level I, Vol. 6, p. 118
Study Session 17-70-n
Indicate the directional effect of an interest rate change or volatility change on an option's price.
A is correct because volatility has an extremely strong effect on option prices. Higher volatility increases call and put option prices because it increases possible upside values (helps calls) and increases the downside values (helps puts) of the underlying.

47. Correct answer: B

Futures Markets and Contracts," Don M. Chance

2010 Modular Level I, Vol. 6, pp. 58-59

Study Session 17-69-c, d

Differentiate between margin in the securities markets and margin in the futures markets, and explain the role of initial margin, maintenance margin, variation margin, and settlement in futures trading.

Describe price limits and the process of marking to market and compute and interpret the margin balance, given the previous day's balance and the change in the futures price.

B is correct. The calculations are provided in the table below:

IM	$6	per contract				
MM	$3.6	per contract				
contracts	15					
position	short					
Day	Beginning balance	Funds deposited	Future price	Price change	Gain/loss	Ending balance
0	0	90	120			90
1	90	0	118	-2	30	120
2	120	0	117	-1	15	135
3	135	0	119	2	-30	105
4	105	0	123	4	-60	45
5	45	45	125	2	-30	60

On day 0, the trader must deposit an initial margin of $90 (= S6 x 15). Subsequent gains and losses are reflected in the ending balance for the day. The ending balance on day 4 is $45. This is below the maintenance margin of $54 (= S3.60 x 15). The trader must deposit $45 on day 5 to bring the balance up to $90. After reflecting a loss of $30, the ending balance on day 5 is $60.

48. Correct answer: C

"Forward Markets and Contracts," Don M. Chance

2010 Modular Level I, Vol. 6, pp. 41-42

Study Session 17-68-f

Describe the characteristics and calculate the gain/loss of forward rate agreements (FRAs).

C is correct because the party that is short the FRA will benefit from a rate decrease with payment based on the following calculation:

$$15,000,000 \left[\frac{(0.04 - 0.045)\left(\frac{90}{360}\right)}{1 + \left[0.04\left(\frac{90}{360}\right)\right]} \right] = -18,564.36$$

49. Correct answer: A

"Alternative Investments," Bruno Solnik and Dennis McLeavey

2010 Modular Level I, Vol. 6, pp. 224-225

Study Session 18-73-j

Explain the benefits and drawbacks to fund of funds investing.

A is correct because blending a high expected return hedge fund with many others for risk reduction purposes means that the overall FOF expected return will be lowered by this diversification.

50. Correct answer: B

"Alternative Investments," Bruno Solnik and Dennis McLeavey

2010 Modular Level I, Vol. 6, pp. 232-234

Study Session 18-73-n

Describe alternative valuation methods for closely held companies and distinguish among the bases for the discounts and premiums for these companies.

B is correct because to estimate a marketability discount for a closely held company, the analyst identifies a publicly traded comparable company with a liquid market. The comparable's market value of equity is the base to which the marketability discount is applied.

51. Correct answer: C

"Alternative Investments," Bruno Solnik and Dennis McLeavey

2010 Modular Level I, Vol. 6, pp. 228-230

Study Session 18-73-1

Discuss the performance of hedge funds, the biases present in hedge fund performance measurement, and explain the effect of survivorship bias on the reported return and risk measures for a hedge fund database.

C is correct because this is not a bias that is associated with distorting the performance of a hedge fund index. Tracking error is a risk more commonly associated with mutual funds and ETFs when their investments deviate significantly from those in the index it is benchmarked against. Hedge funds in fact pursue absolute returns and may deviate materially from

52.

Correct answer: C

"Risks Associated With Investing in Bonds," Frank J. Fabozzi, CFA

2010 Modular Level I, Vol. 5, pp. 275-276

Study Session 15-61-h

Explain the disadvantages of a callable or prepayable security to an investor.

C is correct because when interest rates decline, more borrowers will prepay at par, limiting the potential for a price increase.

53. Correct answer: C

"Risks Associated With Investing in Bonds," Frank J. Fabozzi, CFA

2010 Modular Level I, Vol. 5, pp. 277-281

Study Session 15-61-j

Describe the various forms of credit risk and describe the meaning and role of credit ratings.

C is correct because when the market is willing to pay less for investing in risky bonds, the yield on those bonds widens relative to default-free bonds. Thus the investor is concerned about credit spread risk.

54. Correct answer: C

"Risks Associated With Investing in Bonds," Frank J. Fabozzi, CFA

2010 Modular Level I, Vol. 5, pp. 281-283

Study Session 15-61-k

Explain liquidity risk and why it might be important to investors even if they expect to hold a security to the maturity date.

C is correct because a liquid market can generally be defined by "small bid-ask spreads which do not materially increase for large transactions." (Also smaller bid-ask spread indicates larger liquidity.)

55. Correct answer: B

"Overview of Bond Sectors and Instruments," Frank J. Fabozzi, CFA

2010 Modular Level I, Vol. 5, pp. 307-309

Study Session 15-61-b

Describe the types of securities issued by the U.S. Department of the Treasury (e.g., bills, notes, bonds, and inflation protection securities), and differentiate between on-the-run and off-the-run securities.

B is correct because the inflation-adjusted principal at second 6 months is: 100,000 x 1.02 x 1.015 = 103,530.

Coupon payment = 103,530 x 1.25% = 1,294.

56. Correct answer: B

"Overview of Bond Sectors and Instruments," Frank J. Fabozzi, CFA

2010 Modular Level I, Vol. 5, pp. 313-316

Study Session 15-61-e

Describe the types and characteristics of mortgage-backed securities and explain the cash flow, prepayments, and prepayment risk for each type.

B is correct according to the table below showing the remaining principal balance after 3 monthly payments.

Month	Beginning Balance	Mortgage Payment	Interest	Principal Repayment	Ending Balance
1	220,000.00	1,856.49	1,100.00	756.49	219,243.51
2	219,243.51	1,856.49	1,096.22	760.27	218,483.24
3	218,483.24	1,856.49	1,092.42	764.07	217,719.17

57. Correct answer: C

"Overview of Bond Sectors and Instruments," Frank J. Fabozzi, CFA

2010 Modular Level I, Vol. 5, pp. 318-320

Study Session 15-61-f

State the motivation for creating a collateralized mortgage obligation.

C is correct because the motivation for creating a CMO is to distribute prepayment risk among different classes of bonds.

58. Correct answer: A

"Investment Analysis and Portfolio Management, Eighth Edition," Frank Reilly and Keith C. Brown

2010 Modular Level I, Vol. 4, pp. 260-261

Study Session 12-50-g

Explain the concept of an optimal portfolio and show how each investor may have different optimal portfolio.

A is correct because a less risk-averse investor's highest utility, given the low slope of his utility curve, is likely to touch the efficient frontier at a point that would represent a portfolio with higher risk and more expected return.

59. Correct answer: B

Investment Analysis and Portfolio Management, Eighth Edition," Frank Reilly and Keith C. Brown

2010 Modular Level I, Vol. 4, pp. 277, 280

Study Session 12-50-d, e

Explain the capital asset pricing model, including the security market line (SML) and beta, and describe the effects of relaxing its underlying assumptions.

Calculate, using the SML, the expected return on a security and evaluate whether the security is overvalued, undervalued, or properly valued.

B is correct because

$$\beta_{JKU} = Cov_{JKU,M}/\sigma_M^2 = 0.0225/0.15^2 = 1.0$$

$$E(R_{JKU}) = RFR + \beta_{JKU} \times (R_M - RFR) = 0.05 + 1 \times (0.12 - 0.05) = 0.12$$

The required rate of return of JKU is 12% and the expected return of JKU is 15%; therefore, JKU is undervalued relative to the Security Market Line (SML). The risk-return relationship lies above the SML.

60. Correct answer: B

"Investment Analysis and Portfolio Management, Eighth Edition," Frank Reilly and Keith C. Brown

2010 Modular Level I, Vol. 4, pp. 218-228

Study Session 12-49-c, d

Describe the return objectives of capital preservation, capital appreciation, current income, and total return.

Describe the investment constraints of liquidity, time horizon, tax concerns, legal and regulatory factors, and unique needs and preferences.

B is correct because capital appreciation is an appropriate objective when investors want the portfolio to grow in real terms over time to meet some future need. Under this strategy, growth mainly occurs through capital gains. Generally, long-term investors seeking to build a retirement or college education fund may have this goal.