**June. 2013 CFA Level 1 Mock Examination**

**Morning Session Answers**

**Study Session 1 – Ethical and Professional Standards (1-18) Q=18**

1. Correct answer: B

"Guidance for Standards I–VII," CFA Institute  
2013 Modular Level I, Vol. 1, Reading 2, Standard I (B) Independence and Objectivity, Guidance  
Study Session 1-2-b  
Distinguish between conduct that conforms to the CFA Institute Code of Ethics and Standards of Professional Conduct and conduct that violates the Code and Standards.

B is correct. Quanta should refuse to promote the bonds, which he does not rate as a buy, because his opinion of the Veyron bonds must not be affected by internal pressure or compensation. If Quanta followed the request from his supervisor, he would be in violation of Standard I (B) Independence and Objectivity. Quanta must refuse to promote Veyron bonds until they are an attractive purchase based on fundamental analysis and market pricing

2. Correct answer: B

"Guidance for Standards I–VII," CFA Institute   
2013 Modular Level I, Vol. 1, Reading 2, Standard I (C) Misrepresentation, Guidance; Standard II (A) Material Nonpublic Information, Guidance; Standard III (E) Preservation of Confidentiality, Guidance   
Study Session 1-2-a  
Demonstrate and explain the application of the CFA Institute Code of Ethics and Standards of Professional Conduct to situations involving issues of professional integrity.

B is correct because Standard III (E) Preservation of Confidentiality has not been violated. The analyst has a personal relationship with the officer of the auto company, and he is not a current, former, or prospective client, so there is no obligation for the analyst to maintain client confidentiality. However, the analyst did violate Standard I (C) Misrepresentation when she represented another analyst's work as her own. In addition, the analyst violated Standard II (A) Material Nonpublic Information by including data in her research report on sales figures, which were material and nonpublic.

3. Correct answer: C

"Guidance for Standards I–VII," CFA Institute   
2013 Modular Level I, Vol. 1, Reading 2, Standard V (B) Communication with Clients and Prospective Clients, Guidance; Standard VI (A) Disclosure of Conflicts, Guidance   
Study Session 1-2-c  
Recommend practices and procedures designed to prevent violations of the CFA Institute Code of Ethics and Standards of Professional Conduct.

C is correct because Lagarde would be in violation of Standard V (B) Communication with Clients and Prospective Clients if he included the suspected loss details in his research report, because he has not separated fact from opinion. Lagarde suspects Chorale concealed losses in its leasing division but has not determined this as fact, despite declaring the losses as fact in his research report. In addition, Lagarde may also be in violation of Standard VI (A) Disclosure of Conflicts because he has not made full and fair disclosure of all matters that could reasonably be expected to impair his independence and objectivity or interfere with respective duties to clients. As a sell-side research analyst working for an investment bank, Lagarde faces potential cross-departmental conflicts in writing a research report about a company for whom the bank is currently the lead manager in an IPO, and Lagarde should disclose potential conflicts related to this situation.

4. Correct answer: B

"Guidance for Standards I–VII," CFA Institute   
2013 Modular Level I, Vol. 1, Reading 2, Standard II (A) Material Nonpublic Information, Guidance; Standard VI (B) Priority of Transactions, Guidance  
Study Session 1-2-a  
Demonstrate a thorough knowledge of the CFA Institute Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to situations involving issues of professional integrity.

B is correct. Coursing has not violated Standard V (A) Diligence and Reasonable Basis because she is not analyzing investments, making investment recommendations, or taking investment actions for clients. Coursing has violated Standard VI (B) Priority of Transactions because clients of the bank have not been given priority over investment transactions in which a member or candidate is the beneficial owner. In addition, Coursing violated Standard II (A) Material Nonpublic Information by trading on material nonpublic information. The *Investment Monthly* article written by PNW is considered nonpublic until the magazine is widely distributed, and publication of the magazine will materially impact the market price of stocks highlighted. Even though Coursing is not required by her bank to pre-clear her trades, she is restricted from trading by Standard II (A).

5. Correct answer: C

"Guidance for Standards I–VII," CFA Institute   
2013 Modular Level I, Vol. 1, Reading 2, Standard III (D) Performance Presentation, Guidance; Standard IV (A) Loyalty, Guidance; Standard IV (C) Responsibilities of Supervisors, Guidance   
Study Session 1-2-a  
Demonstrate a thorough knowledge of the CFA Institute Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to situations involving issues of professional integrity.

C is correct because Standard IV (C) Responsibilities of Supervisors has not been violated; Seneca is not responsible for the supervision of any employees when he makes sales demonstrations to clients because he prepared the material himself. Seneca violated Standard IV (A) Loyalty by misleading potential investors on the performance they might achieve with the index funds, thereby causing reputational risk to his employer. Seneca has also violated Standard III (D) Performance Presentation because the sales demonstrations he conducts do not provide a fair and accurate representation of performance that clients are likely to experience.

6. Correct answer: C

"Guidance for Standards I–VII," CFA Institute   
2013 Modular Level I, Vol. 1, Reading 2, Standard V (A) Diligence and Reasonable Basis, Guidance  
Study Session 1-2-b  
Distinguish between conduct that conforms to the CFA Institute Code of Ethics and Standards of Professional Conduct and conduct that violates the Code and Standards.

C is correct. Tacqueria is in violation of Standard V (A) Diligence and Reasonable Basis because he is required to undertake due diligence efforts on the third-party research provider on a regular basis to ensure that the quality of this research continues to meet his necessary standards.

7. Correct answer: C

"Guidance for Standards I–VII," CFA Institute   
2013 Modular Level I, Vol. 1, Reading 2, Standard V (B) Communication with Clients and Prospective Clients, Guidance  
Study Session 1-2-b  
Distinguish between conduct that conforms to the CFA Institute Code of Ethics and Standards of Professional Conduct and conduct that violates the Code and Standards.  
  
C is correct because if recommendations are contained in capsule form (such as a recommended stock list), members and candidates should notify clients that additional information and analysis are available from the producer of the report as required by Standard V (B) Communication with Clients and Prospective Clients. In this case, a clear statement on the website that more information is available upon request would be required.

8. Correct answer: A

"Guidance for Standards I–VII," CFA Institute   
2013 Modular Level I, Vol. 1, Reading 2, Standard VII (A) Conduct as Members and Candidates in the CFA Program, Guidance  
Study Session 1-2-b  
Distinguish between conduct that conforms to the CFA Institute Code of Ethics and Standards of Professional Conduct and conduct that violates the Code and Standards.  
  
A is correct because by completing a question on his examination after time was called, Chowdary violated Standard VII (A) Conduct as Members and Candidates in the CFA Program. By continuing to write, Chowdary took advantage of other candidates and his conduct compromised the validity of his exam performance.

9. Correct answer: C

"Guidance for Standards I–VII," CFA Institute   
2013 Modular Level I, Vol. 1, Reading 2, Standard VI (C) Referral Fees, Guidance  
Study Session 1-2-c  
Recommend practices and procedures designed to prevent violations of the CFA Institute Code of Ethics and Standards of Professional Conduct.  
  
C is correct because Arun has violated Standard VI (C) Referral Fees because he did not disclose the fee paid by Ramport to his employer. The disclosure should have occurred prior to the search being conducted, and at this point, the question of a potential lack of objectivity in the recommendations Arun is making remains, regardless of whether or not the payment is accepted.

10. Correct answer: A

"Guidance for Standards I–VII," CFA Institute

2013 Modular Level I, Vol. 1, Reading 2, Standard I (D) Misconduct, Guidance

Study Session 1-2-b

Distinguish between conduct that conforms to the CFA Institute Code of Ethics and Standards of Professional Conduct and conduct that violates the Code and Standards.

A is correct because Standard I (D) Misconduct states that members and candidates must not engage in any professional conduct involving dishonesty, fraud, or deceit or commit any act that reflects adversely on their professional reputation, integrity, or competence. By reporting only the gifts she received from clients and not the inexpensive gift from her CEO friend, she does not conform to her employer's gift policy of reporting all gifts. Her non-compliance with employer policies reflects adversely on her professional reputation and honesty.

11. Correct answer: B

"Guidance for Standards I–VII," CFA Institute

2013 Modular Level I, Vol. 1, Reading 2, Standard VII (B) Reference to CFA Institute, the CFA Designation, and the CFA Program, Guidance

Study Session 1-2-b

Distinguish between conduct that conforms to the CFA Institute Code of Ethics and Standards of Professional Conduct and conduct that violates the Code and Standards.

B is correct because Standard VII (B) Reference to CFA Institute, the CFA Designation, and the CFA Program forbids candidates to imply they have a partial designation or cite an expected completion date of any level of the CFA Program. Final award of the charter is subject to meeting the CFA Program requirements and approval by the CFA Institute Board of Governors. Garcia should state that he "passed Level III CFA exam" or "passed all three levels of the CFA exams." Stating that he "passed the CFA course" could be taken to mean he obtained his charter, which is incorrect.

12. Correct answer: C

"Guidance for Standards I–VII," CFA Institute

2013 Modular Level I, Vol. 1, Reading 2, Standard I (C) Misrepresentation; Standard IV (A) Loyalty

Study Session 1-2-b

Distinguish between conduct that conforms to the CFA Institute Code of Ethics and Standards of Professional Conduct and conduct that violates the Code and Standards.

C is correct because both Lopez and Sanchez upheld the requirements of Standard I (C) Misrepresentation regarding work completed for an employer. Sanchez has the right to continue using the software primarily developed by Lopez because OneWorld Analytics, not the employee, owns the software. Lopez does not leave with the model he developed while employed by OneWorld Analytics, and therefore, he is not in violation of the Standards. Once Lopez leaves OneWorld, he develops a separate model based on a model he developed prior to joining OneWorld Analytics. The simplified model remains the intellectual property of Lopez. The duplication of features is allowable under Standard IV (A) in that Lopez's expertise gained at his former employer is not considered to be confidential or privileged. Therefore, both Lopez and Sanchez upheld the Standards.

13. Correct answer: A

"Guidance for Standards I–VII," CFA Institute

2013 Modular Level I, Vol. 1, Reading 2, Standard I (D) Misconduct; Standard II (A) Material Nonpublic Information; Standard II (B) Market Manipulation

Study Session 1-2-a

Demonstrate and explain the application of the CFA Institute Code of Ethics and Standards of Professional Conduct to situations involving issues of professional integrity.

A is correct because Rodrigo has likely violated Standard I (D) Misconduct by behaving in an unprofessional manner that reflects adversely on his professional integrity by reporting Torres to the regulator when there is no apparent evidence Torres is using material nonpublic information. Torres is a well-respected analyst known for his in-depth, thorough analysis using a mosaic process. It appears Rodrigo reported Torres only to harm his reputation in order to recapture the market share he has lost over the last two years.

14. Correct answer: C

"Guidance for Standards I–VII," CFA Institute

2013 Modular Level I, Vol. 1, Reading 2, Standard III (A) Loyalty, Prudence, and Care; Standard VI (C) Referrals Fees

Study Session 1-2-a

Demonstrate and explain the application of the CFA Institute Code of Ethics and Standards of Professional Conduct to situations involving issues of professional integrity.

C is correct because Smirnov violated Standard V (A) Diligence and Reasonable Basis because she recommended an external adviser without first understanding the adviser's compliance and internal control procedures. She was correct in seeking to understand the proposed fund manager's code of ethics, quality of performance returns, and ability to adhere to its stated investment strategy, but in order to complete her work, she also needed to perform due diligence regarding the firm's compliance and internal control procedures.

15. Correct answer: B

"Guidance for Standards I–VII," CFA Institute

2013 Modular Level I, Vol. 1, Reading 2, Standard III (A) Loyalty, Prudence, and Care

Study Session 1-2-b

Demonstrate and explain the application of the CFA Institute Code of Ethics and Standards of Professional Conduct to situations involving issues of professional integrity.

B is correct because Standard III (A) Loyalty, Prudence, and Care states: it is a member's or candidate's duty to vote proxies on behalf of clients in an informed and responsible manner. However, if a cost-benefit analysis shows voting all proxies may not benefit the client, voting all proxies may not be necessary. The member or candidate is responsible for informing all clients if this is the policy of the fund manager. The member or candidate must takes steps to disclose this proxy voting policy to clients. Voting the Barnikoff proxy does not appear to offer a benefit because the issue is not of a critical nature, while voting the proxy for Matric involves a material issue and is a benefit that should be voted on.

16. Correct answer: C

"Guidance for Standards I–VII," CFA Institute

2013 Modular Level I, Vol. 1, Reading 2, Standard II (A) Material Nonpublic Information

Study Session 1-2-c

Recommend practices and procedures designed to prevent violations of the CFA Institute Code of Ethics and Standards of Professional Conduct.

C is correct because according to Standard II (A) Material Nonpublic Information, if Merchant stopped market making—a form of proprietary trading—due to being in possession of material nonpublic information, it could tip off investors that Vital is likely to be making a major announcement in the near future. This would be counterproductive to the goals of maintaining the confidentiality of information and providing market liquidity. The Standard recommends market makers remain passive when in possession of material nonpublic information.

17. Correct answer: C

"Guidance for Standards I–VII," CFA Institute

2013 Modular Level I, Vol. 1, Reading 2, Standard V (C) Record Retention

Study Session 1-2-b

Distinguish between conduct that conforms to the CFA Institute Code of Ethics and Standards of Professional Conduct and conduct that violates the Code and Standards.

C is correct because even though Pavlov had his former employer's permission to take his performance record and supporting research reports with him, he does not have the underlying performance data to support those historical return calculations and is, therefore, most likely in violation of Standard V (C) Record Retention.

18. Correct answer: A

"Guidance for Standards I–VII," CFA Institute

2013 Modular Level I, Vol. 1, Reading 2, Standard VI (A) Disclosure of Conflicts, Guidance; Standard VI (B) Priority of Transactions

Study Session 1-2-c

Recommend practices and procedures designed to prevent violations of the CFA Institute Code of Ethics and Standards of Professional Conduct.

A is correct because the group subsidizing staff loans for the purchase of shares is not a conflict of interest for clients because it is a funding mechanism and does not interfere with objectivity when rendering investment advice or taking investment action. However, share purchases by staff would still require disclosure and reporting requirements as per Standard VI (A) Disclosure of Conflicts and Standard VI (B) Priority of Transactions, respectively.

Study Session 2, 3 – Quantitative Methods (19-32) Q=14

19. Correct answer: C

"Common Probability Distributions," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA  
2013 Modular Level I, Vol. 1, Reading 9, Section 4   
Study Session 3-9-q  
Explain Monte Carlo simulation, and describe its major applications and limitations.  
  
C is correct. Monte Carlo simulation provides a distribution of possible solutions to complex functions. The central tendency and the variance of the distribution of solutions give important clues to decision-makers regarding expected results and risk

20. Correct answer: A

"Hypothesis Testing," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA  
2013 Modular Level I, Vol. 1, Reading 11, Section 5  
Study Session 3-11-j  
Distinguish between parametric and nonparametric tests and describe the situations in which the use of nonparametric tests may be appropriate.   
  
A is correct. Nonparametric procedures are primarily used in three situations: when the data do not meet distributional assumptions, when the data are given in ranks, or when the hypothesis being addressed does not concern a parameter.

21. Correct answer: A

"Probability Concepts," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA  
2013 Modular Level I, Vol. 1, Reading 8, Section 2, Example 5   
"Financial Statement Analysis: Applications," Thomas R. Robinson, CFA, Jan Hendrik van Greuning, CFA, Elaine Henry, CFA, and Michael A. Broihahn, CFA  
2013 Modular Level I, Vol. 3, Reading 35, Section 5  
Study Sessions 2-8-f, 10-35-d  
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.  
Describe the use of financial statement analysis in screening for potential equity investments.  
  
A is correct. Because the screens are independent, the probability of passing all four simultaneously is the product of their respective probabilities: 0.65 × 0.45 × 0.40 × 0.30 = 0.0351.   
Given 1,200 potential investments, approximately 1,200 × 0.0351 = 42.12 will pass the screens.

22. Correct answer: A

"Sampling and Estimation," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA  
2013 Modular Level I, Vol. 1, Reading 10, Section 4.2, Equation 6   
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.   
  
A is correct. The confidence interval is calculated as https://media2.testrac.com/cfa/content/graphics/QUL1201307-a.gifwhere https://media2.testrac.com/cfa/content/graphics/QUL1201307-b.gifis the mean of the sample, *ta*/2 is the appropriate *t*-statistic, *s* is the sample standard deviation, and *n* is the sample size.  
  
In this problem, the confidence interval is 12.5 ± [1.67 × 5 / 8] = 12.5 ± 1.04 = 11.46 to 13.54.

23. Correct answer: B

"Common Probability Distributions," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA  
2013 Modular Level I, Vol. 1, Reading 9, Section 3.2, Equation 4   
Study Session 3-9-c, l  
Interpret a cumulative distribution function.   
Determine the probability that a normally distributed random variable lies inside a given interval.  
  
B is correct. First, standardize the value of interest, 7.40, for the given normal distribution:  
Z = (X – μ) / σ = (7.40 – 2.00) / 4 = 1.35.  
Then, use the given table of values to find the probability of a Z value being less than or equal to 1.35 standard deviations above the mean. The value is P(Z ≤ 1.35) = 0.9115.

24. Correct answer: B

"Technical Analysis," Barry M. Sine, CFA, and Robert A. Strong, CFA  
2013 Modular Level I, Vol. 1, Reading 12, Section 3.1.3, Exhibit 5   
Study Session 3-12-b, d  
Describe the construction of and interpret different types of "Technical Analysis charts.  
Identify and interpret common chart patterns.

B is correct. The chart is an example of a candlestick chart.

25. Correct answer: B

"Statistical Concepts and Market Returns," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA  
2013 Modular Level I, Vol. 1, Reading 7, Section 5.4.2, 10, Equation 6, Example 7   
Study Session 2-7-e, m  
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.  
Explain the use of arithmetic and geometric means when analyzing investment returns.  
  
B is correct. The geometric mean return is the correct approach in calculating portfolio average returns across a period of time. In this problem, the geometric mean return is  
  
(1.10 x 0.75 x 1.08 x 1.05 x 1.07)1/5 –1 = 0.02%.

26. Correct answer: C

"Probability Concepts," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA

2013 Modular Level I, Vol. 1, Reading 8, Section 2, p. 434

Study Session 2-8-c

State the probability of an event in terms of odds for and against the event.

C is correct. Odds for Z are calculated as P(Z) / (1 – P(Z)). In this problem, 0.14 / 0.86 = 0.16279 = 16.3%.

27. Correct answer: A 28. Correct answer: C

"Statistical Concepts and Market Returns," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA

2013 Modular Level I, Vol. 1, Reading 7, Section 7.4.2, Example 12

Study Session 2-7-g

Calculate and interpret: (1) a range and a mean absolute deviation and (2) the variance and standard deviation of a population and of a sample.

C is correct. The sample mean is



29. Correct answer: C

"The Time Value of Money," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA

2013 Modular Level I, Vol. 1, Reading 5, Section 2

Study Session 2-5-a

Interpret interest rates as required rates of return, discount rates, or opportunity costs.

C is correct. An opportunity cost is the value that investors forgo by choosing a particular course of action.

30. Correct answer: C

Common Probability Distributions," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA

2013 Modular Level I, Vol. 1, Reading 9, Section 2.2

Study Session 3-9-f, g

Calculate and interpret probabilities given the discrete uniform and the binomial distribution functions.

Construct a binomial tree to describe stock price movement.

C is correct. Across two periods, there are four possibilities:

1. an up move followed by an up move ($48.40 end value),

2. an up move followed by a down move ($39.60 end value),

3. a down move followed by an up move ($39.60 end value), and

4. a down move followed by a down move ($32.40 end value).

The probability of an up move followed by a down move is 0.65 × 0.35, which equals 0.2275.

The probability of a down move followed by an up move is 0.35 × 0.65, which also equals 0.2275. Both of these sequences result in an end value of $39.60.

Therefore, the probability of an end value of $39.60 is 45.50%.

31. Correct answer: C

"Discounted Cash Flow Applications," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA

2013 Modular Level I, Vol. 1, Reading 6, Section 2.1, Equation 1

"Capital Budgeting," John D. Stowe, CFA, and Jacques R. Gagne, CFA

2013 Modular Level I, Vol. 4, Reading 36, Section 4.1, Equation 1

Study Sessions 2-6-a, 11-36-d

Calculate and interpret the net present value (NPV) and the internal rate of return (IRR) of an investment.

Calculate and interpret the results using each of the following methods to evaluate a single capital project: net present value (NPV), internal rate of return (IRR), payback period, discounted payback period, and profitability index (PI).

C is correct. Enter the given cash flows into a financial calculator along with the 10% discount rate, and compute NPV. Alternatively, separately find the present values of the given cash flows using 10% and sum the discounted cash flows.

32. Correct answer: B

"Statistical Concepts and Market Returns," Richard A. DeFusco, CFA, Dennis W. McLeavey, CFA, Jerald E. Pinto, CFA, and David E. Runkle, CFA

2013 Modular Level I, Vol. 1, Reading 7, Section 8

Study Session 2-7-j

Explain skewness and the meaning of a positively or negatively skewed return distribution.

B is correct. Investors should be attracted by a positive skew because the mean return falls above the median.

Study Session 4, 5, 6 – Economics (33-44) Q=12

33. Correct answer: B

"Demand and Supply Analysis: Introduction," Richard V. Eastin and Gary L. Arbogast, CFA   
2013 Modular Level I, Vol. 2, Reading 13, Section 3.13   
Study Session 4-13- j  
Analyze the effects of government regulation and intervention on demand and supply.  
  
B is correct. Prior to the price ceiling, the total surplus was d + e + f + g + h, consisting of consumer surplus of f + e and producer surplus of d + g + h. The price ceiling causes the quantity supplied to decrease to QC and for those consumers who can find supply to gain consumer surplus of g at the expense of producers. With the decline in supply, consumers lose consumer surplus e and producers lose producer surplus d for a combined deadweight loss of d + e.

34. Correct answer: B

"The Firm and Market Structures," Richard G. Fritz and Michele Gambera, CFA  
2013 Modular Level I, Vol. 2, Reading 16, Section 5.1, Exhibit 15   
Study Session 4-16-a, d, e  
Describe the characteristics of perfect competition, monopolistic competition, oligopoly, and pure monopoly.  
Describe and determine the optimal price and output for firms under each market structure.  
Explain factors affecting long-run equilibrium under each market structure.  
  
B is correct. Each company will consider the other's reaction in selecting its strategy. Based on the following summary, it is best for both chains to provide 24-hour service.

|  |  |  |  |
| --- | --- | --- | --- |
| **Chain** | **Consideration** | | **Best Decision** |
| 1 | **If it opens for 24 hours**, it will see a higher payoff regardless of what Chain 2 does. | | Open for 24 hours |
| **Chain 2 Closes at 9 p.m.** | **Chain 2 Open for 24 hours** |
| Chain 1 earns 540 instead of 180. | Chain 1 earns 108 instead of 55. |
| 2 | **If it opens for 24 hours**, it will see a higher payoff regardless of what Chain 1 does. | | Open for 24 hours |
| **Chain 1 Closes at 9 p.m.** | **Chain 1 Open for 24 hours** |
| Chain 2 earns 290 instead of 75. | Chain 2 earns 592 instead of 140. |

35. Correct answer: C

"Aggregate Output, Prices, and Economic Growth," Paul R. Kutasovic CFA, and Richard G. Fritz   
2013 Modular Level I, Vol. 2, Reading 17, Sections 3.3.2; 3.3.3, Exhibit 20   
Study Session 5-17-g, h  
Explain the aggregate supply curve in the short run and long run.  
Explain the causes of movements along and shifts in aggregate demand and supply curves.  
  
C is correct. An increase in the supply of human capital will increase the resource base and cause a shift of the SRAS to the right.

36. Correct answer: A

"Understanding Business Cycles," Michele Gambera, CFA, Milton Ezrati, and Bolong Cao, CFA   
2013 Modular Level I, Vol. 2, Reading 18, Section 2.1, Exhibit 1, Panel B   
Study Session 5-18-a  
Describe the business cycle and its phases.  
  
A is correct. During the peak phase of the business cycle, capital spending expands rapidly but the rate of growth of consumer and business spending slows down; in addition, during the peak, businesses slow their rate of hiring, but the unemployment rate continues to fall.

37. Correct answer: C

"International Trade and Capital Flows," Usha Nair-Reichert and Daniel Robert Witschi, CFA  
2013 Modular Level I, Vol. 2, Reading 20, Sections 4.1; 4.2, Example 10, Exhibit 15   
Study Session 5-20-g  
Describe the balance of payments accounts, including their components.  
  
C is correct.

|  |  |  |
| --- | --- | --- |
| **Current account amounts with signs and grouped appropriately:** | | |
| **Transaction** | **Amount** | **Totals** |
| ***Exports of goods and services in income receipts*** |  | 13,409 |
| Exports of goods and services | 10,000 |  |
| Investment income received from foreigners | 3,409 |  |
|  |  |  |
| ***Imports of goods and services and income payments*** |  | –16,735 |
| Imports of goods and services | –14,216 |  |
| Investment income payments made to foreigners | –2,519 |  |
|  |  |  |
| ***Net unilateral current transfers*** |  | –761 |
| Unilateral current transfers received | 346 |  |
| Unilateral current transfers paid | –1,107 |  |
|  |  |  |
| **Current account balance** |  | **–4,087** |

38. Correct answer: A

"Understanding Business Cycles," Michele Gambera, CFA, Milton Ezrati, and Bolong Cao, CFA   
2013 Modular Level I, Vol. 2, Reading 18, Sections 4.2.2, 4.2.3   
"Currency Exchange Rates," William A. Barker, CFA, Paul D. McNelis, and Jerry Nickelsburg  
2013 Modular Level I, Vol. 2, Reading 21, Section 2   
Study Sessions 5-18-g, 5-21-a, c  
Compare inflation measures, including their uses and limitations.  
Define an exchange rate, and distinguish between nominal and real exchange rates and spot and forward exchange rates.  
Calculate and interpret the percentage change in a currency relative to another currency.  
  
A is correct.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Formula** | **New Zealand** | | | **Canada** |
| **Inflation Rate** |  |  | | |  |
| **Nominal Exchange Rate Change** |  | **https://media2.testrac.com/cfa/content/graphics/ECLI201317_a.gif** | | | |
|  |  | | | | |
| **Real Exchange Rate Change** | **https://media2.testrac.com/cfa/content/graphics/ECLI201317_b.gif** | | **https://media2.testrac.com/cfa/content/graphics/ECLI201317_c.gif** | | |
|  | ***Approximation:*** | | | –1.99% + 1.78% – 1.85% = –2.06%. | |

39. Correct answer: C

"Demand and Supply Analysis: Consumer Demand," Richard V. Eastin and Gary L. Arbogast, CFA

2013 Modular Level I, Vol. 2, Reading 14, Sections 6.3, 6.4

Study Session 4-14-e, f

Compare substitution and income effects.

Distinguish between normal goods and inferior goods, and explain Giffen goods and Veblen goods in this context.

C is correct. A Giffen good is an inferior good. All inferior goods have a negative income effect (less is purchased as income rises). While the substitution effect is always positive for all goods, for a Giffen good the income effect is so strong and so negative that it overpowers the substitution effect. The result is that as its price declines, less of it is purchased: This results in a positively sloped individual demand curve. Therefore, it is least likely that the substitution effect is negative.

40. Correct answer: C

"Demand and Supply Analysis: The Firm," Gary L. Arbogast, CFA, and Richard V. Eastin

2013 Modular Level I, Vol. 2, Reading 15, Section 3.2.2

Study Session 4-15- k, l

Describe the phenomenon of diminishing marginal returns, and calculate and interpret the profit-maximizing utilization level of an input.

Describe the optimal combination of resources that minimizes cost.

C is correct. The firm should initially utilize that resource that maximizes output per monetary unit of input cost (i.e., use the resource with the highest MP/input cost). In this case, it is labor at 120 units/$4 or 30 units/$ while for capital, it is 120 units/$12 or 10 units/$, indicating that a dollar spent on labor is more effective in raising output than a dollar spent on capital. However, as more labor is used, its marginal product will fall and that of capital will rise. Therefore, the optimal output level will be attained when the MP/input cost ratio for both factors are equal.

41. Correct answer: A 42. Correct answer: A

"Understanding Business Cycles," Michele Gambera, CFA, Milton Ezrati, and Bolong Cao, CFA

2013 Modular Level I, Vol. 2, Reading 18, Section 4.2.2

Study Session 5-18-f, g

Explain the construction of indices used to measure inflation.

Compare inflation measures, including their uses and limitations.

A is correct. Both the Laspeyres index and the Paasche index ignore the substitution effect whereby people may substitute higher-priced goods or services with cheaper ones. This situation causes the Laspeyres index (which uses the historical composition of a basket of goods) to be upward biased relative to the true inflation rate, while the Paasche index (which uses the current composition of the basket with cheaper options replacing more expensive ones) is downward biased relative to the true inflation rate. The Fisher index is a geometric mean of the Laspeyres and Paasche indices, and it will, therefore, display less of a substitution bias than the other two.

43. Correct answer: B

"Monetary and Fiscal Policy," Andrew Clare and Stephen Thomas

2013 Modular Level I, Vol. 2, Reading 19, Section 2.3.5

Study Session 5-19-j

Explain the relationships between monetary policy and economic growth, inflation, interest, and exchange rates.

B is correct. With a decline in economic activity and domestic inflation, the currency of the developing country would start to rise against the dollar. To protect the exchange rate target, the developing country's monetary authority will purchase foreign exchange reserves and sell its own currency. This action will increase the domestic money supply and decrease short-term interest rates.

44. Correct answer: B

"Demand and Supply Analysis: Introduction," Richard V. Eastin and Gary L. Arbogast, CFA

2013 Modular Level I, Vol. 2, Reading 13, Sections 3.7, 3.9

"International Trade and Capital Flows," Usha Nair-Reichert and Daniel Robert Witschi, CFA

2013 Modular Level I, Vol. 2, Reading 20, Section 3.1, Exhibit 12

Study Sessions 4-13-i, j, 5-20-e

Calculate and interpret consumer surplus, producer surplus, and total surplus.

Analyze the effects of government regulation and intervention on demand and supply.

Compare types of trade and capital restrictions and their economic implications.

B is correct. With the imposition of the tariff, domestic supply will increase from Q1 to Q2 but domestic demand will fall from Q4 to Q3. The net amount imported will be Q3 – Q2. The change in government revenues is area L, which is the rectangle (Q3 – Q2) × (PT – PW).

Study Session 7, 8, 9, 10 – Financial Reporting and Analysis (45-68) Q=24

45. Correct answer: C

"Understanding Income Statements," Elaine Henry, CFA, and Thomas R. Robinson, CFA   
2013 Modular Level I, Vol. 3, Reading 25, Section 8   
"Financial Analysis Techniques," Elaine Henry, CFA, Thomas R. Robinson, CFA, and Jan Hendrik van Greuning, CFA   
2013 Modular Level I, Vol. 3, Reading 28, Section 5.1   
Study Sessions 8-25-l, 8-28-b  
Describe other comprehensive income, and identify the major types of items included in it.  
Classify, calculate, and interpret activity, liquidity, solvency, profitability, and valuation ratios.  
  
C is correct.

|  |  |  |
| --- | --- | --- |
| Comprehensive earnings = Comprehensive income per share × Common shares outstanding. | $4.15 × 46.506 | $193 |
| Net income = Comprehensive earnings – Other comprehensive income (OCI). | $193 – $87.60 | $105.40 |
| Net income per share (EPS) = Net income / Common shares outstanding. | $105.40 / 46.506 | $2.27 |
| P/E = Stock Price / EPS. | $60.75 / $2.27 | 26.76 |

46. Correct answer: B

"Financial Analysis Techniques," Elaine Henry, CFA, Thomas R. Robinson, CFA, and Jan Hendrik van Greuning, CFA   
2013 Modular Level I, Vol. 3, Reading 28, Section 4.4   
"Non-Current (Long-Term) Liabilities," Elizabeth A. Gordon and Elaine Henry, CFA  
2013 Modular Level I, Vol. 3, Reading 32, Section 5  
Study Sessions 8-28-b, 9-32-l   
Classify, calculate, and interpret activity, liquidity, solvency, profitability, and valuation ratios.  
Calculate and interpret leverage and coverage ratios.  
  
B is correct.  
First, EBIT must be calculated, then the fixed charge coverage ratio.

|  |  |  |
| --- | --- | --- |
|  | | **Company** |
| EBIT = Net income + Interest expense + Income tax expense. | | 3,400 + 1,000 + 1,100 = 5,500. |
| Fixed charge coverage ratio = | EBIT + Lease payments  Interest payments + Lease payments | 5,500 + 500 = 6,000 1,000 + 500 = 1,500 |
| Fixed charge coverage ratio | | 4.00 |

47. Correct answer: B

"Financial Reporting Standards," Elaine Henry, CFA, Jan Hendrik van Greuning, CFA, and Thomas R. Robinson, CFA   
2013 Modular Level I, Vol. 3, Reading 24, Section 5.2   
Study Session 7-24-d  
Describe the International Accounting Standards Board's Conceptual Framework, including the objective and qualitative characteristics of financial statements, required reporting elements, and constraints and assumptions in preparing financial statements.  
  
B is correct. Comparability is not a fundamental qualitative characteristic but rather one of the four characteristics that enhance the usefulness of relevant and faithfully represented financial information.

48. Correct answer: C

"Understanding Balance Sheets," Elaine Henry, CFA, and Thomas R. Robinson, CFA   
2013 Modular Level I, Vol. 3, Reading 26, Sections 2.2, 5.2   
"Income Taxes," Elbie Antonites, CFA, and Michael A. Broihahn, CFA  
2013 Modular Level I, Vol. 3, Reading 31, Section 8  
Study Sessions 8-26-d, 9-31-i, j  
Distinguish between current and noncurrent assets and current and noncurrent liabilities.  
Analyze disclosures relating to deferred tax items and the effective tax rate reconciliation, and explain how information included in these disclosures affects a company's financial statements and financial ratios.  
Identify the key provisions of and differences between income tax and accounting under IFRS and U.S. GAAP.  
  
C is correct. A deferred tax liability is a noncurrent liability that results from temporary differences between a company's income as reported for tax purposes and income as reported for financial statement purposes. Though temporary, deferred tax liabilities are defined as the amounts of income taxes payable in future periods with respect to taxable temporary differences; under IFRS, they are always classified as noncurrent.

49. Correct answer: B

"Understanding Cash Flow Statements," Elaine Henry, CFA, Thomas R. Robinson, CFA, Jan Hendrik van Greuning, CFA, and Michael A. Broihahn, CFA  
2013 Modular Level I, Vol. 3, Reading 27, Section 3.2.1.2, Example 4  
Study Session 8-27-f  
Describe 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.  
  
B is correct. The calculation is as follows:

|  |  |
| --- | --- |
|  | **(€ thousands)** |
| COGS | 600 |
| Less decrease in inventory (500 – 600) | –100 |
| Purchases from suppliers | 500 |
| Plus decrease in A/P (200 – 400) | 200 |
| **Cash paid to suppliers** | 700 |

50. Correct answer: B

"Understanding Cash Flow Statements," Elaine Henry, CFA, Thomas R. Robinson, CFA, Jan Hendrik van Greuning, CFA, and Michael A. Broihahn, CFA   
2013 Modular Level I, Vol. 3, Reading 27, Section 4.4   
Study Session 8-27-i   
Calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios.  
B is correct.

|  |  |
| --- | --- |
| Cash return on assets = CFO / Average total assets. | |
| 600  ½ x (6,000 + 4,000) | **= 12.0%.** |

51. Correct answer: B

"Inventories," Michael A. Broihahn, CFA  
2013 Modular Level I, Vol. 3, Reading 29, Section 3.6   
Study Session 9-29-d, e  
Calculate and compare cost of sales, gross profit, and ending inventory using perpetual and periodic inventory systems.  
Compare and contrast cost of sales, ending inventory, and gross profit using different inventory valuation methods.  
  
B is correct. The periodic and perpetual systems result in the same inventory and cost-of-goods-sold values (and hence, gross profit margin) using both FIFO and specific identification valuation methods but not necessarily using LIFO.

52. Correct answer: C

"Inventories," Michael A. Broihahn, CFA  
2013 Modular Level I, Vol. 3, Reading 29, Section 5   
Study Session 9-29-g  
Describe the financial statement presentation of and disclosures relating to inventories.   
  
C is correct. U.S. GAAP does not permit the reversal of prior-year write-downs; therefore, there are no disclosures related to reversals.

53. Correct answer: A

"Long-Lived Assets," Elaine Henry, CFA, and Elizabeth A. Gordon  
2013 Modular Level I, Vol. 3, Reading 30, Sections 5.1, 5.2   
Study Session 9-30-h  
Explain the impairment of property, plant, and equipment and intangible assets.

A is correct. Under IFRS, first you must determine the recoverable amount that is the higher of:

* Value in use, which is the present value of the future cash flows: $32,000.
* Fair value less costs to sell: $34,000 – 4,000 = $30,000.

The recoverable amount ($32,000) is lower than the carrying value ($36,000).   
Therefore, the asset is impaired and should be written down to that amount.  
  
Under U.S. GAAP, to assess impairment the carrying value ($36,000) is compared with the undiscounted expected future cash flows ($38,000).   
In this case, the carrying value is lower, so the patent is not impaired.

54. Correct answer: B

"Income Taxes," Elbie Antonites, CFA, and Michael A. Broihahn, CFA  
2013 Modular Level I, Vol. 3, Reading 31, Section 2, Example 1   
Study Session 9-31-a, d  
Describe the differences between accounting profit and taxable income, and define key terms, including deferred tax assets, deferred tax liabilities, valuation allowance, taxes payable, and income tax expense.  
Calculate income tax expense, income taxes payable, deferred tax assets, and deferred tax liabilities, and calculate and interpret the adjustment to the financial statements related to a change in the income tax rate.   
  
B is correct. Income tax expense equals income tax payable (the tax rate times the taxable income) plus the increase in the deferred tax liabilities.  
(0.30 × 215,000) + (90,650 – 82,400) = 64,500 + 8,250 = 72,750.

55. Correct answer: B

"Non-Current (Long-Term) Liabilities," Elizabeth A. Gordon and Elaine Henry, CFA  
2013 Modular Level I, Vol. 3, Reading 32, Section 2.5   
Study Session 9-32-d  
Describe the role of debt covenants in protecting creditors.  
  
B is correct. Negative covenants require that a borrower not take certain actions. The requirement to seek the lender's approval before paying dividends is an example of a negative covenant. The other two are affirmative covenants.

56. Correct answer: A

"Financial Reporting Quality: Red Flags and Accounting Warning Signs," Thomas R. Robinson, CFA, and Paul Munter  
2013 Modular Level I, Vol. 3, Reading 33, Section 2   
Study Session 10-33-b, d  
Describe activities that will result in a low quality of earnings.  
Describe common accounting warning signs and methods for detecting each.  
  
A is correct. Activities or actions that inflate sales and understate expenses generally lead to a buildup in assets, such as receivables and inventory, on the balance sheet. Early revenue recognition and delayed expense recognition would decrease cash from operations, not increase it.

57. Correct answer: B

"Financial Analysis Techniques," Elaine Henry, CFA, Thomas R. Robinson, CFA, and Jan Hendrik van Greuning, CFA

2013 Modular Level I, Vol. 3, Reading 28, Section 4.2

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

2013 Modular Level I, Vol. 4, Reading 40, Section 2.2

Study Sessions 8-28-b, 11-40-c

Classify, calculate, and interpret activity, liquidity, solvency, profitability, and valuation ratios.

Evaluate working capital effectiveness of a company based on its operating and cash conversion cycles, and compare the company's effectiveness with that of peer companies.

B is correct. Inventory turnover and days of inventory on hand (DOH) are calculated as follows:



The cash conversion cycle, or net operating cycle, is calculated as follows



The company's cash conversion cycle improved. The reduction in days of sales outstanding indicates the company improved its collections from customers and shortened the cash conversion cycle. The increase in days payable indicates that the company took longer to pay suppliers, which also shortened the cash conversion cycle and indicates greater liquidity. The only metric that deteriorated is days of inventory on hand, which indicates that the company tied up more capital in inventory. Therefore, it did not benefit the cash conversion cycle.

58. Correct answer: A

"Understanding Income Statements," Elaine Henry, CFA, and Thomas R. Robinson, CFA

2013 Modular Level I, Vol. 3, Reading 25, Section 3.2.4, Example 5

Study Session 8-25-b

Describe the general principles of revenue recognition and accrual accounting, specific revenue recognition applications (including accounting for long-term contracts, installment sales, barter transactions, and gross and net reporting of revenue), and the implications of revenue recognition principles for financial analysts.

A is correct. To report cost of sales under gross reporting (and include the cost of rooms), the company must meet four criteria:

 The first criterion is not met. The major hotel chains have the obligation of fulfilling the room contract once it is entered into. Because not all of these conditions are met, the company must use net reporting, where revenue is $500,000 and cost of sales is $250,000.

59. Correct answer: A

"Understanding Income Statements," Elaine Henry, CFA, and Thomas R. Robinson, CFA

2013 Modular Level I, Vol. 3, Reading 25, Section 6.3

Study Session 8-25-g, h

Describe how earnings per share is calculated, and calculate and interpret a company's earnings per share (both basic and diluted earnings per share) for both simple and complex capital structures.

Distinguish between dilutive and antidilutive securities, and describe the implications of each for the earnings per share calculation.

A is correct. EPS = (Net income – Preferred dividends) / Weighted average number of shares outstanding.

Diluted EPS must be less than basic EPS



Therefore, the diluted EPS of $6.99 should be used.

60. Correct answer: C

"Understanding Cash Flow Statements," Elaine Henry, CFA, Thomas R. Robinson, CFA, Jan Hendrik van Greuning, CFA, and Michael A. Broihahn, CFA

2013 Modular Level I, Vol. 3, Reading 27, Section 2.3

Study Session 8-27-d

Distinguish between the direct and indirect methods of presenting cash from operating activities, and describe the arguments in favor of each method.

C is correct. The direct method provides information on the specific sources of operating cash receipts and payments. This method is in contrast to the indirect method, which reconciles net income to cash flow and shows only the net result of these receipts and payments.

61. Correct answer: A

"Understanding Cash Flow Statements," Elaine Henry, CFA, Thomas R. Robinson, CFA, Jan Hendrik van Greuning, CFA, and Michael A. Broihahn, CFA

2013 Modular Level I, Vol. 3, Reading 27, Section 3.2.1.5

Study Session 8-27-f

Describe 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.

A is correct. If the interest payable decreases during the year, then the interest expense on an accrual basis will be lower than the amount of cash interest payments. The cash paid would be the full amount of the expense plus the amounts paid to reduce the interest payable. For example:



62. Correct answer: A

"Understanding Balance Sheets," Elaine Henry, CFA, and Thomas R. Robinson, CFA

2013 Modular Level I, Vol. 3, Reading 26, Section 3.1.5

"Income Taxes," Elbie Antonites, CFA, and Michael A. Broihahn, CFA

2013 Modular Level I, Vol. 3, Reading 31, Section 2

Study Sessions 8-26-d, 9-31-a

Distinguish between current and noncurrent assets and current and noncurrent liabilities.

Describe the differences between accounting profit and taxable income, and define key terms, including deferred tax assets, deferred tax liabilities, valuation allowance, taxes payable, and income tax expense.

A is correct. Deferred tax assets arise from carrying forward unused tax losses and credits but are recognized only if there is an expectation that the company expects to use them (that there will be taxable income in the future).

63. Correct answer: B

"Inventories," Michael A. Broihahn, CFA

2013 Modular Level I, Vol. 3, Reading 29, Section 2

Study Session 9-29-a

Distinguish between costs included in inventories and costs recognized as expenses in the period in which they are incurred.

B is correct. Inventory costs include all direct costs of acquisition, including import taxes and inspection but not storage costs or warehouse administrative costs. Trade discounts, rebates, and similar items reduce the price paid and the costs of purchase.



64. Correct answer: B

"Long-Lived Assets," Elaine Henry, CFA, and Elizabeth A. Gordon

2013 Modular Level I, Vol. 3, Reading 30, Section 2.1, Example 2; Section 3.1

Study Session 9-30-a, d

Distinguish between costs that are capitalized and costs that are expensed in the period in which they are incurred.

Calculate depreciation expense.

B is correct. Because the asset is self-constructed, the costs of specifically identifiable interest during the construction period can be capitalized and included in the cost of the showroom.



65. Correct answer: B

"Long-Lived Assets," Elaine Henry, CFA, and Elizabeth A. Gordon

2013 Modular Level I, Vol. 3, Reading 30, Section 8

Study Session 9-30-k

Compare the financial reporting of investment property with that of property, plant, and equipment.

B is correct. Under IFRS, a building owned for the purpose of earning rentals or capital appreciation—in this case, the one owned by the company and leased out to tenants—is an investment property and can be reported under either the cost model or fair value model.

66. Correct answer: C

"Income Taxes," Elbie Antonites, CFA, and Michael A. Broihahn, CFA

2013 Modular Level I, Vol. 3, Reading 31, Section 3.3

Study Session 9-31-e, h

Evaluate the impact of tax rate changes on a company's financial statements and ratios.

Compare a company's deferred tax items.

C is correct. A decrease in the tax rate will result in a decrease in the previously reported amounts of deferred tax assets. That is, the value of the future tax assets, based on the new lower rate, is reduced for offsetting future tax payments.

67. Correct answer: C

"Non-Current (Long-Term) Liabilities," Elizabeth A. Gordon and Elaine Henry, CFA

2013 Modular Level I, Vol. 3, Reading 32, Section 3.2, Example 10

Study Session 9-32-g, h

Distinguish between a finance lease and an operating lease from the perspectives of the lessor and the lessee.

Determine the initial recognition, initial measurement, and subsequent measurement of finance leases.

C is correct. The lease would qualify as a finance (capital) lease under U.S. GAAP because the present value of the lease payments is more than 90% of the fair value.

Using a financial calculator for an annuity due at the beginning of the period:

PV of lease payments: PMT = 25,000, i = 8%, N = 5, BGN Compute PV.

PV = $107,803, 90% of the fair value: 0.90 × 115,000 = $103,500.

Therefore, the lease is greater than 90% and would be capitalized at $107,803. With the first payment made immediately, the outstanding balance in 2012 = 107,803 – 25,000 = 82,803.

68. Correct answer: B

"Financial Analysis Techniques," Elaine Henry, CFA, Thomas R. Robinson, CFA, and Jan Hendrik van Greuning, CFA

2013 Modular Level I, Vol. 3, Reading 28, Sections 4.2, 4.3

"Accounting Shenanigans on the Cash Flow Statement," Marc A. Siegel

2013 Modular Level I, Vol. 3, Reading 34, Section 4

Study Sessions 8-28-b, 10-34

Classify, calculate, and interpret activity, liquidity, solvency, profitability, and valuation ratios. The candidate should be able to analyze and describe the following ways to manipulate the cash flow statement:

1. stretching out payables,

2. financing payables,

3. securitizing receivables, and

4. using stock buybacks to offset dilution of earnings.

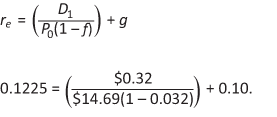
B is correct. An increase in days sales in payables would indicate a lengthening payables cycle, which indicates that the company is not paying its payables as quickly, and would increase the cash flow from operations.

Study Session 11 – Corporate Finance (69-78) Q=10

69. Correct answer: B

"Capital Budgeting," John D. Stowe, CFA, and Jacques R. Gagne, CFA  
2013 Modular Level I, Vol. 4, Reading 36, Section 3  
Study Session 11-36-b  
Describe the basic principles of capital budgeting, including cash flow estimation.  
  
B is correct. A new project reducing the cash flows of an existing project is an externality called "cannibalization."

70. Correct answer: B

"Cost of Capital," Yves Courtois, CFA, Gene C. Lai, and Pamela Peterson Drake, CFA  
2013 Modular Level I, Vol. 4, Reading 37, Sections 3.3.2; 4.4, Equation 16   
Study Session 11-37-h, l  
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.  
Explain and demonstrate the correct treatment of flotation costs.  
  
B is correct. Using Equation 16:  
  


71. Correct answer: B

"Measures of Leverage," Pamela Peterson Drake, CFA, Raj Aggarwal, CFA, Cynthia Harrington, CFA, and Adam Kobor, CFA   
2013 Modular Level I, Vol. 4, Reading 38, Section 3.4, Exhibit 11  
Study Session 11-38-c  
Describe the effect of financial leverage on a company's net income and return on equity.

B is correct.

|  |  |
| --- | --- |
| **All Equity** | **Half Equity and Debt** |
| Net income | Net income × [1 – 30%] |
| Equity = 100% × Assets. | Equity = 50% × Assets. |
| ROE: = Net income / Equity = Net income / (100% × Assets) = Net income / Assets = 10%. | ROE: = (Net income × [1 – 30%]) / Equity = (Net income × [1 – 30%]) / (50% × Assets) = (Net income / Assets) × ([1 – 30%] / 50%) = 10% × 1.4 = 14%. |

Alternatively, looking at the effects of the changes in sequence:  
When equity decreases by half, ROE would become 10% / 0.50 = 20%.  
When net income decreases by 30%, the adjusted ROE would become = 20% × (1 – 0.30) = 14%.

72. Correct answer: C

"The Corporate Governance of Listed Companies: A Manual for Investors," Kurt Schacht, CFA, James C. Allen, CFA, and Matthew Orsagh, CFA, CIPM   
2013 Modular Level I, Vol. 4, Reading 41, Section: Board Committees  
Study Session 11-41-c, e  
Describe board independence and explain the importance of independent board members in corporate governance.  
Describe the responsibilities of the audit, compensation, and nominations committees, and identify factors an investor should consider when evaluating the quality of each committee.  
  
C is correct. Assuming appropriate corporate governance measures, the audit, remuneration/compensation, and nominations committees should be composed entirely of independent board members. Other committees may have members from executive management.

73. Correct answer: B

"Capital Budgeting," John D. Stowe, CFA, and Jacques R. Gagne, CFA  
2013 Modular Level I, Vol. 4, Reading 36, Section 4.4, Table 4  
Study Session 11-36-d  
Calculate and interpret the results using each of the following methods to evaluate a single capital project: net present value (NPV), internal rate of return (IRR), payback period, discounted payback period, and profitability index (PI).

B is correct. The discounted cash flows are:

|  |  |  |
| --- | --- | --- |
| **Year** | **Discounted CF** | **Cumulative Discounted CF** |
| **0** | –1,525.00 |  |
| **1** | 193.69 = 215 / (1.11)1 | 193.69 |
| **2** | 280.01 = 345 / (1.11)2 | 473.70 |
| **3** | 347.32 = 475 / (1.11)3 | 821.02 |
| **4** | 800.36 = 1,215 / (1.11)4 | 1,621.38 |

After three years, $821.02 of the $1,525 investment is recovered, leaving $703.98 left to recover in the fourth year. Proportionately, only 0.88 ( = $703.98 / $800.36) of the cash flow in the fourth year is necessary to recover all of the investment, which makes the discounted payback equal to 3.9 years (rounded up from 3.88).

74. Correct answer: A

"Cost of Capital," Yves Courtois, CFA, Gene C. Lai, and Pamela Peterson Drake, CFA

2013 Modular Level I, Vol. 4, Reading 37, Section 3.1.1, Example 4

Study Session 11-37-b, f

Describe how taxes affect the cost of capital from different capital sources.

Calculate and interpret the cost of fixed-rate debt capital using the yield-to-maturity approach and the debt-rating approach.

A is correct. The annual after-tax cost of debt is the after-tax annual yield to maturity (YTM).

Find the YTM by using a financial calculator as follows:

PV = –1,030.34; FV = 1,000; N = 40 (20 × 2); PMT = 31 (0.062 × 1,000 × 0.5); Compute i.

i = 2.97 semiannually.

Annual YTM = 2.97 × 2 = 5.94.

Consequently, the associated after-tax value = 0.0428 = 0.0594 × [1 – 0.28].

75. Correct answer: A

"Measures of Leverage," Pamela Peterson Drake, CFA, Raj Aggarwal, CFA, Cynthia Harrington, CFA, and Adam Kobor, CFA

2013 Modular Level I, Vol. 4, Reading 38, Section 3.5, Equation 6

Study Session 11-38-b

Calculate and interpret the degree of operating leverage, the degree of financial leverage, and the degree of total leverage.

A is correct. Based on Equation (6):

 The change to accelerated depreciation increases the fixed costs, making DTL (degree of total leverage) increase (i.e., the numerator does not change and the denominator decreases).

76. Correct answer: C

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

2013 Modular Level I, Vol. 4, Reading 40, Sections 2.1.1, 2.1.2

Study Session 11-40-a

Describe primary and secondary sources of liquidity and factors that influence a company's liquidity position.

C is correct. Trade credit and a bank line of credit are considered primary sources of liquidity. Liquidating inventory is a secondary source of liquidity.

77. Correct answer: A

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

2013 Modular Level I, Vol. 4, Reading 40, Section 4.1.1

Study Session 11-40-e

Calculate and interpret comparable yields on various securities, compare portfolio returns with a standard benchmark, and evaluate a company's short-term investment policy guidelines.

A is correct. Discount-basis yield:



78. Correct answer: B

"Dividends and Share Repurchases: Basics," George Troughton, CFA, and Gregory Noronha, CFA

2013 Modular Level I, Vol. 4, Reading 39, Section 2.4, Exhibit 2

Study Session 11-39-a

Describe regular cash dividends, extra dividends, stock dividends, stock splits, and reverse stock splits, including their expected effect on a shareholder's wealth and a company's financial ratios.

B is correct.



Study Session 13, 14 – Equity Investments (79-90) Q=12

79. Correct answer: A

"Market Organization and Structure," Larry Harris   
2013 Modular Level I, Vol. 5, Reading 46, Section 6.2   
Study Session 13-46-h  
Compare market orders with limit orders.  
  
A is correct. The order becomes valid when the price falls to or below 90. But, the "limit 85" makes the order invalid if the price falls below 85. Thus, the trader faces a maximum loss of 15.

80. Correct answer: C

"Security Market Indices," Paul D. Kaplan, CFA, and Dorothy C. Kelly, CFA   
2013 Modular Level I, Vol. 5, Reading 47, Section 6.1   
Study Session 13-47-i, k  
Describe types of fixed-income indices.  
Describe types of security market indices.  
  
C is correct. Compared with equity indices, the large number of fixed-income securities—combined with the lack of liquidity of some securities—has made it more costly and difficult for investors to replicate fixed-income indices and duplicate their performance.

81. Correct answer: A

"Overview of Equity Securities," Ryan C. Fuhrmann, CFA, and Asjeet S. Lamba, CFA   
2013 Modular Level I, Vol. 5, Reading 49, Section 3   
Study Session 14-49-a, b, e  
Describe characteristics of types of equity securities.  
Describe differences in voting rights and other ownership characteristics among different equity classes.  
Compare the risk and return characteristics of types of equity securities.  
  
A is correct. The put option feature facilitates raising capital because the shares are more appealing to investors. It helps investors limit their potential losses because they can sell the shares back to the issuing company if the market price falls below the pre-specified put price. Therefore, putable common shares are beneficial to both the issuing company and the investors.

82. Correct answer: A

"Introduction to Industry and Company Analysis," Patrick W. Dorsey, CFA, Anthony M. Fiore, CFA, and Ian Rossa O'Reilly, CFA   
2013 Modular Level I, Vol. 5, Reading 50, Sections 5, 5.1, 5.1.2   
Study Session 14-50-e, h  
Describe the elements that need to be covered in a thorough industry analysis.  
Describe product and industry life-cycle models, classify an industry as to life-cycle phase (e.g., embryonic, growth, shakeout, maturity, and decline) based on a description of it, and describe the limitations of the life-cycle concept in forecasting industry performance.  
  
A is correct. Companies in mature industries are likely to be pursuing replacement demand rather than new buyers and are probably focused on extending successful product lines rather than introducing revolutionary new products. Therefore, they tend to focus on cost rationalization and efficiency gains rather than on taking lots of market share. Further, companies with superior products or services are likely to gain market share.

83. Correct answer: B

"Financial Reporting Mechanics," Thomas R. Robinson, CFA, Jan Hendrik van Greuning, CFA, Elaine Henry, CFA, and Michael A. Broihahn, CFA   
2013 Modular Level I, Vol. 3, Reading 23, Section 3.1   
"Equity Valuation: Concepts and Basic Tools," John J. Nagorniak, CFA, and Stephen E. Wilcox, CFA   
2013 Modular Level I, Vol. 5, Reading 51, Section 5, Exhibit 6   
Study Sessions 7-23-e, 14-51-h  
Explain the relationships among the income statement, balance sheet, statement of cash flows, and statement of owners' equity.  
Calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to book value.  
  
B is correct. First, determine the end-of-year book value.   
Increase in retained earnings = Net income × (1 – Payout ratio) = $5,000,000 × (1 – 0.4) = $3,000,000.  
Book value per share = (Beginning equity + Increase in retained earnings) / # of outstanding shares = ($45,000,000 + $3,000,000) / 6,000,000 = $8.00.  
Price-to-book ratio = Price / Book value per share = $30.00 / $8.00 = 3.75.

84. Correct answer: A

"Equity Valuation: Concepts and Basic Tools," John J. Nagorniak, CFA, and Stephen E. Wilcox, CFA   
2013 Modular Level I, Vol. 5, Reading 51, Section 4.1   
Study Session 14-51-d  
Calculate the intrinsic value of a non-callable, non-convertible preferred stock.  
  
A is correct. Investors' current required return = $3.75 / $50 = 7.50%.  
New required return = 7.50% + 0.75% = 8.25%.  
New market price = $3.75 / 0.0825 = $45.45.

85. Correct answer: B

"Security Market Indices," Paul D. Kaplan, CFA, and Dorothy C. Kelly, CFA

2013 Modular Level I, Vol. 5, Reading 47, Section 3.2

Study Session 13-47-d, e

Compare and contrast the different weighting methods used in index construction.

Calculate and interpret the value and return of an index on the basis of its weighting method.

B is correct. Equal weighting assigns an equal weight to each constituent security at inception. Therefore, it is the sum of the total return from each security divided by the number of securities in the portfolios (see Exhibit 3).



86. Correct answer: B

"Market Efficiency," W. Sean Cleary, CFA, Howard J. Atkinson, CFA, and Pamela Peterson Drake, CFA

2013 Modular Level I, Vol. 5, Reading 48, Section 5.3

Study Session 13-48-g

Contrast the behavioral finance view of investor behavior to that of traditional finance.

B is correct. Disposition effect relates to the behavioral bias in which investors tend toward avoiding realizing losses but, rather, seek to realize gains. Manager Y has displayed this bias because he rarely realized investment losses but realized most of the investment gains.

87. Correct answer: C

"Overview of Equity Securities," Ryan C. Fuhrmann, CFA, and Asjeet S. Lamba, CFA

2013 Modular Level I, Vol. 5, Reading 49, Section 5.2

Study Session 14-49-a, b

Describe characteristics of types of equity securities.

Describe differences in voting rights and other ownership characteristics among different equity classes.

C is correct. Investors of unsponsored DRs would not have the same voting rights as the direct owners of common shares because the depository bank retains the voting rights.

88. Correct answer: C

"Equity Valuation: Concepts and Basic Tools," John J. Nagorniak, CFA, and Stephen E. Wilcox, CFA

2013 Modular Level I, Vol. 5, Reading 51, Section 5.4, Example 15, Exhibit 7

Study Session 14-51-i

Explain the use of enterprise value multiples in equity valuation, and demonstrate the use of enterprise value multiples to estimate equity value.

C is correct. Enterprise Value (EV) = EBITDA × EV multiple = 15 × 3.2 = 48.

Market capitalization = Enterprise value – MV of debt – MV of preferred stock + Cash & short-term investments = 48 – 10 – 5 + 4.5 = 37.5.

89. Correct answer: C

"Equity Valuation: Concepts and Basic Tools," John J. Nagorniak, CFA, and Stephen E. Wilcox, CFA

2013 Modular Level I, Vol. 5, Reading 51, Section 4.2, Equation 9

Study Session 14-51-e

Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

C is correct.

V0 = D0 (1 + g) / (r – g), where

Sustainable growth rate: g = b × ROE;

b = (1 – Payout ratio);

g = (1 – 0.45) × 15% = 8.25%;

V0 = $3(1.0825) / (0.16 – 0.0825) = $41.90.

90. Correct answer: A

"Equity Valuation: Concepts and Basic Tools," John J. Nagorniak, CFA, and Stephen E. Wilcox, CFA

2013 Modular Level I, Vol. 5, Reading 51, Sections 4.3, 5.1, 6

Study Session 14-51-k

Explain advantages and disadvantages of each category of valuation model.

A is correct. The justified forward P/E approach offers the advantage of incorporating fundamentals and presenting intrinsic-value estimations.

Study Session 17 – Derivatives (91-96) Q=6

91. Correct answer: B

"Forward Markets and Contracts," Don M. Chance, CFA  
2013 Modular Level I, Vol. 6, Reading 61, Section 3.2.2  
Study Session 17-61-g  
Calculate and interpret the payoff of an FRA, and explain each of the component terms of the payoff formula.  
  
B is correct. The financial institution is lending, that is, it is short and will, therefore, lose if the 90-day LIBOR rate at expiration is greater than 2%. The payoff is calculated as follows:  
  
$15,000,000 x [((0.02 – 0.03)(90 / 360)) / ((1 + 0.03(90 / 360))] = $37,220.84

92. Correct answer: B

"Derivative Markets and Instruments," Don M. Chance, CFA  
2013 Modular Level I, Vol. 6, Reading 64, Section 3.1  
Study Session 17-64-b  
Describe, calculate, and interpret the payments of currency swaps, plain vanilla interest rate swaps, and equity swaps.  
  
B is correct. The periodic six-month or 180-day payments are calculated as follows:  
U.S. company pays the dealer R$23,247,088 = 0.107 × (180 / 360) × R$434,525,000.  
Dealer pays the U.S. company US$8,125,000 = 0.065 × (180 / 360) × US$250,000,000.

93. Correct answer: B

"Derivative Markets and Instruments," Don M. Chance, CFA  
2013 Modular Level I, Vol. 6, Reading 63, Section 4.1.4  
Study Session 17-63-g  
Define interest rate caps, floors, and collars.  
  
B is correct. An interest rate cap is a combination of a series of interest rate call options, each with the same exercise rate, where each call option expires on the date the floating rate loan resets.

94. Correct answer: B

"Derivative Markets and Instruments," Don M. Chance, CFA

2013 Modular Level I, Vol. 6, Reading 62, Section 6.1.2

Study Session 17-62-f

Describe the characteristics of the following types of futures contracts: Treasury bill, Eurodollar, Treasury bond, stock index, and currency.

B is correct. The price of a Eurodollar futures contract is dependent on the value of LIBOR, and cash settlement is permitted.

94. Correct answer: C

"Derivative Markets and Instruments," Don M. Chance, CFA

2013 Modular Level I, Vol. 6, Reading 65, Section 2.1.2

Study Session 17-65-a

Determine the value at expiration, the profit, maximum profit, maximum loss, breakeven underlying price at expiration, and payoff graph of the strategies of buying and selling calls and puts, and determine the potential outcomes for investors using these strategies.

C is correct.

Profit for a seller of a put option is calculated as

π = –max(0,X – ST)+ po

Ð = –max(0, $530 – $540) + $23 = $23.

96. Correct answer: B

"Derivative Markets and Instruments," Don M. Chance, CFA

2013 Modular Level I, Vol. 6, Reading 65, Section 2.2.1

Study Session 17-65-b

Determine the value at expiration, profit, maximum profit, maximum loss, breakeven underlying price at expiration, and payoff graph of a covered call strategy and a protective put strategy, and explain the risk management application of each strategy.

B is correct.

The profit on a covered call is calculated as follows:

π = ST – So – max(0,ST – X)+ co

Ð = $215 – $190 – max(0, $215 – $200) + $11.40 = $21.40.

Study Session 18 – Alternative Investments (97-102) Q=6

97. Correct answer: C

"Introduction to Alternative Investments," Terri Duhon, George Spentzos, CFA, and Scott D. Stewart, CFA  
2013 Modular Level I, Vol. 6, Reading 66, Section 2  
Study Session 18-66-a  
Compare alternative investments with traditional investments.  
  
C is correct because alternative investment strategies are more likely to employ securities that trade in less liquid markets than securities that trade in relatively more liquid markets in which traditional, long-only investments trade.

98. Correct answer: B

"Introduction to Alternative Investments," Terri Duhon, George Spentzos, CFA, and Scott D. Stewart, CFA  
2013 Modular Level I, Vol. 6, Reading 66, Section 3.1  
Study Session 18-66-d  
Describe hedge funds, private equity, real estate, commodities, and other alternative investments, including, as applicable, strategies, subcategories, potential benefits and risks, fee structures, and due diligence.  
  
B is correct because quantitative directional is an equity strategy that uses "Technical Analysis to identify over- and underpriced securities, buy the underpriced ones, and short the overpriced ones.

99. Correct answer: B

"Introduction to Alternative Investments," Terri Duhon, George Spentzos, CFA, and Scott D. Stewart, CFA  
2013 Modular Level I, Vol. 6, Reading 66, Section 3.3.1  
Study Session 18-66-f  
Describe, calculate, and interpret management and incentive fees and net-of-fees returns to hedge funds.  
  
B is correct because the $120 million grows by 25% to $150 million = $120 million × (1 + 0.25). The management fee is $2.25 million = $150 million × 0.015, leaving $147.75 million, net of the management fee, or an increase of $27.75 million over the beginning value of $120 million. The 6% hurdle rate requires an increase of $7.2 million = $120 million × 0.06, so the fund has earned $20.55 million = $27.75 million – $7.2 million over the hurdle rate, net of the management fee. The incentive fee is 15% of this, or $3.0825 million = $20.55 million × 0.015, leaving an increase in fund assets, net of management and incentive fees, of $24.6675 million = $27.75 million – $3.0825 million. The investor's return, net of fees, is $24.6675 / $120 million = 20.56%.

100. Correct answer: C

"Introduction to Alternative Investments," Terri Duhon, George Spentzos, CFA, and Scott D. Stewart, CFA

2013 Modular Level I, Vol. 6, Reading 66, Section 4.1

Study Session 18-66-d

Describe hedge funds, private equity, real estate, commodities, and other alternative investments, including, as applicable, strategies, subcategories, potential benefits and risks, fee structures, and due diligence.

C is correct because private equity management fees are based on the full amount of committed capital, whether drawn down or not, less capital that has been returned to investors from investments that have been exited.

101. Correct answer: A

"Introduction to Alternative Investments," Terri Duhon, George Spentzos, CFA, and Scott D. Stewart, CFA

2013 Modular Level I, Vol. 6, Reading 66, Sections 3.4, 4.4, 5.4

Study Session 18-66-e

Describe issues in valuing, and calculating returns on, hedge funds, private equity, real estate, and commodities.

A is correct because a short bias strategy involves positions in traded equities and, moreover, many equities that are liquid enough to be shorted. Valuation can be accomplished using market prices and bid-ask quotes. Valuation of the REIT requires subjective appraisal using a variety of techniques, none of which reflect a market price for the property being appraised. Valuation of firms acquired in LBOs (leveraged buyouts) requires appraisals or estimates because market pricing is no longer available after the firm is taken private.

102. Correct answer: A

"Introduction to Alternative Investments," Terri Duhon, George Spentzos, CFA, and Scott D. Stewart, CFA

2013 Modular Level I, Vol. 6, Reading 66, Section 8.1

Study Session 18-66-g

Describe risk management of alternative investments.

A is correct because while the REIT's holdings are illiquid, the REIT itself is publicly traded. From the investor's perspective, the REIT is a liquid investment and the private equity fund is not.

Study Session 15, 16 – Fixed Income (103-114) Q=12

103. Correct answer: C

"Features of Debt Securities," Frank J. Fabozzi, CFA  
2013 Modular Level I, Vol. 5, Reading 52, Section 5.4  
Study Session 15-52-b  
Describe the basic features of a bond, the various coupon rate structures, and the structure of floating rate notes.  
  
C is correct because an inverse floater's coupon rate must rise when market interest rates fall.

104. Correct answer: B

"Features of Debt Securities," Frank J. Fabozzi, CFA  
2013 Modular Level I, Vol. 5, Reading 52, Section 6.3  
Study Session 15-52-d  
Explain the provisions for redemption and retirement of bonds.  
  
B is correct because a requirement to retire a specified portion of a bond issue each year is a sinking fund provision.

105. Correct answer: C

"Risks Associated with Investing in Bonds," Frank J. Fabozzi, CFA  
2013 Modular Level I, Vol. 5, Reading 53, Section 2.4  
Study Session 15-53-e  
Explain the interest rate risk of a floating-rate security and why its price may differ from par value.  
  
C is correct because the longer until a security's coupon rate resets to market levels, the more its value can differ from par.

106. Correct answer: B

"Risks Associated with Investing in Bonds," Frank J. Fabozzi, CFA  
2013 Modular Level I, Vol. 5, Reading 53, Section 2.5.1  
Study Session 15-53-f  
Calculate and interpret the duration and dollar duration of a bond.

B is correct because duration =

|  |  |  |
| --- | --- | --- |
| (Price if yields decline – Price if yields rise) / |  |  |
| (2 x Initial price x Change in yield in decimal) = | 103.74 – 101.12  2 × 102.31 × 0.002 | = 6.40 |

107. Correct answer: A

"Overview of Bond Sectors and Instruments," Frank J. Fabozzi, CFA  
2013 Modular Level I, Vol. 5, Reading 54, Section 3.2  
Study Session 15-54-a  
Describe features, credit risk characteristics, and distribution methods for government securities.  
  
A is correct because the tap method is when more bonds that are identical to a previous issue are auctioned.

108. Correct answer: C

"Overview of Bond Sectors and Instruments," Frank J. Fabozzi, CFA  
2013 Modular Level I, Vol. 5, Reading 54, Section 4.2.3  
Study Session 15-54-e  
Describe the types and characteristics of mortgage-backed securities, and explain the cash flow and prepayment risk for each type.  
  
C is correct because in a CMO structure, the principal balance of the tranches is paid sequentially, so Tranche A will be repaid first and have a shorter repayment period than Tranche B.

109. Correct answer: C

"Understanding Yield Spreads," Frank J. Fabozzi, CFA

2013 Modular Level I, Vol. 5, Reading 55, Section 3.2.1

Study Session 15-55-c

Explain the basic theories of the term structure of interest rates, and describe the implications of each theory for the shape of the yield curve.

C is correct because the market segmentation theory posits that investors will invest only in their desired maturity and will not move to longer or shorter maturities in response to yields that are too low or too high compared with investors' expectations for the future. Therefore, the shape of the yield curve will not reflect these expectations.

110. Correct answer: A



111. Correct answer: B



112. Correct answer: B 

113. Correct answer: A

"Introduction to the Measurement of Interest Rate Risk," Frank J. Fabozzi, CFA

2013 Modular Level I, Vol. 5, Reading 58, Section 5

Study Session 16-58-h

Describe the convexity measure of a bond, and estimate a bond's percentage price change, given the bond's duration and convexity and a specified change in interest rates.

A is correct because the duration model estimates the change in price as Ð x Δi x 100, or –7.31 x –0.02 x 100 = +14.62%, and the convexity adjustment is C x (Δi)2 x 100, or –24.85 x (0.02)2 x 100 = –0.98%, and 14.62% – 0.98% = 13.64%.

114. Correct answer: C

"Introduction to the Measurement of Interest Rate Risk," Frank J. Fabozzi, CFA

2013 Modular Level I, Vol. 5, Reading 58, Section 7

Study Session 16-58-k

Describe the impact of yield volatility on the interest rate risk of a bond.

C is correct because higher expected yield volatility means greater likelihood of large interest rate changes in that market, implying higher interest rate risk.

Study Session 12 – Portfolio Management (115-120) Q=6

115. Correct answer: C

"Portfolio Management: An Overview," Robert M. Conroy, CFA, and Alistair Byrne, CFA  
2013 Modular Level I, Vol. 4, Reading 42, Section 5.3.2  
Study Session 12-42-d  
Describe mutual funds, and compare them with other pooled investment products.  
  
C is correct. The minimum investment required to open a separately managed account is usually much higher than the amount required to open a mutual fund.\

116. Correct answer: A

"Portfolio Risk and Return: Part I," Vijay Singal, CFA  
2013 Modular Level I, Vol. 4, Reading 43, Section 2.1.6  
Study Session 12-43-a  
Calculate and interpret major return measures, and describe their appropriate uses.  
  
A is correct. (1 + 0.12)0.8 – 1 = 9.49%.

117. Correct answer: B

"Portfolio Risk and Return: Part I," Vijay Singal, CFA  
2013 Modular Level I, Vol. 4, Reading 43, Section 4.1.3  
Study Session 12-43-f  
Describe the effect on a portfolio's risk of investing in assets that are less than perfectly correlated.

B is correct. The formula for the return standard deviation (risk) of a two-asset portfolio is

https://media2.testrac.com/cfa/content/graphics/PMLI201303.gif

The formula for portfolio risk shows that portfolio risk decreases as the correlation decreases.

118. Correct answer: B

"Portfolio Risk and Return: Part II," Vijay Singal, CFA

2013 Modular Level I, Vol. 4, Reading 44, Section 3.2.6

Study Session 12-44-g

Calculate and interpret the expected return of an asset using the CAPM.

B is correct. The CAPM posits the expected return of a security is

E(Ri) = Rf + βi [E(Rm) – Rf)],

where Rf is the risk-free rate, Rm is the return on the market portfolio, and β is the beta of the security. 2% + 1.25 x (6% – 2%) = 7.00%.

119. Correct answer: C

"Portfolio Risk and Return: Part II," Vijay Singal, CFA

2013 Modular Level I, Vol. 4, Reading 44, Section 4.1

Study Session 12-44-f

Explain the capital asset pricing model (CAPM), including the required assumptions, and the security market line (SML).

C is correct because one of the assumptions of the CAPM is that investors plan for the same single holding period.

120. Correct answer: A

"Basics of Portfolio Planning and Construction," Alistair Byrne, CFA, and Frank E. Smudde, CFA

2013 Modular Level I, Vol. 4, Reading 46, Section 2.2.1

Study Session 12-46-d

Distinguish between the willingness and the ability (capacity) to take risk in analyzing an investor's financial risk tolerance.

A is correct. Investment time horizon is an objective factor that measures ability to take risk.