

## Level I Version 2 2012 Sample Exam

1. Henrietta Huerta, CFA, writes a free investment newsletter widely followed by individual investors. Huerta is not aware of who receives the newsletter but it is the primary marketing tool she uses to obtain investment management clients for those who contact her and are willing to pay management fees. For Huerta, the newsletter recommendations serve as the basis for most of her investment actions. Huerta recently completed research on East-West Coffee Roasters (ECR) and has decided to change her initial buy recommendation on ECR to a sell. To avoid violating the CFA Institute Standards of Professional Conduct, Huerta should *most likely* ensure that the changed investment recommendation reaches:
  - A. newsletter recipients first.
  - B. asset management clients first.
  - C. asset management clients and newsletter recipients simultaneously.
  
2. Danielle Deschutes, CFA, is a portfolio manager and part of a ten-person team managing an indexed stock portfolio for institutional accounts. A competing firm, South West Index Managers (SWIM), asks Deschutes to interview with them and to bring her performance history to the meeting. Deschutes informs her employer about the interview and receives written permission to bring the performance history of the stock portfolio with her. When Deschutes shows up for the interview at SWIM she discloses that the performance numbers represent the work of her team and describes the role of each member. To bolster her credibility, she also provides the names of institutional accounts and related assets constituting the portfolio. In her interview at SWIM, Deschutes least likely violated the CFA Institute Standards of Professional Conduct regarding:
  - A. her contribution to the portfolio's returns.
  - B. the stock portfolio's performance history.
  - C. providing details on the institutional accounts.
  
3. When Abdullah Younis, CFA, became a broker at a global financial services organization two years ago, he was told he could allocate his work hours as he saw fit. At this time, Younis served on the board of three non-public golf equipment companies and managed money for several members of his immediate family in a pooled fund. Younis was not compensated for his board service or for the investment pool management. Younis' outstanding returns attract interest from friends and co-workers who persuade him to include their assets in his investment pool. Younis recently retired from all board responsibilities and now spends more than 80% of his time managing the investment pool for which he charges non-family members a management fee. Younis has never told his employer about any of these activities. To comply with the CFA Institute Standards of Professional Conduct, regarding his business activities over the past two years, Younis should least likely disclose which of the following to his employer?
  - A. Board activity
  - B. Family investment pool management.
  - C. Non-family member management fees.
  
4. 缺失

5. Sheila Schleif, CFA, is an equity analyst at an investment bank. Schleif uses a data-driven computer model in making her stock recommendations. Schleif discovers the model contains a coding error. If the coding error were corrected, her most recent buy recommendation would change to a sell. Schleif corrects the coding error, issues a bank-wide revision of her recommendation changing the buy to a sell, and then forwards the revision to all bank clients who received the initial recommendation. Concerning her actions related to the coding error, Schleif most likely violated which of the following CFA Institute Standards of Professional Conduct?
- A. Fair Dealing.
  - B. Priority of Transactions.
  - C. Diligence and Reasonable Basis.
6. Rodney Rodrigues, CFA, is responsible for identifying managers to manage specific asset classes for his firm. In selecting external advisers or subadvisers, Rodrigues reviews the adviser's investment process, established code of ethics, the quality of their published return information, and their compliance and internal control procedures. In completing his review, Rodrigues most likely violated the CFA Institute Standards of Professional Conduct regarding his due diligence on:
- A. adherence to strategy.
  - B. performance measures.
  - C. internal control procedures.
7. Jackson Barnes, CFA, provides financial planning services to his local community for a fee. Barnes has developed a network of specialists including accountants, lawyers, and brokers who contribute their expertise to the financial planning process. Each of the specialists is an independent contractor. Each contractor bills Barnes separately for the work they perform, providing a discount based upon the number of clients Barnes has referred. What steps should Barnes most likely take to ensure he does not violate any CFA Institute Standards of Professional Conduct?
- A. Check with his firm's legal counsel to determine what action should be taken.
  - B. Disclose to clients on their bills the consideration he receives from the specialists.
  - C. Inform clients about his arrangement with the contractors before they agree to hire him.
8. Millicent Plain, CFA, has just finished taking Level II of the CFA examination. Upon leaving the examination site, she meets with four other Level III candidates who also just sat for their exams. Curious about their examination experience, Plain asks the other candidates how difficult the Level III exam was and how they did on it. The candidates say the examination was very difficult but do not speak about specific questions. However, the candidates tell Plain about broad topic areas that were tested and complain about specific formulas, which they prepared for but which did not appear on the exam. The Level III candidates least likely violated the CFA Institute Standards of Professional Conduct by discussing:
- A. specific formulas.
  - B. broad topic areas.
  - C. difficulty of the examination.

9. On a flight to Europe, Romy Haas, CFA, strikes up a conversation with a fellow passenger, Vincent Trujillo. When Trujillo learns Haas is in the investment profession, he asks about the CFA designation. Haas tells him the following about the CFA designation:

- Statement 1: Individuals who have completed the CFA Program have the right to use the CFA designation.
- Statement 2: Use of the designation must be accompanied by an accurate explanation of the requirements to earn and use the designation.
- Statement 3: Once granted the right to use the designation, an individual must also satisfy the CFA Institute membership requirements to maintain their right to use the designation.

In explaining the use of the CFA designation, Haas least likely violated the CFA Institute Standards of Professional Conduct concerning which of the following statements?

- A. Statement 1.
- B. Statement 2.
- C. Statement 3.

10. A borrower is considering three competing mortgage loan offers from her bank. The amount borrowed on the mortgage is \$100,000 with monthly compounding.

Mortgage type	Nominal (stated) annual interest rate at initiation of the loan	Year in which rate first adjusts
30-year fixed rate	5%	N/A
15-year fixed rate	4.385%	N/A
30-year 3/5 adjustable rate mortgage (ARM)	3.75%	3

The rate on the ARM resets at the end of the year 3. Assuming the ARM is reset at 5.5% (i.e. the remaining balance on the loan will now be repaid with 5.5% nominal annual interest), which of the three loans will have the smallest monthly payment after the rate reset, at the end of year 3?

- A. 30-year ARM.
- B. 15-year fixed-rate loan.
- C. 30-year fixed-rate loan.

11. Equity returns series are best described as, for the most part:

- A. platykurtotic (less peaked than a normal distribution).
- B. leptokurtotic (more peaked than a normal distribution).
- C. mesokurtotic (identical to the normal distribution in peakedness).

12. By definition, the probability of any event E is a number between:

- A. zero and positive one.
- B. zero and positive infinity.
- C. minus one and positive one.

13. X and Y are independent events. The probability of X is 0.2 ( $P(X) = 0.2$ ) and the probability of Y is 0.5 ( $P(Y) = 0.5$ ). The joint probability of X and Y ( $P(X, Y)$ ) is closest to:

- A. 0.1.

- B. 0.3.  
C. 0.7.

14. A variable is normally distributed with a mean of 5.00 and a variance of 4.00. Calculate the probability of observing a value of negative 0.40 or less. That is, calculate  $P(X_i \leq -0.40)$  given  $X$  is distributed as  $N(5, 4)$ . Use this excerpt from the cumulative distribution function for the standard normal random variable table to calculate your answer.

Cumulative Probabilities for a Standard Normal Distribution										
$P(Z \leq x) = N(x)$ for $x \geq 0$ or $P(Z \leq z) = N(z)$ for $z \geq 0$										
x or z	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1.10	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8810	0.8830
1.20	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.8997	0.9015
1.30	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9131	0.9147	0.9162	0.9177
1.40	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9279	0.9292	0.9306	0.9319
...										
2.50	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9951	0.9952
2.60	0.9953	0.9955	0.9956	0.9957	0.9959	0.9960	0.9961	0.9962	0.9963	0.9964
2.70	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974
2.80	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981
2.90	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986
3.00	0.9987	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9990	0.9990
3.10	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9992	0.9993	0.9993

The calculated value is closest to:

- A. 0.35%.  
B. 0.62%.  
C. 8.85%.

15. Which of the following statements of null and alternative hypotheses requires a two-tailed test?

- A.  $H_0: \theta = \theta_0$  versus  $H_a: \theta \neq \theta_0$   
B.  $H_0: \theta \leq \theta_0$  versus  $H_a: \theta > \theta_0$   
C.  $H_0: \theta \geq \theta_0$  versus  $H_a: \theta < \theta_0$

Population	1	2
Sample size	$n_1 = 5$	$n_2 = 5$
Sample variance	$S_1^2 = 28$	$S_2^2 = 4$
The samples are drawn independently and both populations are assumed to be normally distributed.		

16. Using the above data, an analyst is trying to test the null hypothesis that the population variances are equal against the alternative hypothesis that the variances are not equal at the 5% level of significance. The table of the F-Distribution is provided below.

Table of the F-Distribution
Panel A: Critical values for right-hand tail areas equal to 0.05

	df <sub>1</sub> (read across)	1	2	3	4	5
Df <sub>2</sub> (read down)	1	161	200	216	225	230
	2	18.5	19.0	19.2	19.2	19.3
	3	10.1	9.55	9.28	9.12	9.01
	4	7.71	6.94	6.59	6.39	6.26
	5	6.61	5.79	5.41	5.19	5.05
Panel B: Critical values for right-hand tail areas equal to 0.025						
	df <sub>1</sub> (read across)	1	2	3	4	5
Df <sub>2</sub> (read down)	1	648	799	864	900	922
	2	38.51	39.00	39.17	39.25	39.03
	3	17.44	16.04	15.44	15.10	14.88
	4	12.22	10.65	9.98	9.60	9.36
	5	10.01	8.43	7.76	7.39	7.15

Which of the following statements is most appropriate? The critical value is:

- A. 6.39 and reject the null.
- B. 7.15 and accept the null.
- C. 9.60 and accept the null.

17. The market demand function for item X is a function of its price, household income, and the price of item Y.

Own-price elasticity of demand for X	-0.8
Income elasticity of demand for X	1.5
Cross-price elasticity of demand for X with respect to the price of Y	0.4

Given the above elasticity coefficients for the two items, which of the following statements is most accurate?

- A. X and Y are substitutes.
- B. Demand for X is elastic.
- C. Item X is an inferior good.

18. 缺失

19. With its existing production facilities, a monopolist firm can produce up to 100 units. It faces the following demand and cost schedules:

Output (units)	Price (\$/unit)	Total Cost (\$/unit)
0	3,000	600
20	2,800	10,600
40	2,600	32,600
60	2,400	66,000
80	2,200	112,600
100	2,000	170,600

The optimal output level for this producer (in units) is closest to:

- A. 20.
- B. 60.

C. 100.

20. The following information has been gathered for a hypothetical economy:

Total Population	1,100
Working Age Population	975
Labor Force	750
Underemployed	120
Unemployed	95
Discouraged Workers	80
Frictionally Unemployed	25
Voluntarily Unemployed	40

The unemployment rate is closest to:

- A. 9.7%.
- B. 12.6%.
- C. 16.0%.

21. Which of the following would be most useful as a leading indicator to signal the start of an economic recovery?

- A. An increase in aggregate real personal incomes (less transfer payments).
- B. A decrease in average weekly initial claims for unemployment insurance.
- C. The narrowing of the spread between the 10-year Treasury yield and the federal funds rate.

22. In early 2011, the British pound (GBP) to New Zealand dollar (NZD) spot exchange rate was 2.0979. The LIBOR interest rates, quoted on a 360-day year basis, were 1.6025% for the British pound and 3.2875% for the New Zealand dollar. The 180-day forward points (scaled up by four decimal places) in GBP/NZD would be closest to:

- A. -343.
- B. -173.
- C. 176.

23. An accounting document that records transactions in the order in which they occur is best described as a:

- A. trial balance.
- B. general ledger.
- C. general journal

24. Which of the following statements is most accurate with respect to financial reporting requirements?

- A. Regulatory authorities are typically private sector, self-regulated organizations.
- B. Standard-setting bodies have authority because they are recognized by regulatory agencies.
- C. The requirement to prepare financial reports in accordance with specified accounting standards is the responsibility of standard-setting bodies.

25. Income statements for two companies (A and B) and the common-sized income statement for the industry are provided below:

All \$ figures in '000s	Company A	Company B	Industry
Sales	\$10,500	\$8,250	100.0%
Cost of goods sold	6,353	5,239	62.8%
Selling, general, and administrative expenses	2,625	2,021	24.8%
Interest expense	840	536	7.0%
Pretax earnings	683	454	5.4%
Taxes	205	145	1.7%
Net earnings	\$ 478	\$ 309	3.7%

The best conclusion an analyst can make is:

- A. Company B's interest rate is lower than the industry average.
- B. Both companies' tax rates are higher than the industry average.
- C. Company A earns a higher gross margin than both Company B and the industry.

26. Which of the following statements about balance sheets is most accurate? Under:

- A. U.S. GAAP, intangibles must be valued at historical cost.
- B. IFRS, a commercial real estate company should use a liquidity based presentation.
- C. IFRS, a classified balance sheet must present current assets before non-current assets.

27. A company recorded the following events in 2010:

	\$'000s
Purchase of securities for trading purposes	240
Proceeds from the sale of trading securities	300
Proceeds from issuance of bonds	500
Purchase of 30% of the shares of an affiliated company	275

On the 2010 statement of cash flows, the company's cash flow from investing activities (in '000s) is closest to:

- A. -\$275.
- B. -\$215.
- C. \$285.

28. Selected information for a company is provided below.

	\$ millions
Sales	4,800
Cost of goods sold	2,880
Purchases	2,940
Average receivables	625
Average inventory	710
Average payables	145

The company's cash conversion cycle (in days) is closest to:

- A. 84.
- B. 120.

C. 138.

29. Select information from a company that uses FIFO inventory method is provided below.

Event	Units	\$/Unit	Total (\$)
Opening inventory	1,000	7.5	7,500
Purchases	250	7.6	1,900
Sales	550	12.00	6,600
Purchases	300	7.70	2,310
Sales	600	12.00	7,200
Ending Inventory	400		

If the company uses the perpetual inventory system versus the periodic inventory system, the gross margin would most likely be:

- A. lower.
- B. higher.
- C. the same.

30. A company, which prepares its financial statements according to IFRS, owns several investment properties on which it earns rental income. It values the properties using the fair value model based on prevailing rental markets. A summary of the properties' valuations is as follows:

- Original cost (acquired in 2009) €50 million
- Fair value valuation as at 31 December 2009 €50.5 million
- Fair value valuation as at 31 December 2010 €54.5 million
- Fair value valuation as at 31 December 2011 €48.0 million

Which of the following best describes the impact of the revaluation on the 2011 financial statements?

- A. €6.5 million charge to net income.
- B. €6.5 million charge to revaluation surplus.
- C. €4.5 million charge to revaluation surplus and €2.0 million charge to net income.

31. A company purchased equipment in 2009 for £25,000; the year-end values for accounting purposes and tax purposes are as follows:

	2010	2009
Carrying amount for accounting purposes	£20,000	£22,500
Tax base for tax purposes	£16,000	£20,000
Tax rate	25%	30%

Which of the following statements best describes the effect of the change in the tax rate on the company's 2010 financial statements? The deferred tax liability:

- A. increased by £250.
- B. decreased by £200.
- C. decreased by £800.

32. An analyst can most accurately identify a LIFO liquidation by observing a(n):

- A. increase in gross margin.
- B. decrease in the LIFO reserve.
- C. change in inventory out of line with change in sales.



33. Selected information about a company is as follows:

(\$ '000)	2010 31 December	2011 Projection
Sales	2,200	2,500
Variable operating costs (% of sales)	28%	30%
Fixed operating costs	1,400	1,400
Tax rate	25%	25%
Dividends paid	55	60
Interest bearing debt at 5%	500	500

The forecasted net income (in '000s) for 2011 is closest to:

- A. \$169.
- B. \$202.
- C. \$244.

34. An analyst has gathered the following information about a company's capital assets:

Year ending	2011	2010
Property plant and equipment	€2,500	€2,500
Accumulated depreciation	375	250
Net book value	2,125	2,250

As at the end of 2011, the expected remaining life of the assets, in years, is closest to:

- A. 6.
- B. 17.
- C. 20.

35. Given the following information about a firm:

- debt-to-equity ratio of 50%
- tax rate of 40%
- cost of debt of 8%
- cost of equity of 13%

the firm's weighted average cost of capital (WACC) is closest to:

- A. 7.5%.
- B. 8.9%.
- C. 10.3%.

36. The unit contribution margin for a product is \$20 and the firm's fixed costs of production up to 300,000 units is \$500,000. The degree of operating leverage (DOL) is most likely the lowest at which of the following production levels (in units)?

- A. 100,000.
- B. 200,000.
- C. 300,000.

37. Which date in the chronology of a dividend payment is most likely determined by a security exchange? The:

- A. declaration date.

- B. ex-dividend date.
- C. holder-of-record date.

38. Which of the following share repurchase methods will most likely take the longest amount of time to execute?

- A. Dutch auction.
- B. Fixed price tender offer.
- C. Open market repurchase.

39. Assuming a 365-day year and the following information for a company:

	Current Year	Previous Year
Sales	\$12,000	\$10,000
Cost of goods sold	\$6,000	\$5,000
Inventory	\$1,200	\$1,000
Accounts payable	\$600	\$500

The firm's days in payables for the current year is closest to:

- A. 18.3.
- B. 35.3.
- C. 36.5.

40. If a stock's intrinsic value is less than its current market price, the most appropriate strategy an active investor can adopt is to:

- A. sell the stock short.
- B. buy the stock on margin.
- C. buy a call option on the stock.

41. An analyst finds that a company she is following has initiated the process of selling unproductive land representing 5% of its total assets and using the proceeds to buy back its common shares.

Holding other factors constant, these actions by the company will most likely result in a:

- A. higher return on equity.
- B. higher operating margin.
- C. lower sustainable growth.

42. Which of the following is the most appropriate reason for using a free-cash-flow-to-equity (FCFE) model to value equity of a company?

- A. FCFE is a measure of the firm's dividend-paying capacity.
- B. FCFE models provide more accurate valuations than the dividend discount models.
- C. A firm's borrowing activities could influence dividend decisions but they would not impact FCFE.

43. The following information is available about a company:

Next year's sales revenue	\$180 million
Next year's net profit margin	15%
Dividend payout ratio	60%
Dividend growth rate expected during Years 2 and 3	25%

Dividend growth rate expected after Year 3	5%
Investors' required rate of return	12%
Number of outstanding shares	8.1 million

The current value per share of the company's common stock according to the two-stage dividend discount model is closest to:

- A. \$39.36.
- B. \$49.20.
- C. \$51.20.

44. A trader buys 500 shares of a stock on margin at \$36 a share using an initial leverage ratio of 1.66. The maintenance margin requirement for the position is 30%. The stock price at which the margin call occurs is closest to:

- A. \$20.57.
- B. \$25.20.
- C. \$30.86.

45. Which of the following inferences concerning market efficiency is most accurate?

- A. Fully exploitable over and under-reactions often occur in efficient markets.
- B. Market pricing anomalies and behavioral biases are contrary to the existence of market efficiency.
- C. If a market is semi-strong form efficient, neither technicians nor fundamental analysts can expect to consistently earn abnormal returns.

46. An investor is long an in-the-money American call option. Would this option most likely ever be exercised early?

- A. No.
- B. Yes, if its time value is high enough.
- C. Yes, if it pays a high enough dividend.

47. A European company issues a 5-year euro-denominated bond with a face value of EUR 50,000,000. The company then enters into a 5-year currency swap with a bank to convert the EUR exposure into US\$ exposure. The notional principals of the swap are EUR 50,000,000 and US\$70,000,000. The European company pays a fixed rate of 5% and the bank pays a fixed rate of 4.5%. Payments are made semiannually on a basis of 30 days per month and 360 days per year. What is the payment from the bank to the company at the end of year 4?

- A. US\$1,750,000.
- B. EUR 1,125,000.
- C. EUR 1,250,000.

48. An investor with \$5000 to invest believes that the price of ABC Corp. stock will appreciate by \$7 to \$95 in two months. Two-month at-the-money puts on one share of ABC stock are trading at \$1.76, while two-month at-the-money calls are trading at \$1.56. What action will he most likely take to profit from his view on ABC stock?

- A. Sell 100 ABC puts.
- B. Buy 100 ABC calls.

- C. Buy 100 ABC shares.

49. An investor is evaluating the purchase of a mutual fund that offers three classes of shares. Fees for each class are provided in the table below:

	Class A	Class B	Class C
Annual fees	1.00%	1.25%	1.25%
Front-end load	2.75%	None	None
Back-end load	None	4% year 1, 1% annually after	1.50% initial 5 years

Given a time horizon of three years, which class is most likely to result in the lowest fees for the investor?

- A. Class A.  
B. Class B.  
C. Class C.

50. In estimating the value of inactively traded securities of a closely held corporation, which of the following statements is least likely correct?

- A. A control premium values the equity from a minority shareholder perspective.  
B. The cost approach assigns the original acquisition price to the company's assets.  
C. Shares should reflect a marketability discount to compensate for a lack of trading in a public market.

51. When using the historical track record of hedge funds to interpret performance, which of the following is least likely correct?

- A. Databases may have backfilling bias since only hedge fund managers with good track records agree to be included.  
B. Self-selection bias is present as index providers decide whether to include a hedge fund in a performance database.  
C. Survivorship bias occurs because poorly performing hedge funds no longer appear in hedge fund databases, thus inflating the reported average performance.

52. The value of an 18-year zero-coupon bond with a maturity value of \$1,000 discounted at a 12% annual interest rate with semi-annual compounding is closest to:

- A. \$122.74.  
B. \$130.04.  
C. \$350.34.

53. A 10% coupon bond with annual payments, maturing in 3 years, is priced at 105. The bond is callable in one year at a call price of 104 or in two years at a call price of 102. The bond's yield to worst most likely occurs when the bond is:

- A. called in year 1.  
B. called in year 2.  
C. held until maturity.

54. All else being the same, the difference between the nominal spread and the Z-spread for a non-Treasury security will be larger when the:
- yield curve is flatter.
  - maturity of the security is longer.
  - security has a bullet maturity rather than an amortizing structure.
55. Assume the following six-month forward rates (presented on an annualized, bond-equivalent basis) were calculated from the yield curve.

Notation	Forward Rate
$if_0$	0.50%
$if_1$	0.70%
$if_2$	1.00%
$if_3$	1.50%
$if_4$	2.20%
$if_5$	3.00%
$if_6$	4.00%

The 3-year spot rate is closest to:

- 0.74%.
  - 1.48%.
  - 2.06%.
56. One advantage of the full valuation approach to measuring interest rate risk relative to the duration/convexity approach is the full valuation approach is:
- more accurate.
  - easier to model.
  - less time-consuming.
57. An analyst uses a valuation model to estimate the value of an option-free bond at 92.733 to yield 11%. If the value estimate rises to 94.474 for a 60 basis point decrease in yield and falls to 91.041 for a 60 basis point increase in yield, the effective duration of the bond is closest to:
- 1.85.
  - 3.09.
  - 6.17.
58. The stock of GBK Corporation has a beta of 0.65. If the risk-free rate of return is 3% and the expected market return is 9%, the expected return for GBK is closest to:
- 3.9%.
  - 6.9%.
  - 10.8%.
59. A return-generating model that provides an estimate of the expected return of a security based on factors such as earnings growth and cash flow generation is best described as a:
- market factor model.
  - fundamental factor model.

C. macroeconomic factor model.

60. A portfolio manager earned a rate of return of 15.5%. The beta of the portfolio is 1.2. If the risk-free rate of return is 2.5% and the market return is 11.8%, Jensen's alpha for the portfolio is closest to:

A. 1.84%.

B. 3.70%.

C. 4.34%.