2009 Level I Mock Exam: Afternoon Session

The afternoon session of the 2009 Level I Chartered Financial Analyst® Mock Examination has 120 questions. To best simulate the exam day experience, candidates are advised to allocate an average of 1.5 minutes per question for a total of 180 minutes (3 hours) for this session of the exam.

Questions	Topic	Minutes
1-18	Ethical and Professional Standards	27
19-32	Quantitative Methods	21
33-44	Economics	18
45-68	Financial Statement Analysis	36
69-78	Corporate Finance	15
79-90	Equity Investments	18
91-96	Derivative Investments	9
97-108	Fixed Income Investments	18
109-114	Alternative Investments	9
115-120	Portfolio Management	9
	Total:	180

LEVEL I MOCK EXAM AFTERNOON

Questions 1 through 18 relate to Ethical and Professional Standards.

- 1. According to the *Standards of Practice Handbook*, which of the following statements about fair dealing is *least* accurate? The Standard related to fair dealing:
 - A. states that members should treat all clients equally.
 - B. imposes a duty with respect to both clients and prospective clients.
 - C. pertains to both investment recommendations and investment actions.
- 2. An asset manager, a CFA charterholder, manages small-cap portfolios for institutional clients. The manager is convinced, given the deteriorating economic conditions, that as a group, small-cap equities will underperform during the next 12-24 months. To preserve her client's wealth, the manager sells small-cap equities that she considers most vulnerable to price declines. After considerable research, the manager buys large-cap equities that she believes are better positioned to weather the expected economic downturn. The manager provides complete disclosure of these trades to her clients after the purchase. Has the manager violated any CFA Institute Standards of Professional Conduct?
 - A. No.
 - B. Yes, relating to suitability.
 - C. Yes, relating to misconduct.
- 3. According to the *Standards of Practice Handbook*, a supervisor establishing procedures to eliminate conflicts of interest relating to personal trading would *least likely* recommend requiring:
 - A. a ban on employee investments.
 - B. disclosures of beneficial ownerships.
 - C. duplicate confirmations of employee transactions.

- 4. David Sandridge earned the right to use the CFA designation in September 1968. Sandridge recently retired from the investment management profession. As he is retired, Sandridge no longer attends CFA Institute society meetings and has stopped paying his CFA Institute dues. According to the *Standards of Practice Handbook*, how should Sandridge refer to his affiliation with the CFA Program?
 - A. David Sandridge, CFA.
 - B. David Sandridge, CFA (retired).
 - C. "I was awarded the CFA charter in 1968."
- 5. A CFA Candidate, who is an investment bank equity analyst writes a research report on an oil company recommending a buy. After reviewing the report and not seeing any disclosures a pension fund manager asks the analyst if the investment bank is currently undertaking any corporate finance activity with this oil company. The analyst states that the investment bank is presently not working with the oil company but has done so in the past. The analyst does not mention or include in the research report, that she is related to the majority shareholder of the investment bank and that she owns shares in the oil company. According to the *Standards of Practice Handbook*, the analyst is *least likely* to have violated the CFA Institute Standards of Professional Conduct that relates to:
 - A. Disclosure of Conflicts.
 - B. Independence and Objectivity.
 - C. Additional Compensation Arrangements.
- 6. According to the *Standards of Practice Handbook*, members are *least likely* required to disclose to clients their:
 - A. service as directors.
 - B. firm's market-making activities.
 - C. responsibilities as CFA charterholders.

- 7. According to the *Standards of Practice Handbook*, a member with supervisory responsibilities violates the CFA Institute Standards of Professional Conduct if the member fails to:
 - A. prevent violations of the law.
 - B. prevent violations of the CFA Code and Standards.
 - C. establish and implement written compliance procedures.
- 8. For the past decade, Rachel Pederson, CFA, has managed the account of Olga Stefansson and in that time developed a close relationship with her client. Stefansson has a beach house in the Bahamas which she offers to Pederson and her family free use of for two weeks as a reward for the excellent returns generated in her account. Pederson is so busy at work she does not tell anyone where she is going for vacation. When accepting Stefansson's offer, Pederson *least likely* violates the CFA Institute Standard relating to:
 - A. Loyalty to Employer.
 - B. Disclosure of Conflicts.
 - C. Independence and Objectivity.
- 9. A CFA charterholder owns an asset management firm with offices downtown. To minimize rent expenses, each year the charterholder ships the previous year's research records to a nearby warehouse. There, the reports are digitized and stored in both electronic and hard-copy forms. After five years, all paper copies are destroyed and only electronic copies are retained. Are the charterholder's record-retention procedures in compliance with the CFA Institute Standards of Practice?
 - A. No.
 - B. Yes, because he is only required to retain hard copies for five years.
 - C. Yes, because he still retains electronic copies of the original documents.

- 10. After work each day, Shinichi Takada, CFA, runs a popular internet blog where he comments on micro-cap stocks. The blog includes a bio of Takada with his education and employment history. He receives no compensation for the blog. On the blog, Takada recommends purchases and sales of stocks based upon astrology. When blogging, Takada *least likely* violates CFA Institute Standard relating to:
 - A. Fair Dealing.
 - B. Duty to Employer.
 - C. Diligence and Reasonable Basis.
- 11. A CFA charterholder agreed in writing with his former employer not to solicit former clients for a period of one year after his termination. After he left his former employer, he consulted with a lawyer about whether the agreement was legally enforceable. The lawyer advised the charterholder that it was doubtful that the agreement could be enforced, so the charterholder sent a marketing brochure about his new firm to his former clients. According to the *Standards of Practice Handbook*, which of the following statements is *most* accurate with respect to the charterholder's conduct?
 - A. The Standards do not apply to the charterholder's conduct.
 - B. The Standards require the charterholder to comply with the agreement with his former employer.
 - C. Because the charterholder relied upon the opinion of legal counsel, he did not violate the Standards.
- 12. A CFA charterholder is asked to review her firm's soft dollar practices. As part of the review, she notes that her firm has failed to disclose the practices to the firm's clients in writing as required by law. The charterholder quickly prepares and distributes the appropriate disclosures. She does not report the firm's violation to the appropriate regulatory authority. According to the *Standards of Practice Handbook*, by not reporting the violation to the regulatory authority, has the charterholder violated any CFA Institute Standards of Professional Conduct?
 - A. No.
 - B. Yes, because she failed to act in the best interest of her employer.
 - C. Yes, because she is required to report legal violations to the appropriate authority.

- 13. Romar Brockman, CFA, is a sell-side analyst. Approximately half of Brockman's compensation comes from his firm's investment-banking division. Brockman is asked to write a report about Anacortes Concrete (AC), an investment-banking client. Despite his concerns about a slowdown in concrete demand, Brockman issues a very positive report on AC. When issuing his report, Brockman *least likely* violates the CFA Institute Standard relating to:
 - A. Loyalty to Employer.
 - B. Disclosure of Conflicts.
 - C. Loyalty, Prudence, and Care.
- 14. Eric Pantoja is enrolled as a candidate in the CFA examination program. He works as an assistant for Chehalis Investments (CI). Pantoja sees CI's purchase list and purchases several of the recommended stocks. Pantoja *least likely* violates the CFA Institute Standard relating to:
 - A. Loyalty to Employer.
 - B. Priority of Transactions.
 - C. Diligence and Reasonable Care.
- 15. Fred Brubacher, CFA, is an analyst at Van City Bank (VCB). Brubacher receives compensation for referrals to the bank's brokerage and personal financial-planning divisions. His recent referrals are long-time clients from his previous employer, and Brubacher does not mention VCB's referral arrangement. Does Brubacher violate any CFA Institute Standards?
 - A. No.
 - B. Yes, with respect to misrepresentation.
 - C. Yes, with respect to conflicts of interest.

- 16. A CFA charterholder has decided to revise her firm's written compliance manual. She checks with counsel regarding changes to applicable laws, rules, and regulations. She incorporates these changes as well as changes to the Code and Standards in the new version and distributes copies to her staff along with a memorandum. The memorandum states that the updated manual includes compliance procedures designed to meet industry standards, regulatory requirements, requirements of the Code and Standards, and circumstances of the firm. According to the *Standards of Practice Handbook*, did the charterholder violate any Standard of Professional Conduct?
 - A. No.
 - B. Yes, because compliance procedures may not be designed to meet industry standards.
 - C. Yes, because compliance procedures should not be altered to meet the circumstances of the firm.
- 17. A CFA charterholder runs a small investment management firm. The firm subscribes to a service from a large investment research firm that provides research reports that can be repackaged as in-house research by smaller firms. The firm distributes these reports to clients with specific references as to their source and author. According to the *Standards of Practice Handbook*, has the charterholder violated the Standard related to misrepresentation?
 - A. No.
 - B. Yes, because she distributed plagiarized material.
 - C. Yes, because she misrepresented her firm's services.
- 18. Firms claiming compliance with the GIPS Standards are *least likely* to be required to:
 - A. undertake a verification process.
 - B. provide a composite list and description to any prospective client on request.
 - C. document their policies and procedures used in establishing and maintaining compliance.

Questions 19 through 32 relate to Quantitative Methods

19. A money manager has \$1,000,000 to invest for one year. She has identified three alternative one-year certificates of deposit (CD) shown below:

	Compounding frequency	Annual interest rate
CD1	Monthly	7.82%
CD2	Quarterly	8.00%
CD3	Continuously	7.95%

Which CD has the *highest* effective annual rate (EAR)?

- A. CD 1
- B. CD 2
- C. CD 3
- 20. A consumer is shopping for a home. His budget will support a monthly payment of \$1,300 on a 30-year mortgage with an annual interest rate of 7.2 percent. If the consumer puts a 10 percent down payment on the home, the most he can pay for his new home is *closest* to:
 - A. \$191,518.
 - B. \$210,840.
 - C. \$212,800.
- 21. An analyst gathers the following information about a common stock investment:

	Date	Amount €
Stock purchase (1 share)	15 January 2006	86.00
Stock purchase (1 share)	15 January 2007	94.00
Stock sale (2 shares @106 per share)	15 January 2008	212.00

The stock does not pay a dividend. The money-weighted rate of return on the investment is *closest* to:

- A. 11.02%
- B. 11.60%
- C. 11.89%

- 22. An analyst gathers the price-earnings ratios (P/E) for the firms in the S&P 500 and then ranks the firms from highest to lowest P/E. She then assigns the number 1 to the group with the lowest P/E ratios, the number 2 to the group with the second lowest P/E ratios, and so on. The measurement scale used by the analyst is *best* described as:
 - A. ordinal.
 - B. interval.
 - C. nominal.
- 23. Using Chebyshev's inequality, what is the minimum proportion of observations from a population of 500 that must lie within two standard deviations of the mean, regardless of the shape of the distribution?
 - A. 75%
 - B. 89%
 - C. 99%
- 24. If a distribution exhibits positive skewness, then the mean *most likely* is located to the:
 - A. left of both the median and mode.
 - B. right of both the median and mode.
 - C. left of the median and right of the mode.
- 25. The manager of a pension fund determines that during the past five years 85 percent of the stocks in the portfolio have paid a dividend and 40 percent of the stocks have announced a stock split. If 95 percent of the stocks have paid a dividend and/or announced a stock split, the joint probability of a stock paying a dividend and announcing a stock split is *closest* to:
 - A. 30%.
 - B. 45%.
 - C. 55%.

- 26. Which of the following statements about a normal distribution is *least* accurate? A normal distribution:
 - A. has an excess kurtosis of 3.
 - B. is completely described by two parameters.
 - C. can be the linear combination of two or more normal random variables.
- 27. A portfolio manager gathers the following information about three possible asset allocations:

Allocation	Expected annual return	Standard deviation of return
I	13%	6%
II	26%	14%
III	32%	20%

The manager's client has stated that her minimum acceptable return is 8 percent. Based on Roy's safety-first criterion, the *most* appropriate allocation is:

- A. I.
- B. II.
- C. III.
- 28. An analyst gathers the following information about a sample:

Mean	12
Number of observations	50
Variance	32

The standard error of the sample mean is *closest* to:

- A. 0.47.
- B. 0.64.
- C. 0.80.

- 29. Compared to the normal distribution, the Student's *t*-distribution *most likely*:
 - A. has fatter tails.
 - B. is more peaked.
 - C. has greater degrees of freedom.
- 30. Which of the following steps in hypothesis testing *most likely* follows collecting the data and calculating the test statistic?
 - A. Stating the decision rule.
 - B. Making the statistical decision.
 - C. Specifying the significance level.
- 31. The following end of month payments of \$400, \$700, and \$300, (respectively) are due. Given a stated annual interest rate of 3.60 percent, the minimum amount of money needed in an account today to satisfy these future payments is *closest* to:
 - A. \$1,308.
 - B. \$1,387.
 - C. \$1,391.
- 32. Which of the following investments will grow to the largest future value?

Investment	Stated Annual Interest Rate:	Frequency:
I	8.40%	Monthly
II	8.60%	Quarterly
III	8.64%	Semi-annually

- A. I.
- B. II.
- C. III.

Questions 33 through 44 relate to Economics

- 33. If mangoes cost India Rupees (INR) 10 each, a consumer spends his budget on fruits that he values more highly than mangoes. However, at a price of INR 4 per mango the consumer buys 20 mangoes. The total consumer surplus (in INR) is *closest* to:
 - A. 26.
 - B. 60.
 - C. 120.
- 34. The *best* characterization of a firm that is operating on its long-run average cost curve is when it:
 - A. experiences constant returns to scale.
 - B. produces a given output at the least possible cost.
 - C. chooses a plant size that minimizes the average fixed cost.
- 35. As the quantity of labor increases, which of the following is the *most likely* outcome with respect to the marginal revenue product (MRP) of labor?
 - A. MRP increases for a monopoly.
 - B. MRP decreases for a firm in perfect competition.
 - C. MRP increases for both monopoly and a firm in perfect competition.
- 36. The cross elasticity of demand for a complementary product would *most likely* be:
 - A. zero.
 - B. positive.
 - C. Negative.
- 37. The return to entrepreneurial ability in a firm that makes a positive economic profit is *most likely*:
 - A. normal.
 - B. less than normal.
 - C. greater than normal.

- 38. The belief that money wage rates are sticky is *least likely* to be associated with:
 - A. classical macroeconomics.
 - B. monetarist macroeconomics.
 - C. Keynesian macroeconomics.
- 39. For a firm in perfect competition, as output increases the marginal revenue will *most likely*:
 - A. increase.
 - B. decrease.
 - C. remain constant.
- 40. Price discrimination is *most likely* an attempt by a monopoly to:
 - A. resell a product.
 - B. capture a producer surplus.
 - C. capture a consumer surplus.
- 41. Which of the following will *most likely* lead to cost-push inflation?
 - A. A decrease in the cost of financing.
 - B. An increase in the money prices of raw materials.
 - C. A technology change that lowers production costs.
- 42. Which of the following is *least likely* to be a tool available to central banks for implementing monetary policy?
 - A. Inflation targeting.
 - B. Adjusting taxation.
 - C. Managing interest rates.

- 43. The monetary policy tools available to the Federal Reserve are *least likely* to include:
 - A. open market operations.
 - B. the ability to determine the required reserve ratios of its member banks.
 - C. adjustments to the amount of gold held as reserves against Federal Reserve notes.
- 44. Suppose the CPI basket contains only two goods and services: oranges and haircuts. In the base period, consumers bought 15 oranges at \$2 each and 5 haircuts at \$10 each. In the current period, consumers buy 15 oranges at \$1.75 each and 5 haircuts at \$12 each. The CPI for the current period is *closest* to:
 - A. 107.81.
 - B. 114.58.
 - C. 117.97.

Questions 45 through 68 relate to Financial Statement Analysis

45. An analyst gathers the following information about a company:

Cost of goods sold	\$18.4 million
Average inventory	\$2.5 million
Receivables turnover	24 times
Number of days of payables	25 days

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

- A. 40.
- B. 59.
- C. 65.

Two companies operating in the same industry both achieved the same return on equity with the same net sales, but the two companies were different with respect to return on total assets. Compared with the company that had the higher return on total assets, the company with the lower return on total assets *most likely* had a higher:

- A. total asset turnover.
- B. financial leverage multiplier.
- C. proportion of common equity in its capital structure.
- 47. If an analyst is preparing common-size financial statements the *most* appropriate way of expressing the interest expense is as a percentage of:
 - A. sales.
 - B. total liabilities.
 - C. total interest-bearing debt.
- 48. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

An analyst gathers the following information about three equipment sales that a company made at the end of the year:

	Original	Accumulated Depreciation	Sales
	Cost	at Date of Sale	Proceeds
1	\$200,000	\$150,000	\$70,000
2	\$200,000	\$200,000	\$30,000
3	\$300,000	\$250,000	\$40,000

All else equal for that year, the company's cash flow from operations will *most likely* be:

- A. the same as net income.
- B. \$40,000 less than net income
- C. \$140,000 less than net income.

The following information is from a company's 2008 financial statements (\$ millions):

Balances as of the year ended 31 December		2007
Retained earnings	140	120
Accounts receivable	43	38
Inventory	48	45
Accounts payable	29	36

In 2008 the company declared and paid cash dividends of \$5 million and recorded depreciation expense in the amount of \$25 million. The company's 2008 cash flow from operations (\$ millions) is *closest* to:

- A. 25.
- B. 30.
- C. 35.
- 50. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

A company using the LIFO inventory method reports a LIFO reserve at year-end of \$85,000, which is \$20,000 lower than the prior year. If the company had used FIFO instead of LIFO in that year, the company's financial statements would have reported:

- A. a lower cost of goods sold, but a higher inventory balance.
- B. a higher cost of goods sold, but a lower inventory balance.
- C. both a higher cost of goods sold and a higher inventory balance.

The year-end balances in a company's LIFO reserve are \$56.8 million in the company's financial statements for both 2007 and 2008. For 2008, the measure that will *most likely* be the same regardless of whether the company uses the LIFO or FIFO inventory method is the:

- A. inventory turnover.
- B. gross profit margin.
- C. amount of working capital.
- 52. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

An analyst gathers the following information about a company:

Shares of common stock outstanding	1,000,000
Net income for the year	\$1,500,000
Par value of convertible bonds with a 4 percent coupon rate	\$10,000,000
Par value of cumulative preferred stock with a 7 percent dividend rate	\$2,000,000
Tax rate	30%

The bonds were issued at par and can be converted into 300,000 common shares. All securities were outstanding for the entire year. Diluted earnings per share is *closest* to:

- A. \$1.05.
- B. \$1.26.
- C. \$1.36.

At the beginning of the year, two companies issued debt with the same market rate, maturity date, and total face value. One company issued coupon-bearing bonds at par and the other company issued zero-coupon bonds. All other factors being equal for that year, compared with the company that issued par bonds, the company that issued zero-coupon debt will *most likely* report:

- A. higher cash flow from operations but not higher interest expense.
- B. both higher cash flow from operations and higher interest expense.
- C. neither higher cash flow from operations nor higher interest expense.
- 54. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

Which of the following is the *simplest* way for a company to increase its reported operating cash flow?

- A. Record sales on a bill-and-hold basis.
- B. Slow down the rate of payment to suppliers.
- C. Use a third party financial institution to pay suppliers.
- 55. When the financial statements materially depart from accounting standards and are not fairly presented, the audit opinion would be a(n):
 - A. adverse opinion.
 - B. qualified opinion.
 - C. disclaimer of opinion.
- 56. An issue subject to a vote at a stockholders' meeting is presented in a(n):
 - A. interim report.
 - B. proxy statement.
 - C. management statement of responsibility.

A company acquires a manufacturing facility in which it will produce toxic chemicals. The cost of the facility (exclusive of the underlying land) is \$25 million and it is expected to provide a 10-year useful life, after which time the company will demolish the building and restore the underlying land. The cost of this restoration and cleanup is estimated to be \$3 million at that time. The facility will be amortized on a straight-line basis. The company's discount rate associated with this obligation is 6.25 percent. The total expense that will be recorded in the first year associated with the asset retirement obligation on this property is *closest* to:

- A. \$163,618.
- B. \$224,945.
- C. \$265,879.
- 58. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

A company receives a payment of \$10,000 on 1 December, for rent on a property for December and January. On receipt, they correctly record it as cash and unearned revenue. If at 31 December, their year-end, they failed to make an adjusting entry related to this payment, ignoring taxes, what is the effect on the financial statements for the year?

- A. Assets are overstated by \$5,000 and Liabilities are overstated by \$5,000
- B. Assets are overstated by \$5,000 and Owner's equity is overstated by \$5,000
- C. Liabilities are overstated by \$5,000 and Owners' equity is understated by \$5,000

An analyst gathers the following information from a company's accounting records (all figures in thousands):

Assets, 31 December 2008	\$5,250
Liabilities, 31 December 2008	2,200
Contributed capital, 31 December 2008	1,400
Retained earnings, 1 January 2008	800
Dividends declared during 2008	200

The analyst's estimate of net income (\$ thousands) for 2008 is *closest* to:

- A. 650.
- B. 850.
- C. 1,050.
- 60. Which of the following is *least likely* to be a characteristic of an effective financial reporting framework?
 - A. Consistency.
 - B. Comparability.
 - C. Comprehensiveness.

An analyst gathers the following data about a company and the industry in which it operates:

	Company (\$ millions)	Industry Averages as a percent of sales
Revenues	5,000	100%
Cost of goods sold	2,100	45%
Operating expenses	1,750	32%
Profit margin	475	9.5%

Which of the following conclusions is *most* reasonable? Compared to the industry, the company:

- A. has the same cost structure and net profit margin.
- B. has a lower gross profit margin and spends more on its operating costs.
- C. is better at controlling product costs, but less effective at controlling operating costs.
- 62. A European based company follows IFRS (International Financial Reporting Standards) and capitalizes new product development costs. During 2008 they spent €25 million on new product development and reported an amortization expense related to a prior year's new product development of €10 million. Other information related to 2008 is as follows:

	€millions
Net income	225
Cash flow from operations	290

An analyst would like to compare the European company to a similar U.S. based company and has decided to adjust their financial statements to U.S. GAAP. Under U.S. GAAP, and ignoring tax effects, the cash flow from operations (€ millions) for the company would be *closest* to:

A. 265.

B. 275.

C. 290.

Which of the following *best* describes taxes payable?

- A. Total liability for current and future taxes.
- B. Tax return liability resulting from current period taxable income.
- C. Actual cash outflow for income taxes including payments (refunds) for other years.
- 64. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

A company is considering issuing either a straight coupon bond or a coupon bond with warrants attached. The proceeds from either issue would be the same. If the firm issues the bond with warrants attached instead of the straight coupon bond, which of the following ratios will *most likely* be lower for the bond with warrants?

- A. Return on assets.
- B. Debt to equity ratio
- C. Interest coverage ratio.

An analyst is forecasting EPS for a company. She prepares the following common sized data from its recent annual report and estimates sales for 2009.

	2009	2008	2007
	forecast	actual	actual
Sales \$ millions	2,250.0	2,150.0	1,990.0
Sales as % of sales		100.00%	100.00%
Cost of goods sold		45.00%	45.00%
Operating Expenses		40.00%	40.00%
Interest expense		3.72%	4.02%
Restructuring expense			7.20%
Pre-tax margin		11.28%	3.78%
Taxes (35%)		3.95%	1.32%
Net Income		7.33%	2.46%

The capital structure of the company has not changed and the company has no short-term interest bearing debt outstanding. The projected net income (in \$ millions) for 2009 is *closest* to:

- A. 162.8
- B. 164.9
- C. 167.4
- 66. The unrealized gains and losses arising from changes in the market value of available-for-sale securities are reported under U.S. GAAP and International Financial Reporting Standards (IFRS) in the:
 - A. equity section for both.
 - B. equity section for U.S. GAAP and the income statement for IFRS.
 - C. income statement for U.S. GAAP and the equity section for IFRS.

A company records the following two transactions:

I.	€300,000 of rental revenue is received in advance on a two-year lease. It is taxed on
	a cash basis, but deferred for accounting purposes.

II. €500,000 of installment sales. No payments are required for one year after which collections will be made on an equal basis over 12 months and taxed on a cash basis. The entire sale and related profit will be recognized for financial reporting purposes in the year of sale.

Which of the above transactions will *most likely* give rise to a deferred tax liability on the balance sheet?

- A. I only.
- B. II only.
- C. Both I and II.
- 68. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

On 1 January 2008 a company enters into a lease agreement to lease a piece of machinery as the lessor with the following terms:

Annual lease payment due 31 December	\$75,000	
Lease term	6 years	
Estimated useful life of the machine	7 years	
Estimated salvage value of the machine	\$0	
Carrying value (cost) of leased asset	\$300,000	
Implied interest rate on lease	7%	
The firm is reasonably assured of the collection of the lease payments.		

The total affect on 2008 pre-tax income for the lessor from this lease is *closest to*:

- A. \$32,143.
- B. \$75,000.
- C. \$82,519.

Questions 69 through 78 relate to Corporate Finance

- 69. Which of the following is *least likely* classified as an opportunity cost?
 - A. The cash savings related to adopting a new production process.
 - B. The cash flows generated by an old machine that is to be replaced.
 - C. The market value of vacant land to be used for a distribution center.
- 70. A capital project with a net present value (NPV) of \$23.29 has the following cash flows:

Year	0	1	2	3	4	5
Cash flow (€)	-100	30	40	40	30	20

The internal rate of return (IRR) for the project is *closest* to:

- A. 10%.
- B. 12%.
- C. 19%.
- 71. Two mutually exclusive projects have conventional cash flows, but one project has a larger NPV while the other project has a higher IRR. Which of the following *least likely* explains this conflict?
 - A. Reinvestment rate assumption.
 - B. Size of the projects' initial investments.
 - C. Risk of the projects as reflected in the required rate of return.

72. An analyst gathers the following information about the cost and availability of raising various amounts of new debt and equity capital for a company:

Amount of new debt	Cost of debt	Amount of new equity	Cost of
(in millions)	(after tax)	(in millions)	equity
≤€4.0	4%	≤€5.0	13%
> €4.0	5%	>€5.0	15%

The company's target capital structure is 60 percent equity and 40 percent debt. If the company raises €0.5 million in new financing, the marginal cost of capital is *closest* to:

- A. 9.8%.
- B. 10.6%.
- C. 11.0%.
- 73. An analyst gathers the following information for a company:

Liquidity measure	Company
Inventory turnover	20.7
Accounts payable turnover	14.1
Accounts receivable turnover	12.5

The company's operating cycle is *closest* to:

- A. 20.9 days.
- B. 33.2 days.
- C. 46.8 days.
- 74. A company is offered trade credit terms of 2/10, net 45. The implicit cost of failing to take the discount and instead paying the account in 45 days is *closest* to:
 - A. 21.28%.
 - B. 23.10%.
 - C. 23.45%.

- 75. A company plans to issue €2,500,000 (face value) of commercial paper for one month. The company is quoted a rate of 5.88 percent with a dealer's commission of 1/8 percent and a backup line cost of 1/4 percent, both of which will be assessed on the face value. The effective cost of the financing is *closest* to:
 - A. 6.03%.
 - B. 6.16%.
 - C. 6.29%.
- 76. Regarding corporate governance, which of the following *most likely* would be a reason for concern when evaluating an independent board member's qualifications? The board member:
 - A. has served on the board for 14 years.
 - B. owns 1,000 shares of the corporation's equity.
 - C. has formerly served on the boards of several successful companies.
- 77. Which of the following is *least likely* to concern an investor evaluating a corporation's shareowner rights provisions?
 - A. Shareowners may nominate board members.
 - B. Shares held by the founding family have supernormal voting rights.
 - C. To ensure accuracy, company executives tabulate and verify shareowner voting.
- 78. A company's optimal capital budget is *best* described as the amount of new capital required to undertake all projects with an internal rate of return greater than the:
 - A. marginal cost of capital.
 - B. cost of new debt capital.
 - C. weighted average cost of capital.

Questions 79 through 90 relate to Equity Investments

- 79. Which of the following is the *least* accurate rationale to justify the use of price-to-book value (P/B) ratio as a measure of relative valuation of companies or common stocks?
 - A. P/B is a useful measure of value for firms that are not expected to continue as a going concern.
 - B. Compared to P/E, the P/B ratio is not influenced by such accounting effects as expensing a capital investment as opposed to capitalizing it.
 - C. P/B is particularly appropriate to value companies primarily composed of liquid assets, for example, those in the financial services industry.
- 80. An analyst is creating a new stock market index that is not affected by stock splits. The index the analyst is *least likely* to develop is:
 - A. unweighted.
 - B. price-weighted.
 - C. value-weighted.
- 81. An analyst gathers the following information about a company:

Common stock \$1.50 par value – Authorized	5,000,000 shares
Issued	4,000,000 shares
Additional paid-in-capital	\$20,000,000
Retained earnings	\$5,000,000
Treasury stock (500,000 shares)	\$10,000,000
Current price per share	\$21

The price-to-book (P/B) ratio of the company is *closest* to:

- A. 2.31.
- B. 3.50.
- C. 4.20.

- 82. A call market is *least likely* characterized as a market:
 - A. with bid-ask prices posted by dealers.
 - B. where buy-sell orders are cleared at a single equilibrium price.
 - C. with participation by a small number of active investors-traders.
- 83. The annual report of a company as at the end of its first year of its operation contains the following data:

Common stock \$0.50 par value – Authorized (2,500,000 shares)	\$ 1,250,000
- Issued (2,000,000 shares)	\$ 1,000,000
Additional paid-in-capital	\$10,000,000
Retained earnings	\$ 4,000,000
Current price per share	\$30

The company's ending inventories using LIFO are valued at \$1,500,000 and a footnote to financial statements reports inventories valued using FIFO would be \$1,900,000. The company's tax rate is 30 percent. The FIFO adjusted price-to-book value of the company is *closest* to:

- A. 3.93.
- B. 4.00.
- C. 4.08.
- 84. An analyst gathers the following data about a company with a double-digit growth rate that is expected to continue for three more years:

Current year's dividend per share	€2.00
Growth rate in dividend during the next three years	30% in each of the years 1 and 2; 20% in year 3
Growth rate in dividend for year 4 and beyond	8%
Weighted average cost of capital	12%
Cost of equity capital	15%

The best estimate of the company's value per share is *closest* to:

- A. €48.68.
- B. €50.68.
- C. **€**85.93.

85. An equity fund manager gathers the following data in order to assess the investment potential of a company and its stock:

	Company	Industry
		Average
Weighted average cost of capital (WACC)	14%	12%
Return on Assets (ROA)	20%	15%
Dividend Yield	0 %	1.2%
Consensus estimate of stock's value	\$53	N/A
Current price of company's stock	\$50	N/A

Based on the above information, which of the following statements *most* accurately describes the company and its stock? The company is a:

- A. growth company and its stock is a growth stock.
- B. growth company and its stock is a speculative stock.
- C. speculative company and its stock is a growth stock.
- 86. Free cash flow to equity is *most* accurately described as operating free cash flow adjusted for:
 - A. only interest payments to debt holders.
 - B. payments to both debt holders (interest and principal) and preferred stockholders.
 - C. both interest and principal payments to debt holders, but not payments to preferred stockholders.
- 87. Assuming efficient markets and a lack of access to superior analysts, which of the following is the *least* important activity in managing portfolios?
 - A. Minimizing total transaction costs.
 - B. Diversifying completely on a global basis.
 - C. Paying close attention to the monetary policy environment.

88. An analyst gathers the following data about a company in order to estimate its price/earnings (P/E) ratio.

Expected dividend payout ratio	40%
Return on equity	15%
Required rate of return	12%
Stock's current market price	\$75

The P/E ratio is *closest* to:

- A. 6.7 x.
- B. 13.3 x.
- C. 20.0 x.
- 89. For growth companies which of the following components of ROE is *most likely* to decline first?
 - A. Profit margin.
 - B. Financial leverage.
 - C. Total assets turnover.
- 90. Which of the following is *least likely* included in the assumptions of an informationally efficient securities market?
 - A. A large number of profit-maximizing participants analyze and value securities.
 - B. New information regarding securities comes to the market in a predictable manner.
 - C. Profit-maximizing investors adjust security prices rapidly to reflect the effect of new information.

Questions 91 through 96 relate to Derivative Investments.

- 91. An investor takes a short position of 10 futures contracts at \$90 on Day 0. The initial margin is \$10 per contract. The maintenance margin is \$5 per contract. On Day 1, the futures settlement price is \$96 and on Day 2, the futures settlement price is \$92. At the end of Day 2, the cash ending balance in the margin account is *closest* to:
 - A. \$80.
 - B. \$120.
 - C. \$140.
- 92. The lower bound on a European call price is the greater of zero and:
 - A. the underlying price minus the exercise price.
 - B. the present value of the exercise price minus the underlying price.
 - C. the underlying price minus the present value of the exercise price.
- 93. A description *least likely* to explain put-call parity is:
 - A. A fiduciary call option strategy and a protective put option strategy for an underlying asset are equal in value.
 - B. A put is equivalent to a long call, a long position in the underlying asset, and a long position in the risk-free asset.
 - C. A call is equivalent to a long put, a long position in the underlying asset, and a short position in the risk-free asset.
- 94. An investor goes long an FRA that expires in 30 days for which the underlying is 90-day LIBOR for a notional of \$10 million. A dealer quotes this instrument at 4.5 percent. At expiration, 60-day LIBOR is 3.5 percent and 90-day LIBOR is 4 percent. The payment made at expiration is *closest* to:
 - A. \$ 12,376 from the investor to the dealer.
 - B. \$ 12,376 from the dealer to the investor.
 - C. \$ 16,570 from the investor to the dealer.

- 95. A market participant has a view regarding the potential movement of a stock. He sells a customized over-the-counter put option on the stock when the stock is trading at \$38. The put has an exercise price of \$36 and the put seller receives \$2.25 in premium. The price of the stock is \$35 at expiration. The profit or loss for the put seller at expiration is:
 - A. \$(1.25)
 - B. \$1.25
 - C. \$2.25
- 96. An investor purchases a stock at \$60 and at the same time, sells a 3-month call on the stock. The short call has a strike price of \$65 and a premium of \$3.60. The risk-free rate is 4 percent. The breakeven underlying stock price at expiration is *closest* to:
 - A. \$56.40
 - B. \$60.80
 - C. \$61.40

Questions 97 through 108 relate to Fixed Income Investments.

- 97. If market interest rates rise, the price of a callable bond, compared to an otherwise identical option-free bond, will *most likely* decrease by:
 - A. less than the option-free bond.
 - B. more than the option-free bond.
 - C. the same amount as the option-free bond.
- 98. A U.S. investor who purchases an option-free bond with a 7 percent coupon rate, maturing in 20 years, and issued by a U.S.-based company is *most likely* exposed to:
 - A. volatility risk and credit risk.
 - B. event risk and interest rate risk.
 - C. volatility risk and yield curve risk.

- 99. All else equal, an increase in expected yield volatility is *most likely* to result in an increase in the price of a(n):
 - A. putable bond.
 - B. callable bond.
 - C. option-free bond.
- 100. An analyst is evaluating the two bonds below:

	Bond A	Bond B
Coupon	6.90%	8.25%
Maturity	Oct 29, 2019	Nov 4, 2019
Callable	No	No
Price	\$102.17	\$102.39
Yield	6.60%	7.90%

Compared with Bond A, Bond B most likely will have:

- A. less interest rate risk and more reinvestment risk.
- B. less reinvestment risk and more interest rate risk.
- C. more interest rate risk and more reinvestment risk.
- 101. An analyst determined that if interest rates increase 120 basis points the price of a bond would be \$89.70, but if interest rates decrease 120 basis points the price of that bond would be \$99.30. If the initial price of the bond is \$95.40, the approximate percentage price change for a 100 basis point change in yield is *closest* to:
 - A. 2.5%.
 - B. 4.2%.
 - C. 8.4%.
- 102. For an A- rated corporate bond that has deteriorating fundamentals, but is expected to remain investment grade, the greatest risk is *most likely*:
 - A. default risk
 - B. liquidity risk
 - C. credit spread risk

- 103. The difference between nominal spread and zero-volatility spread will *most likely* be greatest for a mortgage-backed security:
 - A. in an inverted yield curve environment.
 - B. in a steep upward-sloping yield curve environment.
 - C. with short maturity in a flat yield curve environment.
- 104. A fixed income portfolio manager is evaluating investments in the mortgage market but is concerned about prepayment risk. The security that will *most likely* minimize prepayment risk is:
 - A. a mortgage passthrough security.
 - B. a portfolio of interest-only mortgage loans.
 - C. tranche B of a collateralized mortgage obligation.
- 105. An analyst is evaluating various debt securities issued by a company. The type of security that is *most likely* to yield the lowest recovery in a bankruptcy is a:
 - A. mortgage bond
 - B. debenture bond.
 - C. collateral trust bond.
- 106. A U.S. investor has purchased a tax-exempt 5-year municipal bond at a yield of 3.86 percent which is 100 basis points less than the yield on a 5-year option-free U.S. Treasury. If the investor's marginal tax rate is 32 percent, then the yield ratio are *closest* to:
 - A. 0.79.
 - B. 1.26.
 - C. 5.68.

107. An analyst has gathered the following information provided in the table below:

Period	Years	U.S. Treasury Spot Rate	Credit Spread
		(%)	(%)
1	1	3.00	0.20
2	2	3.50	0.30
3	3	4.00	0.40
4	4	4.50	0.50
5	5	5.00	0.60

Based on the information provided in the table, the current market price of a \$1,000 par value, option-free, 0 percent coupon corporate bond maturing in 5 years is *closest* to:

- A. \$758.70.
- B. \$781.20.
- C. \$804.44.

108. An analyst gathered the following information about a portfolio comprised of three bonds:

Bond	Price (\$)	Par Amount	Duration
		Owned	
A	102.000	\$7 million	1.89
В	94.356	\$5 million	7.70
С	88.688	\$3 million	11.55

Assuming there is no accrued interest, then the portfolio duration is *closest* to:

- A. 5.55 years.
- B. 5.76 years.
- C. 6.82 years.

Questions 109 through 114 relate to Alternative Investments.

- 109. Hedge funds that contain infrequently traded assets would *most likely* exhibit a downward bias with respect to:
 - A. measured risk but not correlations with conventional equity investments.
 - B. correlations with conventional equity investments but not measured risk.
 - C. both measured risk and correlations with conventional equity investments.
- 110. Venture capital investments used to provide capital for companies initiating commercial manufacturing and sales are *most likely* to be considered a form of:
 - A. seed-stage financing.
 - B. first-stage financing.
 - C. second-stage financing.
- 111. Which classification of hedge funds is *least likely* to use a short position in stock as a part of its strategy?
 - A. Market-neutral funds.
 - B. Emerging-market funds.
 - C. Distressed securities funds.
- 112. The infrequent trading of some assets that hedge funds invest in *most likely* results in hedge fund:
 - A. risk being understated.
 - B. returns being understated.
 - C. correlations with other assets being overstated.
- 113. Which of the following is the *least accurate* approach used to value closely held companies? Basing the value of company on the:
 - A. present value of future economic income.
 - B. historic cost of the assets of similar companies.
 - C. average market price of similar companies recently sold.

- 114. The primary motivation for investing in commodity-linked bonds is that they *most likely* provide:
 - A. an income stream.
 - B. capital gains returns.
 - C. protection against interest rate risk.

Questions 115 through 120 relate to Portfolio Management.

- 115. Which of the following constraints would *most likely* appear in the unique needs and preferences section of a trust's investment policy statement? The portfolio is:
 - A. subject to the prudent-man standard.
 - B. prohibited from investing in tobacco companies.
 - C. prohibited from holding less than 5% in cash instruments.
- 116. Over time, the major source of investment return and risk can *most likely* be attributed to:
 - A. stock selection.
 - B. asset allocation.
 - C. risk management.
- 117. The risk-free interest rate is 5 percent, and the return on market portfolio is 8 percent. A stock with a beta of 0.5 that has an estimated rate of return of 7 percent is *most likely*:
 - A. overvalued.
 - B. undervalued.
 - C. correctly valued.
- 118. The minimum variance zero-beta portfolio *most likely* has some:
 - A. systematic and unsystematic risk.
 - B. unsystematic risk and no systematic risk.
 - C. systematic risk and no unsystematic risk.

- 119. Which of the following statements is *least likely* to be an assumption about investor behaviour underlying the Markowitz model?
 - A. Investors maximize one-period expected return
 - B. Investors base their decisions solely on expected return and risk
 - C. Investors have utility curves that are a function of expected returns and variance.
- 120. Compared to the traditional Capital Asset Pricing Model (CAPM), where lending and borrowing are carried out at the risk-free rate, a zero-beta CAPM would *most likely* result in a security market line (SML) with:
 - A. unchanged intercept and slope.
 - B. a higher intercept and flatter slope.
 - C. a lower intercept and steeper slope.