



March 2008

CAIASM Level I Sample Questions

Chartered Alternative Investment Analyst[®]

These questions are designed to be representative, but not a facsimile, of the CAIA Level I examination in March 2008. The sample questions do not cover all of the study materials that comprise the CAIA Level I curriculum, nor do they represent the full set of Level I exam questions.

Question Breakdown

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1. Which of the following statements about the global macro strategy is NOT true?
 - A. Global macro strategies may invest in commodities.
 - B. Global macro managers have a broad investment universe.
 - C. Global macro funds tend to have large amounts of investor capital.
 - D. Global macro strategies are hampered by an inability to apply leverage.

2. What hedge fund strategy invests in spread trades; that is, the simultaneous purchase of one security and the sale of another when the economic relationship between the two securities becomes mispriced?
 - A. Merger arbitrage
 - B. Event arbitrage
 - C. Volatility arbitrage
 - D. Relative value arbitrage

3. A hedge fund of funds reports a monthly hurdle rate vis-à-vis large cap stocks of 0.0047. What does this mean?
 - A. The fund of funds must earn at least 47 basis points per month to be a valuable addition for risk budgeting purposes.
 - B. The fund of funds' average return over the most recent month is 47 basis points.
 - C. The fund of funds' ratio of average return to standard deviation of return is 47 basis points per month.
 - D. On a monthly basis, the fund of funds is expected to earn 47 basis points more than the risk free rate of return.

4. According to Anson, which question is NOT considered to be part of the investment objective of the hedge fund?
 - A. What markets does the hedge fund manager invest?
 - B. What fees will the hedge fund manager charge?
 - C. What is the hedge fund manager's general investment strategy?
 - D. What is the hedge fund manager's benchmark, if any?

5. What is known as a decline in the net asset value of a hedge fund?
 - A. Capacity
 - B. Leverage
 - C. Drawdown
 - D. Lock-up

6. What does a hedge fund fee structure known as “2 and 20” refer to?
- A. An incentive fee that ranges between 2% and 20%.
 - B. A 2% management fee and a 20% incentive fee.
 - C. A 2% incentive fee and a 20% management fee.
 - D. A fee assessed when the return is between 2% and 20% of the highest net asset value.
7. Which statistical term describes a distribution where the tails are thinner than that expected by a normal distribution?
- A. Excess kurtosis
 - B. Leptokurtosis
 - C. Platykurtosis
 - D. Mesokurtosis
8. Logic fund is performing well and has decided to begin reporting its performance to various hedge fund databases. This is an example of what potential type of data risk?
- A. Liquidation bias
 - B. Survivorship bias
 - C. Selection bias
 - D. Event bias
9. How is an accredited individual investor defined according to Rule 501(a) under Regulation D of the Securities Act of 1933?
- A. Net worth exceeding \$1,000,000 and income in excess of \$200,000 per year.
 - B. Net worth exceeding \$1,000,000 and income in excess of \$1,000,000 per year.
 - C. Net worth exceeding \$1,000,000 and income in excess of \$2,000,000 per year.
 - D. Net worth exceeding \$1,000,000 and income in excess of \$500,000 per year.
10. Which is NOT considered a benefit to hedge fund registration by the SEC?
- A. Creation of census information.
 - B. Reduction of internal compliance costs
 - C. Deterrence of fraud
 - D. Adoption of formal compliance procedures

11. Which of the following comes closest to the fair price on a 6-month futures contract on the S&P 500 index given the following information: an index at 1500, the risk free rate at 5%, and the dividend yield at 1%?
- A. \$1,510
 - B. \$1,530
 - C. \$1,550
 - D. \$1,570
12. Which term describes the following relationship between the expected futures spot price and the price of the commodity futures contract?
- $$E(S_T) > F_T$$
- A. Roll yield
 - B. Contango
 - C. Parity
 - D. Backwardation
13. Which of the following is NOT a characteristic of the Goldman Sachs Commodity Index (GSCI)?
- A. GSCI is composed only of physical commodity futures.
 - B. GSCI is equally weighted across commodity groups.
 - C. GSCI is designed to be a tradable index.
 - D. GSCI is a long-only index.
14. In what way does the Dow Jones-AIG Commodity Index (DJ-AIGCI) differ from the Goldman Sachs Commodity Index (GSCI)?
- A. It is a long only index.
 - B. It is composed of futures contracts on physical commodities.
 - C. It has unequal weighting.
 - D. The weightings of the index rely primarily on liquidity data.
15. Which of the following is TRUE for TIPS (Treasury inflation protected securities)?
- A. They do not offer inflation protection for other assets in the portfolio.
 - B. They are designed so that the coupon payment does not change.
 - C. They are designed so that the coupon rate changes according to changes in the consumer price index (the CPI).
 - D. They are designed so that the par value stays constant.

16. What have been the results of studies examining the correlation between the U.S. and international equity markets during periods of market stress and decline?
- A. These markets are not correlated, so international diversification does not work well.
 - B. These markets are not correlated, so international diversification works well.
 - C. These markets are highly correlated, so international diversification does not work well.
 - D. These markets report zero correlation, so international diversification works well.
17. Who regulates the managed futures industry?
- A. The Securities and Exchange Commission
 - B. The Managed Futures Association
 - C. The Commodities Futures Trading Commission
 - D. No one as it is a self regulated industry
18. Which of the following is an example of a trend following futures strategy?
- A. Futures positions taken based upon forecasts of interest rate shifts
 - B. The purchase and sale of two futures positions based upon mispricing
 - C. Futures positions taken based upon news of potential takeovers
 - D. Futures positions taken based upon forecasts of positively skewed return distributions
19. Which of the following situations describes the free rider syndrome in the context of the allocation of incentive fees?
- A. A shareholder who buys into a fund in the middle of a measurement period at a price lower than the previous highest net asset value.
 - B. A shareholder who buys into a fund in the middle of a measurement period at a price higher than the previous highest net asset value.
 - C. A shareholder who buys into a fund at the beginning of a measurement period at a price just equal to the previous highest net asset value.
 - D. A shareholder who buys into a fund at the beginning of a measurement period at a price higher than the previous highest net asset value.

20. Which of the following comes closest to the annualized return on a fund that reports a 16-month return of 16%?
- A. 9.66%
 - B. 11.77%
 - C. 13.88%
 - D. 16.00%
21. Which of the following is TRUE about measures of central tendency?
- A. On an annualized basis, the arithmetic mean will be below the geometric mean (calculated from the same data).
 - B. The arithmetic mean is the appropriate measure of central tendency in cases where the goal is to measure the mean return over successive periods.
 - C. When analyzing a series of returns, a median value that is equal to the arithmetic mean indicates that the return distribution is asymmetric.
 - D. The average continuously compounded return of a return series is found by adding them up and dividing by the number of values in the series.
22. How is the information ratio defined?
- A. As the ratio of the standard deviation of the portfolio divided by the standard deviation of the benchmark.
 - B. As the ratio of the average return on the portfolio less the risk free rate all divided by the standard deviation of returns on the portfolio.
 - C. As the ratio of the average return on long positions divided by the average return on short positions.
 - D. As the ratio of the average return on the portfolio less the average return on the benchmark divided by the standard deviation of the returns difference between the fund and the benchmark (i.e., the standard deviation of tracking error).
23. How is the Sortino ratio different from the Sharpe ratio?
- A. The Sortino ratio uses a benchmark return in place of the risk free return.
 - B. The Sortino ratio uses downside deviation in place of the standard deviation.
 - C. The Sortino ratio uses upside return in place of the average portfolio return.
 - D. The Sortino ratio uses the return on value at risk in place of the risk free return.

24. What is the impact of illiquidity bias on reported hedge fund returns?
- A. Lower volatility and lower correlation with other investments
 - B. Higher volatility and higher correlation with other investments
 - C. Higher volatility and higher average return
 - D. Higher correlation with other assets and higher average return.
25. Which of the following is NOT a property that an ideal benchmark should possess?
- A. Simplicity
 - B. Representativity
 - C. Contractibility
 - D. Comparability
26. Ms. Samuel estimates the covariance between Stock A and Stock B to be 0.471. The variance of Stock A is estimated at 0.516, and the variance of Stock B is estimated at 0.609. Which of the following comes closest to the correlation coefficient between the stocks?
- A. 0.94
 - B. 0.89
 - C. 0.84
 - D. 0.79
27. Which of the following represents one reason why the Pearson product-moment correlation coefficient is preferred compared to covariance?
- A. The correlation coefficient can be positive or negative (or zero) while the covariance can only be positive.
 - B. The correlation coefficient can take on any value while covariance is confined to values within a particular range.
 - C. The correlation coefficient is instantly interpretable while covariance is not.
 - D. The correlation coefficient can be computed for individual assets or groups of assets while the covariance can only be computed for individual assets.
28. How does the Spearman rank correlation statistic improve upon the Pearson correlation coefficient?
- A. It can take values beyond the -1 to +1 range.
 - B. It is less sensitive to extreme data points.
 - C. It tends to produce correlations that are closer to zero.
 - D. It is easier to calculate.

29. What does it mean to say that a correlation coefficient has statistical significance at a confidence level of 95%?
- A. The relationship is important 5 times out of 100.
 - B. The possibility of the relationship being purely due to chance is less than 5%.
 - C. The possibility that the relationship is different from zero is 5%.
 - D. There is a 5% chance that the relationship has been measured incorrectly.
30. A research analyst for TRO hedge fund specifies a regression equation by $R_{\text{Fund}} = a + b R_{\text{Market}} + \epsilon$. Which of the following is TRUE about the error term, given by ϵ , in this specification?
- A. The error term will have an average value of zero.
 - B. The error term approximates the value of the dependent variable when the independent variable is equal to zero.
 - C. The error term is the difference between the predicted value for the dependent variable and the value of the dependent variable with no intercept term.
 - D. The size of the error term depends on the size of the intercept term.
31. Which of the following statements describes the test of the null hypothesis $H_0: b_1 = 0$ at the 5% significance level?
- A. There is 5% chance that the test procedure may lead to the acceptance of the null hypothesis when it is false.
 - B. There is 5% chance that the test procedure may lead to the rejection of the null hypothesis when it is true.
 - C. There is 95% chance that the test procedure may lead to the rejection of the null hypothesis when it is false.
 - D. There is 95% chance that the test procedure may lead to the rejection of the null hypothesis when it is true.

Mr. Hagong Rhee is a project manager for a diversified real estate firm. He has developed a model with the following specifications:

$$K = a + b_1R + b_2\Pi + e$$

Where K is project demand, R is the return on a real estate index, and Π is the change in the inflation rate.

The following estimates have been provided by the model:

$$a = 0.0300, b_1 = 0.0212, s(b_1) = 0.0265, b_2 = 0.0217, s(b_2) = 0.0027$$

Adjusted R-squared = 0.0601, F -stat = 5.21, p -value on F = 0.03

where $s(b_1)$ is the standard error of b_1 and $s(b_2)$ is the standard error of b_2 .

Answer the following **three (3) questions** as they pertain to this model.

32. According to the estimates provided for the model, under what circumstances would project demand be expected to change by 0.03?
- A. When the return on the real estate index is positive and significant, and the change in inflation is zero.
 - B. When the return on the real estate index is zero and the change in inflation is positive and significant.
 - C. When both the return on the real estate index and the change in inflation is positive and significant.
 - D. When both the return on the real estate index and the change in inflation is zero.
33. What does the reported value for adjusted R-squared indicate?
- A. About 6% of the standard deviation of the change in project demand is explained by the independent variables.
 - B. About 6% of the variance of the change in project demand is explained by the independent variables.
 - C. The change in project demand is expected to be positive 6% of the time.
 - D. The change in project demand is expected to be about 6 basis points when the independent variables are zero.
34. Which of the following statement about the F -stat is FALSE?
- A. It measures the ratio of explained variance to unexplained variance.
 - B. The hypothesis that there is no (linear) relationship can be rejected.
 - C. It is adjusted for degrees of freedom.
 - D. The low p -value means that both independent variables are statistically significant.

35. What is the violation of the assumption of constant volatility of residuals (from regression analysis) known as?
- A. Heteroscedasticity
 - B. Multi-collinearity
 - C. Extraneous variables
 - D. Serial correlation
36. The pricing model that explains the dynamics of a large series of hedge fund returns in terms of a smaller set of common explanatory variables, whose influence is common to all funds, is known as type of model?
- A. A factor model
 - B. A conditional model
 - C. A reduction model
 - D. A market model
37. According to the capital asset pricing model (CAPM), what should we expect the value of “alpha” or abnormal return to be equal to?
- A. The risk free rate
 - B. The risk premium
 - C. Zero
 - D. The “normal” return
38. The pricing model suggested by Fama and French adds what two risk factors to the factor given by the expected return on the market portfolio?
- A. Momentum and zero-beta
 - B. Liquidity and growth
 - C. Size and book-to-market
 - D. Volatility and credit
39. Which of the following does NOT describe an area of specialization in the venture capital industry?
- A. Specialization by industry
 - B. Specialization by geography
 - C. Specialization by currency
 - D. Specialization by stage of financing

40. The practice of buying non-financial companies by financial institutions is called:
- A. a crossover.
 - B. merchant banking.
 - C. a leveraged buyout (an LBO).
 - D. a private investment in a public entity (a PIPE).
41. The return patterns for LBOs are shown to exhibit:
- A. significant negative skewness.
 - B. significant positive skewness.
 - C. a near symmetrical distribution.
 - D. significant negative kurtosis.
42. A private equity transaction where an investor or group of investors bargain directly with a public company to acquire an equity position is known as:
- A. a mezzanine debt transaction.
 - B. a distressed debt transaction.
 - C. a crossover transaction.
 - D. a PIPE transaction.
43. Which of the following is TRUE of mezzanine financing?
- A. It is senior to debt represented by bank loans.
 - B. Real estate mezzanine financing typically does not have an equity kicker.
 - C. Return expectations to mezzanine funds is at about the same level as LBO funds.
 - D. Mezzanine financing tends to attract the most capital in a robust economy.
44. Under the rules of priority with respect to security holders, whose claims (from the choices below) are first to be satisfied?
- A. Senior debt
 - B. Subordinated debt
 - C. Equity
 - D. Bank debt

45. Which of the following represents an argument against club deals in the LBO market?
- A. They are rarely utilized in the LBO market.
 - B. They limit the auction process leading to companies being acquired at less attractive prices.
 - C. They might reflect a lack of opportunities in the LBO market.
 - D. They lead to a more concentration of risk particularly for large deals.
46. Which of the following describes the J Curve effect in the life cycle of the venture capital firm?
- A. Profits in the early years followed by losses in the later years.
 - B. Flat revenues in the early years followed by profits in the later years.
 - C. Losses in the early years followed by profits in the later years.
 - D. Moderate profits in the early years followed large profits in the later years.
47. Which of the following is TRUE regarding stale pricing and managed pricing?
- A. Private equity valuations might suffer from managed pricing, but not from stale pricing.
 - B. With managed prices, there is no time lag between observable public market valuations and those in the private equity portfolio.
 - C. While stale pricing can lead to a divergence between book value and market value, stale pricing will not affect the estimates of volatility in private equity markets.
 - D. Because of stale pricing, private equity prices may lag that of a readily determined benchmark.
48. What characteristic allows the mezzanine investor to purchase the senior debt once it has been repaid to a certain level?
- A. Priority of payment
 - B. The takeout provision
 - C. Acceleration
 - D. Subordination
49. Which of the following is NOT a typical investor constraint in the investment policy statement?
- A. Tax concerns
 - B. Expected cash flow patterns
 - C. Risk tolerance
 - D. Liquidity needs

50. Which of the following describes what an employee behind a firewall should first do if he or she needs to share confidential information about an issue with someone on the other side of the wall?
- A. Run a market simulation to determine if the sharing of the information will significantly alter the mix of total information currently available.
 - B. Determine if the information about to be shared concerns a security on a watched or restricted list.
 - C. Consult a designated compliance officer to determine if sharing the information is necessary.
 - D. Make sure that no previous trading violations have been filed against the person on the other side of the wall.
51. Why do the Codes and Standards recommend that investment personnel not participate in equity initial public offerings (IPOs)?
- A. Because participation in equity IPOs may have the appearance of appropriating an attractive investment opportunity from clients for personal gain
 - B. Because equity IPOs, while providing short term gains, are usually not prudent long term investments
 - C. Because equity IPOs carry substantial systematic risk such that they usually fall outside the limits established in the investor policy statement
 - D. Because equity IPOs are often illiquid so that it is difficult for investors to sell the shares quickly at a fair price
52. According to the Codes and Standards, what is the first step that a member should follow if he or she has grounds to believe that imminent or ongoing employer activities are illegal or unethical?
- A. Maintain a file of the activity or activities with proper documentation
 - B. Bring the activity to the attention of their employer through their supervisor
 - C. Move to establish a formal written policy of violations and penalties within the firm
 - D. Maintain confidentiality in order to preserve the integrity of the firm

53. According to the Codes and Standards, which of the following best describes appropriate conduct related to the acceptance of gifts from clients?
- A. Members may accept gifts from clients if they are disclosed and if the employer finds that the gifts will not affect independence and objectivity.
 - B. Members may accept gifts so long as their market value is less than \$100.
 - C. Members cannot accept gifts under any circumstances, in order to avoid even the appearance of a conflict.
 - D. Members cannot accept gifts under any circumstances, because research has shown that any gift, large or small, impairs ethical judgment.
54. Which of the following is NOT a procedure of compliance with respect to the standard “independence and objectivity”?
- A. Protecting the integrity of opinion
 - B. Restricting special cost arrangements
 - C. Creating restricted lists
 - D. Reporting unethical trading behavior
55. According to the Codes and Standards, which of the following actions is proper with regard to investing in oversubscribed issues?
- A. Orders for the smallest subscribers get filled first.
 - B. Orders for institutional subscribers get filled first.
 - C. Orders should be prorated to all subscribers.
 - D. Orders for subscribers not filled in the previous issue get filled first.
56. Which of the following comes closest to the future value of investing 500 € today in a risky project that offers an expected rate of return of 6% over the first year, 7% over the second year, and 4% over the third and last year?
- A. 575 €
 - B. 580 €
 - C. 585 €
 - D. 590 €
57. An investor is looking to purchase a rental property today that will provide a cash flow of \$125,000 per year for three years, and then grow the cash flow by 2.5% per year forever starting in year 4. Using a constant discount rate of 10%, which of the following comes closest to the value of the project today?
- A. \$0.6 million
 - B. \$1.1 million
 - C. \$1.6 million
 - D. \$2.1 million

58. Which of the following comes closest to the internal rate of return of a real estate project that requires an initial investment of £5.5 million, has projected cash flows of £1 million per year for the first five years, and has a projected terminal value of £6.94 million in year 6?
- A. 19%
 - B. 17%
 - C. 15%
 - D. 13%
59. Which of the following describes the cash waterfall of a real estate deal?
- A. The split of the proceeds between the investors and the sponsor
 - B. The present value of inflows minus the present value of outflows
 - C. The return of the deal minus the required rate of return
 - D. The terminal value of the deal
60. Which of the following statements about the National Association of Real Estate Investment Trusts (NAREIT) index is FALSE?
- A. The index measures the total return on the portfolio of publicly traded REITs.
 - B. Because it is a transactions based index, it shows less volatility compared with other real estate indices.
 - C. In addition to levered property returns, the index also captures changes in the value of REIT management.
 - D. The index captures share prices, not the underlying properties.
61. How is the net asset value (NAV) of a real estate project defined?
- A. By adding back depreciation to the net operating income
 - B. By dividing stabilized cash flow by the cap rate
 - C. By subtracting the value of debt and other liabilities from the value of the assets
 - D. By capping stabilized earnings before interest, taxes, depreciation, and amortization (EBITDA) adjusted for cap ex

62. Which of the following represents a negative loan covenant?
- A. Recourse
 - B. Dividends
 - C. Sweeps
 - D. Amortization
63. Like kind exchanges are used for what main purpose?
- A. To defer tax payments otherwise due upon sale
 - B. To acquire property that you intend to sell in the very near future
 - C. To hold on to your existing property for the long run
 - D. As a refinancing tool
64. What role does the special servicer play in the loan securitization process?
- A. Originates the loan
 - B. Ensures that the borrowers are performing in accordance with loan documents
 - C. Controls the loan in the event of default
 - D. Determines how the tranches will be allocated
65. There are two components of the capital gains tax in a real estate transaction. The first is the gain on the sale. What is the second?
- A. The accumulated depreciation
 - B. The dividends received
 - C. The prepayment penalty, if any
 - D. The return waterfall
66. If a real estate investment fund does not generate enough cash flow to pay its preferred annual return, all the profits generated from operations or sale of assets are paid out to “the money.” What does this mean?
- A. The sponsor does not receive any share of monies.
 - B. The sponsor and “the money” split the shortfall on some predetermined basis.
 - C. The deficit in the cash waterfall is made up by selling selective real estate assets.
 - D. The generated cash flows are paid proportionate to the amount invested.

67. Consider a \$1,000,000 fund with a 10% annual preferred return and a negotiated 70/30 split between the money and the sponsor. Suppose the fund earns a 15% return. The Frankin Fund has contributed 90% of the money. Assuming the most common arrangement where the entire profit is split on a 70/30 basis as long as the “pref” is met, how will these profits be split?
- A. Frankin Fund = \$ 90,000; sponsor = \$60,000
 - B. Frankin Fund = \$ 94,500; sponsor = \$55,500
 - C. Frankin Fund = \$100,000; sponsor = \$50,000
 - D. Frankin Fund = \$150,000; sponsor = \$0

68. David Chen is considering investing in a \$1,821,500 property with these expected cash flows:

Year	1	2	3	4	5
Cash Flow	\$204,052	\$344,149	\$675,453	\$711,230	\$1,290,775

Which of the following comes closest to the net present value (NPV) of the deal if the discount rate is 12%?

- A. -\$300,000
 - B. \$300,000
 - C. \$600,000
 - D. \$900,000
69. David Chen is considering investing in a \$1,821,500 property with these expected cash flows:

Year	1	2	3	4	5
Cash Flow	\$204,052	\$344,149	\$675,453	\$711,230	\$1,290,775

Which of the following comes closest to the internal rate of return (IRR) of the deal if the discount rate is 12%?

- A. 11%
- B. 13%
- C. 15%
- D. 17%

70. Which of the following comes closest to the annual payment on a \$17,000,000 real estate loan issued at 8.15% interest with a 15-year amortization?
- A. \$1,500,000
 - B. \$1,750,000
 - C. \$2,000,000
 - D. \$2,250,000
71. Which of the following is TRUE of credit-risky investments?
- A. They tend to follow a normal distribution, as credit risk follows a symmetric pattern.
 - B. They have a positive skew, as credit risk has more upside than downside.
 - C. They tend to follow a platykurtotic distribution, as they are less exposed to outlier events.
 - D. They tend to follow a leptokurtotic distribution because they are exposed to event risk.
72. Which of the following hedge fund trading strategies has low exposure to credit risk?
- A. Market neutral
 - B. Merger arbitrage
 - C. Event driven
 - D. Convertible arbitrage
73. The hedge fund trading strategy known as merger arbitrage has a payoff distribution that is similar to what security?
- A. Short selling stock
 - B. Writing put options
 - C. Buying call option
 - D. Buying put options
74. Studies applying a factor analysis find that different trading strategies explain a relatively small percentage of cross sectional variation in hedge fund returns. This can be explained by what type of risk?
- A. Market risk
 - B. Process risk
 - C. Mapping risk
 - D. Data risk

75. Removing the first 12 to 24 months of reported data is designed to eliminate what type of bias in hedge fund results?
- A. Backfilling bias
 - B. Liquidation bias
 - C. Survivorship bias
 - D. Self-selection bias
76. Artificially boosting the Sharpe ratio in the short run by collecting option premiums results in what type of bias?
- A. Cash substitute bias
 - B. Absolute return bias
 - C. Short volatility bias
 - D. Track record bias
77. When a short position in a security becomes crowded, extra selling pressure can lead to greater sensitivity of that security to downward changes. This is a description of what type of hedge fund risk?
- A. Beta expansion risk.
 - B. Event risk.
 - C. Short volatility risk.
 - D. Mapping risk.
78. Which of the following describes the exception to the general securities law under section 203(b)(3)?
- A. The investment advisor has assets under management of less than \$25 million and is not an advisor to a mutual fund.
 - B. The investment advisor has fewer than 15 clients and does not hold herself out to the public as an investment advisor.
 - C. The investment advisor has less than \$5 million in investments owned directly or indirectly by or for 2 or more natural persons who are not related.
 - D. The investment advisor receives no compensation from operating a commodity pool, operates only one pool, and does not advertise the pool.

79. Which of the following is NOT consistent with the interpretation of the Investment Advisors Act of 1940 as it pertains to hedge funds?
- A. The definition of the Act is broad enough to include hedge fund managers.
 - B. The Act addresses the business of giving investment advice on the value of securities.
 - C. The Act regulates those individuals who provide investment advice to investment companies, pension plans, endowments, and other individuals.
 - D. The Act addresses the difference between long and short investments.
80. Which of the following is TRUE of VaR analysis?
- A. VaR measures are additive.
 - B. The hedge fund manager chooses the level of confidence used in the calculation of VaR.
 - C. VaR assumes that the underlying return distribution has positive skew.
 - D. VaR is based on market outliers.
81. With respect to commodities futures contracts, what type of margin relates to the fluctuation in the value of an investor's account?
- A. Initial margin
 - B. Linked margin
 - C. Variation margin
 - D. Maintenance margin
82. Which of the following describes interest rate parity?
- A. The price of commodity futures will adjust such that investors earn the risk free rate of interest.
 - B. The future exchange rate between two currencies will be dependent upon the differences in their interest rates.
 - C. Interest rates will adjust to changes in inflationary expectations between countries.
 - D. Futures prices and spot prices are connected by the difference between the short term and long term interest rate.
83. Consider the case where $F > S e^{r(T-t)}$. How, in this case, can the hedge fund manager could earn a profit?
- A. By buying the underlying asset and selling the futures contract
 - B. By buying the underlying asset and buying the futures contract
 - C. By selling short the underlying asset and buying the futures contract
 - D. By selling short the underlying asset and selling the futures contract

84. Contango futures markets are said to have an upward sloping price curve. What can explain the shape of the price curve?
- A. The additional risk accepted by the hedger over short periods
 - B. The additional risk accepted by the hedger over long periods
 - C. The additional risk accepted by the speculator over short periods
 - D. The additional risk accepted by the speculator over long periods
85. What is NOT a distinguishing characteristic of the Mount Lucas Management Commodity Index (vis-à-vis the other commodity indices)?
- A. Positive kurtosis
 - B. Negative skew
 - C. Long and short positions
 - D. Less dispersion
86. How does adding a commodity index to a portfolio of stocks and bonds change the efficient frontier?
- A. It shifts the frontier down and to the right.
 - B. It shifts the frontier down and to the left.
 - C. It shifts the frontier up and to the left.
 - D. It shifts the frontier up and to the right.
87. What is the typical fee arrangement paid to Commodity Trading Advisors (CTAs)?
- A. The “2 and 20” structure
 - B. Management fees but not performance fees
 - C. Performance fees but not management fees
 - D. Fixed fees only (never variable fees)
88. What does the evidence show with respect to adding managed futures to a portfolio of stocks and bonds?
- A. A lower Sharpe ratio compared with a stock and bond only portfolio.
 - B. A lower average downside compared with a stock and bond only portfolio.
 - C. A higher expected return compared with a stock and bond only portfolio.
 - D. A lower standard deviation compared with a stock and bond only portfolio.

89. How does downgrade risk differ from credit spread risk?
- A. Downgrade risk originates from interest rate shifts while credit spread risk originates from shifts in default possibility.
 - B. Downgrade risk moves in one direction only (down) while credit spread risk can move in either direction (up or down).
 - C. Downgrade risk originates from a review by an independent agency while credit spread risk originates from a reaction in the financial markets.
 - D. Downgrade risk is most influenced by world events while credit risk is most influenced by company-specific events.
90. Which of the following terms is NOT associated with managing credit risk?
- A. Underwriting standards
 - B. Diversification
 - C. Asset sales
 - D. Immunization
91. According to the empirical evidence reported by Anson over the time period 1991-2005, how do the returns of credit-risky investments correlate with the returns on the S&P 500 index?
- A. The correlations are all positive and all greater than 0.50.
 - B. The correlations are all negative and all less than -0.50.
 - C. The correlations are all positive and in the range of 0.25 to 0.75.
 - D. The correlations are both positive and negative and are close to zero.
92. Corporate bank loans that are legally committed lines of credit are known as what?
- A. Call options
 - B. Revolvers
 - C. First loss loans
 - D. Collateralized debt obligations

93. Which of the following is TRUE with respect to credit-linked notes?
- A. They are issued as zero coupon bonds.
 - B. They are bonds that return the par value to the investor in the event of default or downgrade.
 - C. They are bonds that pay a higher coupon rate to the investor compared with similar bonds with no credit option.
 - D. They are bonds that can be put back to the issuing firm in the event of a default or downgrade.
94. Why are hedge fund returns often modeled with option-like features?
- A. Because, similar to options, hedge funds have an expiration date.
 - B. Because, similar to options, hedge funds have non-constant volatility.
 - C. Because, similar to options, hedge funds have non-linear payoffs.
 - D. Because, similar to options, hedge funds can trade on organized exchanges.
95. The Kalman Filter is a statistical tool applied to improve the accuracy of style analysis results in what way?
- A. To implicitly identify the best styles
 - B. To allow for a contrarian approach in identifying styles
 - C. To allow betas to be less than zero
 - D. To explicitly model changes in style exposures over time
96. What do returns on a diversified index of various hedge fund strategies (shown in Lhabitant over the period 1994-2003) indicate with respect to periods of positive and negative market performance?
- A. Compared with equity-based asset classes, hedge funds offer higher returns in both up markets and down markets.
 - B. Compared with equity-based asset classes, hedge funds offer lower returns in both up markets and down markets.
 - C. Compared with equity-based asset classes, hedge funds offer higher returns in up markets but lower returns in down markets.
 - D. Compared with equity-based asset classes, hedge funds offer lower returns in up markets but higher returns in down markets.

97. Which of the following is FALSE concerning mean-variance optimizer solutions to asset allocation?
- A. They tend to suggest inappropriate optimal portfolios such as 100% allocation to hedge funds.
 - B. They are built to incorporate the impacts of skewness and kurtosis.
 - C. They are usually built under the assumption that investor's utility depends positively on the mean return and negatively on the variance of returns.
 - D. They are usually built under the assumption of a single-period model of investment.
98. Which of the following statements describes the essence of the concept of "portable alpha"?
- A. The recognition that alpha generation and asset allocation are separate and independent decisions.
 - B. The recognition that alpha generation and asset allocation are necessarily attached and go hand-in-hand.
 - C. The recognition that asset allocation does not play any meaningful role in the generation of alpha.
 - D. The recognition that alpha generation can occur only when asset allocation has an active component.
99. The asset allocation tool that operates on the basis of the invested capitals expected contributions to overall return and risk in order to achieve optimal results while maintaining a desired level of aggregate risk is known as what?
- A. Dynamic analysis
 - B. Value at risk
 - C. Risk budgeting
 - D. Parametric risk
100. How does modified VaR improve upon traditional VaR?
- A. By simulating the random variables over a longer period of time.
 - B. By incorporating higher moments of the distribution such as skewness and kurtosis.
 - C. By incorporating different investment styles into the analysis.
 - D. By recognizing and incorporating liquidity risk into the model.

Answer Key

For References: Lh = Hedge Funds: Quantitative Insights (Lhabitant), SPH = Standards of Practice Handbook, HAA=Handbook of Alternative Assets (Anson), LIN =Real Estate Finance (Linneman).

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4	B	HAA, page 99	Topic 21, LO 3
5	C	HAA, page 116	Topic 21, LO 25
6	B	HAA, pages 123-124	Topic 21, LO 36
7	C	HAA, pages 140-145	Topic 22, LO 3
8	C	HAA, pages 180-184	Topic 22, LO 23
9	A	HAA, pages 206-207	Topic 23, LO 1
10	B	HAA, page 218	Topic 23, LO 5
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21	D	Lh, pages 37-39	Topic 3, LO4-LO6
22	D	Lh, pages 66-67	Topic 4, LO1
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25	C	Lh, pages 118-119	Topic 5, LO 8
26	C	Lh, pages 127-128	Topic 5, LO 5
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28	B	Lh, page 132	Topic 6, LO 7
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30	A	Lh, pages 147-148	Topic 7, LO 4
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32	D	Lh, pages 163-167	Topic 7, LO 14
33	B	Lh, pages 163-167	Topic 7, LO 14
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37	C	Lh, pages 182-183	Topic 8, LO 4
38	C	Lh, pages 190-195	Topic 8, LO 5
39	C	HAA, pages 407-410	Topic 28, LO 2
40	B	HAA, page 450-451	Topic 28, Keyword
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46	C	HAA, pages 406-408	Topic 28, Keyword
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49	C	SPH, pages 69-71	Topic 14, LO 2
50	C	SPH, pages 40-42	Topic 13, LO 4
51	A	SPH, pages 122-123	Topic 15, LO 4
52	B	SPH, page 8	Topic 13, LO 2
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55	C	SPH, page 58	Topic 14, LO 1
56	D	LIN, pages 198-201	Topic 16, LO 1
57	C	LIN, pages 204-207	Topic 16, LO 3
58	A	LIN, pages 210-214	Topic 16, LO 7
59	A	LIN, page 160	Topic 18, LO 5
60	B	LIN, pages 225-226	Topic 18, LO 13
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65	A	LIN, page 151	Topic 18, LO 1
66	D	LIN, page 160	Topic 18, LO 4
67	B	LIN, pages 160-161	Topic 18, LO 5
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70	C	LIN, pages 217-218	Topic 16, LO 11
71	D	HAA, pages 140-141	Topic 22, LO 3
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78	B	HAA, pages 215-217	Topic 23, LO 4
79	D	HAA, pages 215-217	Topic 23, LO 3
80	B	HAA, pages 177-180	Topic 22, LO 21
81	C	HAA, pages 282-283	Topic 24, LO 2
82	B	HAA, pages 292-293	Topic 24, LO 3
83	A	HAA, pages 294-296	Topic 24, LO 3
84	D	HAA, pages 298-299	Topic 24, LO 4
85	A	HAA, pages 328-332	Topic 25, LO 8
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90	D	HAA, pages 584-585	Topic 31, LO 3
91	C	HAA, pages 585-586	Topic 31, LO 4
92	B	HAA, page 588	Topic 31, LO 8
93	C	HAA, pages 599-600	Topic 31, LO 16
94	C	Lh, page 202	Topic 8, LO 8
95	D	Lh, pages 216-218	Topic 9, LO 3
96	D	Lh, pages 255-258	Topic 10, LO 4
97	B	Lh, pages 277-282	Topic 11, LO 8
98	A	Lh, pages 288-290	Topic 11, LO 9
99	C	Lh, pages 291-292	Topic 11, LO 11
100	B	Lh, pages 298-299	Topic 12, LO 3