

# Mock Exam 1 Session 1 - Questions

## Question 1

Streamfield University utilizes outsourced investment management, including firms such as Orion Capital Management and Shufelt Investors, for its substantial endowment portfolio. To evaluate the quarterly returns and overall performance of these individual investment managers, Streamfield partners with Axiom Performance Consultants. Axiom Performance Consultants would be considered a(n):

- A) agent.
- B) principal.
- C) custodian.
- D) stakeholder.

## Question 2

In her paper on the investment industry, college student Marissa Gonzales makes the following statements:

Statement 1: "Capital allocation is the transfer of surplus funds from savers to entities that require funds for implementing investment ideas."

Statement 2: "Stewardship is the oversight of investment funds to ensure they are properly managed."

Which of Gonzales's statements is correct?

- A) Statement 1 only.
- B) Statement 2 only.
- C) Both Statement 1 and Statement 2.
- D) Neither Statement 1 nor Statement 2.

### Question 3

Environmental advocates have been pressuring Zion Chemical Corp.'s management to adopt a stronger focus on sustainability. In response, Chief Financial Officer Marion Wilkes has begun investigating the best approach, concluding that Zion should concentrate on the triple bottom line concept. Given this new focus, what are the three key areas Wilkes needs to address?

- A) Transparency, integrity, and accountability.
- B) Environmental, social, and governance issues.
- C) Net income, debt reduction, and share buybacks.
- D) Financial returns, social effects, and environmental impact.

### Question 4

William Zahn, an investment officer for the McAllister family office, faces a generational divide regarding sustainable investments. The younger generation is eager to integrate them into the family portfolio, while the older generation fears a negative impact on performance. Zahn clarifies that the investment industry widely believes investors can achieve both profit-driven goals and positive social and environmental outcomes. This concept is known as:

- A) Impartiality.
- B) Sustainability.
- C) Social license principle.
- D) The triple bottom line.

### Question 5

Due to recent high employee turnover at Tall Hills Asset Management, the management team meets to address the company's culture. Employee exit interviews have cited a lack of communication and no clear direction from executives as reasons for departure. Harrison Vance, CEO of Tall Hills, makes the following statement at the start of the meeting:

"We need to establish a new culture here at Tall Hills with upper management serving as the role models for the rest of the company. Our professional behavior at the executive level will set the tone for the culture of the group."

Which of the following is not a key way to impact the culture at Tall Hills?

- A) Having monthly staff meetings to discuss current events at the firm.
- B) Revising the compensation structure at the firm to benefit top performers.
- C) Having every manager sit down with their direct reports to establish yearly expectations.
- D) Creating a regular employee poll to determine the most important issues to the employees.

### Question 6

For the past five years, David Swanson has been a client of investment advisor Michael Simmons. Simmons is highly accessible, providing regular market updates and always being available for meetings and phone calls. However, despite multiple adjustments to the portfolio, Simmons's investment performance has consistently lagged behind the established benchmark. Which of the following fundamental components of Swanson's trust has Simmons violated?

- A) Credibility.
- B) Competence.
- C) Professionalism.
- D) Communication.

### Question 7

Carhart Brothers Investment Bank, led by Jacob Carhart, has a long-standing reputation in investment banking. Mr. Carhart places great importance on the quality of his employees and the value they deliver to clients. He consistently emphasizes the "value creation equation" in management meetings, which all employees are expected to apply. Which of the following elements is not part of this value creation equation?

- A) Purpose.
- B) Assurance.
- C) Performance.
- D) Professionalism.

### Question 8

Gabriel Costa, an investment advisor, is aware that a new investment product his firm is offering is too complicated for most of his clients to understand. Despite this, the firm stands to earn substantial fees from placing these investments. Costa's supervisor is pressuring him to recommend the investment to his clients, regardless of their level of investment sophistication. Considering these circumstances, which of the CAIA Ethical Principles would Costa not be violating if he were to recommend this investment?

- A) Partnership.
- B) Collaboration.
- C) Client-First Mindset.
- D) High Standards of Conduct.

### Question 9

Mason Blackwell, a successful young entrepreneur, became a client of investment advisor Jane Estrada one year ago. Blackwell favors the latest high-risk investment trends but reacts poorly to losses in his account. Estrada has repeatedly explained that high-risk investments inherently carry the possibility of losses. She has also presented various charts and articles demonstrating how a more diversified portfolio could mitigate market volatility. However, Blackwell remains committed to maintaining high-risk investments. Considering the partnership principle, what course of action should Estrada most logically pursue next?

- A) Ask another member of her firm to co-manage the account with her.
- B) Send daily market updates to Blackwell and discuss possible courses of action.
- C) Slowly diversify the portfolio into less risky investments without telling Blackwell.
- D) Disengage with Blackwell, stating that his investment approach does not align with her ethical standards.

### Question 10

In a review of their compliance manual, it was discovered that Mountain State Pension Fund did not address the topic of political contributions. SEC regulations place limits on political contributions from investors working with pension funds. This regulation was a direct result of the ethical violations discovered at:

- A) Bear Stearns.
- B) New York State Common Retirement Fund.
- C) New York State Teachers Retirement Fund.
- D) California Public Employees Retirement System (CalPERS).

### Question 11

Within the category of real assets, on what types of investments or income sources would infrastructure investments have claims?

- A) Land held by municipalities.
- B) Income from real assets controlled by the public sector.
- C) Public land including timber held on the land.
- D) Tangible and intangible real assets.

### Question 12

Mary Coolidge, CAIA, is analyzing returns and how to properly evaluate them. What is the goal of an investment program with a relative return standard?

- A) Generate returns that are evaluated relative to the risk-free interest rate.
- B) Generate superior returns through identification of inefficient pricing relationships.
- C) Generate returns that are appropriate for a client's risk tolerance.
- D) Generate returns that move with a particular market, with the goal to consistently outperform that market.

### Question 13

Regarding alternative investment fund structures, a common characteristic specific to drawdown funds is that:

- A) the fund lifespan is indefinite at inception.
- B) new shares are issued when capital is added.
- C) each investor commits a certain amount of capital.
- D) incentive fees are limited due to the high-water mark.

### Question 14

Martin Hess is analyzing the partnership agreement of a venture capital limited partnership. Which of the following covenants found by Hess would be categorized as a covenant regarding fund management?

- A) The general partner must not sell its interest in the partnership to a third party.
- B) The partnership may not invest more than \$20 million in any single portfolio company.
- C) The general partner may not privately invest in any portfolio company held by the partnership.
- D) The partnership must only pursue investments in companies within the biotechnology industry.

### Question 15

Hedge fund incentive fees, when structured properly, can align the interests of investors and hedge fund managers. Which of the following best describes when the two parties' interests can be aligned in a cost-effective manner with marginal benefits greater than marginal costs?

- A) Perverse incentive.
- B) Optimal contracting.
- C) Managerial co-investing.
- D) Option view of incentive fees.

### Question 16

An investment of \$100.00 grew to \$105.13 in one year. The interest rate on the investment was continuously compounded. The continuously compounded rate is closest to:

- A) 5.13%.
- B) 5.00%.
- C) 4.88%.
- D) 5.26%.

### Question 17

Which of the following best characterizes a return distribution that has less kurtosis than a normal distribution?

- A) Platykurtic.
- B) Mesokurtic.
- C) Leptokurtic.

### Question 18

Chrissy DeWitt is an equity analyst who uses discounted cash flow analysis to find undervalued securities. She does not believe in using graphs and charts to value securities. Which of the following statements best reflect DeWitt's implied view of market efficiency?

- A) The market is semistrong form efficient, but not weak form efficient.
- B) The market is both weak form efficient and semistrong form efficient.
- C) The market is not semistrong form efficient, but may be weak form efficient.
- D) The market is neither weak form efficient, nor semistrong form efficient.

### Question 19

What is the interest rate (i.e., yield) for a zero-coupon bond with a face value of \$1,000, a current price of \$716.79, and eight years remaining until maturity? Assume annual compounding.

- A) 4.25%.
- B) 4.40%.
- C) 4.65%.
- D) 4.05%.

### Question 20

Which of the following statements is correct relative to the term structure of implied forward rates?

- A) The term structure of forward rates will plot above the spot rate curve when rates are upward sloping.
- B) The term structure of forward rates will plot below the spot rate curve when rates are upward sloping.
- C) The term structure of forward rates will exactly track the spot rate curve with a slight skew upward when rates are upward sloping.
- D) The term structure of forward rates will exactly track the spot rate curve with a slight skew downward when rates are upward sloping.

### Question 21

Which of the following types of credit models incorporate borrower-specific characteristics, such as corporate structure?

- A) Only structural models.
- B) Only reduced-form models.
- C) Both structural and reduced-form models.
- D) Neither structural nor reduced-form models.

### Question 22

An alternative investment analyst has been using a reduced-form credit model to compute an expected credit loss on a loan. The loan is a \$200 million 1-year unsecured loan with a credit spread of 5%. The risk-free rate is 1.5%. What is the exposure at default (EAD) on this particular loan?

- A) \$200 million.
- B) \$210 million.
- C) \$213 million.
- D) \$215 million.

### Question 23

Analyst Julio Rivas recently delivered a presentation regarding the capital asset pricing model (CAPM) to the board of directors of a hedge fund. Rivas makes two key statements about the CAPM in relation to alternative investments.

Statement 1: When applying the CAPM to multiple time periods, the distribution of hedge fund returns must be stationary.

Statement 2: When applying the CAPM, it is assumed that all investment decisions are made based on just the mean and the variance of the distribution of hedge fund returns.

Which of the statements, if any, are correct?

- A) Statement 1 is correct and Statement 2 is correct.
- B) Statement 1 is correct and Statement 2 is incorrect.
- C) Statement 1 is incorrect and Statement 2 is correct.
- D) Statement 1 is incorrect and Statement 2 is incorrect.

### Question 24

The method in which regression estimates are derived by minimizing the sum of squared residuals is best known as:

- A) ordinary least squares (OLS).
- B) weighted least squares.
- C) homoskedastic regression.
- D) heteroskedastic regression.

### Question 25

An analyst is concerned that the trading strategy she recently identified has generated a statistically insignificant result and has asked for guidance in assessing the strategy. A result is statistically significant if it is:

- A) unlikely to have occurred merely by chance, and the  $p$ -value is less than the significance level.
- B) likely to have occurred merely by chance, and the  $p$ -value is less than the significance level.
- C) unlikely to have occurred merely by chance, and the  $p$ -value is greater than the significance level.
- D) likely to have occurred merely by chance, and the  $p$ -value is greater than the significance level.

### Question 26

In hypothesis testing, the confidence level equals:

- A) the probability that the alternative hypothesis is correct.
- B) 1 minus the significance level.
- C) 1 minus the  $p$ -value.
- D) the probability that the null hypothesis is correct.

### Question 27

With respect to issues in sampling and testing, which of the following is a primary problem with data dredging?

- A) Too few tests are performed.
- B) Too many tests are performed.
- C) Too little confidence is placed on the results.
- D) Too much confidence is placed on the results.

### Question 28

With regard to commodity futures contracts, which of the following statements concerning margin is most accurate?

- A)** The initial margin must be posted to a commodity futures account within three days after the first trade.
- B)** If a trader accrues gains, positive variation margin will accrue but will be unavailable for withdrawal by the investor.
- C)** When futures contracts are rolled over, a trader must place a deposit in his account to bring the equity in his account back to the required level.
- D)** The maintenance margin is the amount of margin that must be maintained in a futures account and is usually set at 75–80% of the initial margin.

### Question 29

Which of the following options strategies would be most appropriate for an investor wishing to protect against a security price decline but benefit from an unlimited security price appreciation?

- A)** Long put.
- B)** Bull spread.
- C)** Covered call.
- D)** Protective put.

### Question 30

Which of the following best defines value at risk (VaR)?

- A)** The average loss at a stated level of significance, given abnormal market conditions.
- B)** The maximum loss at a stated level of significance, given abnormal market conditions.
- C)** The maximum loss from peak to trough over a specified period of time, given normal market conditions.
- D)** The maximum loss over a defined period of time at a stated level of significance, given normal market conditions.

### Question 31

Consider a \$100 million fund with a zero mean return. The 10-day standard deviation equals 10%. The fund's returns are normally distributed. Using a 95% confidence level, the 10-day parametric value at risk is closest to:

- A) \$5.0 million.
- B) \$9.5 million.
- C) \$10.0 million.
- D) \$16.5 million.

### Question 32

Blair Kuhnen, CAIA, is analyzing different measures of risk-adjusted performance and has heard about a particular ratio, the Sortino ratio, which is especially useful in analyzing alternative investments. How would the numerator and denominator be best stated in the Sortino ratio formula?

- A) Numerator contains just the portfolio return. Denominator uses downside standard deviation.
- B) Numerator subtracts a target return from the portfolio return. Denominator uses target semistandard deviation.
- C) Numerator is the portfolio's excess return. Denominator is the upside and downside semistandard deviation.
- D) Numerator is the portfolio's average return minus the target rate of return. Denominator is the portfolio's average return less the risk-free rate.

### Question 33

A group of former portfolio managers has started a new mutual fund designed to mimic the performance of the Russell 2000. In their first year, the actual performance of the Russell 2000 was 16.1%, and the new fund returned 17.65%. During the same time period, the managers were able to keep the beta of the portfolio at 1.0. The risk-free rate was 1%. What is the new fund's ex post alpha?

- A) 0 basis points.
- B) 55 basis points.
- C) 155 basis points.
- D) 255 basis points.

### Question 34

Analysts Bill Shears and Penny Rhodes recently derived benchmarks for a hedge fund. Shears concludes that benchmark comparisons can be complicated because drivers of benchmark returns must match those of the fund. Rhodes concludes that benchmark comparisons can be complicated because tests must be run to determine if incremental performance is attributable to skill or luck. Regarding the conclusions reached by Shears and Rhodes:

- A) both Shears and Rhodes are correct.
- B) Shears is correct and Rhodes is incorrect.
- C) Shears is incorrect and Rhodes is correct.
- D) both Shears and Rhodes are incorrect.

### Question 35

An analyst examines the following data related to a hedge fund:

Fund return last year	25%
Fund beta	2.0
Market return last year	17%
Risk-free rate	5%
Long-term expected annual market return	12%

The analyst performs a return attribution for the fund's excess returns, defined as the difference between the fund's return and the risk-free rate. From the return attribution analysis, the analyst should conclude the systematic and idiosyncratic components of the fund's excess returns equal:

- A) 14% and -4%, respectively.
- B) 14% and 11%, respectively.
- C) 24% and -4%, respectively.
- D) 24% and 11%, respectively.

### Question 36

Renee Harris has a portfolio that includes both traditional and alternative assets. She is interested in adding farmland to the portfolio. She has identified a 150-acre farm that is for sale for \$10,000 per acre. Harris will put 40% equity in the deal and will finance the balance with a 6% bank loan. Harris is buying the land for investment purposes only and intends to lease the land to a local farmer. The farmer will annually pay Harris \$1,250 per acre. Harris will pay combined property taxes and insurance of \$60,000 per year. The cap rate on this real estate investment is closest to:

- A) 2.75%.
- B) 6.60%.
- C) 8.50%.
- D) 12.50%.

### Question 37

Miles Erwin and Patrick Morin, portfolio managers at DeVille Family Office, are considering diversifying the DeVille portfolio into real assets. They are each presenting arguments for different alternatives to the Chief Investment Officer.

Erwin's case (Timberland): "Timberland is the more suitable investment. Although its average return is lower than farmland, it offers a lower standard deviation and a lower maximum drawdown, indicating less risk."

Morin's case (Farmland): "Farmland is the superior option for the portfolio. It demonstrates higher risk-adjusted returns, evidenced by a strong Sharpe ratio. Furthermore, it exhibits a strong positive skew and high positive excess kurtosis."

Which manager's statement is correct?

- A) Erwin's statement only.
- B) Morin's statement only.
- C) Both statements are correct.
- D) Neither statement is correct.

### Question 38

What type of instrument is a commodity-linked note (CLN), and what is a key advantage of issuing a CLN? A CLN is a(n):

- A)** short-term debt instrument with the key advantage of having a value at maturity that is a function of the value of the underlying commodity.
- B)** intermediate-term debt instrument with the key advantage of allowing a commodity-producing issuer a way to match the risks of assets and liabilities.
- C)** short-term debt instrument with the key advantage of allowing a commodity-producing issuer the opportunity to record the CLN as equity on its balance sheet.
- D)** short-term equity instrument with the key advantage of allowing a commodity-producing issuer to sell the CLN to a pension fund that is otherwise restricted from investing in commodities.

### Question 39

Which of the following best describes a forward market in contango?

- A)** The forward price is less than the spot price and the term structure is upward sloping.
- B)** The forward price is less than the spot price and the term structure is downward sloping.
- C)** The forward price is greater than the spot price and the term structure is upward sloping.
- D)** The forward price is greater than the spot price and the term structure is downward sloping.

### Question 40

In a forward contract, what term is used to refer to the difference between the spot price of the referenced asset and the price of a forward contract?

- A)** Basis.
- B)** Spread.
- C)** Alpha return.
- D)** Cost of carry.