Level I of the CFA® Exam

Mock Questions with Answers - Mock Exam 2025 #3 - First Session (Ethical and Professional Standards, Quantitative Methods, Economics & Financial Statement Analysis)

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Q.1 An analyst wishes to develop an algorithm capable of predicting how much the market will move if there is a sudden spike in inflation. The best approach for this kind of problem is:

A. Supervised learning.

B. Unsupervised learning.

C. Data query.

Supervised learning is a type of machine learning where an algorithm learns from labeled training data, and uses this learned information to predict outcomes for unseen data. In the context of the question, the analyst is trying to predict market movements based on inflation rates. This is a classic example of a supervised learning problem where the inflation rate can be considered as the input or feature, and the market movement as the output or target. The analyst can train a supervised learning model on historical data where both the inflation rates and corresponding market movements are known. Once the model is trained, it can be used to predict market movements for new inflation rates. This approach is most suitable because it allows for explicit modeling of the relationship between the input (inflation rate) and the output (market movement).

B is incorrect. Unsupervised learning is a type of machine learning where an algorithm learns from unlabeled training data. The goal of unsupervised learning is to find hidden patterns or intrinsic structures in the input data. It does not involve predicting an output based on the input. In the context of the question, the analyst is trying to predict a specific outcome (market movement) based on a specific input (inflation rate). This requires a supervised learning approach where the relationship between the input and output can be explicitly modeled. Therefore, unsupervised learning is not suitable for this problem.

C is incorrect. Data querying is a process that involves requesting information from a database or a set of data based on specific criteria. While data querying can be useful for retrieving specific pieces of information or subsets of data, it does not involve the development of predictive models or algorithms. In the context of the question, the analyst is trying to develop an algorithm capable of predicting market movements in response to inflation spikes. This requires a machine learning approach, particularly supervised learning, which has the analytical and predictive capabilities to model the relationship between inflation rates and market movements. Therefore, data querying is not suitable for this problem.

CFA Level I, Topic 1, Quantitative Methods, Learning Module 11: Introduction to Big Data Techniques. LOS (c): Describe applications of Big Data and Data Science to investment management.

Q.2 During a team meeting, Jasmine discusses how to adjust investment strategies based on the current phase of the business cycle. If the economy is entering a slowdown phase, what type of assets should investors *most likely* consider prioritizing?

A. High-risk, high-return stocks.

B. Commodities like gold and oil.

C. Government bonds and other risk-free assets.

During a slowdown phase of the business cycle, the economy begins to decelerate. This deceleration is characterized by reduced economic activities, lower consumer spending, and potentially higher unemployment rates. In such a scenario, the risk of investing in volatile assets increases significantly. Therefore, investors typically seek safer investments to protect their capital. Government bonds and other risk-free assets are considered safer investments because they offer guaranteed returns and are less susceptible to market volatility. These assets provide a steady stream of income, regardless of the economic conditions, making them an ideal choice for investors during a slowdown phase.

A is incorrect. High-risk stocks are typically associated with companies in industries that are highly sensitive to economic conditions. During a slowdown, these companies may experience reduced revenues and profits, which can lead to a decrease in their stock prices. Therefore, investing in high-risk stocks during a slowdown phase can lead to significant capital losses for investors. Furthermore, the high return associated with these stocks is not guaranteed and depends on the performance of the company and the overall market conditions, both of which are typically unfavorable during a slowdown.

B is incorrect. While it is true that commodities like gold and oil can serve as a hedge against inflation, they are not the most suitable assets to prioritize during a slowdown phase. The prices of commodities are highly volatile and are influenced by a variety of factors including supply and demand dynamics, geopolitical events, and currency fluctuations. During a slowdown, the demand for commodities may decrease due to reduced industrial activity, leading to a decrease in their prices. Therefore, investing in commodities during a slowdown phase can be risky and may not provide the desired returns. Furthermore, commodities do not provide a steady stream of income, unlike government bonds and other risk-free assets, making them less appealing to investors during a slowdown phase.

CFA Level 1, Topic 1 - Economics, Learning Module 2 - Understanding Business Cycles. LOS 2a: Describe the business cycle and its phases.

Q.3 What does the following definition *best describe*?
"A classification system used to separate the population into smaller groups based on distinguishing characteristics. From each stratum, a random sample is taken, and the results are pooled. The size of the samples from each stratum is based on the size of the stratum relative to the population."

A. Systematic Sampling.

B. Simple Random Sampling.

C. Stratified Random Sampling.

The definition provided describes a process where a population is divided into smaller groups, known as strata, based on certain distinguishing characteristics. From each of these strata, a random sample is taken and the results are pooled together. The size of the samples from each stratum is determined based on the size of the stratum relative to the overall population. This is the exact process followed in Stratified Random Sampling. It is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics.

A is incorrect. Systematic Sampling does not involve dividing the population into strata based on distinguishing characteristics. Instead, it involves selecting samples from a population at regular intervals. The interval is determined by dividing the total population size by the desired sample size. For example, if you have a population of 100 and you want a sample of 10, you would select every 10th member of the population for your sample. This method does not take into account any distinguishing characteristics of the population members, and therefore does not match the provided definition.

B is incorrect. Simple Random Sampling is a method where each member of a population has an equal chance of being selected. This method involves selecting members of a population randomly, without any consideration of their characteristics or any attempt to divide the population into strata. This is different from the provided definition, which clearly involves dividing the population into strata based on distinguishing characteristics and selecting samples from each stratum. Therefore, Simple Random Sampling does not fit the provided definition.

CFA Level 1, Topic 1 – Quantitative Methods, Learning Module 7 – Estimation and Inference, LOS 7a: Compare and contrast simple random, stratified random, cluster, convenience, and judgmental sampling and their implications for sampling error in an investment problem.

Q.4 You plan to invest $50,000 annually in a stock index fund for 20 years. Assuming that you will earn 8% per year, the total amount of money you will have at the end of 20 years is *closest to*:

A. $233,047.86

B. $2,288,098.22

C. $2,471,146.08

First, we need to calculate the Future Value annuity factor. This is done using the formula: FV Annuity factor = [(1+r)^N - 1] / r. Substituting the given values into the formula, we get: [(1+0.08)^20 - 1] / 0.08 = 45.76.

We determine the Future Value of the annuity. This is done by multiplying the initial investment by the Future Value annuity factor. So, $50,000 x 45.76 = $2,288,098.22.

These calculations can also be done using a BA II Plus Pro Calculator. By inputting the following values: PMT = 50,000; N=20; I/Y=8; PV=0; and then computing FV, we get $2,288,098.22.

CFA Level 1, Topic 1 – Quantitative Methods, Learning Module 2 – The Time value of Money in Finance, LOS 2b: Calculate and interpret the present value (PV) of fixed-income and equity instruments based on expected future cash flows.

Q.5 Which of the following is *least likely* a limitation of Monte Carlo simulations?

A. Monte Carlo simulations are complex to use.

B. Monte Carlo simulation only provides statistical estimates, not the exact results.

C. Monte Carlo simulations generate a large number of random samples from probability distributions.

Option C, which states that Monte Carlo simulations generate a large number of random samples from probability distributions is not a limitation but rather a significant advantage of Monte Carlo simulations. The ability to generate a vast number of random samples is a fundamental aspect of Monte Carlo simulations. This feature allows for a comprehensive exploration of possible outcomes and scenarios, which is particularly useful in risk assessment and decision-making processes. By generating thousands or even tens of thousands of random samples from specified probability distributions, Monte Carlo simulations can provide a detailed estimation of the risk and value of assets, among other things. This extensive sampling capability enables a more robust and reliable analysis, which can lead to more informed and accurate decisions.

A is incorrect. Monte Carlo simulations involve advanced mathematical and statistical concepts and require a certain level of expertise to implement and interpret correctly. They also require significant computational resources, especially when dealing with large datasets or complex models. This complexity can be a barrier to use, particularly for individuals or organizations with limited resources or expertise. However, this complexity is also a reflection of the power and flexibility of Monte Carlo simulations, which can model complex systems and scenarios that simpler methods cannot.

B is incorrect. While it's true that Monte Carlo simulations provide statistical estimates rather than exact results, this is a fundamental aspect of any simulation or modeling technique. All models are simplifications of reality and therefore can only provide estimates. However, the strength of Monte Carlo simulations lies in their ability to provide a range of possible outcomes, along with probabilities for each, which can provide a more nuanced understanding of risk and uncertainty than a single 'exact' result could.

CFA Level I, Topic 1 – Quantitative Methods, Learning Module 6 – Simulation Methods, LOS 6b: Describe Monte Carlo simulation and explain how it can be used in investment applications.

Q.6 Which of the following combination of characteristics would *most likely* result in a country being considered an Autarky?

A. Nationalism and Cooperation.

B. Nationalism and Non-cooperation.

C. Non-Cooperation and Globalization.

An Autarky is a system where a country seeks to be self-sufficient and avoids engaging in international trade or external assistance. This approach is often driven by a strong sense of nationalism, where the country prioritizes its interests and aims to reduce dependency on foreign entities. Non-cooperation with other countries further emphasizes the autarkic stance, as it involves minimal to no participation in global trade networks or international agreements that could compromise its self-sufficiency goals. This combination of nationalism and non-cooperation is what fundamentally defines an Autarky, making it distinct from other economic systems that might encourage international collaboration or integration. Hence, option B, which combines nationalism and non-cooperation, accurately describes the characteristics of an Autarky.

A is incorrect. Nationalism and cooperation do not lead to an Autarky. The combination leads to bilateralism. While nationalism emphasizes a country's self-interest and independence, the addition of cooperation indicates a willingness to engage with other nations, possibly through trade agreements, alliances, or joint ventures. This blend suggests a balance between maintaining national sovereignty and participating in the global economy or international relations. Such a stance is contrary to the principles of Autarky, which seeks to minimize external influences by avoiding international trade and cooperation.

C is incorrect. Non-cooperation and globalization are contradictory characteristics and do not describe an Autarky. They describe a Hegemony. Globalization refers to the process of increasing interdependence and interaction among countries through the exchange of goods, services, technology, and cultural practices. It implies a country's participation in the global economy and its openness to international trade and investment. On the other hand, non-cooperation suggests a reluctance or refusal to engage with other countries, which is incompatible with the principles of globalization. An Autarky, characterized by self-sufficiency and minimal external trade, would not align with globalization's emphasis on global integration and cooperation.

CFA Level I, Topic 1, Economics, Learning Module 5: Introduction to Geopolitics. LOS d: Describe geopolitical risk.

Q.7 Which of the following is *most likely* an example of an economic tool used by state actors to reinforce cooperative or non-cooperative stances?

A. Armed conflict.

B. World Trade Organization (WTO).

C. North Atlantic Treaty Organization (NATO).

The World Trade Organization (WTO) is an example of an economic tool used by state actors to reinforce cooperative stances. The WTO is an international organization that deals with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably, and freely as possible. The WTO provides a forum for negotiating trade agreements and a place where member states can settle trade disputes. It operates a system of trade rules that apply to all its member states, thus promoting a fair and free trade environment. This makes it a powerful economic tool for state actors to reinforce cooperative stances. By adhering to the rules set by the WTO, state actors can avoid trade disputes and foster a cooperative international trade environment.

A is incorrect. Armed conflict is not an economic tool but a national security tool used by state actors. It is a method of exerting influence or coercion over another state actor. National security tools are those that directly or indirectly impact a country’s resources, people, or borders. Armed conflict is the most extreme example of a national security tool. It involves the use of military force to resolve disputes or enforce a state's interests. While it can have economic implications, it is primarily a tool of force and coercion, not economic cooperation or non-cooperation.

C is incorrect. The North Atlantic Treaty Organization (NATO) is not an economic tool but a cooperative national security tool. NATO is an intergovernmental military alliance between several North American and European countries. It was established as a system of collective defense, where its member states agree to mutual defense in response to an attack by any external party. While NATO promotes cooperation among its member states, it does so in the realm of national security, not economics. Its primary purpose is to safeguard the freedom and security of its member countries through political and military means, not to regulate economic interactions or trade practices.

CFA Level 1, Topic 1 – Economics, Learning Module 5 – Introduction to Geopolitics, LOS 5e: Describe tools of geopolitics and their impact on regions and economies.

Q.8 Sasha Bayle is analyzing the performance of small-cap stocks in an equity index. She is forecasting how stocks will perform relative to the previous quarter in terms of the EPS generated. She performs her analysis using hypothesis testing and rejects the null hypothesis to forecast that sample stocks will generate a higher EPS. Several months later, Bayle discovers that the null hypothesis was, in fact, correct, and her decision was inaccurate. Has Bayle committed an error in her statistical analysis?

A. No.

B. Yes, a Type I error.

C. Yes, a Type II error.

In statistical hypothesis testing, a Type I error occurs when the null hypothesis is true, but is incorrectly rejected. In this scenario, Sasha Bayle has made a forecast that the sample stocks will generate a higher EPS based on her analysis. She rejected the null hypothesis, which stated that the stocks will not generate an EPS exceeding the previous quarter. However, it was later discovered that the null hypothesis was indeed correct. This means that Bayle has committed a Type I error by incorrectly rejecting the null hypothesis. This error is significant because it leads to a false positive result, where a particular effect is reported to exist when in fact it does not. This can lead to incorrect decisions being made based on the analysis.

A is incorrect. The statement that Bayle has not committed an error is incorrect. As explained above, Bayle has indeed committed a Type I error by incorrectly rejecting the null hypothesis. This is a common mistake in statistical analysis, where the analyst incorrectly rejects a true null hypothesis, leading to a false positive result. This can have significant implications, particularly in fields such as finance where decisions are often made based on the results of such analyses.

B is incorrect. The statement that Bayle has committed a Type II error is incorrect. A Type II error occurs when the null hypothesis is false, but is not rejected. In this case, Bayle has rejected the null hypothesis, which was later found to be true. Therefore, she has not committed a Type II error. This type of error is also significant as it leads to a false negative result, where a particular effect is reported not to exist when in fact it does. However, this is not the case in this scenario.

CFA Level 1, Topic 1 – Quantitative Methods, Learning Module 8 – Hypothesis Testing, LOS 8a: Explain hypothesis testing and its components, including statistical significance, Type I and Type II errors, and the power of a test.

Q.9 Which of the following statements is *least accurate*?

A. 1% significance level is the same as a 99% confidence.

B. The alternative hypothesis $(H)_a$) always includes an equal sign.

C. The alternative hypothesis (H_a) is usually the hypothesis which we are trying to assess.

The alternative hypothesis, denoted as H_a, does not always include an equal sign. The null hypothesis, denoted as H_0, represents the current known state of the population parameter being tested and it always includes an equal sign. The alternative hypothesis, on the other hand, is the hypothesis that we conclude if there is sufficient evidence to reject the null hypothesis. For a two-tailed test, the alternative hypothesis will not contain an equal sign, instead, it will contain a "≠" sign. For a one-tailed test, the alternative hypothesis will either have a ">" or a "<" sign, depending on whether we are testing for a value greater than or less than the null hypothesis. Therefore, the statement in option B is least accurate because it incorrectly states that the alternative hypothesis always includes an equal sign.

A is incorrect. The statement in option A is accurate. The significance level, also known as the alpha level, is the probability of rejecting the null hypothesis when it is true. It is usually set at 0.05 or 5%, which corresponds to a 95% confidence level. However, a 1% significance level corresponds to a 99% confidence level. This is because the confidence level is calculated as 1 minus the significance level, expressed as a percentage. Therefore, a 1% significance level is indeed the same as a 99% confidence level, making the statement in option A accurate.

C is incorrect. The statement in option C is also accurate. The alternative hypothesis is usually the hypothesis that we are trying to assess or prove. It is the hypothesis that we conclude if there is sufficient evidence to reject the null hypothesis. This is typically the hypothesis that suggests a statistical significance exists in the population. Therefore, the statement in option C is accurate because it correctly states that the alternative hypothesis is usually the hypothesis that we are trying to assess.

CFA Level I, Topic 1 – Quantitative Methods, Learning Module 8 – Hypothesis Testing, LOS 8a: explain hypothesis testing and its components, including statistical significance, Type I and Type II errors, and the power of a test.

Q.10 Nathan Lewis is planning to subscribe to an investment plan which will generate a return of 5% and provide him with $2,000 at the end of each year for the next 5 years. However, due to financial constraints, he plans to subscribe to the investment plan in 2 years. The present value of the investment plan today is *closest* to:

A. $7,853.93.

B. $8,246.62

C. $8,658.95

The present value of the investment plan today is calculated by first determining the present value (PV) of the ordinary annuity after 2 years, when Nathan Lewis starts the investment plan. The parameters for this calculation are N=5 (the number of years), I/Y=5 (the interest rate), PMT= -2,000 (the payment made each year), and FV=0 (the future value). Using these parameters, the PV is calculated to be $8,658.95.

However, this plan will only start in 2 years. Therefore, we need to adjust the PV to reflect the present value today. This is done by discounting the PV of $8,658.95 at a rate of 5% for 2 years. The formula for this calculation is PV = $8,658.95 / (1.05)^2, which gives us a PV today of $7,853.93. This is the value that Nathan Lewis would need to invest today to receive $2,000 at the end of each year for the next 5 years, starting in 2 years, at a return rate of 5%.

B is incorrect. This option suggests that the present value of the investment plan today is $8,246.62. However, this is not correct as it is the present value of the annuity at time t = 2 and not at time t = 0. The present value at time t = 2 is $8,658.95, not $8,246.62. Therefore, this option does not correctly reflect the present value of the investment plan today.

C is incorrect. This option suggests that the present value of the investment plan today is $8,658.95. However, this is not correct as it is the present value of an annuity in advance, not of an ordinary annuity as required by the question, at time t = 0. The present value of an ordinary annuity at time t = 0 is $7,853.93, not $8,658.95. Therefore, this option does not correctly reflect the present value of the investment plan today.

CFA Level 1, Topic 1 – Quantitative Methods, Learning Module 2 – The Time Value of Money in Finance, LOS 2a: Calculate and interpret the present value (PV) of fixed-income and equity instruments based on expected future cash flows.

Q.11 Given the provided sample correlation coefficient between ETF A and ETF B is 0.5789 and with 45 monthly observations, which of the following t-values would result in rejecting the null hypothesis of no correlation at the 1% significance level? Use the following t-table:

df	$p = 0.10$	$p = 0.05$	$p = 0.025$	$p = 0.01$	$p = 0.005$
42	1.302	1.682	2.018	2.418	2.698
43	1.302	1.681	2.017	2.416	2.695
44	1.301	1.680	2.015	2.414	2.692
45	1.301	1.679	2.014	2.412	2.690
46	1.300	1.679	2.013	2.410	2.687
47	1.300	1.678	2.012	2.408	2.685
48	1.299	1.677	2.011	2.407	2.682

A. 1.697

B. 2.037

C. 2.695

Representing correlation coefficient by ρ, the hypothesis is stated as:

$$H_0 : \rho = 0 \text{ versus } H_a : \rho \neq 0$$

Note that this is a two-sided test. The critical t-value at the 1% significance level and 43 (= 45-2) degrees of freedom is approximately 2.695. Any t-value greater than 2.695 or less than -2.695 would result in rejecting the null hypothesis.

A is incorrect. A t-value of 1.697 does not exceed the critical value of 2.695. This means that if the calculated t-value were 1.697, it would not be sufficient to reject the null hypothesis of no correlation at the 1% significance level. The result would suggest that the evidence is not strong enough to conclude that a significant correlation exists between ETF A and ETF B.

B is incorrect. Although a t-value of 2.037 is greater than the t-values for higher significance levels (e.g., 5% or 10%), it still does not exceed the critical value of 2.695 required to reject the null hypothesis at the 1% significance level. This indicates that while there might be some evidence of correlation, it is not strong enough to be considered statistically significant at the 1% level.

CFA Level I, Topic 1, Quantitative Methods, Learning Module 9: Parametric and Non-Parametric Tests of Independence, LOS 9a: Explain parametric and non-parametric tests of the hypothesis that the population correlation coefficient equals zero and determine whether the hypothesis is rejected at a given level of significance.

Q.12 The interest rate quoted on investment can *least likely* be viewed as:

A. the return forgone from current consumption.

B. the maximum rate of return an investor must receive to accept an investment.

C. a sum of the nominal risk-free rate and premiums to compensate for distinct types of risks.

The interest rate quoted on an investment is not typically viewed as the maximum rate of return an investor must receive to accept an investment. This is because the interest rate is not a cap or limit on the potential return of an investment. Instead, it is a benchmark or minimum return that an investor expects to earn from an investment. The actual return on an investment can be higher or lower than the quoted interest rate, depending on various factors such as the performance of the investment, market conditions, and the investor's own decisions. Therefore, it is not accurate to view the interest rate as the maximum rate of return an investor must receive to accept an investment.

A is incorrect. The statement that the interest rate can be viewed as the return forgone from current consumption is actually correct. This is because the interest rate represents the opportunity cost of investing funds instead of spending them immediately. When an investor chooses to invest funds, they are foregoing the opportunity to spend those funds on current consumption. The interest rate is the return that the investor expects to earn from the investment, which compensates for the return forgone from current consumption. Therefore, it is accurate to view the interest rate as the return forgone from current consumption.

C is incorrect. The statement that the interest rate can be viewed as a sum of the nominal risk-free rate and premiums to compensate for distinct types of risks is also correct. The interest rate on an investment is typically composed of a real risk-free rate plus premiums for various risks. The real risk-free rate is the minimum return that an investor expects to earn from an investment in the absence of any risks. The risk premiums compensate the investor for taking on various types of risks, such as inflation risk, default risk, liquidity risk, and maturity risk. Therefore, it is accurate to view the interest rate as a sum of the nominal risk-free rate and premiums to compensate for distinct types of risks.

CFA Level 1, Topic 1 – Quantitative Methods, learning Module 1 – Rates and returns, LOS 1a: Interpret interest rates as required rates of return, discount rates, or opportunity costs and explain an interest rate as the sum of a real risk-free rate and premiums that compensate investors for bearing distinct types of risk.

Q.13 If in 2001, Dollar/Euro=3.67, and in 2002, Dollar/Euro=4.67, we *most likely* would say that:

A. the Euro has depreciated.

B. the dollar has depreciated

C. the dollar has appreciated.

In the context of foreign exchange, the term depreciation refers to the decrease in the value of a country's currency relative to another currency. In this case, we are comparing the value of the US Dollar to the Euro. The given data shows that in 2001, the exchange rate was Dollar/Euro=3.67, and in 2002, it was Dollar/Euro=4.67. This means that in 2001, 1 Euro was equivalent to 3.67 USD, and in 2002, 1 Euro was equivalent to 4.67 USD.

When we compare these two rates, we can see that the amount of USD needed to buy 1 Euro has increased from 3.67 to 4.67. This indicates that the value of the USD has decreased relative to the Euro. In other words, the USD has depreciated against the Euro.

A is incorrect. The statement "the Euro has depreciated" is not accurate. As explained above, the value of the Euro has actually increased relative to the USD from 2001 to 2002. This is the opposite of depreciation; it is an appreciation. Therefore, option A is not the correct answer.

C is incorrect. The statement "the dollar has appreciated" is also not accurate. Appreciation refers to an increase in the value of a currency relative to another currency. However, as explained above, the value of the USD has decreased relative to the Euro from 2001 to 2002. This is not an appreciation; it is a depreciation. Therefore, option C is not the correct answer.

CFA Level 1, Topic 1 – Economics, Learning Module 7 – Capital Flows and the FX Market, LOS 7a: Describe the foreign exchange market, including its functions and participants, distinguish between nominal and real exchange rates, and calculate and interpret the percentage change in a currency relative to another currency.

Q.14 GR Solutions offers investment plans to its clients. Howard Isaac is one of the firm’s clients currently invested in GR’s ‘Superior Return Plan’. Isaac will require funds to construct a house two years from today. The plan promises to pay $380,000 six years from today. Given a 10% discount rate, the amount of funds Isaac should be able to accumulate for the home construction is *closest* to:

A. $214,500

B. $259,545

C. $314,050

The future value of the investment plan is $380,000, which is to be received six years from today. However, Isaac needs the funds two years from today. Therefore, we need to calculate the present value of the investment plan four years from today (6 years - 2 years = 4 years).

The formula for calculating the present value is:

$$PV = \frac{FV}{(1+r)^n}$$

Where:

- PV = Present value
- FV = Future value = \$380,000
- r = Discount rate = 10% or 0.10
- n = Number of periods = 4 years

Substituting the given values into the formula:

$$PV = \frac{380{,}000}{(1+0.10)^4}$$

First, calculate $(1+0.10)^4$:

$$(1.10)^4 = 1.4641$$

Now calculate the present value:

$$PV = \frac{380{,}000}{1.4641} \approx 259{,}545$$

Option A is incorrect. The amount of \$214,500 is less than the present value of the investment plan four years from today. This might be the result of using a higher discount rate or a longer time period. However, given a 10% discount rate and a time period of four years, the present value of the investment plan is higher than this amount.

Option C is incorrect. The amount of \$314,050 is more than the present value of the investment plan four years from today. This might be the result of using a lower discount rate or a shorter time period. However, given a 10% discount rate and a time period of four years, the present value of the investment plan is lower than this amount.

CFA Level 1, Topic 1 – Quantitative Methods, Learning Module 2 – The Time Value of Money in Finance, LOS 2a: Calculate and interpret the present value (PV) of fixed-income and equity instruments based on expected future cash flows.

Q.15 From the following data: 93, 54, 68, 44, 128, 139, 81, 77, the 6th decile is *closest to*:

A. 79.4

B. 85.8

C. 88.2

In statistics, a decile is a method of splitting up a set of data into 10 equally large subsections. The 6th decile, therefore, represents the point below which 60% of the observations may be found.

To calculate the 6th decile, we use the formula:

$$(n+1)\frac{y}{100} = (8+1)\frac{60}{100} = 5.4$$

where n is the number of observations and y is the decile we are looking for. In this case, n is 8 (the total number of observations) and y is 60 (representing the 6th decile). This gives us a location of 5.4.

Since the location is not a whole number, it means that the 6th decile falls between the 5th and 6th numbers in the data set when arranged in ascending order. These numbers are 81 and 93. We then calculate the 6th decile as:

$$81 + 0.4 \times (93 - 81) = 85.80$$

CFA Level 1, Topic 1 – Quantitative Methods, Learning Module 3 – statistical Measures of Asset Returns, LOS 3a: calculate, interpret, and evaluate measures of central tendency and location to address an investment problem.

Q.16 Consider the following information relating to two portfolios:

- Portfolio A's variance of returns: 52.5%
- Portfolio B's variance of returns: 63%
- Covariance of return between the two portfolios: 0.315

The correlation of returns between these two portfolios is *closest to*:

A. 0.104

B. 0.315

C. 0.548

The correlation of returns between two portfolios is calculated using the following formula:

$$\text{Corr}(R_A, R_B) = \frac{\text{Cov}(R_A, R_B)}{\sigma_A \times \sigma_B}$$

Where:

- $\text{Corr}(R_A, R_B)$ is the correlation of returns between portfolio A and portfolio B,
- $\text{Cov}(R_A, R_B)$ is the covariance of returns between the two portfolios,
- σ_A is the standard deviation of returns for portfolio A,
- σ_B is the standard deviation of returns for portfolio B.

In this case:

- The covariance of returns, $\text{Cov}(R_A, R_B)$, is given as 0.315.
- The variance of returns for portfolio A is 52.5% (or 0.525 in decimal form).
- The variance of returns for portfolio B is 63% (or 0.63 in decimal form).

The standard deviation is the square root of the variance, so we calculate the standard deviations for both portfolios:

$$\sigma_A = \sqrt{0.525} \approx 0.724$$

$$\sigma_B = \sqrt{0.63} \approx 0.794$$

Now, substituting these values into the correlation formula:

$$\text{Corr}(R_A, R_B) = \frac{0.315}{0.724 \times 0.794}$$

First, calculate the denominator:

$$0.724 \times 0.794 \approx 0.575$$

Now, calculate the correlation:

$$\text{Corr}(R_A, R_B) = \frac{0.315}{0.575} \approx 0.5477$$

CFA Level I, Topic 1 – Quantitative Methods, Learning Module 5 – Portfolio Mathematics, LOS 5b: Calculate and interpret the covariance and correlation of portfolio returns using a joint probability function for returns.

Q.17 If there is no variability in the data set, the geometric mean will *most likely* be equal to:

A. arithmetic and harmonic mean.

B. harmonic mean but will be lower than the arithmetic mean.

C. arithmetic mean but will be higher than the harmonic mean.

The geometric mean is a type of average that is calculated by multiplying all the numbers in the data set together and then taking the nth root of the product, where n is the total number of values in the data set. When there is no variability in the data set, meaning all the numbers are the same, the geometric mean will be equal to that number. Since the arithmetic mean (the sum of all numbers divided by the total number of values) and the harmonic mean (the reciprocal of the arithmetic mean of the reciprocals) will also be equal to that number, the geometric mean will be equal to both the arithmetic and harmonic mean.

B is incorrect. This option suggests that the geometric mean will be equal to the harmonic mean but will be lower than the arithmetic mean. This is not accurate because when there is no variability in the data set, all the means will be equal. The harmonic mean is always less than or equal to the geometric mean, which is always less than or equal to the arithmetic mean. However, in the case of no variability, all these means will be equal to each other.

C is incorrect. This option suggests that the geometric mean will be equal to the arithmetic mean but will be higher than the harmonic mean. This is not accurate because when there is no variability in the data set, all the means will be equal. The harmonic mean is always less than or equal to the geometric mean, which is always less than or equal to the arithmetic mean. However, in the case of no variability, all these means will be equal to each other.

CFA Level 1, Topic 2 – Quantitative Methods, Learning Module 1 – Rates and Return, LOS 1b: calculate and interpret different approaches to return measurement over time and describe their appropriate uses.

Q.18 A stock's returns for the past four years are as follows: 12%, 9.5%, 8%, 14.7%. The geometric mean return is *closest to*:

A. 11.02%

B. 11.05%

C. 51.90%

The geometric mean return is calculated by multiplying the returns for each year, taking the fourth root of the result (since there are four years), and then subtracting one to convert the result back into a percentage. This is represented by the formula:

$$\text{Geometric mean} = (1.12 \times 1.095 \times 1.08 \times 1.147)^{\frac{1}{4}} - 1$$

When we plug in the given returns into this formula, we get 0.1102 or 11.02%. This is the geometric mean return of the stock over the past four years. This method of calculation takes into account the compounding effect of returns, which is why it is used in finance to calculate average returns over multiple periods.

CFA Level 1, Topic 2 – Quantitative Methods, Learning Module 1 – Rates and Return, LOS 1b: Calculate and interpret different approaches to return measurement over time and describe their appropriate uses.

Q.19 Which of the following is *least likely* a reason for a government to impose trade restrictions?

A. To protect new or infant industries.

B. To avoid comparative advantage over other countries.

C. To protect goods that are crucial to a country’s defense.

The concept of comparative advantage is a fundamental principle in international trade and economic theory. It suggests that countries should specialize in producing and exporting only goods and services in which they have a relative advantage, and import those in which they have a relative disadvantage. Therefore, it is least likely that a government would impose trade restrictions to avoid comparative advantage. Instead, they would want to exploit this advantage to maximize their gains from trade. Imposing trade restrictions would be counterproductive as it would prevent the country from fully utilizing its resources and achieving maximum efficiency.

A is incorrect. The statement "To protect new or infant industries" is a common reason for governments to impose trade restrictions. This is known as the infant industry argument, which suggests that new industries need protection from international competition until they are mature and can compete on their own. Governments often impose tariffs, quotas, or other trade barriers to protect these industries from foreign competition, allowing them to grow and develop. Therefore, this is a likely reason for a government to impose trade restrictions, not the least likely.

C is incorrect. The statement "To protect goods that are crucial to a country’s defense" is another common reason for governments to impose trade restrictions. National security is a major concern for any country, and certain industries are considered crucial for a country's defense. These industries often include weapons manufacturing, aerospace, and technology. Governments often impose trade restrictions to protect these industries, ensuring they can produce the necessary goods for the country's defense. Therefore, this is also a likely reason for a government to impose trade restrictions, not the least likely.

C.F.A. Level 1, Topic 2 – Economics, Learning Module 6 – International Tarde, LOS 6c: explain the motivations for and advantages of trading blocs, common markets, and economic unions.

Q.20 A company which produces 5G communication equipment has two factories, A and B. 40% of the equipment are made in factory A, 60% in factory B. It has been established that 90% of the equipment produced by factory A meets specifications while only 75% of the equipment produced by factory B meets specifications. If a Telco buys the equipment, the probability that it meets specifications is *closest to*:

A. 0.40

B. 0.76

C. 0.81

The probability that the equipment meets specifications is calculated using the total probability rule, which is a fundamental concept in probability theory. The total probability rule states that the probability of an event can be found by considering all the different ways that it can occur and adding up their probabilities.

In this case, the event we are interested in is that a piece of equipment meets specifications. This event can occur in two ways: either the equipment is produced by factory A and meets specifications, or it is produced by factory B and meets specifications. The probabilities of these two events are given by $P(M|A)P(A)$ and $P(M|B)P(B)$ respectively, where $P(M|A)$ and $P(M|B)$ are the probabilities that the equipment meets specifications given that it is produced by factory A or B, and $P(A)$ and $P(B)$ are the probabilities that the equipment is produced by factory A or B.

Given that $P(A) = 0.4$, $P(B) = 0.6$, $P(M|A) = 0.9$, and $P(M|B) = 0.75$, we can calculate $P(M)$ as follows:

$$P(M) = P(M|A)P(A) + P(M|B)P(B) = 0.9 * 0.4 + 0.75 * 0.6 = 0.81$$

A is incorrect. This option suggests that the probability that the equipment meets specifications is 0.40. This is incorrect because it seems to be based on the multiplication rule of probability, which states that the joint probability of two events is the product of the probability of one event and the conditional probability of the other event given the first. However, this rule is not applicable here because the events of the equipment being produced by factory A and meeting specifications are not independent.

B is incorrect. This option suggests that the probability that the equipment meets specifications is 0.76. This is incorrect because it seems to be based on the addition rule of probability, which states that the probability that at least one of two events will occur is the sum of their individual probabilities minus the probability that they both occur. However, this rule is not applicable here because the events of the equipment being produced by factory A and meeting specifications are not mutually exclusive.

CFA Level 1, Topic 2 – Quantitative Methods, Learning Module 4 – Probability Trees and Conditional Expectation, LOS 4b: Formulate an investment problem as a probability tree and explain the use of conditional expectations in investment application.

Q.21 Which of the following is *least likely* associated with the imposition of capital restrictions?

A. To maintain fixed exchange rates.

B. The prohibition of foreign investments in certain domestic countries.

C. Providing domestic capital to foreign investors to invest in the domestic country.

Capital restrictions are typically measures implemented by a government or a central bank to control the inflow and outflow of foreign capital in a country's economy. The primary purpose of these restrictions is to limit the amount of foreign capital entering domestic markets. This is done to protect the domestic economy from potential risks associated with foreign investments, such as economic instability or loss of control over domestic industries. Therefore, providing domestic capital to foreign investors contradicts the very essence of capital restrictions, as it would increase, rather than limit, foreign influence and control over domestic markets.

A is incorrect. While it is true that controlling capital flows can help achieve a target exchange rate, this is not the primary purpose of capital restrictions. Capital restrictions are primarily used to limit foreign capital inflow to protect the domestic economy. However, maintaining a fixed exchange rate can be a secondary benefit of these restrictions. Fixed exchange rates can help a government maintain low inflation, which can keep interest rates low and encourage consumer spending. Therefore, while capital restrictions can indirectly contribute to maintaining fixed exchange rates, this is not their primary purpose.

B is incorrect. The statement suggests that capital restrictions involve the prohibition of foreign investments in certain domestic countries. While this is partially true, it is not entirely accurate. Capital restrictions do limit the inflow of foreign capital into domestic markets, but they do not necessarily prohibit all foreign investments. The restrictions are typically selective, targeting specific industries or types of investments that are considered high-risk or potentially harmful to the domestic economy. Therefore, while capital restrictions can involve the prohibition of certain types of foreign investments, they do not involve a blanket prohibition of all foreign investments in domestic markets.

CFA Level 1, Topic 2 – Economics, Learning Module 7 – Capital Flows and the FX Market, LOS 7c: Describe common objectives of capital restrictions imposed by governments.

Q.22 In the long run, firms operating in a perfectly competitive industry will *most likely*:

A. set prices just above marginal cost to control competition.

B. use product differentiation and innovation to gain market share.

C. operate at the minimum average cost on their long-run average cost curves.

In a perfectly competitive market, firms are considered as price takers. This means they do not have the power to control or influence the market price. Instead, they must accept the price that is determined by the overall market supply and demand. The long-run equilibrium for a firm in such a market is achieved when it operates at the minimum point of its long-run average cost (LRAC) curve. This point signifies the most efficient scale of production, where the firm can achieve the lowest possible cost per unit of output. At this scale, the firm's average total cost equals the market price, which allows it to cover all its costs, including a normal profit. However, it does not earn any economic profits. This outcome is a direct consequence of the competitive pressures in the market. Any economic profits would attract new entrants, which would increase supply and drive down prices until only normal profits are possible. This is why option C is the correct answer.

A is incorrect. The suggestion that firms set prices just above marginal cost to control competition is a misunderstanding of the nature of a perfectly competitive market. In such markets, individual firms do not have control over the price; they are price takers. The market price is determined by the intersection of the industry supply and demand curves. Firms can only decide on the quantity to produce, and in the long run, they produce where price equals marginal cost. This also coincides with the minimum average cost due to the properties of the cost curves. The idea of setting prices independently is not feasible in a perfectly competitive market.

B is incorrect. The strategy of using product differentiation and innovation to gain market share is not applicable to perfectly competitive markets. Perfect competition is characterized by many firms selling identical (homogeneous) products, with no single firm having the ability to influence market prices. Product differentiation is a characteristic of monopolistic competition or oligopoly, where firms have some degree of market power and can distinguish their products from those of competitors. In a perfectly competitive market, the focus is on producing at the lowest possible cost rather than differentiating products.

CFA Level 1, Topic 2 - Economics, Learning Module 1 - Firms and Market Structures, LOS 1a: determine and interpret breakeven and shutdown points of production, as well as how economies and diseconomies of scale affect costs under perfect and imperfect competition.

Q.23 An exchange rate between two South American currencies has increased to 1.6200. If the base currency has appreciated by 10% against the price currency, the initial exchange rate between the two currencies was *closest* to:

A. 1.4122

B. 1.4522

C. 1.4727

The percentage appreciation is calculated by dividing the appreciated exchange rate by the initial exchange rate. In this scenario, the initial exchange rate is what we are trying to find. The equation for this calculation is as follows:

$$\frac{1.62}{X} = 1.10$$

When we solve this equation for X, we find that X equals 1.4727. This means that the initial exchange rate, before the base currency appreciated by 10%, was approximately 1.4727.

CFA Level 1, Topic 2 – Economics, Learning Module 7 – Capital Flows and the FX Market, LOS 7a: Describe the foreign exchange market, including its functions and participants, distinguish between nominal and real exchange rates, and calculate and interpret the percentage change in a currency relative to another currency.

Q.24 An analyst calculates the arithmetic mean return for a portfolio allocated 30% to U.S. equities and 70% to U.S. bonds. He has collected annual return data for the years 2000 to 2004.
Exhibit 1: Stock and Bond Return Data 2000-2004

	Stocks(%)	Bonds(%)
2000	7.4	10.1
2001	−5.6	3.4
2002	3.7	−1.1
2003	9.3	7.9
2004	14.7	12.8

The arithmetic mean return for the portfolio is *closest to*:

A. 6.40%

B. 9.30%

C. 13.37%

The arithmetic mean return for the portfolio is calculated by taking the average of the portfolio returns for each year from 2000 to 2004. The portfolio return for each year is calculated by taking the weighted average of the returns of the stocks and bonds, with weights of 30% and 70% respectively.

For example, the portfolio return for the year 2000 is calculated as (0.3 * 7.4%) + (0.7 * 10.1%) = 9.29%. Similarly, the portfolio returns for the years 2001, 2002, 2003, and 2004 are calculated as 0.70%, 0.34%, 8.32%, and 13.37% respectively. The arithmetic mean return is then calculated by adding up these annual portfolio returns and dividing by the number of years, which is 5 in this case. This gives us an arithmetic mean return of 6.40%.

B is incorrect. This option suggests that the arithmetic mean return for the portfolio is 9.30%. However, this is not the case. The value of 9.30% is actually the portfolio return for the year 2000, not the arithmetic mean return for the entire period from 2000 to 2004. The arithmetic mean return is calculated by taking the average of the portfolio returns for each year, not just the return for one year.

C is incorrect. This option suggests that the arithmetic mean return for the portfolio is 13.37%. However, this is not the case. The value of 13.37% is actually the portfolio return for the year 2004, not the arithmetic mean return for the entire period from 2000 to 2004. The arithmetic mean return is calculated by taking the average of the portfolio returns for each year, not just the return for one year.

CFA Level 1, Topic 2 – Quantitative Methods, Learning Module 1 – Rates and return, LOS 1b: Calculate and interpret different approaches to return measurement over time and describe their appropriate uses.

Q.25 Mark Sinatra is a U.S. equity investor with a global investment portfolio. Sinatra's portfolio currently comprises North and European equities. He would like to expand his portfolio and allocate $0.5 million to Japanese equities. Information concerning current and expected one-month spot rates is summarized in the exhibit below:

	Spot Rate	Expected Spot Rate in One Month
USD/EUR	1.3805	1.3759
JPY/EUR	0.0071	0.0089

The expected change in the USD/JPY rate in one month is *closest* to:

A. -20.49%

B. -0.33%

C. 25.77%

The change in the USD/JPY rate in one month is calculated by first determining the current USD/JPY spot rate, which is 194.4366. This is derived from dividing the current USD/EUR spot rate of 1.3805 by the current JPY/EUR spot rate of 0.0071. The expected one-month spot rate for USD/JPY is then calculated as 154.5955, which is derived from dividing the expected one-month USD/EUR spot rate of 1.3759 by the expected one-month JPY/EUR spot rate of 0.0089. The expected change in the USD/JPY rate is then calculated by dividing the expected one-month spot rate by the current spot rate and subtracting 1, which gives -20.49%.

B is incorrect. This option suggests that the expected change in the USD/JPY rate in one month is -0.33%. This is derived from incorrectly dividing the expected one-month USD/EUR spot rate of 1.3759 by the current USD/EUR spot rate of 1.3805 and subtracting 1. However, this calculation does not take into account the JPY/EUR spot rates, which are crucial in determining the USD/JPY spot rates. Therefore, this calculation does not accurately represent the expected change in the USD/JPY rate.

C is incorrect. This option suggests that the expected change in the USD/JPY rate in one month is 25.77%. This is derived from incorrectly dividing the current USD/JPY spot rate of 194.4366 by the expected one-month spot rate of 154.5955 and subtracting 1. However, this calculation is incorrect because it does not accurately represent the expected change in the USD/JPY rate. The expected change in the rate should be calculated by dividing the expected one-month spot rate by the current spot rate, not the other way around.

CFA Level 1, Topic 2 – Economics, Learning Module 8 – Exchange Rate Calculations, LOS 8b: Explain the arbitrage relationship between spot and forward exchange rates and interest rates, calculate a forward rate using points or in percentage terms, and interpret a forward discount or premium.

Q.26 Which of the following must *most likely* happen for the balance of trade to improve?

A. savings must increase.

B. domestic production must decrease.

C. investments must be greater than savings.

The fundamental relationship among domestic saving, investment, the fiscal balance, and the trade balance. The equation for this relationship is:

$S = I + (G - T) + (X - M)$

Where:

- I = Gross private domestic investment
- G = Government spending on final goods and services for both current consumption and investment in capital goods
- X = Exports
- M = Imports
- T = Taxes

By rearranging the equation, we get:

$(X - M) = (S - I) - (G - T)$

The balance of trade is the difference between the exports and imports for a given period of a country. When savings increase, consumption decreases as less income is available for spending. This leads to less absorption of goods and services domestically, which in turn leads to a decrease in imports and a decrease in foreign borrowing. Both of these factors contribute to an improvement in the balance of trade.

Option B is incorrect. The statement suggests that domestic production must decrease for the balance of trade to improve. However, if domestic production decreases, then the exports decrease. This leads to a deterioration in the balance of trade as the country is exporting less goods and services, which negatively impacts the trade balance.

Option C is incorrect. The statement suggests that investments must be greater than savings for the balance of trade to improve. However, based on the equation above, if investments are greater than savings, the left-hand side of the equation decreases. This implies a decrease in the balance of trade, which is not an improvement. Therefore, this statement is incorrect.

CFA Level 1, Topic 2 – Economics, Learning Module 7 – Capital Flows and the FX Market, LOS 7b: Describe exchange rate regimes and explain the effects of exchange rates on countries' international trade and capital flows.

Q.27 A perfectly competitive firm should shut down immediately if it is operating such that the:

A. selling price is less than the marginal cost.

B. selling price is less than the average variable cost.

C. selling price is less than the average total cost but greater than the average variable cost.

In a perfectly competitive market, a firm should immediately cease operations if the selling price is less than the average variable cost, as indicated in option B. The reasoning behind this is that in the short run, a firm should continue to operate as long as it can cover its variable costs, even if it cannot cover its total costs. Variable costs are those that change with the level of output, such as raw materials and direct labor. If the firm's revenue from selling the product is sufficient to cover these variable costs, it should continue to produce. This is because it can contribute to covering a portion of the fixed costs, which are costs that do not change with the level of output, such as rent or salaries. These fixed costs must be paid regardless of whether the firm is operating or not. However, if the selling price falls below the average variable cost, the firm would not be able to cover even its variable costs. In such a scenario, continuing to operate would lead to losses greater than the fixed costs. Therefore, shutting down becomes the preferable option to minimize losses.

A is incorrect. The statement that a firm should shut down if the selling price is less than the marginal cost is not accurate. Marginal cost is the cost of producing one more unit of a good. In the short run, the firm aims to cover its variable costs, and any contribution towards fixed costs is considered beneficial. Even if the selling price is less than the marginal cost, the firm may still cover its variable costs and contribute towards fixed costs. Therefore, it should not necessarily shut down.

C is incorrect. The statement that a firm should shut down if the selling price is less than the average total cost but greater than the average variable cost is not accurate. In this scenario, the firm is covering all its variable costs and contributing towards its fixed costs. Although the firm is not making a profit, it is minimizing its losses by covering a portion of its fixed costs. Shutting down would mean the firm incurs losses equal to its total fixed costs, which is worse than operating at a loss where the selling price covers the variable costs and contributes towards fixed costs. Therefore, the firm should not shut down immediately in this scenario.

CFA Level 1, Topic 2 - Economics, Learning Module 1 - Firms and Market Structures, LOS 1a: Determine and interpret breakeven and shutdown points of production, as well as how economies and diseconomies of scale affect costs under perfect and imperfect competition.

Q.28 Which of the following is *least likely* an objective of fiscal policy?

A. Liquidity trap.

B. Controlling inflation.

C. Increasing industrial or agricultural output.

A liquidity trap is a situation that is typically a consequence of monetary policy, not fiscal policy. It occurs when interest rates are near zero and savings rates are high, making monetary policy ineffective. In such a scenario, consumers prefer to keep their funds in savings rather than purchasing Treasury securities due to the prevailing belief that interest rates will soon rise, which would decrease bond prices. Fiscal policy, on the other hand, is primarily concerned with government spending and taxation, and does not directly deal with interest rates or savings rates. Therefore, a liquidity trap is not an objective of fiscal policy.

B is incorrect. Controlling inflation is indeed an objective of fiscal policy. Fiscal policy can be used as a significant tool to control the inflation rate. When the government increases taxes, the demand for goods and services decreases, which can help to control inflation. Therefore, the assertion that controlling inflation is not an objective of fiscal policy is incorrect. Fiscal policy can directly influence the inflation rate through its impact on the aggregate demand in the economy.

C is incorrect. Increasing industrial or agricultural output is also an objective of fiscal policy. Fiscal policy can influence certain sectors of the economy in direct or indirect ways. For instance, some policies can have a direct impact on the value of land in the agricultural sector. The agricultural sector is very capital-intensive, and a well-designed fiscal policy can affect the relative demand and competitiveness of exports for agricultural products. Therefore, fiscal policy can be used to increase the output of certain sectors in the economy, making this option incorrect.

CFA Level 1, Topic 2 – Economics, Learning Module 3 – Fiscal Policy, LOS 3b: Describe roles and objectives of fiscal policy as well as arguments as to whether the size of a national debt relative to GDP matters.

Q.29 Which of the following is *least likely* a strategy used by governments to protect domestic goods?

A. Licenses.

B. Import quotas.

C. A decrease in tariffs.

Tariffs are essentially taxes imposed on imported goods. When a government imposes tariffs, it increases the cost of foreign goods, making domestic goods more competitive in terms of price. Therefore, a decrease in tariffs would have the opposite effect. It would make foreign goods cheaper and more competitive, which could potentially harm domestic industries. This is why a decrease in tariffs is least likely to be a strategy used by governments to protect domestic goods. Governments typically use tariffs as a tool to protect domestic industries from foreign competition. By reducing tariffs, they would be making foreign goods more attractive to consumers, which could lead to a decrease in demand for domestic goods.

A is incorrect. Licenses are indeed a strategy used by governments to protect domestic goods. A license is a permit given by the government to import specific goods and services. It is a form of non-tariff barrier used to control and limit the amount of foreign goods entering the country. For instance, a government might restrict the import of certain cars and only grant licenses to specific companies to import these cars. This limits the availability of foreign cars in the market, thereby protecting domestic car manufacturers from excessive foreign competition. Furthermore, the government might charge a hefty fee for the issuance of these licenses, which would increase the cost of the imported goods, making domestic goods more competitive.

B is incorrect. Import quotas are another strategy used by governments to protect domestic goods. An import quota is a restriction that sets a physical limit on the quantity of a good that can be imported during a specific period. This means that once the quota is reached, no more of that specific good can be imported. This restriction leads to a decrease in the supply of foreign goods, which can lead to an increase in demand for domestic goods, thereby protecting domestic industries. By limiting the amount of foreign goods in the market, import quotas help to ensure that domestic industries can thrive.

CFA Level 1, Topic 2 – Economics, Learning Module 6 – International Trade, Los 6b: Compare types of trade restrictions, such as tariffs, quotas, and export subsidies, and their economic implications.

Q.30 The stock index's arithmetic mean return is 6%, with a standard deviation of 11.7%. The coefficient of variation is *closest to*:

A. 1.40

B. 1.95

C. 5.70

The coefficient of variation (CV) is a statistical measure that helps in understanding the dispersion of data points in a data series around the mean. It is calculated as the ratio of the standard deviation to the mean. In this case, the arithmetic mean return of the stock index is given as 6% and the standard deviation is 11.7%. Therefore, the CV can be calculated as follows:

CV = Standard Deviation / Mean = 11.7 / 6 = 1.95

This calculation shows that the coefficient of variation is closest to 1.95, which corresponds to option B. This means that the dispersion of the stock index returns around the mean is 1.95 times the mean. This is a relatively high value, indicating a high level of volatility in the stock index returns.

A is incorrect. This option suggests a CV of 1.40. This would imply that the standard deviation is 1.40 times the mean. However, using the given values of standard deviation (11.7%) and mean (6%), the CV is calculated as 1.95, not 1.40. Therefore, option A is not the correct answer because it does not correctly represent the calculation of the CV based on the provided data.

C is incorrect. This option suggests a CV of 5.70. This would imply that the standard deviation is 5.70 times the mean. However, using the given values of standard deviation (11.7%) and mean (6%), the CV is calculated as 1.95, not 5.70. Therefore, option C is not the correct answer because it does not correctly represent the calculation of the CV based on the provided data. It seems to suggest an erroneous calculation where the square root of the standard deviation is taken before calculating the CV, which is not the correct method for calculating the CV.

CFA Level I, Topic 2 – Quantitative Methods, Learning Module 3 – Statistical Measures of Asset returns, LOS 3b: Calculate, interpret, and evaluate measures of dispersion to address an investment problem.

Q.31 Consider the following table with the spot rates of different currencies.

Currency	Spot rate
USD/CNY	7.23
USD/AUD	1.49
GBP/USD	1.27

Mitchel, an FX dealer, has quoted the CNY/GBP spot rate at 0.10. The arbitrage profit that can be earned from transacting CNY/GBP is *closest* to:

A. 0.01

B. 0.11

C. 0.18

The cross rate is a currency exchange rate calculated using two other exchange rates. In this case, we are using the USD/CNY and GBP/USD spot rates to calculate the GBP/CNY cross rate. The formula for this calculation is as follows:

USD/CNY * GBP/USD = GBP/CNY

Substituting the given spot rates into this formula, we get:

7.23 * 1.27 = 9.18

This gives us the GBP/CNY cross rate. However, we need the CNY/GBP cross rate, which is the inverse of the GBP/CNY cross rate. Therefore, we calculate the CNY/GBP spot rate as follows:

CNY/GBP = 1 / GBP/CNY = 1 / 9.18 = 0.11

This is the prevailing spot price. However, the dealer has quoted a lower price of 0.10. This discrepancy between the quoted price and the prevailing spot price creates an arbitrage opportunity. Arbitrage is the practice of taking advantage of a price difference between two or more markets. In this case, the arbitrage profit is the difference between the prevailing spot price and the quoted price, which is 0.11 - 0.10 = 0.01.

CFA Level 1, Topic 2 – Economics, Learning Module 8 – Exchange Rate Calculations. LOS a: Calculate and interpret currency cross-rates.

Q.32 Due to the upcoming elections in the U.S., the CAD/USD currency exchange rates have risen from 1.17 to 1.31. The percentage change in the value of the USD in terms of CAD is *closest to*:

A. -10.68%

B. 11.96%

C. 10.68%

The question asks for the percentage change in the value of the USD in terms of the CAD due to the rise in the CAD/USD currency exchange rates from 1.17 to 1.31. The percentage change can be calculated by taking the ratio of the new value to the old value, subtracting one, and then multiplying by 100 to convert to a percentage. In this case, the calculation is $\frac{1.31}{1.17} - 1 = 0.1196$, which gives a percentage change of 11.96%. This indicates that the value of the USD has appreciated by 11.96% against the CAD. It's important to note that this calculation does not imply that the CAD has depreciated by 11.96% against the USD. The percentage change in the value of one currency against another is not symmetric, meaning that an appreciation of one currency does not equate to an equal depreciation of the other.

A is incorrect. This option suggests a percentage change of -10.68%. This value represents the percentage change of the CAD in terms of the USD, not the USD in terms of the CAD as the question asks. This value is calculated as $\frac{(\frac{1}{1.31})}{(\frac{1}{1.17})} - 1 = -0.10687$, which shows that the CAD has depreciated by 10.687% against the USD. However, this is not the correct answer to the question, which asks for the percentage change in the value of the USD in terms of the CAD.

B is incorrect. This option suggests a percentage change of 10.68%. This value represents the absolute depreciation rate of the CAD against the USD, not the percentage change in the value of the USD in terms of the CAD as the question asks. The absolute depreciation rate is a measure of the decrease in value of one currency against another, without taking into account the initial value of the currency. This is not the correct answer to the question, which asks for the percentage change in the value of the USD in terms of the CAD.

CFA Level 1, Topic 2 – Economics, Learning Module 7 – Capital Flows and the FX Market, LOS 7a: Describe the foreign exchange market, including its functions and participants, distinguish between nominal and real exchange rates, and calculate and interpret the percentage change in a currency relative to another currency.

Q.33 Real money accounts are *most likely* on which side of the market?

A. The broker.

B. The sell-side.

C. The buy-side.

Real money accounts are typically associated with institutional investors such as mutual funds, insurance companies, and pension funds. These entities are considered to be on the buy-side of the market as they are the ones who are buying investment services. They are the end-users of the financial markets, investing on behalf of their clients or for their own accounts. They do not use derivatives for their investment strategies, instead, they invest directly in securities such as stocks, bonds, and other assets. This is in contrast to the sell-side of the market, which includes entities that sell investment services, such as investment banks and broker-dealers.

A is incorrect. The broker is not the most likely side of the market for real money accounts. Brokers are intermediaries that facilitate transactions between buyers and sellers. They do not typically hold positions in the market for their own account, but rather earn commissions from facilitating transactions for others. While real money accounts may use brokers to execute their trades, the accounts themselves are not on the broker side of the market. They are the clients of the brokers, not the brokers themselves.

B is incorrect. The sell-side of the market is not the most likely side for real money accounts. The sell-side refers to entities such as investment banks, broker-dealers, and other financial firms that sell investment services. These entities act as intermediaries, facilitating transactions between buyers and sellers. They earn income from commissions and fees for their services. Real money accounts, on the other hand, are the end-users of these services. They are the ones buying the investment services from the sell-side, not selling them. Therefore, they are considered to be on the buy-side of the market, not the sell-side.

CFA Level 1, Topic 2 – Economics, Learning Module 7 – Capital Flows and the FX Market, LOS 7a: Describe the foreign exchange market, including its functions and participants, distinguish between nominal and real exchange rates, and calculate and interpret the percentage change in a currency relative to another currency.

Q.34 Two hypothetical currencies, ABC and XYZ, are trading at the spot rate of 1.60 ABC/XYZ. If the interest rate in ABC's country is 7% and 5% in XYZ's country, and the actual 1-year forward rate is 1.62, which of the following is *most accurate*?

A. Arbitrage profit opportunity does not exist.

B. Arbitrage profit can be earned by buying the forward contract at 1.62.

C. Arbitrage profit can be earned by selling the forward contract at 1.62.

The actual forward rate of 1.62 is lower than the arbitrage-free forward rate of 1.6304. The arbitrage-free forward rate is calculated using the formula $1.60 \times \frac{1.07}{1.05}$. The difference between the arbitrage-free forward rate and the actual forward rate presents an arbitrage opportunity. Arbitrage is the practice of taking advantage of a price difference between two or more markets, in this case, the forward contract market and the spot market. By buying the forward contract at the lower rate of 1.62 and selling it at the higher arbitrage-free rate of 1.6304, a risk-free profit of 0.0104, i.e., $(1.6304 - 1.62)$ can be made. This is a classic example of buying low and selling high, a fundamental principle in finance and trading.

A is incorrect. This option suggests that an arbitrage profit opportunity does not exist. However, as explained above, the difference between the actual forward rate and the arbitrage-free forward rate does present an arbitrage opportunity. Therefore, this option contradicts the correct answer and the fundamental principles of arbitrage and trading.

C is incorrect. This option suggests that an arbitrage profit can be earned by selling the forward contract at 1.62. However, as explained above, the arbitrage profit is earned by buying the forward contract at 1.62, not selling it. Selling the forward contract at 1.62 would not yield a profit, as the arbitrage-free forward rate is higher at 1.6304. Therefore, this option contradicts the correct answer and the fundamental principles of arbitrage and trading.

CFA Level 1, Topic 2 – Economics, Learning Module 8 – Exchange rate Calculations, LOS 8b: Explain the arbitrage relationship between spot and forward exchange rates and interest rates, calculate a forward rate using points or in percentage terms, and interpret a forward discount or premium.

Q.35 In which of the following accounting systems would an analyst write down inventories as the lowest value between the cost of inventories and the market price?

A. IFRS

B. US GAAP

C. Both IFRS and US GAAP

Under the US GAAP accounting system, an analyst would write down inventories as the lowest value between the cost of inventories and the market price. This is because the US GAAP follows the Lower of Cost or Market (LCM) rule. According to this rule, companies must record the cost of their inventory at whichever cost is lower, the original cost or its current market price. This is done to ensure that if the market price drops significantly, the company's financial statements will accurately reflect the potential loss in profits if the inventory were to be sold. This method is used to prevent overstatement of the inventory's value and to provide a more conservative view of the company's financial position.

A is incorrect. The International Financial Reporting Standards (IFRS) does not follow the Lower of Cost or Market (LCM) rule. Instead, it uses the Lower of Cost and Net Realizable Value (NRV) rule. The NRV is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. Therefore, under IFRS, an analyst would write down inventories as the lowest value between the cost of inventories and the net realizable value. This method is used to ensure that the inventory is not overvalued and that the financial statements provide a fair view of the company's financial position.

B is incorrect. While it is true that the US GAAP uses the Lower of Cost or Market (LCM) rule, it is not accurate to say that both IFRS and US GAAP use this rule. As explained above, IFRS uses the Lower of Cost and Net Realizable Value (NRV) rule. Therefore, an analyst would not write down inventories as the lowest value between the cost of inventories and the market price under both IFRS and US GAAP.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 6 – Analysis of Inventories, LOS 6a: Describe the measurement of inventory at the lower of cost and net realisable value and its implications for financial statements and ratios .

Q.36 Which of the following accounting treatments *most likely* represents a set of conservative accounting activities?

A. Increasing estimates of salvage value, decreasing accrual of reserves for bad debts, and early recognition of impairments.

B. Using accelerated depreciation, decreasing valuation allowances on deferred tax assets, and expensing current period costs.

C. Early recognition of impairment, increasing valuation allowances on deferred tax assets, and using accelerated depreciation.

Option C, which includes early recognition of impairment, increasing valuation allowances on deferred tax assets, and using accelerated depreciation, is the correct answer. These are all conservative accounting activities. Conservative accounting is a principle that involves more expenses and liabilities and fewer revenues and assets. It is a policy of anticipating possible future losses but not future gains. This approach can lead to a lower net income, lower asset balance, and higher liability balance.

A is incorrect. Increasing estimates of salvage value, decreasing accrual of reserves for bad debts, and early recognition of impairments do not represent a set of conservative accounting activities. Increasing estimates of salvage value and decreasing accrual of reserves for bad debts are not conservative practices. The salvage value is the estimated resale value of an asset at the end of its useful life. Increasing this value would increase the asset's net book value, which is not a conservative approach. Similarly, decreasing the accrual of reserves for bad debts would reduce the expenses and liabilities, which is also not a conservative approach. Although early recognition of impairments is a conservative practice, it alone does not make option A a conservative set of accounting activities.

B is incorrect. Using accelerated depreciation, decreasing valuation allowances on deferred tax assets, and expensing current period costs do not represent a set of conservative accounting activities. While using accelerated depreciation and expensing current period costs are conservative practices, decreasing valuation allowances on deferred tax assets is not. Valuation allowance is a contra-account to the deferred tax assets. Decreasing this allowance would increase the value of deferred tax assets, which is not a conservative approach. Therefore, despite having two conservative practices, the presence of a non-conservative practice makes option B an incorrect choice.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 10 – Financial Reporting Quality, LOS 10c: Explain the difference between conservative and aggressive accounting.

Q.37 Which of the following activities will *most likely* increase cash flow from operations?

I. A $334,000 increase in accounts receivable.
II. A $250,000 decrease in inventories.
III. A $600,000 increase in accounts payable.

A. Activities I and II.

B. Activities I and III.

C. Activities II and III.

Cash flow from operations is influenced by changes in assets and liabilities. Specifically, a change in assets is inversely related to a change in cash flow, while a change in liabilities is directly related to a change in cash flow.

Activity II involves a $250,000 decrease in inventories. Inventories are a type of current asset. When inventories decrease, it means that more goods have been sold, which increases cash inflow. This is because the company is converting its inventories into cash through sales. Therefore, a decrease in inventories will increase cash flow from operations.

Activity III involves a $600,000 increase in accounts payable. Accounts payable is a type of current liability. When accounts payable increase, it means that the company is delaying its payments to suppliers, which allows it to hold onto its cash for a longer period. This increases cash flow from operations because the company is effectively using its suppliers' money to fund its operations. Therefore, an increase in accounts payable will increase cash flow from operations.

A is incorrect. This option includes Activity I, which involves a $334,000 increase in accounts receivable. Accounts receivable is a type of current asset. When accounts receivable increase, it means that the company has made more sales on credit, which decreases cash inflow. This is because the company is not receiving cash immediately from these sales. Therefore, an increase in accounts receivable will decrease cash flow from operations. This is why option A is incorrect.

B is incorrect. This option includes Activities I and III. As explained above, Activity I will decrease cash flow from operations, while Activity III will increase cash flow from operations. Therefore, the net effect on cash flow from operations is uncertain. This is why option B is incorrect.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 4 – Analyzing statement of Cash flows 1, LOS 4b: describe the steps in the preparation of direct and indirect cash flow statements, including how cash flows can be computed using income statement and balance sheet data.

Q.38 For tax purposes, Lex Corp uses straight-line depreciation to depreciate one of its assets. Lex Corp depreciates the same asset using the accelerated depreciation method for reporting purposes. The asset's tax base for the first year if the asset was purchased at $550,000 and has a 10-year useful life is *closest to*

A. $55,000

B. $440,000

C. $495,000

The tax base of the asset is calculated by subtracting the straight-line depreciation from the cost of the asset. The straight-line depreciation method is a method of calculating depreciation and amortization, the process of expensing an asset over a longer period of time. This method is the most commonly used and it results in fewer mistakes, is the easiest to calculate, and reduces the chances of a miscalculation. The formula for this method is (Cost of Asset - Salvage Value) / Useful Life of Asset. In this case, the cost of the asset is $550,000 and the straight-line depreciation is $55,000 (which is calculated by dividing the cost of the asset by the useful life of the asset, i.e., $550,000/10 years). Therefore, the tax base of the asset is $550,000 - $55,000 = $495,000.

A is incorrect. The value of $55,000 is the asset's depreciation using the straight-line method, not the tax base of the asset. The tax base of an asset is the value of the asset for the purpose of calculating tax liability. It is calculated by subtracting the accumulated depreciation from the cost of the asset. In this case, the accumulated depreciation is $55,000, which is calculated using the straight-line method.

B is incorrect. The value of $440,000 is the asset’s carrying value in the income statement, not the tax base of the asset. The carrying value of an asset is the original cost of the asset minus accumulated depreciation, accumulated depletion, accumulated amortization, and accumulated impairment. The carrying value is also known as the book value. In this case, the carrying value of the asset in the income statement is calculated by subtracting the accelerated depreciation from the cost of the asset, i.e., $550,000 - $110,000 = $440,000.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 9 – Analysis of Income Taxes, LOS 9a: contrast accounting profit, taxable income, taxes payable, and income tax expense and temporary versus permanent differences between accounting profit and taxable income.

Q.39 Which of the following *most likely* indicate accounting manipulations in the financial statements?

A. Company E's sales are 40% lower than the sales of Company F. Both are engaged in the production of TV shows.

B. Company C operates in providing telecommunication services and does not show a transmission cost, whereas Company D is engaged in the same industry and has substantial transmission costs.

C. Company A does not show an increase in capital assets, whereas Company B operates in the same industry and has increased its capital assets by 50%. Both companies are engaged in financial consulting.

The transmission costs are a significant and unavoidable expense for companies operating in the telecommunications sector. These costs are associated with the transmission of voice, data, and video across networks. Given the nature of the business, these costs are expected to be present as they represent the operational costs directly tied to the core services provided by telecommunication companies. If a company within this industry does not report such costs, it raises suspicions that the financial figures may have been manipulated to present a more favorable financial position than what actually exists. This manipulation could be an attempt to hide expenses to inflate profit figures or to mislead stakeholders about the company's operational efficiency and cost management practices.

A is incorrect. The comparison between Company E's and Company F's sales, where Company E's sales are 40% lower, does not necessarily indicate accounting manipulations. Sales figures can vary significantly between companies for numerous legitimate reasons, including differences in market strategy, brand recognition, product quality, and competitive positioning. Lower sales in comparison to another company do not inherently suggest manipulation of financial statements but rather could reflect competitive dynamics, market conditions, or operational challenges.

C is incorrect. The fact that Company A does not show an increase in capital assets, as opposed to Company B which increased its capital assets by 50%, does not inherently indicate accounting manipulations. Companies operating in the same industry can have vastly different investment strategies and capital expenditure plans. Some companies might focus on intangible assets, such as developing proprietary software or investing in human capital, rather than increasing physical capital assets. Additionally, differences in capital asset growth could be attributed to differences in business size, lifecycle stage, or strategic priorities.

CFA Level I, Topic 3—Financial Statements Analysis, Learning Module 10: Analysis of Income Taxes, LOS 10h: describe accounting warning signs and methods for detecting manipulation of information in financial reports

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Q.40 Mavi Inc. is a male fashion brand based in Italy. Ahmed is an analyst working on the cash flow statement of Mavi using the direct method.

Sales	150
COGS	90
Interest Expenses	30
Dep. Expenses	25
Decrease in Acc. Rec.	10
Increase in Acc. Pay.	20
Increase in Int. Pay.	50

Using the financial data provided in the table, the cash collection (cash collected from customers) of Mavi Inc. is *closest to*:

A. $20

B. $140

C. $160

The formula for cash collections is Sales + Decrease in Accounts Receivables. In this case, the sales amount to $150 and there is a decrease in Accounts Receivables of $10. Therefore, the cash collections amount to $160. It is important to note that Depreciation expense is not considered in the direct method of calculating cash flow from operating activities.

A is incorrect. This option suggests that the cash collection is $20, which is the increase in accounts payable. However, this is not the correct way to calculate cash collections. Cash collections from customers consist of sales made for cash (cash sales) and cash collected from credit customers. The activity in the accounts receivable and sales accounts is used to determine the cash collections from customers. Therefore, the increase in accounts payable does not factor into the calculation of cash collections.

B is incorrect. This option suggests that the cash collection is $140, which is calculated by adding the decrease in accounts receivable to the sales. However, this is not the correct calculation for cash collections. As mentioned earlier, cash collections are calculated as Sales + Decrease in Accounts Receivables. In this case, the sales amount to $150 and there is a decrease in Accounts Receivables of $10. Therefore, the cash collections amount to $160, not $140.

It is also important to understand how cash payments to suppliers and cash paid for interest are calculated. Cash payments to suppliers represent the amount paid by the company for merchandise it plans to sell to its customers. It is determined using the cost of purchases and the activity in the accounts payable account. Cash paid for interest represents amounts paid by the company for interest. The amount is calculated by taking interest expense and adjusting it by the activity in the interest payable account.

CFA Level I, Topic 3 - Financial Statements Analysis, Learning Module 4: Analyzing Statements of Cash Flows 1, LOS 4b: describe the steps in the preparation of direct and indirect cash flow statements, including how cash flows can be computed using income statement and balance sheet data.

Q.41 Which of the following is *least likely* a category into which a firm reporting under the IFRS Framework could put dividend payments?

I. Operating activities
II. Investing activities
III. Financing activities

A. I only.

B. II only.

C. I and III only.

Under the International Financial Reporting Standards (IFRS), dividend payments are not classified as investing activities. The IFRS provides guidelines for how companies should maintain and report their accounts, defining the types of transactions that should be reported in different types of activities. According to these guidelines, dividend payments can be classified as either operating activities or financing activities, but not as investing activities.

Operating activities are the company's primary activities, such as providing goods or services. Financing activities are transactions that affect the equity and debt of the company. Dividend payments are considered a financing activity because they are a distribution of profits to shareholders, which affects the company's equity. They can also be considered an operating activity because they are a regular part of the company's operations.

A is incorrect. The statement in option A is not entirely wrong as dividends paid can indeed be classified as an operating activity under IFRS. However, it is not the only category into which a firm could put dividend payments. Dividends paid can also be classified as a financing activity. Therefore, the assertion that dividends paid can only be classified as an operating activity is incorrect.

Operating activities are the company's primary activities, such as providing goods or services. Dividend payments can be considered an operating activity because they are a regular part of the company's operations. However, they can also be considered a financing activity because they are a distribution of profits to shareholders, which affects the company's equity.

C is incorrect. The statement in option C is incorrect because it suggests that dividends paid can be classified as either an operating activity or a financing activity. While this is true, the option is incorrect because it excludes the possibility of dividends paid being classified as an investing activity. Under IFRS, dividends received can be classified as an investing activity, but not dividends paid.

Investing activities are transactions that involve the purchase and sale of long-term assets, such as property, plant, and equipment, as well as investment securities. Dividends received from an investment can be considered an investing activity because they are returns on an investment. However, dividends paid are not considered an investing activity because they are not related to the purchase or sale of long-term assets.

CFA Level 1, Topic 3 –Financial Statement Analysis, Learning Module 4 – Analyzing Statement of Cash Flows 1, LOS 4d: Contrast cash flow statements prepared under

International Financial Reporting standards (IFRS) and US Generally Accepted Accounting Principles (US GAAP).

Q.42 In an economy in a period of inflation, which of the following methods will *most likely* produce a higher debt-to-equity ratio?

A. Last-in, first-out (LIFO).

B. First-in, first-out (FIFO).

C. The inventory valuation method will not affect the debt-to-equity ratio.

In an inflationary period, the Last-in, first-out (LIFO) method is most likely to produce a higher debt-to-equity ratio. This is because, under LIFO, the most recently acquired (and thus, more expensive) inventory items are sold first. This results in a higher cost of goods sold (COGS), which in turn reduces net income and retained earnings. Since retained earnings are a part of equity, a decrease in retained earnings leads to a decrease in equity. As the debt-to-equity ratio is calculated by dividing total debt by total equity, a decrease in equity (denominator) will result in a higher debt-to-equity ratio. This is why option A is the correct answer.

A is incorrect. The First-in, first-out (FIFO) method, on the other hand, sells the oldest (and thus, less expensive) inventory items first. This results in a lower COGS, which in turn increases net income and retained earnings. Since retained earnings are a part of equity, an increase in retained earnings leads to an increase in equity. As the debt-to-equity ratio is calculated by dividing total debt by total equity, an increase in equity (denominator) will result in a lower debt-to-equity ratio. Therefore, option B is incorrect as it would not result in a higher debt-to-equity ratio in an inflationary period.

C is incorrect. The statement that the inventory valuation method will not affect the debt-to-equity ratio is incorrect. As explained above, the choice of inventory valuation method (LIFO or FIFO) can significantly impact the cost of goods sold, net income, retained earnings, and ultimately, the debt-to-equity ratio. Therefore, option C is incorrect as the inventory valuation method does indeed affect the debt-to-equity ratio.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 6 – Analysis of Inventories, LOS 6b: calculate and explain how inflation and deflation of inventory costs affect the financial statements and ratios of companies that use different inventory valuation methods.

Q.43 An analyst has gathered the following information on a small-cap firm for May 2016:

- Opening inventory: $2 million
- Closing inventory: $3 million
- Cost of sales: $10 million

Given the information, the inventory turnover ratio is *closest to:*

A. 3

B. 4

C. 5

The inventory turnover ratio is a measure of the number of times inventory is sold or used in a time period such as a year. It is calculated by dividing the cost of goods sold by the average inventory. In this case, the average inventory is calculated by adding the opening and closing inventory and dividing by 2. This gives us an average inventory of $2.5 million. The cost of sales is given as $10 million. Therefore, the inventory turnover ratio is calculated as $10 million divided by $2.5 million, which equals 4. This is why option B is the correct answer.

A is incorrect. This option suggests that the inventory turnover ratio is 3. This would be the case if we used the closing inventory of $3 million to calculate the ratio. However, this is not the correct method. The correct method is to use the average inventory, not just the closing inventory. Using the closing inventory would give us a ratio of $10 million divided by $3 million, which equals 3.33. This is not the correct answer, as it does not accurately reflect the inventory turnover ratio for the entire period.

C is incorrect. This option suggests that the inventory turnover ratio is 5. This would be the case if we used the opening inventory of $2 million to calculate the ratio. However, this is not the correct method. The correct method is to use the average inventory, not just the opening inventory. Using the opening inventory would give us a ratio of $10 million divided by $2 million, which equals 5. This is not the correct answer, as it does not accurately reflect the inventory turnover ratio for the entire period.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 11 – Financial Analysis Techniques, Los 11b: Calculate and interpret activity, liquidity, solvency, and profitability ratios.

Q.44 In which step of the financial statement analysis framework would an analyst *most likely* utilize regression analysis?

A. Process Data.

B. Analyze and Interpret the Data.

C. Develop and Communicate Conclusions and Recommendations.

In the "Process Data" step, the analyst uses various analysis tools to manipulate and organize the collected data. This may involve computing financial ratios, creating charts, preparing common-size financial statements, or performing statistical analyses such as regression analysis. Regression analysis is a statistical method used to examine the relationship between variables, which is a part of data processing.

B is incorrect. "Analyze and Interpret the Data" is more about assessing the processed data to draw conclusions or make recommendations. While the results of regression analysis may be interpreted in this step, the actual application of regression analysis occurs in the data processing step.

C is incorrect. "Develop and Communicate Conclusions and Recommendations" focuses on presenting the findings of the analysis in an appropriate format. This step involves communicating the conclusions and recommendations derived from the analysis, not the application of analytical tools like regression analysis.

CFA Level 1, Topic 5 – Financial Statements Analysis, Learning Module 1 –Introduction to Financial Statement Analysis, LOS 1a: describe the steps in the financial statement analysis framework.

Q.45 Which of the following statements is *most likely* correct? The activity ratio:

A. indicates how efficiently a company performs its day-to-day tasks.

B. is not relevant for a financial statement analysis as it indicates the operation efficiency.

C. measures the quantity of an asset or flow that is associated with the ownership of a specified claim.

The activity ratio is a financial metric that is used to determine how efficiently a company is able to convert its assets into cash or sales. It is a measure of the effectiveness of a company's operations and its ability to generate revenue from its assets. This is why option A, which states that the activity ratio indicates how efficiently a company performs its day-to-day tasks, is the correct answer. The activity ratio is a key indicator of a company's operational efficiency. It provides insights into how well a company is managing its assets to generate sales and cash flow. A higher activity ratio indicates that a company is able to generate more sales or cash from its assets, suggesting efficient management of assets. Therefore, the activity ratio is a crucial tool for investors and analysts to assess a company's operational efficiency.

B is incorrect. The statement that the activity ratio is not relevant for a financial statement analysis as it indicates the operation efficiency is incorrect. In fact, the activity ratio is a crucial part of financial statement analysis. It provides valuable insights into a company's operational efficiency, which is a key factor in assessing a company's financial health and performance. The activity ratio helps analysts and investors understand how well a company is utilizing its assets to generate sales and cash flow. Therefore, dismissing the activity ratio as irrelevant for financial statement analysis is a misunderstanding of its importance and role in financial analysis.

C is incorrect. The statement that the activity ratio measures the quantity of an asset or flow that is associated with the ownership of a specified claim is incorrect. This description is more applicable to valuation ratios, not activity ratios. Valuation ratios, such as the price-to-earnings ratio or the price-to-book ratio, measure the financial value of an asset in relation to a specific claim, such as earnings or book value. On the other hand, the activity ratio measures the efficiency of a company's operations, specifically how well it is able to convert its assets into sales or cash. Therefore, option C confuses the purpose and function of the activity ratio with that of valuation ratios.

CCFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 11 – Financial Analysis Techniques, LOS 11b: Calculate and interpret activity, liquidity, solvency, and profitability ratios.

Q.46 Turks & Co. is a glass-manufacturing firm whose income statement is being analyzed by an analyst at a local credit rating firm. Some relevant accounts for the year 2016 have been given in the following table:

Income Statement

Sales	15,000
COGS	6,500
Gross Profit	8,500
Depreciation	800
SG&A	550
Lease Payments	350
EBIT	6,800
Interest Payment	250
EBT	6,550
Taxes	1,965
EAT	4,585

Using the given data, the fixed charge coverage ratio of the firm is *closest to*:

A. 11.92

B. 20.42

C. 28.60

The fixed charge coverage ratio is a solvency ratio that measures a firm's ability to meet its fixed charge obligations, which include interest payments and lease payments. This ratio is particularly useful for firms that lease a significant portion of their assets, such as shipping and airline companies. The formula for calculating the fixed charge coverage ratio is as follows:

$$\text{Fixed charge coverage ratio} = \frac{(\text{EBIT} + \text{Fixed charges before tax})}{(\text{Interest payments} + \text{Fixed charges before tax})}$$

In the case of Turks & Co., the fixed charges before tax are represented by the lease payments. Substituting the given values into the formula, we get:

$$\text{Fixed charge coverage ratio} = \frac{(6,800 + 350)}{(350 + 250)} = 11.92$$

B is incorrect. This option incorrectly calculates the fixed charge coverage ratio by including the fixed charges before tax in the numerator but not in the denominator. The correct formula requires the inclusion of both interest payments and fixed charges before tax in the denominator. Using the incorrect formula:

$$\text{Fixed charge coverage ratio} = \frac{(6,800 + 350)}{(350)} = 20.42$$

This results in a significantly higher ratio, which would inaccurately suggest that the firm is more capable of meeting its fixed charge obligations than it actually is.

C is incorrect. This option does not consider interest payments in the calculation of the fixed charge coverage ratio. Interest payments are a crucial component of a firm's fixed charges, and excluding them from the calculation would provide an incomplete and misleading picture of the firm's solvency. The correct formula requires the inclusion of both interest payments and lease payments in the denominator.

CFA Level I, Topic 3 - Financial Statements Analysis, Learning Module 11: Financial Analysis Techniques, LOS 11b: calculate and interpret activity, liquidity, solvency, and profitability ratios.

Q.47 Which of the following statements is/are *most accurate* regarding the common-size analysis of financial statements?

I. A vertical common-size balance sheet presents all the line items as a percentage of total assets.
II. A vertical common-size income statement presents all the line items as a percentage of net income.
III. A horizontal common-size income statement calculates all line items as a percentage of the base year's income statement.

A. II.

B. II and III.

C. I and III.

Statement I is accurate as it correctly describes a vertical common-size balance sheet. In this type of financial statement, all line items are indeed presented as a percentage of total assets. This method of presentation allows for easy comparison across different periods and between different companies, regardless of their size. It provides a clear picture of the company's asset structure and how it changes over time. It also helps in identifying trends and patterns in the company's financial position.

Statement III is also correct. A horizontal common-size income statement calculates all line items as a percentage of the base year's income statement. This method is used to analyze the changes in the line items of an income statement over a period of time. It helps in understanding the trend and growth pattern of various income and expense items. It also provides valuable insights into the company's operational efficiency and profitability trends.

A is incorrect. This option only includes statement II, which is incorrect. A vertical common-size income statement does not present all the line items as a percentage of net income. Instead, it presents all the line items as a percentage of revenue. This method is used to analyze the proportion of each income statement line item to the total revenue, which helps in understanding the cost structure and profitability of the company. Therefore, option A is incorrect as it includes an inaccurate statement.

B is incorrect. This option includes statements II and III. As explained above, statement II is incorrect.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 11 – Financial Analysis Techniques, LOS 11a: Describe tools and techniques used in financial analysis, including their uses and limitations.

Q.48 A hypothetical firm, operating under IFRS, leased equipment for 5 years with a finance lease that requires annual payments of $20,000 at the interest rate of 7%. The lease schedule is given in the following table:

Year	Beginning Book Value (Lease Liability)	Interest Expense at 7%	Annual Lease Payment	Ending Lease Liability (Beginning Lease Liability + Int. Exp. -) Lease Payment	Book Value Asset (Beginning Book Value - Dep. Exp)
1	$82,003.90	$5,740.27	$20,000	$67,744.17	$65,603.12
2	$67,744.17	$4,742.09	$20,000	$52,486.27	$49,202.32
3	$52,486.27	$3,674.04	$20,000	$36,160.30	$32,801.52
4	$36,160.30	$2,531.22	$20,000	$18,691.51	$16,400.72
5	$18,691.52	$1,308.41	$20,000	-$0.07	-$0.08

Using the above-mentioned assumptions, which of the following *best* describes the impact on the cash flow statement of the lessee (in the first year)?

A. Cash outflow of $14,260 from operating activities, and cash inflow of $5,740 from financing activities.

B. Cash inflow of $5,740 from operating activities,/ and cash outflow of $14,260 from financing activities.

C. Cash outflow of $5,740 from operating activities, and cash outflow of $14,260 from financing activities.

Under the International Financial Reporting Standards (IFRS), a finance lease is considered a method of financing an asset. The lessee, in this case, is required to recognize both an asset and a liability in their financial statements. The liability is equivalent to the present value of the lease payments, and the asset is depreciated over the lease term. The lease payments are divided into two components: the interest expense and the principal repayment. The interest expense is recognized in the income statement and is considered an operating activity in the cash flow statement. The principal repayment reduces the lease liability and is considered a financing activity in the cash flow statement.

Given the lease schedule in the question, in the first year, the interest expense is $5,740 and the lease payment is $20,000. The principal repayment can be calculated as the difference between the lease payment and the interest expense, which is $14,260 ($20,000 - $5,740). Therefore, in the cash flow statement of the lessee in the first year, there will be a cash outflow of $5,740 from operating activities (due to the interest expense) and a cash outflow of $14,260 from financing activities (due to the principal repayment).

A is incorrect. This option suggests a cash outflow of $14,260 from operating activities and a cash inflow of $5,740 from financing activities. However, under a finance lease, the interest expense is considered an operating activity and the principal repayment is considered a financing activity. Therefore, the cash outflow from operating activities should be the interest expense ($5,740), not the principal repayment ($14,260). Similarly, the cash inflow from financing activities should be the principal repayment ($14,260), not the interest expense ($5,740). This option incorrectly categorizes the cash flows.

B is incorrect. This option suggests a cash inflow of $5,740 from operating activities and a cash outflow of $14,260 from financing activities. However, under a finance lease, both the interest expense and the principal repayment are considered cash outflows, not inflows. The interest expense ($5,740) is a cash outflow from operating activities and the principal repayment ($14,260) is a cash outflow from financing activities. This option incorrectly identifies the direction of the cash flows.

CFA Level I, Topic 3—Financial Statements Analysis, Learning Module 8: Analysis of Long-Term Assets, LOS 8a: explain the financial reporting of leases from the perspectives of the lessors and lessees

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Q.49 An analyst gathered the following data on YMU Corp. for the year 2018:

- Free cash flow to the firm: $90 million
- Net income: $80 million
- Depreciation: $30 million
- Capital expenditure: $20 million
- Tax rate: 36%
- No change in working capital.

For the year 2018, the interest expense is *closest to;*

A. $0 million.

B. $30 million.

C. $110 million.

The Free Cash Flow to the Firm (FCFF) is defined as:

$$\text{FCFF} = \text{Net Income} + \text{Non-cash Expenditure} + \text{Interest Expense} \times (1 - \text{Tax Rate}) - \text{Fixed Investm}$$

To isolate the interest expense from this equation, we rearrange it as follows:

$$\text{Interest Expense} = \frac{\text{FCFF} - \text{Net Income} - \text{Non-cash Expenditure} + \text{Fixed Investment}}{1 - \text{Tax Rate}}$$

Substituting the given values:

- FCFF = $90 million

- Net Income = $80 million
- Non-cash Expenditure (Depreciation) = $30 million
- Fixed Investment = $20 million
- Tax Rate = 36% or 0.36

Substitute these values into the formula:

$$\text{Interest Expense} = \frac{90 - 80 - 30 + 20}{1 - 0.36}$$

Now simplify the expression:

$$\text{Interest Expense} = \frac{0}{0.64} = 0$$

This calculation shows that the interest expense for YMU Corp. for the year 2018 is $0 million.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 5 – Analyzing Statement of Cash Flows 2, LOS 5b: calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios.

Q.50 For the past year, Firm X -- an Austrian high-tech firm that follows IFRS -- has spent $5 million on research costs and $5 million on development costs on a staff management software whose feasibility has been established. Firm Z -- an American space-tech firm that reports under US GAAP is in the early stages of a similar whose completion is still in question, but the firm has also spent $5 million on research costs and $5 million on development costs over the same period. If both firms have had the same revenue, which firm will *most likely* report the highest net income?

A. Firm X will report a higher net income than Firm Z.

B. Firm Z will report a higher net income than Firm X.

C. Firm X and Firm Z will report the same net income.

Firm X, adhering to the International Financial Reporting Standards (IFRS), is expected to report a higher net income than Firm Z, which operates under the United States Generally Accepted Accounting Principles (US GAAP). The primary reason for this difference lies in the contrasting accounting treatments for research and development costs under IFRS and US GAAP. Both standards require research costs to be expensed as they occur. However, IFRS permits the capitalization of development costs once certain criteria, including the technical feasibility of completing the asset for use or sale, are met. In the case of Firm X, the feasibility of its staff management software has been established, allowing it to capitalize the $5 million spent on development costs. This capitalization reduces its expenses for the period, potentially increasing its net income.

A is incorrect. The assumption that Firm Z would report a higher net income than Firm X is incorrect due to the different accounting treatments under US GAAP and IFRS. Under US GAAP, which Firm Z follows, both research and development costs are expensed. This accounting treatment results in higher expenses for Firm Z. On the other hand, Firm X, following IFRS, can capitalize its development costs, leading to lower expense recognition for the period and, consequently, a higher net income.

B is incorrect. The assertion that Firm X and Firm Z would report the same net income is incorrect due to the different accounting treatments for development costs under IFRS and US GAAP. IFRS, followed by Firm X, allows for the capitalization of development costs once technical feasibility is established. This accounting treatment results in lower expense recognition for Firm X. In contrast, Firm Z, following US GAAP, must expense both research and development costs, leading to higher expenses and, consequently, a lower net income.

CFA Level I, Topic 3—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 6a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination.

Q.51 If a deferred tax liability is not expected to be reversed in the future, how should it *most likely* be classified?

A. Equity.

B. Income.

C. Liability.

When a deferred tax liability is not expected to reverse, it no longer represents a true liability, as no future tax payment will be required. Instead, accounting standards allow such a DTL to be classified as equity, since it effectively increases shareholders' residual interest in the company. While a DTL itself is not an ownership interest, its non-reversal means it permanently contributes to the company's retained earnings, making equity the most appropriate classification..

B is incorrect. Income refers to an increase in economic benefits during the accounting period through inflows or asset enhancements that result in an increase in equity. However, a deferred tax liability arises from temporary differences in tax and accounting rules and does not generate any economic benefit. Classifying it as income would overstate the company's profitability and mislead stakeholders about financial performance.

C is incorrect. Normally, a deferred tax liability represents a future tax obligation and is classified as a liability. However, if the DTL is not expected to reverse, it ceases to be a future obligation and should not remain classified as a liability. Keeping it as a liability would overstate the company's future tax obligations, misrepresenting its financial position.

CFA Level I, Topic 3—Financial Statements Analysis, Learning Module 9: Analysis of Income Taxes, LOS 9b: explain how deferred tax liabilities and assets are created and the factors that determine how a company’s deferred tax liabilities and assets should be treated for the purposes of financial analysis.

Q.52 John, an experienced portfolio manager, has been tracking the performance of BlueChip Co., a leading firm in the technology sector. BlueChip Co. has outperformed market expectations for the last several quarters, bolstering John's confidence in the company's future prospects. Despite recent industry-wide downturns and analyst reports suggesting a cooling off in the tech sector, John is convinced that BlueChip Co. will continue to outperform based on his detailed analysis and understanding of the company's fundamentals. He disregards the recent negative reports, attributing them to market overreaction. Which of the following biases is John *most likely* exhibiting in his analysis?

A. Overconfidence Bias

B. Confirmation Bias

C. Conservatism Bias

John is demonstrating a clear case of confirmation bias. Confirmation bias is a cognitive bias that leads individuals to seek out, interpret, and remember information that confirms their pre-existing beliefs or hypotheses, while ignoring or discounting information that contradicts these beliefs. In this scenario, John is selectively focusing on his own analysis of BlueChip Co., which is favorable, and disregarding external reports that do not align with his positive outlook on the company. This selective attention to information that confirms his beliefs, while ignoring contradictory data, is a classic example of confirmation bias. It's important to note that confirmation bias can lead to flawed decision-making, as it can cause individuals to overlook important information that could impact their decisions.

A is incorrect. Overconfidence bias is a cognitive bias that leads individuals to overestimate their own abilities or the accuracy of their predictions. In this scenario, there is no clear indication that John is overestimating the accuracy of his predictions or the reliability of his analysis. While he is confident in his analysis of BlueChip Co., this confidence is not necessarily misplaced or exaggerated. The main issue here is not overconfidence, but rather John's selective attention to information that confirms his existing beliefs, which is indicative of confirmation bias.

C is incorrect. Conservatism bias is a cognitive bias that leads individuals to be overly cautious or conservative in their decision-making, often resulting in a reluctance to revise their beliefs or predictions in the face of new, contradictory information. In this scenario, while John is ignoring negative reports, the bias he exhibits is more aligned with seeking information that confirms his pre-existing beliefs (confirmation bias) rather than a reluctance to update his views based on new information. It's important to note that conservatism bias can lead to flawed decision-making, as it can cause individuals to stick with outdated beliefs or predictions, even when new information suggests that these beliefs or predictions are no longer accurate.

CFA Level 1, Topic 3, Learning Module 12 – Introduction to Financial Statement Modelling, LOS 12b: Explain how behavioral factors affect analyst forecasts and recommend remedial actions for analyst biases.

Q.53 Adam Geller is the CFO of Cube Corp. and is also the chairman of the board. Board members do not have sufficient control over management because the *board is* not comprised of a *majority* of *independent* outsiders. Cube's shareholders recently accused the firm of misrepresenting its financial reports. Which of the following factors is most likely responsible for management's action of providing low-quality financial reporting?

A. Motivation.

B. Opportunity.

C. Rationalization.

In the context of Cube Corp, the board does not have a majority of independent outsiders and the CFO, Adam Geller, is also the chairman of the board. This dual role and lack of independent oversight creates an environment where management has the opportunity to misrepresent financial reports. The lack of sufficient control over management is a significant factor that can lead to low-quality financial reporting. This is because without proper checks and balances, management can manipulate financial data to present a more favorable financial position than what is actually the case. This can be done through various means such as inflating revenue, understating expenses, or not adequately disclosing liabilities. Therefore, the opportunity to misrepresent financial reports is the most likely reason for the management's action of providing low-quality financial reporting in Cube Corp.

A, Motivation, is incorrect. While motivation can indeed lead to misrepresentation of financial reports, it is not the most likely reason in this case. Motivation to misrepresent financial reports often arises from personal or corporate pressures such as the desire to meet certain performance targets, secure bonuses, or ensure future financing. However, the question does not provide any information to suggest that such pressures exist in Cube Corp. Therefore, while motivation could potentially be a factor, it is not the most likely reason for the misrepresentation of financial reports in this case.

C, Rationalization, is incorrect. Rationalization refers to the process where an individual justifies unethical behavior, such as misrepresenting financial reports, by convincing themselves that their actions are necessary or not truly harmful. However, the question does not provide any evidence to suggest that such a mindset exists within Cube Corp's management. Therefore, while rationalization could potentially be a factor in some cases of financial misrepresentation, it is not the most likely reason in this case.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 10 – Financial Reporting Quality, LOS 10d: Describe motivations that might cause management to issue financial reports that are not high quality and conditions that are conducive to issuing low-quality, or even fraudulent, financial reports.

Q.54 Under which of the following cases is the capitalization of development cost *most likely* prohibited? In the case of:

A. an IFRS compliant company.

B. software development by a company following US GAAP.

C. the development of a life-saving drug by a company following US GAAP.

Under US GAAP, both research and development costs are required to be expensed as they are incurred. This means that the costs associated with the development of a life-saving drug, regardless of its potential future benefits, cannot be capitalized. Instead, these costs must be recognized as an expense in the period they are incurred. This approach is based on the conservatism principle of accounting, which prefers to avoid overstatement of assets and income. Therefore, in the case of a company following US GAAP, the capitalization of development cost is most likely prohibited when it comes to the development of a life-saving drug.

A is incorrect. This option suggests that an IFRS compliant company would be prohibited from capitalizing development costs. However, this is not accurate. The International Financial Reporting Standards (IFRS) actually allows companies to capitalize development costs and recognize an intangible asset arising from development or during the development phase of internal projects once certain criteria are met. These criteria include the technical feasibility of completing the intangible asset, the intention to complete and use or sell the asset, the ability to use or sell the asset, and the availability of resources to complete the development.

B is incorrect. This option suggests that software development by a company following US GAAP would be prohibited from capitalizing development costs. However, this is not entirely accurate. While it is true that US GAAP generally requires that both research and development costs are expensed as they are incurred, there is an exception for certain costs related to software development. Specifically, costs incurred during the application development stage can be capitalized under US GAAP.

CFA Level I, Topic 3—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 6a: Compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination.

Q.55 Calculate the Number of days of payable ratio if Ending inventory is $5,000, Sales are $12,000, COGS is $2,000, Average payables are $800, and Beginning inventory is $3,000.

A. 5 days

B. 42 Days

C. 73 days

The number of days of payable ratio is calculated by first determining the purchases, which is the sum of the ending inventory and the cost of goods sold (COGS), minus the beginning inventory. In this case, the purchases amount to $4,000, calculated as $5,000 (ending inventory) plus $2,000 (COGS) minus $3,000 (beginning inventory). The next step is to calculate the purchases turnover ratio, which is the ratio of purchases to average payables. Here, the purchases turnover ratio is 5, calculated as $4,000 (purchases) divided by $800 (average payables). Finally, the number of days of payable is calculated by dividing 365 by the purchases turnover ratio, which gives us 73 days.

A is incorrect. The answer of 5 days seems to be a misinterpretation of the purchases turnover ratio. The purchases turnover ratio is a measure of how quickly a company pays its suppliers. A high turnover ratio could indicate that the company is paying its suppliers quickly, which could be a sign of good financial health. However, this ratio does not directly translate into the number of days of payable. The number of days of payable is calculated by dividing 365 by the purchases turnover ratio, which in this case gives us 73 days, not 5 days.

B is incorrect. The answer of 42 days seems to be a calculation of the number of days of payable without considering the beginning inventory in the calculation of purchases. The beginning inventory is an important component of the purchases calculation, as it represents the inventory that the company had at the start of the period. Without considering the beginning inventory, the purchases amount would be overstated, leading to an understated purchases turnover ratio and an overstated number of days of payable. Therefore, the correct calculation of the number of days of payable, taking into account the beginning inventory, gives us 73 days, not 42 days.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 11 – Financial Analysis Techniques, LOS 11b: Calculate and interpret activity, liquidity, solvency, and profitability ratios.

Q.56 Which of the following financial assets are *least likely* reported at their fair value on the balance sheet?

A. Held-for-trading securities.

B. Held-to-maturity securities

C. Available-for-sale securities.

Held-to-maturity securities, as indicated by option B, are the least likely to be reported at their fair value on the balance sheet. This is primarily due to the accounting treatment of these types of securities. Held-to-maturity securities are typically reported at their amortized cost on the balance sheet, not their fair value. The amortized cost is the initial investment cost adjusted for the amortization of discount or premium, if any, plus the amounts of the payments received that are attributable to the principal. This method of accounting reflects the company's intent to hold these securities until they mature, rather than trading them for short-term gains. Therefore, the market value of these securities is not as relevant as it is for other types of securities.

A is incorrect. Held-for-trading securities are not the least likely to be reported at their fair value. In fact, they are always reported at their fair value on the balance sheet. This is because these securities are bought with the intention of short-term profit making through trading activities. Therefore, their current market value is highly relevant and is used for reporting purposes. Any changes in the fair value of these securities are reported in the income statement, reflecting the gains or losses from trading activities.

C is incorrect. Available-for-sale securities are also not the least likely to be reported at their fair value. These securities are neither held for trading purposes nor to maturity. Instead, they represent a middle ground where the company has the flexibility to sell if needed, but may also hold onto them for a longer period. As such, these securities are also reported at their fair value on the balance sheet. However, unlike held-for-trading securities, the unrealized gains or losses from changes in fair value are reported as a separate component of shareholders' equity, not in the income statement.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 3 – Analyzing Balance Sheets, LOS 3c: Explain the financial reporting and disclosures related to financial instruments.

Q.57 When determining the fair value of a financial asset, which factor is *least likely* to be considered under the IFRS fair value measurement principles?

A. The historical cost of acquiring the asset.

B. The expected future cash flows from the asset.

C. The current market conditions affecting the asset's price.

The International Financial Reporting Standards (IFRS) primarily focuses on the current market conditions and the expected future cash flows from the asset when determining the fair value of a financial asset. The historical cost of acquiring the asset is not considered because it does not reflect the current market value of the asset. The fair value measurement under IFRS is based on the price that would be received in an orderly market transaction, which is influenced by the current market conditions and the expected future economic benefits from the asset, not the cost at which the asset was originally acquired.

B is incorrect. The expected future cash flows from the asset are a key component of the fair value measurement under IFRS. These cash flows represent the economic benefits that the asset is expected to generate over its life. The present value of these cash flows is often used in fair value calculations. Therefore, the expected future cash flows from the asset are a relevant factor in determining the fair value of a financial asset under IFRS, not a factor that is least likely to be considered.

C is incorrect. Current market conditions, such as interest rates, exchange rates, and market liquidity, play a crucial role in determining the fair value of a financial asset under IFRS. These conditions influence the asset's price in the market, which is used to determine the fair value of the asset. Therefore, the current market conditions affecting the asset's price are a relevant factor in determining the fair value of a financial asset under IFRS, not a factor that is least likely to be considered.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 3 –Analyzing Balance Sheets, LOS 3c: explain the financial reporting and disclosures related to financial instruments.

Q.58 Regarding the financial statement analysis framework, a visit to production facilities is *most likely* required in which of the following phases?

A. The collection of input data.

B. The interpretation of the processed data.

C. Developing and communicating conclusions and recommendations.

The collection of input data phase of the financial statement analysis framework is crucial as it involves gathering all the necessary data that will be used in the analysis. This data collection may require a visit to the production facilities or retail stores. The reason for this is to gain a comprehensive understanding of the company's operations, which can provide valuable insights into its financial performance. For instance, observing the production process can reveal the efficiency of the operations, the quality of the products, and the company's capacity to meet demand. All these factors can significantly impact the company's financial performance and hence, are important data points for the analysis. Therefore, a visit to the production facilities is most likely required in this phase.

B is incorrect. This option refers to the interpretation of the processed data, which is the fourth step in the financial analysis framework. In this phase, the analyst interprets the output of the data processing. While this step is crucial in the analysis process, it does not typically require a visit to the production facilities. The interpretation of the data is usually done in an office setting, where the analyst can assess the processed data and use it to support a conclusion or recommendation. Therefore, a visit to the production facilities is less likely to be required in this phase.

C is incorrect. This option refers to the phase of developing and communicating conclusions and recommendations. In this phase, the analyst communicates the conclusions and recommendations derived from the analysis in an appropriate format. This phase is about articulating the findings of the analysis and does not typically involve a visit to the production facilities. The analyst uses the data collected and interpreted in the previous phases to draw conclusions and make recommendations. Therefore, a visit to the production facilities is less likely to be required in this phase.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 1 – Introduction to Financial Statement Analysis, LOS 1a: Describe the steps in the financial statement analysis framework.

Q.59 Which of the following is *least likely* to be true about impairment reversals under IFRS?

A. Impairment reversals are allowed for identifiable long-lived assets.

B. Impairment reversals can be recognized above the original carrying amount.

C. Impairment reversals are recognized if the recoverable amount of the asset increases.

According to the International Financial Reporting Standards (IFRS), impairment reversals are indeed allowed, but they are subject to certain restrictions. One of these restrictions is that the reversal cannot increase the asset's carrying amount above its original carrying amount before the impairment was recognized. This is to prevent the overstatement of assets and to ensure that the financial statements provide a true and fair view of the company's financial position. Therefore, the statement in option B that impairment reversals can be recognized above the original carrying amount is incorrect.

A is incorrect. The statement in option A that impairment reversals are allowed for identifiable long-lived assets is true. According to IFRS, if there is an increase in the recoverable amount of an asset, impairment reversals are permitted. This is because the increase in the recoverable amount indicates that the reasons for the impairment no longer exist or have decreased. Therefore, it is appropriate to reverse the impairment to reflect the improved prospects of the asset. This makes the statement in option A correct, and hence, it is not the least likely to be true about impairment reversals under IFRS.

C is incorrect. The statement in option C that impairment reversals are recognized if the recoverable amount of the asset increases is also true. As mentioned earlier, an increase in the recoverable amount of an asset is one of the conditions for recognizing an impairment reversal under IFRS. This is because the increase in the recoverable amount indicates that the asset's value has improved, and hence, the impairment loss previously recognized no longer applies or has decreased. Therefore, it is appropriate to reverse the impairment to reflect the asset's improved value. This makes the statement in option C correct, and hence, it is not the least likely to be true about impairment reversals under IFRS.

CFA Level I, Topic 3 — Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7b: Explain and Evaluate How Impairment and Derecognition of Property, Plant, and Equipment, and Intangible Assets Affect the Financial Statements and Ratios.

Q.60 Layout Works is a printing press that takes 25 days to settle its payables. Customers take an average of 10 days to pay Layout. Given that the average cash conversion cycle of the printing industry is 110 days, the firm's estimated days of inventory on hand is *closest to*:

A. 75 days.

B. 115 days.

C. 125 days.

The estimated days of inventory on hand for Layout Works is calculated using the formula for the Cash Conversion Cycle (CCC), which is a key measure of a company's liquidity and operational efficiency. The CCC is calculated as the sum of the Days of Sales Outstanding (DSO) and the Days of Inventory on Hand (DIO), minus the Number of Days of Payables (DOP). In this case, the CCC is given as 110 days, the DSO is 10 days, and the DOP is 25 days. Substituting these values into the formula gives us:

CCC = DSO + DIO - DOP

110 = 10 + DIO - 25

By rearranging the equation, we can solve for DIO:

DIO = 110 - 10 + 25 = 125 days

This means that Layout Works has an estimated 125 days of inventory on hand, which is the time period between when the company purchases its inventory and when it receives cash from customers for the sale of that inventory.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 11 – Financial Analysis Techniques, LOS 11b: Calculate and interpret activity, liquidity, solvency, and profitability ratios.

Q.61 According to the Fundamentals of Compliance section of the Global Investment Performance Standards, total firm assets must:

A. Not include assets assigned to a sub-advisor.

B. Include non-discretionary and discretionary assets.

C. Be included in composites on the basis of their respective book values.

Total firm assets must include both non-discretionary and discretionary assets. This is in accordance with the Fundamentals of Compliance section of the Global Investment Performance Standards (GIPS). The GIPS are ethical standards to be used by investment managers for creating performance presentations that ensure fair representation and full disclosure of investment performance. In the context of these standards, total firm assets are defined as the aggregate of all portfolios managed by the firm, including both discretionary and non-discretionary assets. Discretionary assets are those over which the firm has the authority to determine which securities to buy or sell, while non-discretionary assets are those where the firm does not have this authority. The inclusion of both types of assets in the total firm assets ensures a comprehensive representation of the firm's management performance.

A is incorrect. It suggests that total firm assets should not include assets assigned to a sub-advisor. This is not in line with the GIPS. According to the standards, total firm assets should include assets assigned to a sub-advisor, provided the firm has discretion over the selection of the sub-advisor. This is because the firm is still responsible for the management of these assets, even though they are being managed by a sub-advisor. Excluding these assets from the total firm assets would not provide a complete picture of the firm's asset management performance.

C is incorrect. It suggests that total firm assets should be included in composites on the basis of their respective book values. This is not in accordance with the GIPS. The standards require that total firm assets be included in composites based on their fair values, not their book values. Fair value is a more accurate measure of the assets' worth, as it reflects the amount for which they could be exchanged between knowledgeable, willing parties in an arm's length transaction. Using book values, which are based on the original cost of the assets, could result in a misrepresentation of the firm's asset management performance.

CFA Level 1, Topic 10 – Ethics, Learning Module 4 – Introduction to the Global Investment Performance Standards (GIPS), LOS 4d: Describe the fundamentals of compliance, including the recommendations of the GIPS Standards with respect to the definition of the firm and the firm's definition of discretion.

Q.62 Jason Briggs works as the chief analyst at Crescent Investment Bank. After issuing a general recommendation to all clients, Briggs invites the bank's largest institutional investors to discuss the recommendation further as they pay an additional fees for detailed analysis. Mr Briggs has *most likely*?

A. Not violated any standard.

B. Violated standard III(B) - Fair dealing.

C. Violated Standard V(B) - Communication with clients.

Jason Briggs, as the chief analyst at Crescent Investment Bank, has not violated any standard by discussing an already issued recommendation with the bank's largest institutional investors. This is because firms are allowed to offer different service levels to clients, provided that this is disclosed to all clients. In this case, the institutional investors, who have the most significant holdings, are likely to pay an additional fee to receive a more detailed analysis. This practice is not in violation of any standard as it is a common practice in the financial industry where clients who pay more receive more detailed and personalized services. Therefore, option A is the correct answer.

B is incorrect. The claim that Briggs has violated Standard III(B) - Fair Dealing is not accurate. This standard is designed to prevent practices that favor one client group over another beyond what is allowed by law. In this case, Briggs has issued a general recommendation to all clients, which means he has not favored any particular group. The additional discussion with the largest institutional investors is a separate service for which they pay an additional fee. This does not constitute a violation of fair dealing as all clients were given the initial recommendation and the additional service is a result of a separate agreement. Therefore, Briggs' actions do not constitute a violation of Standard III(B).

C is incorrect. The assertion that Briggs has violated Standard V(B) - Communication with Clients is not substantiated by the information provided in the question. Standard V(B) requires members and candidates to distinguish facts from opinions when presenting investment analyses and recommendations and to disclose to their clients the basic format and general principles they use to analyze and select securities, any material changes to the same, and the risks associated with the investment process. The question does not provide any evidence that Briggs has failed to meet these requirements. He has merely offered a more detailed analysis to clients who pay an additional fee, which does not in itself constitute a violation of Standard V(B).

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3c: Identify conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

Q.63 Janice Hart is a research analyst at Time Associates, an investment banking firm. She has been asked to write a research report on Blue Inc. Time was the chief underwriter of Blue Inc.'s stock when it had undertaken an IPO two years ago. In addition, two of Time's directors continue to hold a significant proportion of Blue Inc.'s shares. Hart's *most appropriate* course of action will be to;

A. decline writing the research report due to the presence of a conflict of interest.

B. write the research report and disclose the special relationship to clients on a request basis.

C. write the research report and disclose the special relationship between Time Associates and Blue Inc.

Option C aligns with Standard IV(A) - Disclosure of Conflicts, which is a part of the ethical guidelines that financial analysts like Janice Hart are expected to follow. According to this standard, Hart should write the research report and disclose the special relationship between Time Associates and Blue Inc. This is because Time Associates was the chief underwriter of Blue Inc.'s stock during its IPO two years ago, and two of Time's directors continue to hold a significant proportion of Blue Inc.'s shares. This relationship could potentially threaten Hart's independence and objectivity in writing the research report. By disclosing this relationship, Hart is ensuring transparency and maintaining her professional integrity. This action also helps to build trust with the clients, as they are made aware of the potential conflict of interest and can make informed decisions based on the disclosed information.

A is incorrect. While it is true that there is a potential conflict of interest due to Time Associates' relationship with Blue Inc., declining to write the research report is not the most appropriate course of action. This is because the conflict of interest can be managed appropriately through disclosure, as per Standard IV(A) - Disclosure of Conflicts. By declining to write the report, Hart would be avoiding the issue rather than addressing it in a professional and ethical manner. Furthermore, her refusal to write the report could potentially deprive clients of valuable information about Blue Inc.

B is incorrect. This option suggests that Hart should write the research report and disclose the special relationship between Time Associates and Blue Inc. only on a request basis. This approach is not in line with Standard IV(A) - Disclosure of Conflicts, which requires full and proactive disclosure of any potential conflicts of interest. By disclosing the relationship only on a request basis, Hart would be withholding important information from clients who do not specifically ask for it. This could potentially harm the trust relationship between Hart and her clients, and it could also lead to clients making uninformed decisions.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3b: Recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct.

Q.64 Gus Horace is a real estate advisor in a developing country. Horace is attempting to sell agricultural land to a restaurant chain to grow its produce. The land lies parallel to a river where industrial waste is frequently dumped. In marketing the land to the potential client, Horace states, "This is a purchase you will not regret. You should more than likely expect to enjoy a healthy crop in your first year of farming." Horace does not disclose that the original landowner is an acquaintance of his. Horace is *least likely* in violation of which Standard?

A. Fair dealing.

B. Misconduct.

C. Disclosure of conflicts.

There is no evidence to suggest that Gus Horace has violated the Standard relating to fair dealing. Standard III(B) requires members and candidates to be fair and objective to all clients when providing investment analysis, recommendations, taking investment actions, or engaging in any other professional activities. In the given scenario, Horace has not shown any unfairness or bias towards any client. He is attempting to sell the land to a potential client without any indication of favoritism or discrimination.

B is incorrect. Horace has indeed violated the Standard of Misconduct. This is evident from the fact that he lied about the potential of the land to produce healthy crops in the first year of farming, despite being aware that the land lies parallel to a river where industrial waste is frequently dumped. Standard 1(D) – Misconduct forbids members and candidates from engaging in any professional conduct that involves dishonesty, fraud, or deceit. By providing false information about the land's productivity, Horace has acted dishonestly and fraudulently, thereby violating this Standard.

C is incorrect. Horace has also violated the Standard of Disclosure of conflicts. This is because he failed to disclose that the original owner of the land is his acquaintance. Standard VI(A) – Disclosure of conflicts requires members and candidates to make full and fair disclosures of all matters that could potentially impair their independence and objectivity or interfere with their duties to their clients. By not disclosing his relationship with the original landowner, Horace has failed to meet this Standard, as this information could potentially influence his objectivity and independence in the transaction.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3c: Identify conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

Q.65 To comply with the CFA Institute Code of Ethics, members and candidates should *most appropriately*:

A. promote the integrity of the legal system.

B. place the integrity of the investment profession above their interests.

C. maintain their duty of loyalty towards clients, prospects, and employers

The CFA Institute Code of Ethics emphasizes the importance of maintaining the integrity of the investment profession. It requires members and candidates to act with integrity, competence, diligence, respect, and in an ethical manner with all stakeholders in the global capital markets. It also mandates them to place the interests of the profession and clients above their own. This is crucial in ensuring that the investment profession maintains its credibility and trustworthiness, which are essential for its survival and growth. Furthermore, it requires members and candidates to use reasonable care and exercise independent professional judgment in all their professional activities. This is to ensure that their actions and decisions are based on sound professional judgment and not influenced by personal interests or biases.

A is incorrect. While promoting the integrity of the legal system is important, it is not the primary focus of the CFA Institute Code of Ethics. The Code of Ethics goes beyond the legality of behavior and focuses more on the ethical conduct of members and candidates in the investment profession. It requires them to act with integrity, competence, diligence, respect, and in an ethical manner with all stakeholders in the global capital markets. This includes not only complying with the law but also acting in a manner that upholds the integrity and credibility of the investment profession. Therefore, while promoting the integrity of the legal system is important, it is not the most appropriate action to comply with the CFA Institute Code of Ethics.

C is incorrect. Maintaining a duty of loyalty towards clients, prospects, and employers is indeed a part of the Standards of Professional Conduct, but it is not the primary focus of the CFA Institute Code of Ethics. The Code of Ethics emphasizes the importance of acting with integrity, competence, diligence, respect, and in an ethical manner with all stakeholders in the global capital markets. It also requires members and candidates to place the interests of the profession and clients above their own. While maintaining a duty of loyalty towards clients, prospects, and employers is important, it is not the most appropriate action to comply with the CFA Institute Code of Ethics.

CFA Level 1, Topic 10 – Ethics, Learning Module 2 – Code of Ethics and Standards of professional Conduct, LOS 2b: Identify the six components of the Code of Ethics and the Seven Standards of Professional Conduct.

Q.66 Chris Tummings works for a brokerage firm. On Tuesday, one of his analysts mailed all investors a recommendation for XYZ Company's stock. The following day, Tummings receives a call from one of his clients to sell XYZ at market price. What should Tummings *most likely* do?

A. Accept the sell order.

B. Not accept the order because it is contrary to the firm's recommendation.

C. Advise the customer of the change in recommendation before accepting the order.

Option C aligns with the Standard III(B): Fair Dealing of the CFA Institute's Code of Ethics and Standards of Professional Conduct. This standard requires that members and candidates deal fairly and objectively with all clients when providing investment analysis, making investment recommendations, taking investment action, or engaging in other professional activities. In this scenario, Chris Tummings, who works for a brokerage firm, receives a sell order from a client for XYZ Company's stock. This order comes a day after the firm's analysts recommended the stock to all investors. To adhere to Standard III(B), Tummings should inform the client about the change in recommendation before executing the sell order. This ensures that the client is aware of all relevant information before making a decision, thus promoting fair dealing and protecting the client's interests.

A is incorrect. While it may seem like the straightforward action to take, accepting the sell order without informing the client about the change in recommendation would violate Standard III(B): Fair Dealing. This standard requires that members and candidates deal fairly and objectively with all clients when providing investment analysis, making investment recommendations, taking investment action, or engaging in other professional activities. By not informing the client about the change in recommendation, Tummings would be withholding relevant information that could potentially influence the client's decision. This could lead to the client making an uninformed decision, which is not in their best interest.

B is incorrect. Not accepting the order because it is contrary to the firm's recommendation is not the correct course of action. The client has the right to make their own investment decisions, even if they contradict the firm's recommendations. Refusing to execute the order would infringe upon the client's autonomy and could potentially harm their interests. Furthermore, it would violate Standard III(A): Duties to Clients, which requires members and candidates to act for the benefit of their clients and place their clients' interests before their own or their employer's interests.

CFA Level 1, Topic 10, Reading 71 – Guidance for Standards I-VII, LOS 71c: recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct.

Q.67 Wallace Associates is a sell-side research firm with clients primarily from the financial services sector. Sarah Parker, a research analyst from Wallace Associates, has been assigned Midland Trust, Wallace Associates' most recent client. Parker is compensated with a primary research fee and agent options, which allow her to purchase 2% of her client's common shares if the stock performs well. After conducting thorough research using public sources, Parker determines that a buy recommendation will be most appropriate. She includes a minor footnote at the end of the report that discloses the volume and expiration date of her eligible options. According to the Standards of Practice Handbook, has Parker *most likely* violated the Code and Code and Standards?

A. Yes, because her disclosure is not prominent.

B. No, because she has disclosed the extent of her participation in the options.

C. Yes, because accepting the options may impair her independence and objectivity.

Option C correctly identifies that Sarah Parker's acceptance of the options may impair her independence and objectivity. According to Standard I(B) – Independence and Objectivity of the Standards of Practice Handbook, members and candidates are prohibited from receiving, offering, or soliciting any gifts or benefits that could potentially compromise their independence and objectivity. In this case, Parker's compensation structure, which includes agent options that allow her to purchase 2% of her client's common shares if the stock performs well, could potentially influence her research and recommendations. This is because she stands to benefit if the stock performs well, which could lead her to issue a buy recommendation even if the stock is not a good investment. Therefore, her acceptance of the options could impair her independence and objectivity, which is a violation of Standard I(B).

A is incorrect. The argument that Parker's disclosure is not prominent is not valid. According to the Standards of Practice Handbook, disclosures must be clear and prominent, but there is no specific requirement regarding where in the report the disclosure must be placed. In this case, Parker included a footnote at the end of the report that discloses the volume and expiration date of her eligible options. While the footnote is at the end of the report, it is still a clear and prominent disclosure of her participation in the options.

B is incorrect. While it is true that Parker has disclosed the extent of her participation in the options, this does not absolve her of the potential violation of Standard I(B). The Standards of Practice Handbook requires members and candidates to avoid any actions that could impair their independence and objectivity, regardless of whether they disclose these actions. In this case, Parker's acceptance of the options could potentially impair her independence and objectivity, even though she has disclosed her participation in the options.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3c: Identify conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

Q.68 Francis Meyer is a derivatives trader at Walsh & Spencer. Meyer has put Laura Peterson - a trader serving the firm and reporting to Meyer - in charge of monitoring trades executed for client accounts with low risk. Due to a hectic work schedule, Peterson inadvertently overlooks an accidental allocation of a high-risk equity stock to the accounts. According to Standard IV(C) - Responsibilities of supervisors, Meyer is *most likely*?

A. Not in violation, as the standards do not cover Peterson’s conduct.

B. Not in violation once she has delegated her supervisory responsibilities to Peterson.

C. In violation, because she remains responsible for her supervisory duties despite the delegation.

According to Standard IV(C) - Responsibilities of Supervisors, it is the duty of members and candidates to make reasonable efforts to ensure that anyone under their supervision complies with all applicable rules, laws, regulations, and the Code and Standards. In this case, Francis Meyer, being a derivatives trader at Walsh & Spencer, has put Laura Peterson in charge of monitoring trades executed for client accounts with low risk. However, Peterson inadvertently overlooks an accidental allocation of a high-risk equity stock to the accounts. Despite delegating the supervisory duties to Peterson, Meyer remains responsible for her supervisory duties. This is because the standard requires Meyer to ensure that Peterson is adequately performing her duties and complying with the rules. The accidental allocation of a high-risk equity stock to the accounts is a clear violation of the rules, and Meyer, as Peterson's supervisor, is responsible for this oversight. Therefore, Meyer is in violation of Standard IV(C).

A is incorrect. As per Standard IV(C), Meyer, as a supervisor, is required to ensure that Peterson, who is under her supervision, complies with all applicable rules, laws, regulations, and the Code and Standards. The fact that Peterson inadvertently overlooked an accidental allocation of a high-risk equity stock to the accounts does not absolve Meyer of her supervisory responsibilities. Therefore, the claim that the standards do not cover Peterson’s conduct is incorrect.

B is incorrect. Even though Meyer has delegated her supervisory responsibilities to Peterson, she remains responsible for her supervisory duties. As per Standard IV(C), Meyer is required to make reasonable efforts to ensure that Peterson complies with all applicable rules, laws, regulations, and the Code and Standards. The fact that Peterson inadvertently overlooked an accidental allocation of a high-risk equity stock to the accounts does not absolve Meyer of her supervisory responsibilities. Therefore, the claim that Meyer is not in violation once she has delegated her supervisory responsibilities to Peterson is incorrect.

CFA Level 1, Topic 10 – Ethics, Learning Module 2 – Code of Ethics and Standards of professional Conduct, LOS 2c: Explain the ethical responsibilities required by the Code and Standards, including the sub sections of each Standard.

Q.69 Bill Kesler works as an analyst in Minecraft Investment Advisors. He is attending a private conference call with the CEO of another company in the cafeteria of his office, but the phone is not on speaker mode. During the call, he took notes of the earnings projections on loose sheets but forgot to take them along with him. The portfolio managers found the loose sheets and traded stocks on behalf of their clients based on the earnings projections mentioned in the notes. Who has *most likely* violated the Standards?

A. Bill Kesler.

B. The portfolio managers.

C. Bill Kesler and the portfolio managers.

Both Bill Kesler and the portfolio managers have violated Standard II(A): Material Nonpublic Information. Bill Kesler, as an analyst, has a responsibility to protect any material non-public information he comes across during his work. In this case, he failed to do so by leaving his notes containing earnings projections in a public place where others could find them. This is a clear violation of his duty to prevent the misuse of such information.

On the other hand, the portfolio managers also violated the same standard by trading stocks based on the information they found in Kesler's notes. The information was non-public and material, and using it for trading constitutes insider trading, which is a serious violation of the standard. Therefore, both parties are at fault and have most likely violated the Standards.

A is incorrect. While it is true that Bill Kesler violated the standard by not securing his notes, the question asks who has most likely violated the Standards. In this case, it is not just Kesler, but also the portfolio managers who have violated the standard. Therefore, option A is incorrect because it does not fully answer the question.

B is incorrect. Similar to option A, while the portfolio managers did violate the standard by trading on non-public information, they are not the only ones at fault. Kesler also violated the standard by not securing his notes. Therefore, option B is incorrect because it does not fully answer the question.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3c: Identify conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

Q.70 Upon reviewing the materials received during the investigation of a professional conduct inquiry, the *most likely* preliminary course of action for a designated officer is to:

A. Revoke the member’s CFA charter.

B. Suspend the member’s membership.

C. Propose a sanction, which the member can reject.

Upon reviewing the materials obtained during a professional conduct investigation, a designated officer's most likely preliminary course of action is to propose a disciplinary sanction. This proposal is then presented to the member who can either accept or reject it. This process is designed to ensure fairness and transparency in the disciplinary process. The member is given the opportunity to review the proposed sanction and make a decision based on their understanding of the situation. If the member rejects the proposed sanction, the matter is then escalated to a hearing panel. The role of the hearing panel is to review the case, determine whether a violation has occurred, and if so, decide on the appropriate sanction to be imposed. This process ensures that the member is given due process and that the sanction is proportionate to the violation committed.

A is incorrect. The revocation of a member's CFA charter is a severe disciplinary action that is not taken as a preliminary course of action. Revoking a member's charter is a decision that is made at the disciplinary review stage, after a thorough investigation and hearing process. It is not a decision that a designated officer would make upon initially reviewing the materials from a professional conduct investigation. Revoking a charter is a serious action that can have significant professional and personal consequences for the member, and as such, it is not taken lightly or prematurely.

B is incorrect. Similarly to option A, suspending a member's membership is not a preliminary course of action. Suspension is a disciplinary action that is taken after a thorough investigation and hearing process, not upon initial review of the investigation materials. A designated officer does not have the authority to suspend a member's membership based solely on the materials received during the investigation. The decision to suspend a member's membership is made at the disciplinary review stage, after the member has been given the opportunity to present their case and the hearing panel has made a determination on the violation and the appropriate sanction.

CCFA Level 1, Topic 10 – Ethics, Learning Module 2 – Code of Ethics and Standards of professional Conduct, LOS 2a: Describe the structure of the CFA Institute Professional Conduct Program and the process for the enforcement of the Code and Standards.

Q.71 Jewel Knowles is a research analyst at Trimont Limited. During her research, Knowles comes across an unpublished research report in the firm's electronic database that is not password-protected. The report concerns ADP, a biotechnology firm developing lab equipment using in-house technology. In the report, the writer recommends a strong buy based on personal observations, ADP's financial projections, discussions with company executives, and industry data analysis. At the end of the report, a footnote reveals the report will be released when ADP launches a prototype of the equipment in the market. After reading the report, Knowles decides to add ADP shares to her investment portfolio. Can Knowles *most appropriately* be recommended to purchase the stock?

A. No, she is not permitted to act on material non-public information.

B. Yes, she can act on a recommendation prepared using the mosaic theory.

C. Yes, but she will have to seek her supervisor’s consent prior to the purchase.

Jewel Knowles is not permitted to act on material non-public information. The information she has come across is not yet public and is considered material as it can significantly impact the stock price of ADP. Acting on such information would be a violation of the ethical standards set by the financial industry. These standards are in place to ensure a fair and level playing field for all investors. If Knowles were to act on this information, she would be gaining an unfair advantage over other investors who do not have access to this information. This is considered insider trading and is illegal.

B is incorrect. The mosaic theory allows analysts to use a combination of public and non-material non-public information to make investment decisions. However, in this case, Knowles has not used the mosaic theory. Instead, she has come across material non-public information and is considering using it to her advantage. This is a clear violation of Standard II(A) – Material nonpublic information. The mosaic theory cannot be used as a defense in this case because the information Knowles has is both non-public and material.

C is incorrect. Even if Knowles were to seek her supervisor's consent prior to purchasing the stock, it would still be a violation of ethical standards. This is because the information she has is material and non-public. Acting on such information, even with consent, is considered insider trading and is illegal. It would be a violation of Standard II(A) – Material nonpublic information, and Standard IV(C) – Responsibilities of supervisors. Supervisors are expected to ensure that their subordinates comply with all ethical standards, and giving consent in this case would be a failure to fulfill this responsibility.

CFA Level 1, Topic 10 – Ethics, Learning Module 2 – Code of Ethics and Standards of professional Conduct, LOS 2c: Explain the ethical responsibilities required by the Code and Standards, including the sub sections of each Standard.

Q.72 Walter Stewart, the chief investment manager at Carl & Mathews, known for their asset management services, is attending an official investment conference. In a conversation with Marie Lance, a philanthropist planning to establish an investment fund for a charitable foundation, Stewart mentions that one of his former clients had been interested in donating to a similar cause. He then offers to provide Lance with the contact details of this former client. Is Stewart most likely violating the CFA Institute Standards of Professional Conduct concerning client confidentiality?

A. Yes, because he is offering to share a former client's contact information without their consent.

B. No, because the client is no longer associated with him, and thus confidentiality does not apply.

C. No, because he is not revealing any specific confidential information about the client's investments or personal details.

The CFA Institute Standards of Professional Conduct, specifically Standard III(E) – Preservation of Confidentiality, requires members and candidates to maintain the confidentiality of information of current, former, and prospective clients unless they are legally obligated to disclose it, or if they have explicit permission from the client. In this scenario, Walter Stewart, the chief investment manager at Carl & Mathews, is offering to share the contact details of a former client. This act of sharing contact information without the apparent consent of the former client is a violation of the confidentiality standard. The contact details of a client, whether current, former, or prospective, are considered confidential information. Therefore, Stewart's offer to provide these details to Marie Lance, a philanthropist planning to establish an investment fund for a charitable foundation, constitutes a breach of confidentiality.

B is incorrect. The reasoning behind this option is flawed because it suggests that the confidentiality requirement does not apply once a client is no longer associated with the member or candidate. However, this is not the case. The CFA Institute Standards of Professional Conduct, specifically Standard III(E) – Preservation of Confidentiality, clearly states that the confidentiality of client information applies to current, former, and prospective clients. Therefore, the fact that the client is no longer associated with Stewart does not nullify the confidentiality requirement. The client's contact information remains confidential and should not be disclosed without explicit consent, regardless of the current status of the client's relationship with Stewart.

C is incorrect. This option suggests that Stewart is not violating the confidentiality standard because he is not revealing any specific confidential information about the client's investments or personal details. However, this reasoning is incorrect because it overlooks the fact that the client's contact information itself is considered confidential information. The act of sharing contact information, even without revealing specific investment or personal details, can still be considered a breach of confidentiality, especially in the context of a professional relationship governed by the CFA Institute's standards. Therefore, Stewart's offer to share a former client's contact details without their explicit consent is a violation of the confidentiality standard.

CFA Level 1, Topic 10 – Ethics, Learning Module 2 – Code of Ethics and Standards of professional Conduct, LOS 2c: Explain the ethical responsibilities required by the Code and Standards, including the sub sections of each Standard.

Q.73 Which of these is *most likely* not one of the issues a verification report must confirm?

A. Justify whether all of the members of the administrative decision tribunal are financial experts.

B. Determine whether a firm has complied with all firm-wide composite construction requirements.

C. Proof of whether processes and procedures are designed to calculate and present compliant performance results.

The Global Investment Performance Standards (GIPS) do not require the members of the administrative decisions tribunal to be financial experts. The GIPS are ethical standards to be used by investment management companies in order to establish a globally standardized, industry-wide approach to creating performance presentations that communicate investment results to prospective clients. The standards do not stipulate the qualifications of the members of the administrative decision tribunal, hence this is not an issue that a verification report must confirm.

B is incorrect. The statement "Determine whether a firm has complied with all firm-wide composite construction requirements" is actually one of the main issues that a verification report must confirm. The GIPS require that firms must comply with all firm-wide composite construction requirements. This includes ensuring that all actual, fee-paying, discretionary portfolios are included in at least one composite. Therefore, a verification report must confirm that a firm has complied with these requirements.

C is incorrect. The statement "Proof of whether processes and procedures are designed to calculate and present compliant performance results" is also a key issue that a verification report must confirm. The GIPS require that firms must have processes and procedures in place that are designed to calculate and present compliant performance results. This includes ensuring that the firm has a compliant presentation that includes all the required information. Therefore, a verification report must confirm that the firm's processes and procedures are designed to calculate and present compliant performance results.

CFA Level 1, Topic 10 – Ethics, Learning Module 4 – Introduction to the Global Investment Performance Standards (GIPS), LOS 4e: Describe the concept of independent verification.

Q.74 Catherine Tike serves at a brokerage firm. The firm executes trades for client accounts directed to it by Kyle Investments, an investment management firm. Tike has had an excellent performance year, generating substantial capital gains for several client accounts. Kyle's CEO offers Ms. Tike a fully paid cruise trip to the Maldives to appreciate her exceptional performance. According to the Standards of Practice Handbook, Tike should *most likely*?

A. Decline the offer, as the additional compensation is excessive.

B. Accept the offer and notify her employer immediately afterward.

C. Obtain written consent from her employer before accepting the offer.

Option C aligns with the guidelines set out in the Standards of Practice Handbook, specifically Standard IV(B) – Additional Compensation Arrangements. This standard stipulates that members and candidates should not accept gifts, benefits, compensation, or consideration that competes with or might potentially compete with their employer's interests unless they have obtained written consent from all parties involved. In this scenario, Catherine Tike, who works at a brokerage firm, has been offered a fully paid cruise trip to the Maldives by Kyle's CEO as a token of appreciation for her exceptional performance. This offer can be seen as additional compensation. Therefore, according to Standard IV(B), Tike should obtain written consent from her employer before accepting the offer. This ensures transparency and avoids any potential conflicts of interest that might arise from accepting such a gift.

A is incorrect. The Standards of Practice Handbook does not specify a limit on the value of additional compensation that can be accepted. Therefore, the assertion that the additional compensation is excessive and should be declined is not in line with the guidelines. The key factor is not the value of the compensation, but whether it competes with the employer's interests and whether written consent has been obtained from all parties involved. In this case, Tike can accept the offer as long as she gets permission from her employer.

B is incorrect. While notifying the employer about the additional compensation is a step in the right direction, it is not sufficient according to the Standards of Practice Handbook. Standard IV(B) requires not just notification, but written consent from the employer before accepting the offer. This is to ensure that the employer is fully aware of and agrees to the additional compensation arrangement. Simply notifying the employer after accepting the offer does not meet the requirements of the standard and could potentially lead to conflicts of interest.

CFA Level 1, Topic 10 – Ethics, Learning Module 2 – Code of Ethics and Standards of Professional Conduct, LOS 2c: Explain the ethical responsibilities required by the Code and Standards, including the sub-sections of each Standard.

Q.75 Renee Irving is part of five analysts developing a research report on a pharmaceutical company. Irving strongly believes the stock should be rated as a 'weak hold.' Her recommendation is based on a discussion with a medical expert who believes the company's latest drug has more side- effects than originally claimed. Her team members are of the collective opinion that her recommendation is too conservative and that a 'hold' recommendation is more appropriate given that the drug has provided promising results in numerous trials. Irving disagrees with the group's recommendation. Irving's *most appropriate* course of action would be to:

A. Request for a change in assignment.

B. Request her name to be withdrawn from the report.

C. Continue identifying herself with the report and disclose her difference in opinion.

Option C aligns with the best practices of transparency and professional conduct in the field of financial analysis. Renee Irving, despite having a differing opinion, should continue to identify herself with the report and disclose her difference in opinion. This approach ensures that all perspectives are considered and that the final decision is made with full knowledge of all viewpoints. It also respects the collective decision-making process of the team, while still allowing for individual perspectives to be heard. This approach is in line with the principles of integrity, objectivity, and professional behavior, which are fundamental to the practice of financial analysis.

A is incorrect. Requesting a change in assignment would not be the most appropriate course of action for Irving. While it is understandable that she might feel uncomfortable with the group's decision, withdrawing from the assignment would not solve the issue at hand. It would merely avoid the disagreement rather than addressing it. Furthermore, it could potentially deprive the team of her valuable insights and expertise. Therefore, this option does not align with the principles of professional responsibility and commitment to the task at hand.

B is incorrect. Requesting her name to be withdrawn from the report would also not be the most appropriate course of action. While this might seem like a way for Irving to distance herself from a decision she disagrees with, it would not contribute to a constructive resolution of the disagreement. It could also be seen as a lack of professional responsibility and commitment. Moreover, it would deprive the readers of the report of the knowledge of her differing opinion, which could be valuable information for them. Therefore, this option does not align with the principles of transparency, professional responsibility, and commitment to the task at hand.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3b: Recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct.

Q.76 Which of these agents can most accurately claim compliance with GIPS?

I. Investment management firms managing assets
II. Plan sponsors that are not managing assets.
III. Vendors who are providing investment management software.

A. Agent I.

B. Agent I and II

C. Agent I, II, and III.

The Global Investment Performance Standards (GIPS) are a set of standardized, industry-wide ethical principles that provide investment management firms with guidance on how to calculate and report their investment results to prospective clients. The goal of GIPS is to promote transparency and fair competition among investment management firms.

GIPS are specifically designed for investment management firms that manage assets. These firms are responsible for managing the assets of their clients and making investment decisions on their behalf. Therefore, they are required to adhere to the GIPS in order to ensure that they are providing accurate and fair information to their clients. This includes providing a fair representation of their investment performance and disclosing all relevant information that may affect a client's decision to invest with them.

B is incorrect. Plan sponsors that are not managing assets are not required to adhere to the GIPS. This is because they are not involved in the management of assets and therefore do not have the same responsibilities as investment management firms. They do not make investment decisions on behalf of clients and therefore do not need to provide the same level of transparency and disclosure as investment management firms.

C is incorrect. Vendors who are providing investment management software are not required to adhere to the GIPS. This is because they are not involved in the management of assets or the making of investment decisions. Their role is to provide software solutions to investment management firms, and therefore they do not have the same responsibilities as these firms. They do not need to provide the same level of transparency and disclosure as investment management firms, and therefore cannot claim compliance with GIPS.

CFA Level 1, Topic 10 – Ethics, Learning Module 4 – Introduction to the Global Investment Performance Standards (GIPS), LOS 4a: Explain why the GIPS standards were created, what parties the GIPS standards apply to, and who is benefitted by the standards.

Q.77 A non-governmental organization starts a movement to protest against increasing pollution and requests for relocation of factories. A few activists were arrested. One of the arrested activists is an equity analyst in an investment management firm. Has the analyst violated any standard? If yes, what action should be taken against the analyst?

A. No.

B. Yes, he should be given a letter of warning.

C. Yes, he should be dismissed from his service, and the CFA Institute should be notified.

The analyst's participation in a civil movement based on personal belief does not constitute misconduct. The CFA Institute's Standards of Professional Conduct does not prohibit members or candidates from participating in lawful protests or civil movements. The Standards primarily focus on professional conduct in the investment industry, and do not extend to personal activities unless they reflect negatively on the individual's professional integrity or the integrity of the investment profession. In this case, the analyst's participation in a protest against pollution does not reflect negatively on his professional integrity or the integrity of the investment profession. Therefore, no action should be taken against the analyst.

B is incorrect. As explained above, the analyst's participation in a lawful protest does not constitute misconduct under the CFA Institute's Standards of Professional Conduct. Therefore, there is no basis for issuing a letter of warning to the analyst. Issuing a letter of warning without a valid reason could be seen as an unfair disciplinary action, which could potentially harm the analyst's professional reputation and career.

C is incorrect. The suggestion that the analyst should be dismissed from his service and the CFA Institute should be notified is an extreme measure that is not warranted in this case. Dismissal from service and notification to the CFA Institute are disciplinary actions that are typically reserved for serious violations of the Standards of Professional Conduct, such as fraud, deceit, or other forms of professional misconduct. In this case, the analyst's participation in a lawful protest does not constitute a serious violation of the Standards. Therefore, there is no basis for such extreme disciplinary actions.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3c: Identify conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

Q.78 Which of the following is the *most appropriate* practice of a firm with a firewall policy implemented for its research and investment banking divisions?

A. Prohibiting communication between research and investment banking personnel.

B. Basing the research analyst’s compensation on a flat rate without any contingent bonuses.

C. To improve the accuracy of investment analysis, investment banking personnel regularly review research reports prepared by the research division.

The most appropriate practice for a firm with a firewall policy implemented for its research and investment banking divisions is to base the research analyst’s compensation on a flat rate without any contingent bonuses. This is because a desirable element of a firewall system is that the compensation arrangement should minimize pressure on research analysts and reward independence and objectivity. Compensation based on a flat fee rate will achieve this purpose. It ensures that the research analyst is not influenced by the potential for higher earnings to skew their research in favor of the investment banking division. This maintains the integrity of the research and ensures that it is conducted in an unbiased and objective manner.

A is incorrect. The statement suggests prohibiting all forms of communication between research and investment banking personnel. While some firms may adopt this approach, it may not be the most effective or desirable solution. Completely cutting off communication between the two divisions could hinder the flow of necessary information and create operational inefficiencies. A more effective solution would be controlling the flow of information across the wall by passing it through a compliance department. This ensures that necessary information is shared, but in a controlled and regulated manner that maintains the integrity of the firewall policy.

C is incorrect. This option suggests that investment banking personnel regularly review research reports prepared by the research division to improve the accuracy of investment analysis. However, this practice could undermine the independence and objectivity of the research analyst. If investment banking personnel have the authority to review, approve, disapprove, or otherwise make changes to research reports, it could lead to a conflict of interest. The research may be influenced by the investment banking division's interests, which could compromise the accuracy and objectivity of the research. Therefore, this is not a desirable practice for a firm with a firewall policy between its research and investment banking divisions.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3b: Recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct.

Q.79 To prevent misconduct, the Standards of Practice Handbook *most likely* recommends members and candidates to encourage their employers to:

A. restrict employee participation in IPOs.

B. develop firewalls between different departments.

C. disseminate a list of potential violations and disciplinary sanctions to all firm employees

The Standards of Practice Handbook recommends members and candidates to encourage their employers to disseminate a list of potential violations and disciplinary sanctions to all firm employees. This is because it is crucial for all employees to be aware of the potential consequences of their actions. By having a clear understanding of what constitutes a violation and the potential disciplinary actions that could be taken, employees are more likely to adhere to the rules and regulations set by the firm. This not only helps to maintain a high standard of conduct within the firm, but also protects the firm from potential legal and reputational risks.

A is incorrect. While restricting employee participation in IPOs is a recommended practice, it is not the most effective way to prevent misconduct. This practice is primarily aimed at ensuring compliance with Standard 1(B) - Independence and Objectivity. It is designed to prevent conflicts of interest that could arise when employees have a personal financial interest in the securities they are dealing with. However, this measure alone does not address the full range of potential violations that could occur in a firm.

B is incorrect. Developing firewalls between different departments is a recommended procedure for Standard II(A) – Material Nonpublic Information. The purpose of these firewalls is to prevent the spread of sensitive information between departments, thereby preventing employees from acting on material nonpublic information. While this is an important measure for preventing insider trading and other forms of misconduct related to the misuse of information, it does not address other types of misconduct.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3b: Recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct.

Q.80 Samantha Town is a portfolio manager at Wallace Associates situated in Dallas, Texas. This year, Town has delivered exceptional performance for one of her client's accounts. In exchange for the performance, her client has offered her two front-row tickets to an opera and the opportunity to meet the stage cast after the show. To ensure she does not violate the CFA Standards of Professional Conduct, Town's *most appropriate* course of action would be to:

A. reject the offer.

B. inform her employer after attending the opera show.

C. accept the offer after obtaining written permission from both parties.

The CFA Standards of Professional Conduct, specifically Standard I(B) – Independence and Objectivity, allows members and candidates to accept gifts, benefits, and compensation from clients, provided they have received permission from all involved parties. This standard is designed to ensure that the professional's independence and objectivity are not compromised by the acceptance of such gifts. In this case, Samantha Town has delivered exceptional performance for her client, and the client wishes to reward her with tickets to an opera and a chance to meet the stage cast. This gift does not appear to be an attempt to influence her professional judgment or to gain unfair advantage. However, to maintain transparency and adhere to the CFA Standards, it is crucial that Samantha obtains written permission from both her client and her employer before accepting the gift.

A is incorrect. While it might seem that rejecting the offer outright would be the simplest way to avoid any potential conflict of interest or violation of the CFA Standards, this is not necessarily the case. Standard I(B) – Independence and Objectivity does not prohibit the acceptance of gifts outright. Instead, it allows for the acceptance of gifts under certain conditions, one of which is obtaining permission from all involved parties. Therefore, rejecting the offer outright would not be the most appropriate course of action for Samantha. It is important to note that the CFA Standards are designed to guide professionals in making ethical decisions, not to restrict them unnecessarily.

B is incorrect. Informing her employer after attending the opera show would not be the most appropriate course of action for Samantha. While the CFA Standards do allow for members and candidates to inform their employers after receiving gifts if prior notification is not possible, this is not the case here. Samantha has the opportunity to seek permission from her employer before accepting the gift. By doing so, she would be adhering more closely to the spirit of the CFA Standards, which emphasize transparency and the avoidance of any potential conflicts of interest. Therefore, option B would not be the most appropriate course of action.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3d: Demonstrate the application of the Code of Ethics and Standards of Professional Conduct to situations involving issues of professional integrity.

Q.81 Jessica March and Adam Pocock are CFA Level III candidates and colleagues. The two regularly study together for the Level III exam. During one of their study sessions, the two individuals engage in a discussion: March: "Earlier in the year, I had a discussion with Tim Martin, a Level III candidate, who said that the most recent exam was very difficult." Pocock: "Difficult or not, I have already told my superior that I will become a charter holder shortly following completion of the Level III exam." According to the Standards of Practice Handbook, which individual is *most likely* in violation?

A. March; she has shared confidential information with Pocock.

B. Pocock; has made a guarantee regarding the receipt of the charter.

C. March; she has engaged in discussion with Martin regarding the exam and its contents.

Pocock has violated Standard VII(B) – Reference to the CFA Institute, the CFA Designation, and the CFA Program. This standard explicitly prohibits candidates from making any guarantees about the final award of the charter. Pocock's statement that he will become a charter holder shortly after completing the Level III exam is a clear violation of this standard. The final award of the charter is not solely dependent on the completion of the Level III exam. It is also subject to meeting the other CFA Program requirements and approval by the CFA Institute Board of Governors. Pocock's premature guarantee could potentially mislead others about the process and requirements of the CFA Program.

A is incorrect. The claim that March has shared confidential information with Pocock is not supported by the information provided. According to the Standards of Practice Handbook, confidential information refers to specific exam content, such as topics or questions. In this case, March has only shared a general opinion about the difficulty level of the exam, which does not constitute a violation of confidentiality.

C is incorrect. The statement that March has engaged in a discussion with Martin regarding the exam and its contents is not necessarily a violation of the Standards of Professional Conduct. The Standards do not prohibit candidates from discussing their general experiences or perceptions of the exam. What is prohibited is the sharing of specific exam content. In this case, March has only shared a general opinion about the difficulty level of the exam, which does not constitute a violation of the Standards.

CFA Level 1, Topic 10 – Ethics, Learning Module 2 – Code of Ethics and Standards of professional Conduct, LOS 2c: Identify conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

Q.82 Kelvin Charmer, CFA, plans to allocate shares to his clients following a recent IPO by a fast-growing IT Company. According to the CFA Institute Code of Ethics and Standards of Professional Conduct, Charmer, in case of oversubscription of the issue, will most likely breach his duty to clients by:

A. avoiding odd-lot distributions.

B. not foregoing any sales to himself.

C. prorating to all clients for whom the issue is appropriate.

Option B directly violates the CFA Institute Code of Ethics and Standards of Professional Conduct, specifically Standard III (B) - Fair Dealing. This standard requires that all members treat their clients fairly based on their individual investment objectives and circumstances. In the event of an oversubscription of an issue, members and candidates are expected to forgo any sales to themselves. This is to ensure that additional shares are freed up for clients, thereby maintaining a fair and equitable distribution of shares. By not foregoing any sales to himself, Kelvin Charmer would be breaching his duty to his clients, as he would be prioritizing his own interests over those of his clients. This is a clear violation of the ethical standards set by the CFA Institute.

A is incorrect. When an issue is oversubscribed, it should be prorated to all subscribers and taken on a round-lot basis. This is to avoid the creation of odd-lot distributions, which can be more difficult to sell in the market. Therefore, by avoiding odd-lot distributions, Charmer would actually be acting in the best interests of his clients, ensuring that they receive shares in a form that is most beneficial to them. This action aligns with the CFA Institute's standards of professional conduct and does not constitute a breach of duty.

C is incorrect. Distributing the issues to all customers for whom the investments are appropriate and consistent with the firm's policies for allocating blocks of stock is not a breach of duty. In fact, this action is in line with the CFA Institute's standards of professional conduct. It ensures that all clients are treated fairly and equitably, and that the allocation of shares is done in a manner that is consistent with each client's investment objectives and circumstances. Therefore, prorating to all clients for whom the issue is appropriate does not constitute a breach of duty, but rather, it is an example of good professional conduct.

CFA Level 1, Topic 10, Reading 72 – Introduction to the Global Investment Performance Standards (GIPS), LOS 72c: Explain the ethical responsibilities required by the Code and Standards, including the sub-sections of each standard.

Q.83 Which of the following activities *most likely* represents market manipulation and is also a violation of the CFA Institute Standards of Professional Conduct?

A. An investment analyst exaggerates his firm’s performance to win new client accounts.

B. A global hedge fund increases the stock price of an oil producer when it makes a significant purchase of its shares.

C. A dealer firm buys and sells stock shares between two accounts under its management to create artificial trading activity.

The firm is artificially inflating the trading volume by executing buy/sell transactions between two accounts under its management. This artificial trading activity is intended to trigger an increase in the stock price. This is a clear example of market manipulation as it involves the deliberate attempt to interfere with the free and fair operation of the market and create false or misleading appearances with respect to the price of, or market for, a security, commodity or currency.

A is incorrect. The scenario described in this option, where an investment analyst exaggerates his firm’s performance to win new client accounts, is not an example of market manipulation. Instead, it is an example of misrepresentation. Misrepresentation involves making false or misleading statements about a company's performance. While this is unethical and potentially illegal, it is not the same as market manipulation. Market manipulation involves actions aimed at deceiving or misleading investors by artificially affecting the price or volume of a security. In this case, the analyst is not trying to affect the price or volume of a security, but is instead trying to attract new clients by overstating the firm's performance.

B is incorrect. The action described in this option, where a global hedge fund increases the stock price of an oil producer when it makes a significant purchase of its shares, is not an example of market manipulation. This is because the increased trading activity is not based on an attempt to artificially affect the price or volume of the security. Instead, it is a result of a legitimate trading strategy. The hedge fund is buying shares of the oil producer for its own investment purposes, not to create a false or misleading appearance with respect to the price of the security. Therefore, while this action may affect the stock price, it is not considered market manipulation.

CFA Level 1, Topic 10 – Ethics, Learning Module 2 – Code of Ethics and Standards of professional Conduct, LOS 2c: Explain the ethical responsibilities required by the Code and Standards, including the sub-sections of each Standard.

Q.84 The employees of LockHurst Traders, a dealer firm, established an equity fund that invests in highly speculative 'hot' issues for their investment portfolios. The employees received permission from their employer before setting up the fund. A company officer pre clears all securities purchased. The latest security purchased by the fund is issued by a manufacturer that has previously undertaken an IPO of the fund's stock. The employees have agreed with the manufacturer to purchase a large stock quantity to induce a price increase. The stock will later be sold to clients when its price has doubled. Which of the following standards is *least likely* being violated?

A. Fair dealing.

B. Misrepresentation

C. Responsibility of supervisors.

Misrepresentation, as per Standard I(C), requires members and candidates to avoid making any false statements or misrepresentations related to investment analysis, recommendations, actions, or other professional activities. In the given scenario, there is no evidence or information suggesting that the employees of LockHurst Traders have made any misrepresentations in their dealings. They have established an equity fund, invested in speculative 'hot' issues, and even received permission from their employer before setting up the fund. All securities purchased are pre-cleared by a company officer. Therefore, there is no violation of the Misrepresentation standard in this case.

A is incorrect. The employees' agreement with the manufacturer to purchase a large quantity of stock to induce a price increase is a clear violation of Standard III(B) - Fair Dealing. This standard requires that investment professionals deal fairly and objectively with all clients when providing investment analysis, making investment recommendations, taking investment action, or engaging in other professional activities. By artificially inflating the trading volume to sell the stock when the price has doubled, the employees are not treating all clients fairly. They are manipulating the market for their own benefit, which is against the principles of fair dealing.

C is incorrect. The company officer, who is supposed to clear the securities, has pre-cleared a transaction that does not prioritize the interests of the clients. This is a violation of Standard IV(C) - Responsibility of Supervisors. This standard requires that members and candidates take reasonable steps to ensure that anyone subject to their supervision complies with all applicable laws, rules, regulations, and the Code and Standards. In this case, the company officer has failed to fulfill his supervisory responsibilities by allowing a transaction that is not in the best interest of the clients.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3c: Identify conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

Q.85 Raynee Beaupre, CFA, works for an investment advisory firm in the US. However, she is working as a registered adviser in Camaro, a nation in the Indian Ocean. The law of Camaro does not require her to disclose the referral fee received for recommendations of investment products. Is Beaupre liable to disclose the referral fee?

A. No

B. Yes, according to Standard 1(D) – Misconduct.

C. Yes, according to Standard 1(A) – Knowledge of the law.

Option C aligns with Standard I(A): Knowledge of the Law, which states, "When applicable law and the Code and Standards require a different conduct, members and candidates must follow the stricter of the applicable law or the Code and Standards". In this case, even though the law of Camaro does not require Beaupre to disclose the referral fee, the Code and Standards do. Therefore, Beaupre is obligated to adhere to the stricter rule, which in this case is the Code and Standards. This is because the Code and Standards are designed to ensure transparency, fairness, and ethical conduct in the financial industry. By disclosing the referral fee, Beaupre is upholding these principles and ensuring that her clients are fully informed about any potential conflicts of interest. This is crucial for maintaining trust and integrity in the financial industry.

A is incorrect. This option suggests that Beaupre is not required to disclose the referral fee because the law of Camaro does not require it. However, this is a misunderstanding of Standard I(A): Knowledge of the Law. This standard requires members and candidates to adhere to the stricter rule when there is a conflict between the applicable law and the Code and Standards. In this case, the Code and Standards are stricter because they require the disclosure of the referral fee. Therefore, Beaupre is obligated to disclose the referral fee, regardless of the law of Camaro. By not disclosing the referral fee, Beaupre would be violating Standard I(A) and potentially undermining the principles of transparency, fairness, and ethical conduct in the financial industry.

B is incorrect. This option suggests that Beaupre is required to disclose the referral fee according to Standard 1(D) – Misconduct. However, this is not the case. Standard 1(D) – Misconduct pertains to actions that reflect adversely on a member's or candidate's professional reputation, integrity, or competence. In this case, Beaupre's action of not disclosing the referral fee does not reflect adversely on her professional reputation, integrity, or competence. Instead, it is a matter of adhering to the stricter rule between the applicable law and the Code and Standards, as stipulated by Standard I(A): Knowledge of the Law. Therefore, Standard 1(D) – Misconduct is not relevant in this case.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3b: Recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct.

Q.86 A firm values its assets using fair values. Its asset base comprises of the following asset categories: Category 1: Fee-paying discretionary portfolios Category 2: Non-fee-paying discretionary portfolios Category 3: Fee-paying non-discretionary portfolios Category 4: Non-fee-paying nom-discretionary portfolios Based on the requirements of the Global Investment Performance Standards (GIPS), for periods beginning on or after January 1, 2011, the firm's total assets are most likely the aggregate of:

A. All four categories

B. Categories 1 and 2

C. Categories 1,2, and 3.

According to the Global Investment Performance Standards (GIPS), for periods beginning on or after January 1, 2011, total firm assets must be the aggregate fair value of all discretionary and non-discretionary assets managed by the firm. This includes both fee-paying and non-fee-paying portfolios. The GIPS standards are designed to ensure fair representation and full disclosure of investment performance. They provide an ethical framework for the calculation and presentation of the investment performance history of an investment management firm. The standards aim to promote transparency and comparability among investment firms.

Given this, the firm's total assets would most likely be the aggregate of all four categories. This is because the GIPS standards require the inclusion of all discretionary and non-discretionary assets, regardless of whether they are fee-paying or non-fee-paying. This is to ensure that the firm's total assets are accurately represented and that there is no bias in the representation of the firm's assets.

B is incorrect. This option suggests that the firm's total assets would be the aggregate of only the fee-paying discretionary portfolios and non-fee-paying discretionary portfolios. This is not in line with the GIPS standards, which require the inclusion of all discretionary and non-discretionary assets, regardless of whether they are fee-paying or non-fee-paying. Excluding the non-discretionary portfolios would result in an inaccurate representation of the firm's total assets.

C is incorrect. This option suggests that the firm's total assets would be the aggregate of the fee-paying discretionary portfolios, non-fee-paying discretionary portfolios, and fee-paying non-discretionary portfolios. While this option includes more categories than option B, it still excludes the non-fee-paying non-discretionary portfolios. This is not in line with the GIPS standards, which require the inclusion of all discretionary and non-discretionary assets, regardless of whether they are fee-paying or non-fee-paying. Excluding any category would result in an inaccurate representation of the firm's total assets.

CFA Level 1, Topic 10 – Ethics, Learning Module 4 – Introduction to the Global Investment Performance Standards (GIPS), LOS 4d: Describe the fundamentals of compliance, including the recommendations of the GIPS Standards with respect to the definition of the firm and the firm's definition of discretion.

Q.87 According to the CFA Institute Standards of Practice Handbook, which of the following compliance procedures are members and candidates *least likely* recommended to consider?

A. Prohibiting employees from sharing clients' details

B. Offering different levels of service to clients on a selective basis.

C. Limiting the number of employees who know that a recommendation is to be disseminated.

Offering different levels of service to clients on a selective basis is least likely recommended according to the CFA Institute Standards of Practice Handbook. The reason behind this is the Standard III(B) – Fair Dealing. This standard requires members and candidates to deal fairly and objectively with all clients when providing investment analysis, making recommendations, or taking investment actions. Offering different service levels to clients on a selective basis is a violation of this Standard. It is important to note that while members and candidates can provide further guidance regarding an investment recommendation to their major clients, this should only be done after issuing a general recommendation to all clients.

A is incorrect. The suggestion of prohibiting employees from sharing clients' details is actually a recommended procedure, not a least likely recommended one. This procedure is recommended to prevent the violation of standard III(E) – Preservation of Confidentiality. This standard emphasizes the importance of maintaining the confidentiality of client information. Sharing client details could lead to a breach of this confidentiality, which could have serious consequences for both the client and the member or candidate. Therefore, prohibiting employees from sharing clients' details is a crucial compliance procedure.

C is incorrect. The suggestion of limiting the number of employees who know that a recommendation is to be disseminated is also a recommended procedure. This procedure is recommended to prevent the violation of standard II(A) – Material Nonpublic Information. This standard requires members and candidates to refrain from using material nonpublic information in an unethical or illegal manner. Limiting the number of employees who are privy to a recommendation before it is disseminated can help to prevent the misuse of this information. Therefore, this is also a crucial compliance procedure.

CFA Level 1, Topic 10 – Ethics, Learning Module 3 – Guidance for Standards I-VII, LOS 3b: Recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct.

Q.88 Standard I (A) – Knowledge of the Law requires members or candidates to *most likely*?

A. Document a violation when disassociating themselves from illegal activity.

B. Have detailed knowledge of all the laws that could potentially govern their activities.

C. Abide by the rules and regulations related to the administration of the CFA examination.

Standard I (A) – Knowledge of the Law primarily requires members or candidates to abide by the rules and regulations related to the administration of the CFA examination. This standard emphasizes the importance of adhering to the rules and regulations set forth by the CFA Institute. These rules and regulations are designed to ensure the integrity of the examination process and to maintain the high standards of the CFA designation. By adhering to these rules, members and candidates demonstrate their commitment to ethical conduct and professional excellence. This adherence is not just about passing the examination, but also about upholding the values and principles that the CFA designation represents.

A is incorrect. While the Standard does recommend members and candidates to document a violation when disassociating from illegal or unethical activity, it is not a requirement. The primary purpose of this recommendation is to provide a record of the member's or candidate's actions and their reasons for disassociating from the activity. However, the absence of such documentation does not necessarily mean that the member or candidate is not abiding by the Standard. The key factor is the action of disassociation itself, not the act of documenting it.

B is incorrect. Although members and candidates are required to understand the laws and regulations which govern their professional activities, they are not required to become experts on or have detailed knowledge of all the laws that govern their activities. The Standard does not expect members and candidates to have an exhaustive knowledge of all potential laws that could apply to their activities. Instead, it expects them to have a reasonable understanding of the laws and regulations relevant to their professional activities and to seek legal advice when necessary.

CFA Level 1, Topic 10 – Ethics, Learning Module 2 – Code of Ethics and Standards of professional Conduct, LOS 2c: Explain the ethical responsibilities required by the Code and Standards, including the sub sections of each Standard.

Q.89 When establishing trade allocation procedures for client portfolios, members and candidates should *most likely* consider giving all client accounts participating in block trades the:

A. same execution price and charging the same commission.

B. execution price and commission on a first-in, first-out basis.

C. same execution commission and execution price based on a first-in, first-out basis.

When establishing trade allocation procedures for client portfolios, it is most appropriate to give all client accounts participating in block trades the same execution price and charge the same commission. This is because block trades are large trades that are processed at the same time, and therefore, it is fair and equitable to give all participating accounts the same execution price and commission. This ensures that all clients are treated equally and that no client is disadvantaged due to the timing of their trade. This approach aligns with the principles of fairness and equality in the financial industry.

B is incorrect. The suggestion of assigning the execution price and commission on a first-in, first-out basis is not the most appropriate method for block trades. This is because block trades are processed as a single unit, and therefore, it is not feasible to apply a first-in, first-out basis. This method would create a situation where the first orders in the block trade would receive a different execution price and commission than the later orders, which would not be fair or equitable. This approach would also be more complex and time-consuming to implement, which could potentially delay the execution of the block trade.

C is incorrect. This option suggests giving the same execution commission and execution price based on a first-in, first-out basis. This is not the most appropriate method for block trades for the same reasons as mentioned for option B. Block trades are processed as a single unit, and it is not feasible or fair to apply a first-in, first-out basis. This approach would create a situation where the first orders in the block trade would receive a different execution price and commission than the later orders. This would not be fair or equitable and would also be more complex and time-consuming to implement.

CFA Level 1, Topic 10, Reading 71 – Guidance for Standards I-VII, LOS 71a: Demonstrate the application of the Code of Ethics and Standards of Professional Conduct to situations involving issues of professional integrity.

Q.90 Martha Lopez is a portfolio manager at Hampshire Bank (HB), a local investment bank in Florida. HB's policy is to allocate trades fairly and equitably to all client accounts. Lopez trades small-cap and mid-cap stocks on behalf of her clients. Following a severe decline in small-cap stocks, Lopez significantly reduces the allocation to these stocks from portfolios most sensitive to losses first followed by other client accounts. She also decides to increase the allocation to mid-cap stocks for all client accounts. She fully discloses the actions to her clients after she completes the trades.
Lopez has *least likely* violated the CFA Institute Standards of Professional Conduct relating to:

A. Fair dealing.

B. Loyalty, prudence, and care.

C. Diligence and reasonable basis.

Martha Lopez, as a portfolio manager, has shown loyalty, prudence, and care in her actions. She has prioritized the interests of her clients over her own or her firm's interests. After observing a severe decline in small-cap stocks, she reduced the allocation to these stocks from portfolios most sensitive to losses first, followed by other client accounts. This action demonstrates her prudence and care in managing her clients' portfolios. She also decided to increase the allocation to mid-cap stocks for all client accounts, which could be seen as a strategic move to balance the portfolios and mitigate potential losses from the small-cap stocks. Furthermore, she fully disclosed her actions to her clients after she completed the trades, showing transparency and loyalty to her clients.

A is incorrect. The fair dealing standard requires investment professionals to deal fairly and objectively with all clients when providing investment analysis, making investment recommendations, taking investment action, and engaging in other professional activities. In this case, Lopez has not acted fairly with all her client accounts by giving priority to the most sensitive client accounts when selling small-cap shares. This action could be seen as a violation of the fair dealing standard. She should have considered a more equitable approach in allocating trades to ensure fair dealing with all her clients.

C is incorrect. The standard concerning diligence and reasonable basis requires investment professionals to exercise diligence, independence, and thoroughness in analyzing investments, making investment recommendations, and taking investment actions. Lopez's decision to increase the allocation to mid-cap stocks without conducting a thorough analysis could potentially violate this standard. She should have conducted a comprehensive analysis of the mid-cap stocks before deciding to increase their allocation in her clients' portfolios. This would have ensured that her decision was based on a reasonable and adequate basis.

CFA Level I, Topic 10, Ethics, Learning Module 5: Ethics Application. LOS (b): Explain how the practices, policies, and conduct do or do not violate the CFA Institute Code of Ethics and Standards of Professional Conduct.
