Level I of the CFA® Exam

Mock Questions with Answers - Mock Exam 2025 #1 - First Session (Ethical and Professional Standards, Quantitative Methods, Economics & Financial Statement Analysis)

Offered by AnalystPrep

Last Updated: Mar 3, 2025

Q.1 Suppose your portfolio has declined in value from $1,240,000 to $1,114,000 during the year. The continuously compounded rate of return is *closest to*:

A. -12.48%

B. -10.71%

C. -6.21%

The formula for continuous compounding is as follows:

Continuous rate = ln(1 + HPR) = ln(S1/S0)

Where S1 is the value at the end of the period and S0 is the value at the beginning of the period.

Applying this formula to the given scenario, where the portfolio value has declined from $1,240,000 (S0) to $1,114,000 (S1), we get:

ln(1,114,000/1,240,000) = -0.1071 or -10.71%

CFA Level 1, Topic 1 - Quantitative Methods, Learning Module 1 – Rates and Return, LOS 1d: Calculate and interpret annualized return measures and continuously compounded returns and describe their appropriate uses.

Q.2 Which of the following is the *most accurate* definition of a Type II error?

A. Rejecting the null hypothesis when it is true.

B. Rejecting the null hypothesis when it is false.

C. Failure to reject the null hypothesis when it is false.

In statistics, errors are classified into two types: Type I and Type II. A Type II error, as defined in option C, is the failure to reject the null hypothesis when it is false. This means that we accept the null hypothesis as true, even though it is not. This can occur due to various reasons such as insufficient sample size, inappropriate statistical tests, or lack of power in the study. This error is considered more serious than a Type I error because it leads to accepting a false premise as true, which can have significant implications in decision-making processes. Therefore, option C is the most accurate definition of a Type II error.

A is incorrect. This option defines a Type I error, not a Type II error. A Type I error is the rejection of the null hypothesis when it is true. This means that we reject the null hypothesis, assuming it to be false, even though it is true. This type of error is also known as a false positive. It can occur due to various reasons such as the use of inappropriate statistical tests, bias in data collection, or even pure chance. While this error is less serious than a Type II error, it can still lead to incorrect conclusions and decisions.

B is incorrect. This option describes the correct action when the null hypothesis is false, which is to reject it. This is not an error but the desired outcome in hypothesis testing. If the null hypothesis is false and we reject it, we are making a correct decision. This is the goal of any statistical test - to correctly identify the truth or falsity of the null hypothesis. Therefore, this option does not define a Type II error.

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.3 A pension fund manager expects that payments of $1,500,000 per year will be paid to retirees starting at the beginning of Year 6. They will extend until Year 19. The discount rate is 8% compounded annually. The present value of the pension liability today is *closest to*:

A. $7,792,901.63

B. $8,416,333.80

C. $12,366,355.50

We need to calculate the present value (PV) of an ordinary annuity with 14 payments from the perspective of Year 5. The formula for calculating the present value of an ordinary annuity is:

$$PV = A \times \left[\frac{1 - \frac{1}{(1+r)^N}}{r}\right]$$

Where A is the annuity payment, r is the discount rate, and N is the number of periods. Substituting the given values into the formula, we get:

$$PV = 1,500,000 \times \left[\frac{1 - \frac{1}{(1+0.08)^{14}}}{0.08}\right] = 12,366,355.5$$

This gives us the present value at Year 5. To find the present value today (at t=0), we need to discount this amount back 5 years using the same discount rate of 8%. This gives us:

$$PV = \frac{12,366,355.5}{(1+0.08)^5} = 8,416,333.80$$

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.4 Zeng is developing a regression model to predict stock market returns using the GDP growth rate. He considers quarterly returns of the S&P 500 (S&P) as a proxy for stock market returns and quarterly changes in GDP as GDP growth rate (GDP Growth). The linear regression model is as follows:

$$\text{S\&P} = \beta_0 + \beta_1(\text{GDP Growth}) + \epsilon$$

Zeng develops the following partial ANOVA table and regression statistics based on the last 10 years of quarterly data pertaining to the S&P 500 and GDP.

	DF	Sum of Squares
Regression	1	108
Residual	38	To be calculated
Total	39	155.5

The standard error of the estimate for Zeng's model to predict stock market returns using the GDP growth rate is *closest to*:

A. 0.0366.

B. 0.0534.

C. 1.1180.

$$\text{Standard Error of Estimate}(s_e) = \sqrt{\frac{\text{sum of square of errors}}{n-2}}$$

Where:

$$\text{Sum of square of Errors} = \text{SST-SSR} = 155.5 - 108 = 47.5$$
$$n = 40 \text{ (Based on 10 years of quarterly data)}$$

Thus,

$$s_e = \sqrt{\frac{47.5}{40-2}} = 1.1180$$

CFA Level 1, Topic 1 – Quantitative Methods, Learning Module 10 – Simple Linear Regression, LOS 10c: Calculate and interpret measures of fit and formulate and evaluate tests of fit and of regression coefficients in a simple linear regression.

Q.5 An analyst wishing to assess whether the economy has reached the peak of the business cycle would *most likely* be best advised to look for indications that:

A. Businesses have slowed their rate of hiring.

B. Businesses have begun to purchase heavy equipment.

C. The economy is showing moderate or possibly falling rates of inflation.

To assess if an economy has reached the peak of the business cycle, an analyst should most likely observe the rate of hiring among businesses. At the peak, hiring typically slows as demand stabilizes and the urgency to meet higher production needs diminishes. This slowdown is a key indicator that the business cycle may be nearing its upper limit before a potential downturn.

During the expansion phase, companies increase hiring to capitalize on growing demand. However, as the economy approaches the peak, the rate of hiring decelerates because there is less need for additional labor to fulfill orders, signaling that the economy might be at or near the peak of its cycle.

B is incorrect. Purchasing heavy equipment typically indicates that businesses are preparing for future growth or recovery, suggesting a position earlier in the business cycle. This type of investment is usually observed when businesses anticipate a long-term increase in production, not when the economy is at its peak.

C is incorrect. Moderate or falling rates of inflation can occur at various stages of the business cycle, not exclusively at the peak. While inflationary trends are important economic indicators, they are not definitive signals of the peak phase of the business cycle alone, as inflation can be influenced by various factors beyond immediate economic conditions.

CFA Level 1, Topic 1 – Economics, Learning Module 2 – Understanding Business Cycles, Los 2a: describe the business cycle and its phases.

Q.6 Chris Summing is analyzing Hedge funds' performances over the past 4 years. He divided the industry into 2 categories: global macro hedge funds and non-global macro hedge funds. The *most appropriate* sampling method utilized is;

A. Systematic Sampling.

B. Simple random sampling.

C. Stratified random sampling.

In stratified random sampling, the population is divided into distinct, non-overlapping subgroups or strata. Each stratum is then sampled as an independent sub-population, from which individual elements can be randomly selected. This method is particularly useful when dealing with a population that has significant differences or variations. In the context of the question, Chris Summing is analyzing Hedge funds' performances and has divided the industry into two categories: global macro hedge funds and non-global macro hedge funds. These two categories represent distinct strata within the population of hedge funds. By using stratified random sampling, Chris can ensure that each stratum is adequately represented in the sample, thereby increasing the accuracy and reliability of the analysis. This method allows for more precise estimates and inferences about specific subgroups within the population, which would not be possible with a more generalized random sample.

A is incorrect. Systematic sampling involves selecting members from a larger population according to a random starting point and a fixed, periodic interval. This interval, known as the sampling interval, is determined by dividing the population size by the desired sample size. While systematic sampling can be an effective method in certain situations, it is not the most appropriate method in this case. This is because systematic sampling does not account for the distinct categories or strata that Chris has identified within the hedge fund industry. Therefore, it would not ensure that each stratum is adequately represented in the sample, which could lead to biased or inaccurate results.

B is incorrect. Simple random sampling involves selecting a sample from the entire population in such a way that each member or element of the population has an equal chance of being selected. While this method is straightforward and easy to implement, it does not account for the distinct strata within the population. In the context of the question, simple random sampling would not ensure that both global macro hedge funds and non-global macro hedge funds are adequately represented in the sample. This could lead to skewed results and inaccurate conclusions about the performance of the different types of hedge funds.

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.7 Which of the following is *least likely* to be a way through which globalization can increase non-state actors' profits?

A. Reducing costs.

B. Increasing sales.

C. Increasing investment flows.

Investment flows, while a significant aspect of globalization, do not directly contribute to the increase in profits for non-state actors in the same manner as reducing costs or increasing sales. Investment flows refer to the movement of capital across borders, encompassing both portfolio investments, which are typically short-term and involve the purchase of securities, and foreign direct investments (FDIs), which are long-term commitments and involve acquiring a lasting interest in or control over a foreign company. While these flows are crucial for the global economy and can lead to increased economic activity, they are not a direct mechanism through which non-state actors, such as multinational corporations or international NGOs, increase their profits. Instead, investment flows are more about the allocation of resources across borders rather than the immediate generation of profit.

A is incorrect. Reducing costs directly contributes to an increase in profits for non-state actors. In the context of globalization, companies can leverage international differences in the cost of labor, taxation, and regulatory environments to significantly lower their operational costs. For instance, by outsourcing production to countries with lower labor costs or moving parts of their operations to countries with more favorable tax regimes, non-state actors can reduce their expenses, thereby increasing their profit margins. This strategy is a direct and effective way of enhancing profitability through globalization.

B is incorrect. Increasing sales is another direct method through which non-state actors can boost their profits as a result of globalization. By entering new markets and expanding their customer base internationally, companies can significantly increase their sales volumes. Globalization facilitates access to a broader range of markets beyond domestic borders, allowing non-state actors to tap into emerging markets and regions with high demand for their products or services. This expansion is a key driver of revenue growth and, by extension, profit increases for companies operating on a global scale. Hence, increasing sales through globalization is a straightforward and impactful way for non-state actors to enhance their profitability.

CFA Level 1, Topic 1 – Economics, Learning Module 5 – Introduction to Geopolitics, LOS 5b: Describe geopolitics and its relationship with globalization.

Q.8 S&M Bank's Certificate of Deposit (CD) pays 10% compounded semi-annually. The bank allows the investor to reinvest the interest at the same rate for two years. The worth of the CD at maturity if the investor currently invests $200,000 will be *closest* to:

A. $242,000.00

B. $243,101.25

C. $243,680.58

The question is asking for the future value of a lump sum investment with semi-annual compounding. The formula for calculating the future value (FV) of a lump sum with semi-annual compounding is given by:

$$FV_N = PV1 + \frac{r_s}{m}^{mN}$$

Where:

PV = Present value of investment.

r = Interest rate.

m = Semi-annual compounding periods.

N = Maturity period of the investment.

Substituting the given values into the formula, we get:

$$FV_N = 200,0001 + \frac{0.1}{2}^{2\times2} = \$200,000 \times 1.216 = \$243,101.25$$

This calculation can also be done using a financial calculator. For the BA II Plus Pro Calculator, the inputs would be:

$PV = -\$200,000; I/Y = 10/2 = 5; N = 2 \times 2 = 4; PMT = 0; CPT => FV = \$243,101.25$

A is incorrect. This option represents the future value after two years, assuming annual compounding. The formula for annual compounding is

$$FV_N = \$200,0001 + 0.1^2 = \$242,000$$

. This is not the correct calculation because the problem specifies semi-annual compounding, not annual compounding. Therefore, using the annual compounding formula will not yield the correct future value.

C is incorrect. This option represents the future value after two years, assuming quarterly compounding. The formula for quarterly compounding is

$$FV_N = 200,0001 + \frac{0.1}{4}^{4\times2} = \$200,000 \times 1.218 = \$243,680.58$$

. This is not the correct calculation because the problem specifies semi-annual compounding, not quarterly compounding. Therefore, using the quarterly compounding formula will not yield the correct future value.

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.9 What *most likely* happens to the consumer surplus of the importing country when tariffs are imposed?

A. The consumer surplus increases.

B. The consumer surplus decreases.

C. There Is no change in the consumer surplus.

Option B is the correct answer because a tariff, which is essentially a tax on imported goods, is a trade restriction that is designed to protect domestic producers from international competition. When a tariff is imposed, it increases the cost of imported goods. This increase in cost is passed on to the consumers, making the imported goods more expensive. As a result, consumers are forced to pay more for these goods than they were previously willing to pay, leading to a decrease in consumer surplus. Consumer surplus is the difference between what consumers are willing to pay for a good or service and what they actually pay. Therefore, when the price of goods increases due to tariffs, the consumer surplus decreases because consumers are now paying more than they were willing to pay. This also leads to an increase in the consumption of locally produced products, as they become relatively cheaper compared to the imported goods.

A is incorrect. As explained above, a tariff increases the price of imported goods, which in turn decreases the consumer surplus. The consumer surplus increases when the price of a good falls and decreases when the price of a good rises. Therefore, when tariffs are imposed, the price of imported goods rises, leading to a decrease in consumer surplus. The increase in the consumption of locally produced products due to the imposition of tariffs does not lead to an increase in consumer surplus, but rather a shift in consumption patterns from imported goods to locally produced goods.

C is incorrect.As explained above, tariffs increase the price of imported goods, which leads to a decrease in consumer surplus. The consumer surplus is affected by any change in the price of goods, whether it is an increase or a decrease. Therefore, the imposition of tariffs, which leads to an increase in the price of imported goods, results in a change in the consumer surplus, specifically a decrease.

CFA Level 1, Topic 1 – 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.10 The correlation coefficient of Microsoft and Apple’s stock returns is 0.7. The return variance of Microsoft is 0.004, and the return variance of Apple is 0.008. The covariance of Microsoft and Apple’s stocks is *closest to*:

A. 0.000795

B. 0.00395

C. 0.02

The correlation coefficient of Microsoft and Apple’s stock returns is given as 0.7. The return variance of Microsoft is 0.004, and the return variance of Apple is 0.008. The covariance of Microsoft and Apple’s stocks can be calculated using the formula:

Covariance = Correlation Coefficient × Standard Deviation of Microsoft × Standard Deviation of Apple

Before we can use this formula, we need to calculate the standard deviations of Microsoft and Apple's stock returns. The standard deviation is the square root of the variance, so:

Standard Deviation of Microsoft ($\sigma_{\text{Microsoft}}$) = $\sqrt{0.004}$ = 0.0632

Standard Deviation of Apple (σ_{Apple}) = $\sqrt{0.008}$ = 0.0894

With these values, we can now calculate the covariance:

$\text{Cov}(\text{Microsoft}, \text{Apple}) = 0.7 \times 0.0632 \times 0.0894$

$\text{Cov}(\text{Microsoft}, \text{Apple}) = 0.00395$

A is incorrect. A covariance of 0.000795 would imply a much lower correlation between the stock returns of Microsoft and Apple, given their respective standard deviations. This is not consistent with the given correlation coefficient of 0.7.

C is incorrect. A covariance of 0.02 would suggest a much higher correlation between the stock returns of Microsoft and Apple, given their respective standard deviations. This is not consistent with the given correlation coefficient of 0.7. It would also imply a much higher degree of joint variability in the returns of the two stocks than is suggested by their individual variances.

CFA Level 1, Topic 1 - Quantitative Methods, Learning Module 3 – Statistical Measures of Asset Returns, LOS 3d: Interpret the correlation between two variables to address an investment problem.

Q.11 Kelly Cronin is one of the statistical experts at CMSSP. He is presently using internally-developed software to explain the relationship between a company’s EPS growth and profitable opportunities as measured by the spread between the equity return on new projects and the firm’s cost of equity. After regressing a sample company’s historical EPS on its return spread for the past ten years, Cronin presented the results to his superior, Brendan Tracy. The following table displays the results of the regression:

Exhibit 1: Explaining EPS Growth by Changes in the Return Spread

	Coefficients	Standard error
Intercept	1.207	0.5522
Return spread	22.901	1.992

Regression Statistics

Standard error of estimate	1.120
Observations	62
Mean return spread	0.0943
Variance of mean return spread	0.007721

An excerpt of the t-table is given below.

df	p = 0.10	p = 0.05	p = 0.025	p = 0.01	p = 0.005
50	1.299	1.676	2.009	2.403	2.678
60	1.296	1.671	2.000	2.390	2.660
70	1.294	1.667	1.994	2.381	2.648

Using the information provided in Exhibit 1, and the return spread of 15%, the 95 percent prediction interval for EPS growth will be *closest to*:

A. 2.38% to 6.91%.

B. 2.40% to 6.88%.

C. 2.08% to 7.21%.

The first step in this analysis is to make a prediction for the EPS growth. This is done by using the formula:

EPS growth = 1.207 + b (spread between the equity return on new projects and the firm's cost of equity)

Substituting the given values into the formula, we get:

EPS growth = 1.207 + 22.901(0.15) = 4.6421%

The next step is to compute the variance of the forecast or prediction error, denoted as s_f^2. This requires the following values:

- Squared standard error of the estimate: s_e^2

- Value of independent variable: X

- Mean return spread: $\bar{X}$

- Variance of the mean return spread: s_x^2

Using these values, we can apply the formula for s_f^2:

$$s_f^2 = s_e^2[1 + \frac{1}{n} + \frac{(X-\bar{X})^2}{(n-1)s_X^2}]$$

Substituting the given values into the formula, we get:

$$s_f^2 = 1.12^2[1 + \frac{1}{62} + \frac{(0.15-0.0943)^2}{(62-1)0.007721}] = 1.282895$$

Thus, the standard deviation of the forecast error, s_f, is the square root of s_f^2, which is approximately 1.13265.

The critical value of the t-statistic, t_c, given a 95% confidence interval and (62 – 2) = 60 degrees of freedom, is approximately 2.00. Finally, the prediction interval is calculated as:

$4.642 \pm t_c s_f = 4.642 \pm 2(1.113265) = [2.3767\% \text{ to } 6.9073\%]$

CCFA Level 1, Topic 1 – Quantitative Methods, Learning Module 10– Simple Linear Regression, LOS 10c: Calculate and interpret measures of fit and formulate and evaluate tests of fit and of regression coefficients in a simple linear regression

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Q.12 If the significance level of a test is 0.05 and the probability of a type II error is 0.25, the power of the test is *closest to*:

A. 0.2

B. 0.7

C. 0.75

The power of a statistical test is defined as the probability that it correctly rejects the null hypothesis when the null hypothesis is false. It is calculated as 1 minus the probability of a Type II error. In this case, the probability of a Type II error is given as 0.25. Therefore, the power of the test can be calculated as 1 - 0.25 = 0.75. This means that there is a 75% chance that the test will correctly reject the null hypothesis when it is false. This is a relatively high power, indicating that the test is likely to be effective at detecting a false null hypothesis.

A is incorrect. A power of 0.2 would mean that there is only a 20% chance that the test will correctly reject the null hypothesis when it is false. This is significantly lower than the actual power of the test, which is 0.75. This discrepancy arises from the incorrect assumption that the power of the test is equal to the significance level, which is not the case. The significance level is the probability of rejecting the null hypothesis when it is true, not the probability of correctly rejecting it when it is false.

B is incorrect. A power of 0.7 would mean that there is a 70% chance that the test will correctly reject the null hypothesis when it is false. While this is closer to the actual power of the test than option A, it is still not correct. The discrepancy arises from the incorrect assumption that the power of the test is equal to 1 minus the significance level, which is not the case. The power of the test is calculated as 1 minus the probability of a Type II error, not 1 minus the significance level.

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.13 Which of the following is the *least likely* motivation for globalization among non-state actors?

A. Intrinsic gain.

B. Currency exchange.

C. Access to resources and markets.

The reason for this is that while currency exchange is indeed a characteristic of globalization, it is not necessarily a primary motivation for non-state actors to engage in globalization. Non-state actors, such as multinational corporations, non-governmental organizations, and international non-profit organizations, typically globalize for reasons that directly benefit their operations or objectives. Currency exchange, while an aspect of global financial transactions, is more of a byproduct of globalization rather than a driving force. It is a mechanism that facilitates global trade and investment, but it is not a goal or motivation in and of itself.

A is incorrect. Intrinsic gain is indeed a motivation for globalization among non-state actors. Intrinsic gain refers to benefits that go beyond mere profit. For instance, a non-state actor might globalize to learn new methods and practices that can enhance productivity, efficiency, or effectiveness. This is a form of intrinsic gain because it provides benefits that extend beyond immediate financial gain. It can lead to long-term improvements in the organization's operations, competitiveness, and sustainability. Therefore, intrinsic gain is a valid and significant motivation for non-state actors to engage in globalization.

C is incorrect. Access to resources and markets is another major motivation for globalization among non-state actors. By globalizing, non-state actors can reach new markets, access diverse resources, and tap into global networks of knowledge, technology, and innovation. This can enable them to expand their operations, increase their revenues, and enhance their competitiveness. It can also provide them with opportunities for investment, collaboration, and strategic partnerships. Therefore, access to resources and markets is a compelling motivation for non-state actors to engage in globalization.

CFA Level 1, Topic 1 – Economics, Learning Module 5 – Introduction to Geopolitics, LOS 5b: describe geopolitics and its relationship with globalization.

Q.14 Consider the correlation coefficient choices below. The correlation coefficient that indicates the weakest linear relationship is *closest to*:

A. -0.8

B. 0.35

C. 0.65

In statistics, the correlation coefficient is a measure of the strength and direction of the linear relationship between two variables. It ranges from -1 to +1, where -1 indicates a perfect negative linear relationship, +1 indicates a perfect positive linear relationship, and 0 indicates no linear relationship. The closer the correlation coefficient is to -1 or +1, the stronger the linear relationship. Conversely, the closer the correlation coefficient is to 0, the weaker the linear relationship.

Given the options -0.8, 0.35, and 0.65, the correlation coefficient that indicates the weakest linear relationship is 0.35. This is because 0.35 is closest to 0 among the three options, indicating a weaker linear relationship compared to -0.8 and 0.65.

A is incorrect. The correlation coefficient of -0.8 indicates a strong negative linear relationship. This is because -0.8 is closer to -1, which represents a perfect negative linear relationship. A negative correlation coefficient means that as one variable increases, the other decreases, and vice versa. However, the strength of this relationship is stronger compared to a correlation coefficient of 0.35, making option A incorrect.

C is incorrect. The correlation coefficient of 0.65 indicates a strong positive linear relationship. This is because 0.65 is closer to +1, which represents a perfect positive linear relationship. A positive correlation coefficient means that as one variable increases, the other also increases, and vice versa. However, the strength of this relationship is stronger compared to a correlation coefficient of 0.35, making option C incorrect.

CFA Level 1, 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.15 As Kim Richard has been looking at ways to increase efficiency in the construction process especially with regard to fuel consumption. She ran a regression explaining the variation in fuel consumption as a function of distance. The total variation of the dependent variable was 160.85, the explained variation was 80.15, and the unexplained variation was 100.70. She had 60 monthly observations. The standard error of the estimate in the regression is *closest to*:

A. 1.32

B. 1.52

C. 1.74

The standard error of the estimate is a measure of the accuracy of predictions made with a regression line. It is calculated as the square root of the unexplained variation divided by the number of observations minus two. In this case, the unexplained variation is 100.7 and the number of observations is 60. Therefore, the calculation becomes the square root of 100.7 divided by 58 (60-2), which equals approximately 1.3177. This value is closest to 1.32, hence option A is the correct answer. This calculation is crucial in regression analysis as it helps to understand the dispersion of the data points around the regression line, which in turn helps in making accurate predictions.

B is incorrect. As explained above.

C is incorrect.As explained above

CFA Level 1, Topic 1 – Quantitative Methods, Learning Module 10 – Introduction to Linear regression, LOS 10d: describe the use of analysis of variance (ANOVA) in regression analysis, interpret ANOVA results, and calculate and interpret the standard error of estimate in a simple linear regression.

Q.16 When inventories start to accumulate, the inventories-to-sales ratio reaches its above-normal level. Which phase of the business cycle is *most likely* associated with an increased inventories-to-sales ratio?

A. Peak.

B. Trough

C. Expansion

The peak phase of the business cycle is most likely associated with an increased inventories-to-sales ratio. This is because at the peak of the business cycle, economic activity has reached its maximum. During this phase, demand begins to slow down, but production processes might not yet have adjusted to this decreased demand. As a result, companies end up with more inventory than they can sell, leading to an increase in the inventories-to-sales ratio. This higher ratio is a reflection of slowing sales and accumulated inventory, typical of the peak phase. The peak phase is characterized by high economic activity, but it is also the point where the economy starts to contract. This contraction is often accompanied by a decrease in demand for goods and services. However, production processes, which are often based on forecasts and past sales, may not immediately adjust to this decrease in demand. This lag in adjustment can result in companies producing more goods than they can sell, leading to an accumulation of inventories. This accumulation is reflected in an increased inventories-to-sales ratio, which is a key indicator of the peak phase of the business cycle.

B is incorrect. The trough phase marks the lowest point of the business cycle, where economic activity is at its minimum. In this phase, businesses have usually adjusted their production to meet the lower demand. Consequently, inventories are generally lower and more in line with reduced sales, which does not lead to a significant increase in the inventories-to-sales ratio. In fact, as the economy starts to recover from the trough, businesses may experience lower inventory levels relative to sales as demand begins to pick up again. The trough phase is characterized by low economic activity and low demand for goods and services. During this phase, businesses typically adjust their production processes to align with the decreased demand, resulting in lower inventory levels. As such, the inventories-to-sales ratio during the trough phase is usually lower, reflecting the reduced inventory levels and the beginning of an economic recovery.

C is incorrect. During the expansion phase, the economy is growing, and demand for goods is typically rising. Businesses increase their production to meet this higher demand. In this phase, inventories are often quickly sold, and the focus is on keeping up with demand rather than on accumulating stock. Therefore, the inventories-to-sales ratio tends to be lower or stable as sales increase in proportion to or faster than inventories. The expansion phase is characterized by a growing economy and increasing demand for goods and services. Businesses typically increase their production to meet this increased demand, resulting in a quick turnover of inventories. As such, the inventories-to-sales ratio during the expansion phase is usually stable or decreasing, reflecting the quick turnover of inventories and the focus on meeting the increasing demand.

CFA Level 1, Topic 1 – Economics, Learning Module 2 – Understanding Business cycles, LOS 2c: Describe how resource use, consumer and business activity, housing sector activity, and external trade sector activity vary over the business cycle and describe their measurement using economic indicators.

Q.17 If the exchange rate of Euros in terms of dollars has increased from 1.12 USD/EUR to 1.24 USD/EUR, then the *most likely* impact on prices of goods denominated in Euros is that Euro-denominated goods cost:

A. less in terms of USD.

B. more in terms of USD.

C. the same in terms of USD.

The exchange rate of Euros in terms of dollars has increased from 1.12 USD/EUR to 1.24 USD/EUR. This increase in the exchange rate signifies that more US dollars are now required to purchase the same amount of Euros. In other words, the value of the Euro has appreciated relative to the US dollar.

When we talk about goods that are priced in Euros, this increase in the exchange rate means that these goods will now cost more when their price is converted into US dollars. This is because the purchasing power of the US dollar against the Euro has decreased due to the appreciation of the Euro. Therefore, for someone using US dollars to buy Euro-denominated goods, these goods have effectively become more expensive.

A is incorrect. As explained above, the increase in the exchange rate from 1.12 to 1.24 USD/EUR means that more dollars are now needed to buy the same amount of Euros. This effectively makes Euro-denominated goods more expensive for someone using US dollars, not less. Therefore, option A is not the correct answer.

C is incorrect. The cost of goods in USD terms is directly related to the exchange rate. When the exchange rate increases, as it has in this case from 1.12 to 1.24 USD/EUR, the cost in USD also increases. It does not remain the same. Therefore, option C is not the correct answer.

CFA Level 1, Topic 1 – 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.18 Which of the following is *least likely* a benefit of having strong institutions in a country, with respect to geopolitics?

A. They allow countries to engage internationally with independence.

B. They contribute to more stable internal and external political forces.

C. Increase in the likelihood of a country defecting from its cooperative roles.

Strong institutions such as independent judiciaries, stable democratic governments, and effective regulatory bodies, are more likely to increase a country\'s commitment to its international obligations and cooperative agreements. Strong institutions provide a framework for transparent decision-making, accountability, and oversight, which can help prevent corruption, political instability, and unilateral actions that could undermine international cooperation.

\n

A is incorrect. Countries with strong institutions, including organizations promoting the rule of law and property rights, act internationally with more authority and independence.

\n

B is incorrect. Strong institutions guarantee the stability of internal and external political forces, giving countries more opportunities to develop cooperative relationships.

\n

CFA Level 1, Topic 1, Learning Module 5– Introduction to Geopolitics, LOS 15a: Describe geopolitics from a cooperation versus competition perspective.

Q.19 A survey is conducted to determine if the average starting salary of investment bankers is equal to or greater than $57,000 per year. Given a sample of 115 newly employed investment bankers with a mean starting salary of $65,000 and a standard deviation of $4,500, and assuming a normal distribution, the test statistic is *closest to*:

A. 20.44

B. 19.06

C. 1.78

The standard error of the sample is calculated by dividing the standard deviation by the square root of the sample size. In this case, the standard deviation is $4,500 and the sample size is 115. This gives a standard error of approximately 419.6272.

Once the standard error of the sample is known, the test statistic can be calculated. The test statistic is calculated by subtracting the hypothesized value from the sample mean and then dividing this difference by the standard error of the sample mean. In this case, the sample mean is $65,000 and the hypothesized value is $57,000. This gives a difference of $8,000. When this difference is divided by the standard error of the sample mean (419.6272), the result is approximately 19.06. This is why option B is the correct answer.

A is incorrect. This option suggests that the test statistic is closest to 20.44. However, as explained above, the test statistic is calculated by subtracting the hypothesized value from the sample mean and then dividing this difference by the standard error of the sample mean. Using the given values, this calculation does not result in 20.44. Therefore, option A is not the correct answer.

C is incorrect. This option suggests that the test statistic is closest to 1.78. However, as explained above, the test statistic is calculated by subtracting the hypothesized value from the sample mean and then dividing this difference by the standard error of the sample mean. Using the given values, this calculation does not result in 1.78. Therefore, option C is not the correct answer.

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.20 A portfolio manager of a fixed income has developed the below contingency table of the number of bonds within the portfolio by sector and bond rating.

	Bond-rating		
Sector	A	AA	AAA
Housing	24	33	28
Security	28	26	24
Banking	98	83	36
Agriculture	150	95	61
Transport	20	26	16

The relative frequency of AA-rated banking bonds, based on the total count, is *closest to*:

A. 11.10%

B. 31.56%

C. 39.17%

In this case, the AA-rated banking bonds are 83, and the total count of all bond rating values is 748. The calculation is as follows:

$$\text{Relative frequency} = \frac{\text{AA-rated sector bond value}}{\text{Total count of all bond rating values}} = \frac{83}{748} = 11.10\%$$

This calculation gives us the proportion of AA-rated banking bonds in the entire portfolio, which is the definition of relative frequency in this context.

B is incorrect. The value of 31.56% is the relative frequency for AA-rated banking bonds, but it is calculated based on the marginal frequency for all AA-rated bonds, not the total count of all bond rating values. The calculation is as follows:

$$\text{Relative frequency} = \frac{\text{AA-rated sector bond value}}{\text{Total count of all bond rating values}} = \frac{83}{33+26+83+95+26} = 31.56\%$$

This calculation gives us the proportion of AA-rated banking bonds among all AA-rated bonds, which is not what the question is asking for. The question is asking for the relative frequency based on the total count of all bond rating values, not just the AA-rated ones.

C is incorrect. The value of 39.17% is the relative frequency for AA-rated banking bonds, but it is calculated based on the marginal frequency for all banking bonds, not the total count of all bond rating values. The calculation is as follows:

$$\text{Relative frequency} = \frac{\text{AA-rated sector bond value}}{\text{Total count of all bond rating values}} = \frac{83}{98+83+36} = 39.17\%$$

This calculation gives us the proportion of AA-rated banking bonds among all banking bonds, which is not what the question is asking for. The question is asking for the relative frequency based on the total count of all bond rating values, not just the banking ones.

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.21 Which of the following is the name given to the demand curve in an oligopolistic pricing strategy?

A. Vertical demand curve.

B. Kinked demand curve.

C. Horizontal demand curve.

The kinked demand curve is used to describe the demand curve in an oligopolistic pricing strategy. The kinked demand curve model is a theory that explains the pricing behavior of oligopolies. In an oligopolistic market, each firm faces a unique demand curve that is "kinked" at the current price. The model is based on a few key assumptions:

If a firm raises its price, its competitors will not follow suit. This leads to a significant loss in market share for the firm that increased its price. This part of the demand curve is relatively elastic, meaning that the quantity demanded is sensitive to changes in price.

If a firm lowers its price, competitors are likely to match the price decrease in order to maintain their market share. This part of the demand curve is relatively inelastic, meaning that the quantity demanded is not very sensitive to changes in price.

The "kink" in the demand curve is at the current price level. This kink reflects the asymmetrical reaction of competitors to price changes. In other words, competitors are more likely to respond to a price decrease than a price increase.

A is incorrect. A vertical demand curve suggests that the quantity demanded does not change with price. This is not typical in oligopolistic markets. Oligopolies, which are characterized by a few dominant firms, usually experience a change in demand when there are price variations. In other words, the quantity demanded is not fixed but varies with the price, which contradicts the concept of a vertical demand curve.

C is incorrect. A horizontal demand curve implies perfect elasticity, where any change in price leads to an infinite change in quantity demanded. This is more indicative of perfect competition, not oligopoly. In a perfectly competitive market, firms are price takers and cannot influence the market price. Therefore, they face a horizontal demand curve. However, in an oligopoly, firms have some degree of market power and can influence the price, which contradicts the concept of a horizontal demand curve.

CFA Level 1, Topic 1 – Economics, Learning Module 1 – Firm and market structures, LOS 1d: explain supply and demand relationships under oligopoly, including the optimal price and output for firms as well as pricing strategy.

Q.22 The data collected from such devices as smart phones, cameras, RFID chips, is referred as:

A. generated by sensors.

B. generated by individuals.

C. generated by business processes.

In the era of digitalization, data is collected from a myriad of devices such as smartphones, cameras, RFID chips, and satellites. This data is often referred to as sensor data, making option A the correct answer. The reason behind this is that these devices are equipped with sensors that capture various types of data. For instance, smartphones have multiple sensors like GPS, accelerometer, gyroscope, etc., that generate data about the user's location, movement, orientation, and so on. Similarly, cameras capture visual data, RFID chips generate data about the objects they are attached to, and satellites collect data about the earth's surface, weather conditions, etc. All these devices are usually connected to computers via wireless networks, which further process and analyze the collected sensor data.

B is incorrect. While it's true that individuals do generate data, the context of the question is about data collected from devices like smartphones, cameras, RFID chips, etc. The data generated by individuals typically comes in the form of text, video, photo, and audio formats. This could be through social media posts, website clicks, time spent on a webpage, and other digital interactions. However, this data is often unstructured and requires sophisticated tools and techniques for processing and analysis.

C is incorrect. Business process data usually comes from corporations and other public entities. It includes information flows such as credit card data, sales information, corporate exhaust, and other structured data related to the operations of a business. While this data is crucial for business decision-making, it does not align with the context of the question, which is about data collected from devices like smartphones, cameras, RFID chips, etc.

CFA Level 1, Topic 1 – Quantitative Methods, Learning Module 11 – Introduction to Big Data Techniques, LOS 11b: Describe Big Data, Artificial Intelligence, and Machine Learning.

Q.23 Which of the following statements is *most accurate*? Bootstrap resampling technique:

A. treats the initial sample as a stand-in for the entire population, allowing for the creation of a sampling distribution through repeated resampling.

B. requires conventional analytical formulas like z-statistics to create a sampling distribution for statistical inferences.

C. information about the population is essential to mimic the process of drawing samples from the population.

The Bootstrap resampling technique indeed treats the initial sample as a stand-in for the entire population, allowing for the creation of a sampling distribution through repeated resampling. This method is a powerful statistical tool that allows us to estimate the sampling distribution of almost any statistic. It works by repeatedly drawing samples (with replacement) from the original data sample and recalculating the statistic for each resample. This process builds an empirical representation of the sampling distribution of the statistic. The bootstrap method is particularly useful when the theoretical distribution of the statistic is complicated or unknown. It allows us to make inferences about the population based on the sample data.

B is incorrect. The statement that Bootstrap resampling requires conventional analytical formulas like z-statistics to create a sampling distribution for statistical inferences is not accurate. In fact, one of the main advantages of the Bootstrap resampling technique is that it bypasses the need for conventional analytical formulas like z-statistics. Instead, it relies on computer simulations to create a sampling distribution for statistical inferences. This makes it a very flexible and powerful tool, especially when dealing with complex statistical models where traditional methods are difficult to apply or interpret.

C is incorrect. The statement that information about the population is essential to mimic the process of drawing samples from the population in Bootstrap resampling is not accurate. In reality, in Bootstrap resampling, we do not have information about the population. Our only insight comes from a sample drawn from the "unknown population." The technique relies on the sample to mimic the process of drawing samples from the population. This is one of the key features of the Bootstrap resampling technique, as it allows us to make inferences about the population based on the sample data, without needing to know anything about the population itself.

CFA Level I, Topic 1 - Quantitative Methods, Learning Module 6, Simulation Methods, LOS 7c: describe the use of bootstrap resampling in conducting a simulation based on observed data in investment applications.

Q.24 Given the following set: 3.1%, 5.3%, 4.3%, 12.1%, 4.2%, 12.8%, 1.8%, the third quartile is *closest to*:

A. 4.3%

B. 12.1%

C. 12.8%

Quartiles are values that divide a set of data into four equal parts. The third quartile, also known as the upper quartile, is the value below which 75% of the data falls. In other words, it is the median of the upper half of the data set.

To calculate the third quartile, we first need to arrange the data in ascending order. The given set, when arranged in ascending order, is: 1.8, 3.1, 4.2, 4.3, 5.3, 12.1, 12.8. The formula to find the position of the third quartile is $(n+1) \times \frac{75}{100}$, where n is the number of observations. In this case, n is 7, so the position of the third quartile is $(7+1) \times \frac{75}{100} = 6$. This means the third quartile is the 6th observation in the ordered data set, which is 12.1.

A is incorrect. This option suggests that the third quartile is 4.3%. However, in the ordered data set, 4.3% is the 4th observation, not the 6th. Therefore, it does not represent the value below which 75% of the data falls, and so it cannot be the third quartile.

C is incorrect. This option suggests that the third quartile is 12.8%. However, in the ordered data set, 12.8% is the 7th observation, not the 6th. Therefore, it does not represent the value below which 75% of the data falls, and so it cannot be the third quartile. Furthermore, as the highest value in the data set, 12.8% is actually the maximum, or the "upper fence", not the third quartile.

CFA Level 1, Topic 2 – 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.25 Which of the following is the primary objective of most central banks?

A. Controlling inflation.

B. Maintaining price stability.

C. Controlling unemployment.

The primary objective of most central banks is to maintain price stability. This is because price stability is a key factor in ensuring a healthy economy. When prices are stable, it encourages economic growth and stability, as it allows businesses and individuals to make long-term plans and investments without worrying about sudden changes in prices. This stability in prices also helps to maintain the value of the currency, which is crucial for international trade and investment. Therefore, while controlling inflation and unemployment are important functions of central banks, they are secondary to the main goal of maintaining price stability.

A is incorrect. While controlling inflation is indeed a function of central banks, it is not their primary objective. Inflation control is a means to an end, with the end being price stability. Inflation erodes the purchasing power of money, which can lead to economic instability. Therefore, central banks aim to control inflation to maintain price stability. However, the primary objective is not to control inflation per se, but to ensure price stability.

C is incorrect. Controlling unemployment is another function of central banks, but again, it is not their primary objective. Unemployment can lead to social and economic problems, and central banks use various tools to try to keep unemployment at a manageable level. However, the primary objective of central banks is to maintain price stability, as this is the most direct way they can contribute to a healthy and stable economy.

CFA Level 1, Topic 2 – Economics, Learning Module 4 – Monetary Policy, LOS 4a: Describe the roles and objectives of central banks.

Q.26 As an economic analyst at a large financial firm, Grace is tasked with assessing the potential impact of recent changes in housing permits and construction data on future economic trends. Given the leading nature of these indicators, what conclusions might Grace *most likely* draw about the forthcoming economic conditions?

A. Stagnant construction data suggests a rapid economic turnaround is imminent.

B. The economy is likely to enter an expansion phase if housing permits and construction activities are increasing.

C. A decrease in housing permits indicates immediate improvements in consumer confidence and economic stability.

Option B is the correct answer because increases in housing permits and construction activities are leading indicators that typically precede economic expansion. These indicators suggest that developers are confident in future economic conditions, prompting them to invest in new projects. This investment can stimulate various sectors of the economy through increased employment and spending. The construction industry is a significant contributor to the economy, and an increase in construction activities can lead to job creation, increased consumer spending, and overall economic growth. Therefore, if housing permits and construction activities are increasing, it is a strong indication that the economy is likely to enter an expansion phase.

A is incorrect. Stagnant construction data more likely indicates uncertainty or a cautious approach among investors and developers. This could be due to various factors such as economic instability, high interest rates, or a decrease in consumer confidence. These conditions do not suggest a rapid economic turnaround. Instead, they indicate that the economy may not turn around quickly as investors and developers are waiting for more favorable conditions before committing to new projects.

C is incorrect. A decrease in housing permits typically signals a lack of confidence in future economic conditions. This could be due to a variety of factors such as high interest rates, economic instability, or a decrease in consumer spending. These conditions do not suggest immediate improvements in consumer confidence and economic stability. Instead, they indicate a potential slowdown in the economy as developers are less willing to invest in new projects due to unfavorable economic conditions.

CFA level 1, Topic 2 - Economics, Learning Module 2 - Understanding Business Cycles, LOS 2c: Describe how resource use, consumer and business activity, housing sector activity, and external trade sector activity vary over the business cycle and describe their measurement using economic indicators.

Q.27 When the economy bounces back from a prolonged period of contraction, the inventory turnover ratio of most companies will *most likely*:

A. Start to increase.

B. Start to decrease.

C. Remain unchanged.

The inventory turnover ratio is a measure of how quickly a company sells its inventory. It is calculated by dividing sales by average inventory. When the economy recovers from a prolonged period of contraction, it is expected that sales will increase as consumer confidence and spending power improve. This increase in sales will lead to a depletion of accumulated inventories, which in turn will increase the inventory turnover ratio. This is because the ratio is directly proportional to sales - as sales increase, so does the inventory turnover ratio.

B is incorrect. As explained above, an economic recovery typically leads to an increase in sales, which in turn increases the inventory turnover ratio. The ratio would only decrease if sales were to decrease or if average inventory were to increase significantly, neither of which are typical characteristics of an economic recovery.

C is incorrect. The inventory turnover ratio is a dynamic measure that is influenced by changes in both sales and average inventory. In a recovering economy, it is expected that both of these factors will change - sales will increase and average inventory will decrease as accumulated stock is sold off. These changes will result in a change in the inventory turnover ratio, making option C incorrect.

CFA Level 1, Topic 2 – Economics, Learning Module 2 – Understanding Business Cycles, LOS 2c: Describe how resource use, consumer and business activity, housing sector activity, and external trade sector activity vary over the business cycle and describe their measurement using economic indicators.

Q.28 The time governments take to discuss, vote, and enact fiscal policies is *most likely*called:

A. Action lag.

B. Impact lag.

C. Recognition lag.

Action lag is the term used to describe the time taken between the identification of the need for government intervention in the economy through fiscal policy and the actual implementation of these policy measures. This lag includes all the steps involved in the policy-making process, such as discussion, voting, and enacting legislation. Fiscal policies often require extensive debate, legislative approval, and administrative setup, all of which contribute to the length of the action lag. The process of enacting fiscal policies is often complex and time-consuming, involving multiple stages of discussion and approval. This is why it is referred to as an 'action lag' - because there is a significant delay between the recognition of the need for policy intervention and the actual action of implementing the policy.

B is incorrect. Impact lag, also known as effect lag, refers to the time it takes for the implemented fiscal or monetary policy to have a noticeable effect on the economy. This lag occurs after the policy actions, such as tax changes or government spending adjustments, have been implemented. It represents the delay between the implementation of the policy and the observable impact on economic indicators like GDP, employment, or inflation. While impact lag is a significant aspect of fiscal policy, it is not the term used to describe the time governments take to discuss, vote, and enact fiscal policies.

C is incorrect. Recognition lag is the time delay between the onset of an economic problem, such as a recession or inflation, and when policymakers and economists recognize that there is an issue that needs addressing. This lag can be due to the time it takes to collect and analyze economic data, or due to the delay in perceiving or acknowledging that the economic trend is problematic and not just a short-term fluctuation. While recognition lag is an important concept in economics, it does not refer to the time taken by governments to discuss, vote, and enact fiscal policies.

CFA Level 1, Topic 2 – Economics, Learning Module 3 – Fiscal Policy, LOS 3d: Explain the implementation of fiscal policy and the difficulties of implementation as well as whether a fiscal policy is expansionary or contractionary.

Q.29 Two hypothetical currencies – ABC and XYZ – are trading at a spot rate of 1.60 ABC/XYZ. If the interest rate in ABC and XYZ's countries is 7% and 5%, respectively, the arbitrage-free forward rate ABC/YXZ is *closest to*:

A. 1.6000

B. 1.5701

C. 1.6304

Interest rate parity theory is a fundamental concept in international finance. According to this theory, the difference in interest rates between two countries should be equal to the differential between the forward exchange rate and the spot exchange rate. This is to prevent arbitrage opportunities, where investors could take advantage of discrepancies in interest rates and exchange rates to make risk-free profits.

The formula to calculate the arbitrage-free forward rate is as follows:

$$F_{ABC/XYZ} = S_{ABC/XYZ}\left(\frac{1 + r_{ABC}}{1 + r_{XYZ}}\right)$$

Where:

$F_{ABC/XYZ}$ is the forward rate between ABC and XYZ,

$S_{ABC/XYZ}$ is the spot rate between ABC and XYZ,

r_{ABC} is the interest rate in ABC's country, and

r_{XYZ} is the interest rate in XYZ's country.

In this case, the spot rate is 1.60 ABC/XYZ, the interest rate in ABC's country is 7% (or 0.07 as a decimal), and the interest rate in XYZ's country is 5% (or 0.05 as a decimal). Substituting these values into the formula, we get:

$$\text{Forward rate} = 1.60 \times \frac{1 + 0.07}{1 + 0.05} = 1.6304$$

A is incorrect. This option suggests that the forward rate is the same as the spot rate, which is 1.60. However, this is not consistent with the interest rate parity theory, which states that the forward rate should reflect the difference in interest rates between the two countries. In this case, since the interest rate in ABC's country is higher than that in XYZ's country, the forward rate should be higher than the spot rate.

B is incorrect. This option suggests that the forward rate is calculated by dividing the interest rate in XYZ's country by the interest rate in ABC's country, and then multiplying the result by the spot rate. The calculation would look like this:

$$\text{Forward rate (ABC/XYZ)} = \text{Spot rate (ABC/XYZ)} \times \left(\frac{\text{XYZ interest rate}}{\text{ABC interest rate}}\right)$$

$$= \left(1.60 \times \frac{1.05}{1.07}\right) = 1.5701$$

However, this is not the correct way to calculate the forward rate according to the interest rate parity theory. The correct formula, as stated above, takes into account the difference in interest rates between the two countries, not the ratio of the two interest rates.

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.30 After the 2008 financial crisis, the emerging market economies have demonstrated tremendous GDP growth. The following table contains the hypothetical GDP of 10 emerging markets.

Emerging Markets	GDP (Trillion USD)
Taiwan	1.1
Thailand	1.1
Pakistan	1.3
Iran	1.4
Turkey	1.5
Saudi Arabia	1.6
Korea	1.8
Mexico	2.2
Indonesia	2.8
Brazil	3.2

Using the given data, the 60th percentile of emerging markets GDP is *closest to:*

A. USD 1.72 trillion

B. USD 2.68 trillion

C. USD 6.6 trillion

Since n=10, then

$$\text{60th percentile} = (n + 1) \times \frac{L}{100} = (10 + 1) \times \frac{60}{100} = 6.6$$

The $X_6 = 1.6$ and $X_7 = 1.8$.

Therefore

$$\text{Estimated 60th percentile} = X_6 + 0.6(X_7 - X_6) = 1.6 + 0.6 \times (1.8 - 1.6) = 1.72$$

B is incorrect. It indicates the arithmetic mean of the resulting GDPs.

C is incorrect. It indicates the approximate value of a percentile.

CFA Level 1, Topic 2, 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.31 The USD/GBP spot exchange rate is 0.6985. Assuming a 1-year forward rate quoted as +9.5 points, the 1-year forward USD/GBP rate is *closest to*:

A. 0.6995

B. 0.6976

C. 10.200

Each quoted point also known as a basis point, in a forward exchange rate is equal to 0.01% or 0.0001 or 1/10,000. In this case, +9.5 points equate to 0.00095. To calculate the forward USD/GBP rate, we add this value to the spot exchange rate. Hence, 0.6985 (the spot exchange rate) + 0.00095 (the value of the quoted points) equals 0.69945. When rounded to four decimal places, this value is closest to 0.6995, which is the value given in option A.

B is incorrect. This option suggests that the 1-year forward USD/GBP rate is 0.6976. This would be the case if we subtracted 0.00095 from the spot exchange rate of 0.6985. However, this is not the correct procedure for calculating the forward rate. The forward rate is determined by adding the value of the quoted points to the spot rate, not subtracting it. Therefore, option B is incorrect because it misrepresents the calculation method for the forward rate.

C is incorrect. This option suggests that the 1-year forward USD/GBP rate is 10.200. This would be the case if we added +9.5 directly to the spot exchange rate of 0.6985. However, this is not the correct procedure for calculating the forward rate. The forward rate is determined by adding the value of the quoted points (expressed as a decimal) to the spot rate, not adding the quoted points directly. Therefore, option C is incorrect because it misrepresents the calculation method for the forward rate and results in a value that is far from the actual forward rate.

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.32 Calculate the 4-firm Herfindahl-Hirschman Index of Tech Inc., Sun Systems, LiteC.org, and Git firms with market shares of 32%, 20%, 31%, and 17%, respectively.

A. 0.2674

B. 0.5171

C. 1

The Herfindahl-Hirschman Index (HHI) is a measure of market concentration, calculated by squaring the market shares of all firms in the market and summing them. It provides insight into the competitiveness of a market.

Given the market shares of Tech Inc., Sun Systems, LiteC.org, and Git as 32%, 20%, 31%, and 17%, respectively, the HHI is calculated as follows:

$$\text{HHI} = (0.32)^2 + (0.20)^2 + (0.31)^2 + (0.17)^2$$

$$\text{HHI} = 0.1024 + 0.04 + 0.0961 + 0.0289 = 0.2674$$

B is incorrect. The value 0.5171 is not the correct HHI. It suggests a higher level of concentration, which does not reflect the given market shares. A possible reason for this incorrect value could be a miscalculation or overestimation of one or more market shares in the squaring process.

C is incorrect. An HHI of 1 represents a monopolistic market where one firm controls 100% of the market. In this case, none of the firms have such a dominant share; the market is divided among four firms with significant competition.

CFA Level 1, Topic 2 – Firms and Market Structures, LOS 1e: Identify the type of market structure within which a firm operates and describe the uses and limitations of concentration measures.

Q.33 Smith Hermes is a portfolio manager that invests in smalls cap stocks that are subject to mergers and acquisitions. The asset allocation and the return data of Smith's portfolio are provided in the following table. Using the given data, the deviation of the weighted average (mean) return from the arithmetic mean return of the portfolio will be *closest to*:

Asset	Asset Return	Asset Allocation
Solar Panel Corp.	21%	13%
Crowd fund Inc.	17.50%	24%
Peer-Loaning Co.	-11%	27%
Dimitri Bogus Ltd.	-9%	17%
Hanover Corp.	27%	19%

A. The weighted average mean deviates by -1.54%.

B. The weighted average mean deviates by 7.80%.

C. The weighted average mean deviates by 1.21%.

$$\text{Weighted average return on each asset} = \text{Weight of asset} \times \text{Return of asset}$$

Note the above formula has been used in the following table. We then sum up the individual weighted means of all the assets to get the weighted mean of the portfolio:

Asset	Asset Return	Asset Allocation	Weighted Avg.
Solar Panel Corp.	21%	13%	2.73%
Crowd fund Inc.	17.50%	24%	4.20%
Peer-Loaning Co.	-11%	27%	-2.97%
Dimitri Bogus Ltd.	-9%	17%	-1.53%
Hanover Corp.	27%	19%	5.13%
Arithmetic Mean	9.10%		
Weighted Average Mean	7.56%		

Note the arithmetic and weighted average mean is calculated as:

$$\begin{aligned}\text{Weighted Average mean} &= \frac{(21\% \times 13\%)}{100\%} + \frac{(17.5\% \times 24\%)}{100\%} + \frac{(-11\% \times 27\%)}{100\%} + \frac{(-9\% \times 17\%)}{100\%} + \frac{(27\% \times 1}{100\%} \\ &= 7.56\% \\ \text{Arithmetic mean} &= \frac{21\% + 17.5\% + (-11\%) + (-9\%) + 27\%}{5} \\ &= 9.10\%\end{aligned}$$

Therefore,

$$\begin{aligned}\begin{array}{c}\text{Deviation of the weighted average mean} \\ \text{return from the arithmetic mean return}\end{array} &= \text{Weighted average mean} - \text{Arithmetic mean} \\ &= 7.56\% - 9.10\% \\ &= -1.54\%\end{aligned}$$

B is incorrect. It indicates the Weighted Average Mean.
C is incorrect. It indicates the Arithmetic Mean.

CFA Level 1, Topic 2, 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.34 If the central bank reduces the reserve requirements and increases net redemptions (purchases) of treasury securities, then:

A. interest rates would rise, and bank lending activities would decrease.

B. banks would increase lending activities, and the money supply would increase.

C. banks would decrease acceptance of deposits, and the money supply would decrease.

When the central bank reduces the reserve requirements, it essentially allows banks to hold less money in reserve. This means that banks have more money available to lend to customers. The act of lending increases the money supply in the economy because it creates new money. This is a fundamental principle of fractional reserve banking.

Furthermore, when the central bank purchases treasury securities, it is essentially injecting money into the banking system. This is because when the central bank purchases these securities, it pays for them by creating new money. This new money then becomes part of the banks' reserves, which they can then lend out to customers. Again, this act of lending increases the money supply in the economy. Therefore, both of these actions by the central bank - reducing reserve requirements and purchasing treasury securities - lead to an increase in the money supply and bank lending activities.

A is incorrect. This option suggests that reducing reserve requirements and purchasing treasury securities would lead to higher interest rates and decreased lending activities. However, this is not the case. When the central bank reduces reserve requirements, it increases the amount of money that banks have available to lend. This increase in supply of money tends to lower interest rates, not raise them. Similarly, when the central bank purchases treasury securities, it injects money into the banking system, which also tends to lower interest rates and stimulate lending activities.

C is incorrect. This option suggests that the central bank's actions would lead to a decrease in the acceptance of deposits and a decrease in the money supply. However, this is not the case. When the central bank reduces reserve requirements, it increases the amount of money that banks have available to lend. This means that banks are more able to accept deposits, not less. Furthermore, both reducing reserve requirements and purchasing treasury securities increase the money supply, not decrease it.

CFA Level 1, Topic 2 – Economics, Learning Module 4– Monetary Policy, LOS 4b: Describe tools used to implement monetary policy and the monetary transmission mechanism, and explain the relationships between monetary policy and economic growth, inflation, interest, and exchange rates.

Q.35 A profit-maximizing monopolist should choose an output level and price such that:

A. Marginal revenue equals marginal cost, and price exceeds average total cost.

B. Marginal revenue is greater than marginal cost, and price equals average total cost.

C. Marginal revenue is greater than marginal cost, and price is less than average variable cost.

In the context of a profit-maximizing monopolist, the optimal output level and price are determined when the marginal revenue equals the marginal cost, and the price is set above the average total cost. This is the principle of profit maximization in monopolistic markets. The monopolist, unlike firms in perfect competition, has the ability to influence the market price. Therefore, after determining the output level where marginal revenue equals marginal cost, the monopolist can set a price that exceeds the average total cost, thereby capturing economic rents. This is the essence of option A, which is the correct answer.

B is incorrect. This option suggests that the marginal revenue is greater than the marginal cost, and the price equals the average total cost. However, this does not represent the profit-maximizing point. If the marginal revenue is greater than the marginal cost, it implies that the firm can still increase its profit by producing more units. This is because the revenue generated from selling an additional unit (marginal revenue) is greater than the cost of producing that additional unit (marginal cost). Therefore, the firm has not yet reached its profit-maximizing output. Furthermore, if the price is set equal to the average total cost, it would mean that the monopolist is only covering its costs and is not earning any profit. This contradicts the objective of profit maximization.

C is incorrect. This option suggests that the marginal revenue is greater than the marginal cost, and the price is less than the average variable cost. Similar to option B, if the marginal revenue is greater than the marginal cost, the firm has not yet reached its profit-maximizing output. Moreover, if the price is set below the average variable cost, it would mean that the firm is not even covering its variable costs. This would result in losses for the firm. A profit-maximizing entity, particularly a monopolist, would not adopt a strategy that results in losses.

CFA Level 1, Topic 2 – Economics, Learning Module 1 – Firms and Market Structures, LOS 1c: Explain supply and demand relationships under monopolistic competition, including the optimal price and output for firms as well as pricing strategy.

Q.36 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 terms appreciation and depreciation are used to indicate the increase or decrease in value of one currency against another. In this case, we are looking at the Dollar/Euro exchange rate in 2001 and 2002. The exchange rate is quoted as Dollar/Euro, which means that the dollar is the quote currency and the euro is the base currency. In foreign exchange, the base currency is typically set to be equal to 1.

In 2001, the exchange rate was Dollar/Euro=3.67, which means that 1 Euro was equivalent to 3.67 USD. In 2002, the exchange rate increased to Dollar/Euro=4.67, meaning that 1 Euro was now equivalent to 4.67 USD. This increase in the exchange rate indicates that more dollars are needed to purchase the same amount of Euros. In other words, the value of the dollar has decreased relative to the Euro. This is what is referred to as depreciation of the dollar.

A is incorrect. Depreciation refers to a decrease in value. However, in this case, the Euro has actually increased in value relative to the dollar, as evidenced by the increase in the Dollar/Euro exchange rate from 3.67 in 2001 to 4.67 in 2002. This increase in value is referred to as appreciation, not depreciation. Therefore, option A is incorrect.

C is incorrect. Appreciation refers to an increase in value. However, in this case, the dollar has actually decreased in value relative to the Euro, as evidenced by the increase in the Dollar/Euro exchange rate from 3.67 in 2001 to 4.67 in 2002. This decrease in value is referred to as depreciation, not appreciation. Therefore, option C is incorrect.

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.37 On June 1st, 2017, Hall Street Journal received a cash payment of USD 1,000 for a two-year subscription to the monthly journal. This transaction would *most likely* result in which of the following on June 1st, 2017?

A. Cash increased by USD 1,000, and income increased by USD 1,000.

B. Cash increased by USD 1,000, and unearned fees increased by USD 1,000.

C. Cash increased by USD 1,000; unearned fees increased by USD 500, and income increased by USD 500.

The correct answer is option B because when Hall Street Journal received the cash payment for the two-year subscription, it did not immediately earn the revenue. The revenue will be earned over the course of the two-year period as the company fulfills its obligation to deliver the monthly journal to the subscriber. Until the service is delivered, the cash received is considered a liability and is recorded as unearned fees or revenues. As the company delivers the journals each month, a portion of the unearned fees will be transferred to revenue. This process is in accordance with the revenue recognition principle in accounting, which states that revenue should be recognized when it is earned, not necessarily when cash is received.

A is incorrect. This option suggests that cash increased by USD 1,000, and income increased by USD 1,000. While it is true that the cash increased by USD 1,000, it is incorrect to say that income also increased by the same amount. This is because the income will be recognized over the two-year period as the company delivers the journals to the subscriber, not immediately upon receipt of the cash.

C is incorrect. This option suggests that cash increased by USD 1,000; unearned fees increased by USD 500, and income increased by USD 500. While it is true that the cash increased by USD 1,000, it is incorrect to divide the increase between unearned fees and income. The entire amount should be recorded as unearned fees until the company fulfills its obligation to deliver the journals to the subscriber. Only then can a portion of the unearned fees be transferred to income.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 2 – Analyzing Income statements, LOS 2a: Describe general principles of revenue recognition, specific revenue recognition applications, and implications of revenue recognition choices for financial analysis.

Q.38 Which of the following may be considered a warning sign indicating the manipulation of financial statements? I. Excessive non-recurring costs classified in the income statement. II. Net profit of 2% in the first three quarters followed by net profit of 17% in the 4th quarter. III. The number of days of sales outstanding was 15 days. The same figure for the industry was 75 days. The company is engaged in providing engineering consultancy services, and the customers generally pay after the design submitted by the company has been approved by the customer's construction team, which takes roughly 2-3 months.

A. III.

B. I & II.

C. I, II, & III.

I is incorrect. Excessive non-recurring costs classified in the income statement can be a sign of financial manipulation. Non-recurring costs are expenses that are unusual and not expected to occur again in the foreseeable future. If a company consistently reports high non-recurring costs, it may be attempting to manipulate its financial statements by inflating these costs to reduce its net income and, consequently, its tax liability. This practice can distort the company's true financial performance and mislead investors and analysts.

II is incorrect. A sudden increase in net profit, such as a net profit of 2% in the first three quarters followed by a net profit of 17% in the 4th quarter, can also be a warning sign. This could indicate that the company is manipulating its earnings to meet or beat analyst expectations. Companies may do this by recognizing revenue prematurely, delaying expenses, or using other accounting tricks to inflate their profits. This can create an illusion of financial health and performance that is not reflective of the company's actual operations.

III is incorrect. A significantly lower number of days of sales outstanding (DSO) compared to the industry average can also be a red flag. DSO measures the average number of days it takes a company to collect payment after a sale has been made. In this case, the company's DSO is 15 days, while the industry average is 75 days. This discrepancy could indicate that the company is recognizing revenue before it has been earned, which is a form of financial manipulation. This is especially concerning given that the company's customers typically take 2-3 months to approve designs and make payments.

When analyzing a company's financial statements, it is crucial to look beyond the numbers and consider the context and business practices. Warning signs of financial manipulation can often be found in the details of the financial statements and require a thorough and critical analysis.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 10 – Financial Reporting Quality, LOS 10h: Describe accounting warning signs and methods for detecting manipulation of information in financial reports.

Q.39 One year ago, ABC Corp bought a corporate bond for $1,000 and classified it as available for sale. It collected $40 in coupons, and the bond is now worth $1,020. What should ABC Corp show for this bond on its balance sheet?

A. $1,000

B. $1,020

C. $1,060

Securities that are classified as available for sale, like the corporate bond in question, should be shown at their fair value on the balance sheet. In this case, the fair value of the bond is $1,020, which is its current worth. The fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This is in accordance with the Generally Accepted Accounting Principles (GAAP) and the International Financial Reporting Standards (IFRS) which require that available-for-sale securities be reported at fair value. The changes in fair value are reported in other comprehensive income until the investment is sold. Therefore, ABC Corp should show $1,020 for this bond on its balance sheet.

A is incorrect. Securities classified as available for sale should be shown at their fair value, not at their purchase price or amortized cost. The purchase price or amortized cost is typically used for securities that are held to maturity. In this case, the bond's fair value is $1,020, not its purchase price of $1,000. Therefore, showing the bond at $1,000 on the balance sheet would not accurately reflect its current worth.

C is incorrect. This option suggests that the bond should be shown at $1,060 on the balance sheet, which appears to be the sum of the bond's current worth ($1,020) and the coupons collected ($40). However, this is not how securities available for sale should be reported on the balance sheet. The coupons collected are considered as income and should be reported separately in the income statement, not added to the value of the bond on the balance sheet. Therefore, showing the bond at $1,060 on the balance sheet would not be in accordance with the accounting standards for reporting available-for-sale securities.

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.40 Core Corp. has an inventory that was written down to $6,500. Due to a shortage in supply, the Net Realizable Value of inventory increased to $8,000. The value of write-up of inventory if Core Corp reports under US GAAP is *closest to*:

A. $0

B. $1,500

C. $14,500

Option A is the correct answer because under the US Generally Accepted Accounting Principles (US GAAP), write-ups of inventory are not permitted. This means that once an inventory has been written down, its value cannot be increased in the future, even if the Net Realizable Value (NRV) of the inventory increases. In this case, Core Corp. had an inventory that was written down to $6,500. Later, due to a shortage in supply, the NRV of the inventory increased to $8,000. However, despite this increase in NRV, the value of the inventory cannot be written up to reflect this increase under US GAAP. Therefore, the value of the write-up of inventory for Core Corp. under US GAAP is $0.

B is incorrect. This option assumes that write-ups are allowed under US GAAP. It calculates the amount of the write-up as the difference between the new NRV and the written-down value of the inventory (\$1,500 = \$8,000 - \$6,500). However, as mentioned earlier, write-ups are not permitted under US GAAP. Therefore, even though the NRV of the inventory has increased, its value cannot be written up to reflect this increase. Hence, the value of the write-up of inventory under US GAAP is not \$1,500.

C is incorrect. This option adds the amount of the initial write-down to the new NRV to calculate the value of the write-up (\$14,500 = \$6,500 + \$8,000). However, this calculation is incorrect because write-ups are not allowed under US GAAP. Therefore, the value of the write-up of inventory under US GAAP is not \$14,500.

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.41 ABC Corp is a large publicly traded company. At the end of the Auditor's report, the auditor *most likely* provides:

A. assurance that financial statements are fairly presented.

B. no assurance that financial statements are fairly presented.

C. reasonable assurance that financial statements are fairly presented.

The role of an auditor in a publicly traded company like ABC Corp is to examine the financial statements and provide an opinion on their fairness and accuracy. This process involves a thorough review of the company's financial records, transactions, and internal controls. The auditor uses various auditing techniques, including sampling, to gather evidence and form an opinion. However, due to the inherent limitations of an audit, such as the use of judgment and the use of testing, the auditor cannot guarantee absolute assurance. Instead, they provide a reasonable assurance, which is a high level of assurance, but not an absolute one. This is why option C is the correct answer.

A is incorrect. While it is true that the auditor's role is to provide an opinion on the fairness of the financial statements, it is important to note that they cannot provide absolute assurance. This is due to the inherent limitations of an audit, such as the use of judgment, the use of testing, and the fact that most of the audit evidence is persuasive rather than conclusive.

B is incorrect. The primary role of an auditor is to provide an opinion on the fairness of the financial statements. If the auditor provides no assurance, it would mean that they have not performed their duties properly. While it is true that the auditor cannot provide absolute assurance due to the inherent limitations of an audit, they do provide a high level of assurance, known as reasonable assurance.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 1 – Introduction to Financial Statement Analysis, LOS 1c: Describe the importance of regulatory filings, financial statement notes and supplementary information, management’s commentary, and audit reports.

Q.42 MZJ & Sons, an audit firm, is reviewing the financial statements of Xspace, a space tech firm. Xspace has developed a communication device that will never require charging or batteries. Since the scope of the valuation of such a product is limited, the auditors are unable to express their opinion. In such a situation an auditor will *most likely* issue a/an:

A. Disclaimer of opinion.

B. Qualified audit opinion.

C. Unqualified audit opinion.

A disclaimer of opinion is the most likely response an auditor would issue when they encounter a situation where the scope of the audit is limited, and they are unable to form an opinion on the financial statements. A disclaimer of opinion is issued when the auditor has not been able to obtain sufficient appropriate audit evidence on which to base the audit opinion. As a result, the auditor does not express an opinion on the financial statements. This scenario is applicable in the case of MZJ & Sons auditing Xspace. The unique nature of Xspace's product—a communication device that never requires charging or batteries—presents a valuation challenge that limits the scope of the audit. The inability to accurately value such a groundbreaking product means that the auditors cannot confidently assert the financial position or performance of Xspace, leading to the issuance of a disclaimer of opinion.

B is incorrect. A qualified audit opinion is issued when the auditor concludes that the financial statements may not be presented fairly, either due to a limitation in scope or a material misstatement. However, in this case, the issue is not about the fairness of the financial statements but about the inability of the auditors to form an opinion due to the unique nature of the product. Therefore, a qualified audit opinion would not be the most appropriate response in this situation.

C is incorrect. An unqualified audit opinion, also known as a clean opinion, is issued when the auditor concludes that the financial statements of the entity are presented fairly, in all material respects, in accordance with the applicable financial reporting framework. This type of opinion is not suitable when there is a significant limitation in the scope of the audit, as is the case with Xspace. The unique nature of the product prevents the auditors from forming a complete opinion on the financial statements. Therefore, an unqualified audit opinion would not be the most appropriate response in this situation.

CFA Level 1, Topic 3 – Financial Statements Analysis, Learning Module 1 –Introduction to Financial Statement Analysis, LOS 1c: describe the importance of regulatory filings, financial statement notes and supplementary data, management’s commentary, and audit reports.

Q.43 Turks Printers is a printer retailer that sells printers to large corporations. The Turks use the FIFO method of inventory.

Beginning Inventory	50 printers at $100 each
Purchased on January 1st	100 printers at $110 each
Purchased on March 1st	20 printers at $130 each

If Turks sell 130 printers to Hyper Corp. in April, the cost of goods sold is *closest to*:

A. $13,800

B. $14,224

C. $14,600

The correct answer is option A, which calculates the cost of goods sold (COGS) using the First-In, First-Out (FIFO) method. The FIFO method is a cost flow assumption where the first goods purchased or produced are assumed to be sold first. In this case, Turks Printers uses the FIFO method for its inventory.

When Turks Printers sells 130 printers to Hyper Corp. in April, the cost of goods sold is calculated as follows: The first 50 printers sold are from the beginning inventory, which cost $100 each. The next 80 printers sold are from the batch purchased on January 1st, which cost $110 each. Therefore, the total cost of goods sold is (50 printers * $100) + (80 printers * $110) = $13,800.

This calculation is based on the assumption that the printers are sold in the order they were purchased, which is the essence of the FIFO method. This method reflects the actual flow of goods in most businesses and results in a lower cost of goods sold during periods of inflation, which can increase reported profits.

Option B is incorrect. This option seems to use the weighted average method to calculate the cost of goods sold. The weighted average cost method divides the cost of goods available for sale by the number of units available for sale, which yields the weighted average cost per unit. This cost is then used to calculate the cost of goods sold and ending inventory. However, this method is not applicable in this case because Turks Printers uses the FIFO method, not the weighted average method.

Option C is incorrect. This option appears to use the Last-In, First-Out (LIFO) method to calculate the cost of goods sold. The LIFO method assumes that the last goods purchased or produced are the first ones to be sold. This method can result in a higher cost of goods sold during periods of inflation, which can decrease reported profits. However, this method is not applicable in this case because Turks Printers uses the FIFO method, not the LIFO method.

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.44 Baskin Ice Creams' net income for the year ended December 31^{st}, 2016, was USD

1,750,000. The following are the details of the common stock of the company.

Shares outstanding on January 1 2016	96,000
Shares repurchased on May 1, 2016	16,000
Shares issued on August 1 2016	40,000
Shares issued on November 1, 2016	6,000
Shares outstanding on December 31, 2016	126,000

The company declared 3 for 1 stock split on March 1st, 2016, which took effect on October 1st, 2016. If the company declared and paid a USD 450,000 dividend on preferred stock, the company's basic EPS is *closes*t to:

A. 4.21

B. 5.99

C. 12.62

In the first step, the number of shares outstanding for each period of the year is calculated. From January to April 2016, there were 96,000 shares outstanding. From May to July 2016, after the repurchase of 16,000 shares, there were 80,000 shares outstanding. From August to October 2016, after the issuance of 40,000 shares, there were 120,000 shares outstanding. Finally, from November to December 2016, after the issuance of 6,000 shares, there were 126,000 shares outstanding.

Next, the weighted average number of shares outstanding is determined by the length of time each quantity of shares was outstanding. This is calculated as follows:

$$\text{Weighted average for January to April} = 96,000 \times \frac{4}{12} = 32,000$$

$$\text{Weighted average for May to July} = 80,000 \times \frac{3}{12} = 20,000$$

$$\text{Weighted average for August to October} = 120,000 \times \frac{3}{12} = 30,000$$

$$\text{Weighted average for November to December} = 126,000 \times \frac{2}{12} = 21,000$$

Adding these up gives a total weighted average number of shares outstanding of 103,000.

However, for the calculation of EPS, a stock split is treated as if it took effect at the beginning of the year. Therefore, the weighted average number of shares outstanding for EPS calculation purposes is adjusted for the 3 for 1 stock split:

$$\text{Adjusted weighted average shares} = 103,000 \times 3 = 309,000$$

Finally, the basic EPS is calculated by subtracting the preferred dividends from the net income and dividing by the weighted average number of shares. This gives an EPS of:

$$\text{Basic EPS} = \frac{(1,750,000 - 450,000)}{309,000} = 4.21$$

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 2 – Analyzing Income Statements, LOS 2d: Describe how earnings per share is calculated and calculate and interpret a company's basic and diluted earnings per share for companies with simple and complex capital structures including those with anti-dilutive securities.

Q.45 Which of the following statements is/are inaccurate?

I. Post-employment benefits and warranty expenses result in a deferred tax liability.
II. Deferred tax liabilities provide future tax savings.
III. If a deferred tax liability is not expected to reverse, a valuation allowance is created.

A. I

B. II & III

C. I, II & III

Statement I is incorrect. Post-employment benefits and warranty expenses typically result in a deferred tax asset, not a liability. These are expenses recognized in the financial statements before they are deductible for tax purposes. This timing difference creates a situation where the company will pay less tax in the future when these expenses are deductible, leading to a deferred tax asset. Therefore, the first statement is incorrect because it misrepresents the nature of post-employment benefits and warranty expenses in relation to deferred taxes.

Statement II is incorrect. Deferred tax liabilities represent future tax payments, not savings. They occur when a company has taxable temporary differences, meaning it has reported higher income in its financial statements than in its tax return. This situation leads to higher taxes payable in the future, not savings. Therefore, the second statement is incorrect because it misinterprets the implications of deferred tax liabilities.

Statement III is incorrect. A valuation allowance is related to deferred tax assets, not liabilities. It is created when it is more likely than not that some portion or all of the deferred tax asset will not be realized in the future. The concept of a valuation allowance does not apply to deferred tax liabilities. Therefore, the third statement is incorrect because it misapplies the concept of a valuation allowance to deferred tax liabilities.

CFA Level 1, Topic 3 – Financial Statement 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

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Q.46 Firm A reports under US GAAP, and Firm B follows IFRS. Both firms sell identical assets held for investment purposes for the same price of $2.5 million. Assuming that the income tax on the sale of the investment is $275,000, which firm is *most likely* to report lower cash flows from operating activities?

A. Firm A will most likely report lower cash flows from operations.

B. Firm B will most likely report lower cash flows from operations.

C. Both firms will always have identical cash flows from operations.

The key difference between Firm A, which reports under US GAAP, and Firm B, which follows IFRS, lies in how they classify the tax effects from the sale of investment assets. This classification significantly impacts the reported cash flows from operating activities for both firms.

Under the US Generally Accepted Accounting Principles (GAAP), all tax payments are typically reported as part of cash flows from operating activities. This means that the tax expense related to the sale of investment assets, which in this case amounts to $275,000, will be included in the operating section of the cash flow statement. This inclusion will reduce the reported cash flows from operating activities for Firm A. Therefore, Firm A is more likely to report lower cash flows from operating activities as it has to include the tax expense from the sale of investment assets in this section.

B is incorrect. The International Financial Reporting Standards (IFRS) provide more flexibility in the classification of cash flows. Specifically, IFRS allows firms to classify cash flows in a way that best represents their business activities. As a result, Firm B has the option to report the tax effects from the sale of investment assets either under operating activities or under investing activities. If Firm B chooses to classify this tax expense under investing activities, it won't reduce its reported cash flows from operating activities. This flexibility potentially results in higher reported operating cash flows for Firm B, making it less likely to report lower cash flows from operations compared to Firm A.

C is incorrect. As explained above, US GAAP requires the inclusion of all tax payments in the operating activities, while IFRS allows for more flexibility. This difference in classification rules can lead to different reported cash flows from operating activities for the two firms.

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.47 Baskin Ice Creams' net income for the year ended 31^{st} December 2016 was USD 1,750,000. The following are the details of the common stock of the company.

Shares outstanding as on 1 Jan 2016	96,000
Shares repurchased on 1 May 2016	16,000
Shares issued on 1 August 2016	40,000
Shares issued on 1 Nov 2016	6,000
Shares outstanding on 31 Dec 2016	126,000

The company declared and paid USD 450,000 dividends on preferred stock. What is the company's weighted average number of shares outstanding?

A. 101,000

B. 103,000

C. 126,000

The number of shares outstanding during different periods of the year and the length of time each quantity of shares was outstanding need to be considered to answer this question.

From January to April 2016, the number of shares was 96,000. This period lasted for 4 months. The contribution of this period to the weighted average is calculated as $96,000 \times (\frac{4 \text{ months}}{12 \text{ months}}) = 32,000$.

From May to July 2016, the number of shares was 80,000. This period lasted for 3 months. The contribution of this period to the weighted average is calculated as $80,000 \times (\frac{3 \text{ months}}{12 \text{ months}}) = 20,000$.

From August to October 2016, the number of shares was 120,000. This period lasted for 3 months. The contribution of this period to the weighted average is calculated as $120,000 \times (\frac{3 \text{ months}}{12 \text{ months}}) = 30,000$.

From November to December 2016, the number of shares was 126,000. This period lasted for 2 months. The contribution of this period to the weighted average is calculated as $126,000 \times (\frac{2 \text{ months}}{12 \text{ months}}) = 21,000$.

Adding up these contributions, we get the weighted average number of shares outstanding as 103,000.

A is incorrect. This option suggests that the weighted average number of shares outstanding is 101,000. However, this does not match with the calculations based on the given data. The calculations clearly show that the weighted average number of shares outstanding is 103,000, not 101,000.

C is incorrect. This option suggests that the weighted average number of shares outstanding is 126,000. However, this is the number of shares outstanding at the end of the year, not the weighted average for the year. The weighted average takes into account the number of shares outstanding during different periods of the year and the length of time each quantity of shares was outstanding. The calculations clearly show that the weighted average number of shares outstanding is 103,000, not 126,000.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 2 – Analyzing Income Statements, LOS 2d: Describe how earnings per share is calculated and calculate and interpret a company's basic and diluted earnings per share for companies with simple and complex capital structures including those with antidilutive securities.

Q.48 Thermax Steel Company had a weighted average of 60,000 shares of common stock outstanding. The company has only one potentially dilutive security: USD 25,000 of 4 percent convertible bonds, convertible into a total of 5,000 shares. The company reported a net income of USD 100,000 for the year ended on 30th June 2016. The tax rate is 30%. The diluted EPS of the company is *closest* to:

A. USD 1.55

B. USD 1.67

C. USD 1.69

Diluted EPS is a financial metric that indicates the profitability of a company by taking into account all the securities that could potentially be converted into common stock. In this case, Thermax Steel Company has one potentially dilutive security: USD 25,000 of 4 percent convertible bonds, which can be converted into a total of 5,000 shares.

If these bonds are converted, the bonds would no longer be outstanding, and instead, an additional 5,000 shares of common stock would be outstanding. This would increase the total number of shares, thereby diluting the EPS. Furthermore, if the bonds were converted, Thermax Steel Company would not have to pay the interest of USD 1,000 on the convertible debt. This would increase the net income available to common shareholders by USD 700 on an after-tax basis, as the company's tax rate is 30%.

Therefore, the diluted EPS is calculated by dividing the adjusted net income (USD 100,000 + USD 700) by the adjusted number of shares (60,000 + 5,000), which gives us USD 1.55.

B is incorrect. This option suggests that the diluted EPS is USD 1.67. However, this does not take into account the conversion of the bonds into common stock and the subsequent increase in the number of shares. Therefore, this calculation does not accurately reflect the diluted EPS.

C is incorrect. This option suggests that the diluted EPS is USD 1.69. Similar to option B, this does not take into account the conversion of the bonds into common stock and the subsequent increase in the number of shares. Therefore, this calculation does not accurately reflect the diluted EPS.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 2 – Analyzing Income Statements, LOS 2d: Describe how earnings per share is calculated and calculate and interpret a company's basic and diluted earnings per share for companies with simple and complex capital structures including those with antidilutive securities.

Q.49 Baku Mart, a chain of hypermarkets, reported a net income of $400,000 and paid cash dividends of $260,000 to preferred stockholders for 2016. At the beginning of 2016, Baku had 8,000 shares of common stock outstanding, but the firm issued 3,000 new shares on November 1st, 2016. Given this information, the basic EPS of Baku Mart is *closest* to:

A. $8.26

B. $16.47

C. $22.00

The formula for basic Earnings Per Share (EPS) is the net income minus the preferred dividend, divided by the weighted average shares of common stock.

$$\text{Basic EPS} = \frac{\text{Net Income} - \text{Preferred Dividend}}{\text{Weighted average shares of common stock}}$$

In this case, the net income is $400,000 and the preferred dividend is $260,000. The weighted average shares of common stock is calculated as

$$\text{Weighted average shares of common stock} = \frac{\sum(\text{Number of shares} \times \text{Number of months shares we}}{\text{Total number of months in the period}}$$

In the given scenario, where the company had 8,000 shares outstanding for 12 months and an additional 3,000 shares for 2 months, the expression would be:

$$\text{Weighted average shares of common stock} = \frac{(8,000 \times 12) + (3,000 \times 2)}{12}$$

This formula accounts for the time-varied share counts within the fiscal year to compute an average that reflects the relative impact of each share count over the total time period.

Thus,

$$\text{Basic EPS} = \frac{(400,000 - 260,000)}{8,500} = \$16.47$$

A is incorrect. This option suggests that the basic EPS is $8.26. However, this does not align with the calculation using the formula for basic EPS. If we were to use this value, it would imply that the net income was significantly lower or the preferred dividend or the weighted average shares of common stock were significantly higher. However, based on the information provided in the question, we know that this is not the case. Therefore, option A is incorrect.

C is incorrect. This option suggests that the basic EPS is $22.00. However, this does not align with the calculation using the formula for basic EPS. If we were to use this value, it would imply that the net income was significantly higher or the preferred dividend or the weighted average shares of common stock were significantly lower. However, based on the information provided in the question, we know that this is not the case. Therefore, option C is incorrect.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 2 – Analyzing Income Statements, LOS 2d: Describe how earnings per share is calculated and calculate and interpret a company's basic and diluted earnings per share for companies with simple and complex capital structures including those with anti-dilutive securities.

Q.50 ABC Company’s oldest goods purchased are sold first and the newest goods purchased remain in the ending inventory; This is an example of the:

A. LIFO.

B. FIFO.

C. Weighted average cost method.

The First-In, First-Out (FIFO) method is a system used for inventory valuation that assumes that goods are sold in the order they are purchased, so the oldest goods are sold first, and the newest goods remain in inventory. This method is commonly used in industries where perishability is an issue, such as food service or retail. It ensures that the oldest inventory, which was purchased at a potentially different cost, is sold first, thereby reducing the risk of inventory obsolescence. This method also provides a better match of current costs with revenues, as the costs of the oldest items are used to calculate the cost of goods sold, which is then matched with the revenue generated from those sales.

A is incorrect. The Last-In, First-Out (LIFO) method is a system used for inventory valuation that assumes that the newest goods are sold first, and the oldest goods remain in inventory. This is the opposite of the FIFO method. Under LIFO, the cost of the most recent purchases is matched against revenue, and the older inventory costs are reported as part of ending inventory. This method is typically used in industries where prices are rising, as it results in higher cost of goods sold and lower ending inventory, thereby reducing taxable income and deferred tax liability. However, it is important to note that LIFO is not accepted under International Financial Reporting Standards (IFRS).

C is incorrect. The Weighted Average Cost method is a system used for inventory valuation that assigns the same cost to each unit of inventory, regardless of when or at what cost each unit was purchased or produced. It is calculated by dividing the total cost of goods available for sale by the total units available for sale. This results in inventory being valued at an average cost per unit. This method is typically used in industries where inventory items are so intermingled that it becomes impossible to assign a specific cost to an individual unit. However, this method does not reflect the actual physical flow of goods, unlike the FIFO or LIFO methods.

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.51 Livecom, a pharmaceutical company, is working on a drug that would cure leukemia. The total costs, before the stage of assessing feasibility, were $23 million. The molecule has passed the feasibility stage, and the company intends to develop the molecule for commercial sale. The development was completed within 6 months, and the costs incurred amounted to $76 million. However, the company has not yet received any approval from the FDA. The *most appropriate* accounting treatment of the costs if the company follows IFRS is:

A. record an expense of $23 million and record an intangible asset of $76 million.

B. charge an expense of $99 million and record an intangible asset of $23 million after receiving the approval.

C. record an intangible asset of $99 million, charge an expense of $23 million if the approval is received, and $99 million if the FDA rejects the molecule.

Under the International Financial Reporting Standards (IFRS), the accounting treatment of costs in the development of a new drug, such as the one being developed by Livecom, is guided by the principles that differentiate between the research and development phases. These principles are crucial in determining how costs are accounted for in the financial statements of the company.

The research phase includes activities aimed at obtaining new knowledge and searching for alternatives for materials, devices, products, processes, etc. Costs incurred during this phase are expensed as they are incurred. This is because the outcome of the research phase is uncertain and the costs cannot be directly linked to future economic benefits. In the case of Livecom, the $23 million incurred before assessing feasibility represents research costs. As per IFRS, these costs should be expensed, which means they should be recorded as an expense in the income statement of the company.

On the other hand, the development phase involves the application of research findings to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems, or services before the start of commercial production or use. Costs incurred during the development phase can be capitalized as an intangible asset if certain criteria are met. These criteria include technical feasibility, intention to complete and use or sell the asset, ability to use or sell the asset, how the asset will generate probable future economic benefits, and the availability of adequate technical, financial, and other resources to complete the development. In the case of Livecom, the molecule has passed the feasibility stage and the company intends to develop it for commercial sale. Therefore, the $76 million incurred during the development phase can be recorded as an intangible asset.

Option B is incorrect. As explained above.

Option C is incorrect. As explained above.

CFA Level 1, Topic 3 – Financial statement Analysis, Learning Module 7 – Analysis of Long Term Assets, LOS7a: Compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination.

Q.52 Which of the following is *least likely* a reason for a firm to overstate its net income?

A. To minimize incentive compensation.

B. To meet analysts' earnings expectations.

C. To remain in compliance with lending contracts.

Overstating net income is not a strategy that a firm would employ to minimize incentive compensation. Incentive compensation is typically tied to the performance of the firm, and higher reported profits often lead to higher incentive compensation for management and employees. Therefore, if a firm's management wanted to minimize incentive compensation, it would not be motivated to overstate net income. Overstating net income would actually work against the goal of minimizing incentive compensation, as it would likely result in higher, not lower, incentive payouts. This is because incentive compensation is often designed to reward strong financial performance, and overstating net income would create the appearance of stronger financial performance. Therefore, it is least likely that a firm would overstate its net income to minimize incentive compensation.

B is incorrect. It is common for firms to face pressure to meet or exceed the earnings expectations set by financial analysts. Meeting these expectations can have a positive impact on a firm's stock price and overall market perception. Overstating net income can be a tactic used by firms to create the appearance of financial health and success, even if this portrayal is not entirely accurate. By overstating net income, a firm can give the impression that it is meeting or exceeding analysts' earnings expectations, which can help to maintain or increase its stock price and improve its standing in the market. Therefore, it is not least likely that a firm would overstate its net income to meet analysts' earnings expectations.

C is incorrect. Firms may overstate net income to remain in compliance with lending covenants or agreements. Many lending agreements include clauses that require the borrower to maintain certain financial ratios or performance metrics. If a firm is at risk of breaching these covenants, overstating net income can make its financial situation appear healthier and reduce the risk of being considered in default of its loan agreements. Overstating net income can help a firm to maintain the required financial ratios or performance metrics, thereby helping it to remain in compliance with its lending agreements. Therefore, it is not least likely that a firm would overstate its net income to remain in compliance with lending contracts.

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.53 XYZ equipment limited has made the following inventory purchases during the first quarter of 2017.

Period	Number of units	Price per unit
January	108	GBP 45
February	94	GBP 48
March	86	GBP 46

During the quarter, the company sold 200 units at GBP 50 per unit. The company had 5 units of inventory at the cost of GBP 49 per unit on hand at the beginning of the quarter. The company has 93 units at the end of the quarter and specifically identifies that 86 were those procured in March. Assuming FIFO methods, what is the gross profit of the company during the first quarter of 2017?

A. GBP 698

B. GBP 719

C. GBP 849

The total revenue is calculated by multiplying the number of units sold (200 units) by the selling price per unit (GBP 50), which gives us GBP 10,000.

The total cost of goods sold is calculated using the FIFO (First-In, First-Out) method. This method assumes that the first goods purchased are the first ones to be sold. Therefore, the cost of goods sold is calculated based on the cost of the earliest purchased goods.

At the beginning of the quarter, the company had 5 units of inventory at the cost of GBP 49 per unit, which amounts to GBP 245. In January, the company purchased 108 units at GBP 45 per unit, amounting to GBP 4,860. In February, the company purchased 94 units, but only 87 units were sold (200 units sold - 108 units from January - 5 units from beginning inventory), at GBP 48 per unit, amounting to GBP 4,176. The total cost of goods sold is therefore GBP 9,281 (GBP 245 + GBP 4,860 + GBP 4,176).

The gross profit is then calculated by subtracting the total cost of goods sold (GBP 9,281) from the total revenue (GBP 10,000), which gives us GBP 719.

A is incorrect. Option A suggests a gross profit of GBP 698. This would imply a different cost of goods sold, which is not consistent with the FIFO method and the given inventory and purchase data. The cost of goods sold, according to the data provided and using the FIFO method, is GBP 9,281, not GBP 9,302 (which would result in a gross profit of GBP 698). Therefore, option A is incorrect.

C is incorrect. Option C suggests a gross profit of GBP 849. This would imply a different cost of goods sold, which is not consistent with the FIFO method and the given inventory and purchase data. The cost of goods sold, according to the data provided and using the FIFO method, is GBP 9,281, not GBP 9,151 (which would result in a gross profit of GBP 849). Therefore, option C is incorrect.

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.54 Which of the following statement(s) is/are true with regard to reporting of Property, Plant, and Equipment by companies?

I. IFRS permits companies to report PPE using either a cost model or a revaluation model. US GAAP permits only the cost model for reporting PPE.
II. Reversals of impairment losses are permitted under US GAAP.
III. IFRS allow a company to use the cost model for some classes of assets and the revaluation model for others, but the company must apply the same model to all assets within a particular class of assets.

A. I only.

B. I & II only.

C. I & III only.

Statement I is accurate because the International Financial Reporting Standards (IFRS) does indeed allow companies to report Property, Plant, and Equipment (PPE) using either a cost model or a revaluation model. The cost model involves recording an asset at its cost minus any accumulated depreciation and impairment losses. The revaluation model, on the other hand, allows for the asset to be carried at a revalued amount, which is its fair value at the date of revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses. The US Generally Accepted Accounting Principles (GAAP), however, only permits the cost model for reporting PPE.

Statement III is also correct. IFRS allows a company to use different models (cost or revaluation) for different classes of assets. However, within a particular class of assets, the same model must be applied. This is to ensure consistency and comparability in financial reporting. For example, if a company chooses to use the revaluation model for its buildings, it must apply this model to all buildings it owns.

A is incorrect. While it includes statement I, which is accurate, it does not include statement III, which is also true. As explained above, IFRS does allow a company to use different models for different classes of assets, but the same model must be applied within a particular class of assets. Therefore, option A is incomplete as it does not acknowledge this aspect of IFRS.

B is incorrect. This option includes statements I and II. While statement I is accurate, statement II is not. Statement II suggests that reversals of impairment losses are permitted under US GAAP. This is not the case. Under US GAAP, once an impairment loss is recognized, it cannot be reversed. This is a key difference between US GAAP and IFRS, as the latter does allow for reversals of impairment losses under certain conditions. Therefore, option B is incorrect as it includes an inaccurate statement.

CFA Level 1, Topic 3 – Financial Statement Analysis, Learning Module 7 – Analysis of Long-Term Assets, LOS 7h: explain and evaluate how impairment and derecognition of property, plant, and equipment, and intangible assets affect the financial statements and ratios.

Q.55 An analyst needs to study the US bond market. The entire population of 10,000 bonds is divided into small samples based on their maturity period. This is *most likely* an example of:

A. Systematic sampling.

B. Simple random sampling.

C. Stratified random sampling.

In the given scenario, the analyst is studying the US bond market and divides the entire population of 10,000 bonds into smaller samples based on their maturity period. This is a clear example of stratified random sampling. Stratified random sampling is a method of sampling that involves the division of a population into smaller groups known as strata. The strata are formed based on members' shared attributes or characteristics. In this case, the maturity period of the bonds is the shared attribute. Once the strata are formed, samples are randomly selected from each stratum. This ensures that the sample accurately reflects the population across all strata. This method is particularly useful when the population is heterogeneous, or diverse, as it ensures that all groups within the population are adequately represented in the sample.

A is incorrect. Systematic sampling is a different method of sampling that involves selecting samples using a pre-determined regular interval, known as K. This interval is calculated using a formula where N represents the population size and n represents the sample size. In systematic sampling, the first unit is selected randomly and then every Kth unit is selected. This method is often used when a stream of input from which samples are taken is constantly flowing. However, in the given scenario, the analyst is not selecting samples at regular intervals, but rather based on a specific characteristic (maturity period), which is not characteristic of systematic sampling.

B is incorrect. Simple random sampling is a method of sampling that involves selecting samples from the entire population such that each element within the population has an equal chance of being selected. This method does not involve the selection of strata, or groups within the population with similar characteristics. In the given scenario, the analyst is not selecting samples randomly from the entire population, but rather dividing the population into strata based on the maturity period of the bonds. This is not characteristic of simple random sampling, making option B incorrect.

CFA Level 1, Topic 3 – 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.56 When prices are rising, the value of ending inventory is the highest under the:

A. FIFO method.

B. LIFO method.

C. Weighted average cost.

The FIFO method operates on the assumption that the first goods purchased or produced are the first ones to be sold. Therefore, in a period of rising prices, the cost of the older inventory, which is lower, is recognized first in the cost of goods sold. The newer, more expensive inventory, is left in ending inventory. As a result, the value of ending inventory under the FIFO method is higher compared to other inventory valuation methods.

B is incorrect. The LIFO (Last-In, First-Out) method operates on the assumption that the last goods purchased or produced are the first ones to be sold. In a period of rising prices, the cost of the newer, more expensive inventory is recognized first in the cost of goods sold. The older, cheaper inventory, is left in ending inventory. Therefore, the value of ending inventory under the LIFO method is lower compared to the FIFO method.

C is incorrect. The Weighted Average Cost method calculates the average cost of all goods available for sale during the period. This average cost is then used to determine the cost of goods sold and the ending inventory. In a period of rising prices, the value of ending inventory under the Weighted Average Cost method is lower compared to the FIFO method because it includes the cost of older, cheaper inventory in its calculation.

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.57 In the United States, listed companies are *most likely* to provide the following details in Management’s Discussion & Analysis: I. Significant events and uncertainties that affect the company’s liquidity, capital resources, and results of operations. II. Information about the effects of inflation, changing prices, or other material events and uncertainties that may cause the future operating results and financial condition to depart from the current reported financial information. III. Information about off-balance sheet obligations and contractual commitments. IV. Critical accounting policies that require management to make subjective judgments.

A. I and II.

B. I, II, and IV.

C. I, II, III and IV.

Point I states that significant events and uncertainties that affect the company's liquidity, capital resources, and results of operations must be highlighted. This is a crucial aspect of the MD&A as it provides investors with an understanding of the company's financial health and its ability to generate cash flows in the future. It also gives an insight into the management's view of the company's future prospects.

Point II requires the MD&A to provide information about the effects of inflation, changing prices, or other material events and uncertainties that may cause the future operating results and financial condition to materially depart from the current reported financial information. This is important as it helps investors understand the potential risks and uncertainties that could impact the company's future financial performance.

Point III mandates the disclosure of information about off-balance sheet obligations and contractual commitments. This is essential as off-balance sheet items can have a significant impact on a company's financial position and risk profile. Disclosing these items provides a more complete picture of the company's financial obligations.

Finally, point IV requires companies to discuss the critical accounting policies that require management to make subjective judgments and significantly impact reported financial results. This is important as it provides transparency about the accounting policies and practices used by the company and how they affect the financial statements.

A is incorrect. It only includes points I and II. While these points are important, they do not provide a complete picture of the information required in the MD&A. Specifically, it omits the requirement to disclose off-balance sheet obligations and contractual commitments (point III) and the need to discuss critical accounting policies (point IV).

B is incorrect. It includes points I, II, and IV but omits point III. While the information in points I, II, and IV is crucial, the absence of point III, which requires the disclosure of off-balance sheet obligations and contractual commitments, makes this option incomplete. This information is essential for a comprehensive understanding of a company's financial position and risk profile.

CFA Level 1, Topic 4 – Financial Statement Analysis, Learning Module 1 – Introduction to Financial Statement Analysis, LOS 1 c: Describe the importance of regulatory filings, financial statement notes and supplementary information, management’s commentary, and audit reports.

Q.58 When an auditor determines that the financial statements depart from accounting standards and are not fairly presented, he/she issues:

A. qualified audit opinion.

B. an adverse audit opinion.

C. an unqualified audit opinion.

An adverse audit opinion is issued when an auditor determines that the financial statements have significant departures from the accounting standards and are not fairly presented. This is a serious issue as it indicates that the financial statements are misleading and cannot be relied upon for making informed decisions. The auditor, in this case, believes that the misstatements are so material and pervasive that they pervade the financial statements as a whole. This is why option B is the correct answer.

A is incorrect. A qualified audit opinion is issued when the auditor concludes that, except for the effects of the matter to which the qualification relates, the financial statements give a true and fair view in accordance with the applicable financial reporting framework. This means that there are certain areas or aspects in the financial statements that do not comply with the generally accepted accounting principles (GAAP) or there is a limitation on the scope of the auditor's work. However, these issues are not pervasive to the financial statements as a whole. Therefore, the financial statements, except for the particular issue, are presented fairly in all material respects. This is different from an adverse opinion where the misstatements are so material and pervasive that they affect the financial statements as a whole.

C is incorrect. An unqualified audit opinion, also known as a clean opinion, is issued when the auditor concludes that the financial statements give a true and fair view in accordance with the applicable financial reporting framework. In other words, the auditor believes that the financial statements are free from material misstatements and are presented fairly in all material respects in accordance with the applicable accounting standards. This is the best type of report a business can receive. An unqualified opinion indicates a clean bill of health for the business's financial statements and is an indication that the financial statements are reliable and can be trusted by users such as investors, creditors, and others. This is in contrast to an adverse opinion where the auditor believes that the financial statements are not presented fairly in all material respects.

CFA Level 1, Topic 4 – Financial Statement Analysis, Learning Module 1 – Introduction to Financial Statement Analysis, LOS 1 c: Describe the importance of regulatory filings, financial statement notes and supplementary information, management’s commentary, and audit reports.

Q.59 During a seminar, the speaker asked the attendees to give their understanding of high-quality financial reporting. The attendees gave the following key points:

I. High-quality financial reports must have consistent profit.
II. High-quality financial reports spend a good amount of time and energy on the

presentation and distribution of financial reports.

III. High-quality financial reports are decision-useful.

Which of the statements mentioned above is the *most accurate* justification of high-quality financial reporting?

A. Statement I.

B. Statement II.

C. Statement III.

Option C accurately captures the essence of high-quality financial reporting. High-quality financial reporting is fundamentally characterized by its utility in decision-making processes. The primary goal of financial reporting is to provide stakeholders, such as investors, creditors, and regulatory bodies, with accurate, relevant, and timely information that aids in making informed decisions. Statement III encapsulates this essence by emphasizing that high-quality financial reports are decision-useful. This means that such reports not only present the financial health and performance of an entity accurately but also ensure that the information is relevant to the needs of its users. This criterion of decision usefulness is widely recognized by accounting standards and frameworks globally as a cornerstone of high-quality financial reporting.

A is incorrect. While consistency in profit reporting can be a sign of stable financial performance, it does not solely define the quality of financial reporting. High-quality financial reports must accurately reflect the financial position and performance of an entity, regardless of whether the profits are consistently high, variable, or even if there are losses. The emphasis on consistent profit overlooks the importance of transparency, accuracy, and comprehensiveness in reporting financial information. High-quality financial reporting should provide a faithful representation of an entity's financial performance, including the volatility and uncertainties inherent in business operations, rather than presenting consistently positive results that may not fully reflect reality.

B is incorrect. While the presentation and distribution of financial reports are important aspects of communication with stakeholders, they do not inherently determine the quality of the financial reporting. High-quality financial reports are distinguished by the accuracy, relevance, and reliability of the information they contain, rather than by the effort expended on their presentation and distribution. A well-presented and widely distributed financial report that lacks accurate and relevant information would not be considered high-quality. The essence of high-quality financial reporting lies in its content and its ability to meet the decision-making needs of its users, rather than in the aesthetics or the distribution efforts of the reporting entity.

CFA Level I, Topic 4—Financial Statements Analysis, Learning Module 10: Analysis of Income Taxes, LOS 9a: compare financial reporting quality with quality of reported results (including quality of earnings, cash flow, and balance sheet items)

Q.60 Under US GAAP, which of the following leases will be recorded as a finance lease from the lessee's perspective?

A. A firm leased equipment with the asset's present value of $81,575 while the asset's fair value is $97,000.

B. A jet rental company leased a private jet from a leasing company for ten years. The economic life of similar jets is twelve years.

C. A firm leased machinery for $100,000 and promised that the machinery would be returned to the lessor at the maturity of the lease.

Under US GAAP, a lease is classified as a finance lease from the lessee's perspective if it meets any of the following criteria: the lease transfers ownership of the underlying asset to the lessee; the lessee has the option to purchase the underlying asset and is reasonably certain to exercise that option; the lease term is for a major part of the asset’s economic life; the present value of the lease payments equals or exceeds substantially all of the fair value of the asset; or the underlying asset has no alternative use to the lessor.

The jet rental company leased a private jet from a leasing company for ten years, while the economic life of similar jets is twelve years. This means that the lease term covers 83% of the asset's useful life. According to the criteria mentioned above, if the lease term is for a major part of the asset’s useful life, it is classified as a finance lease. Therefore, in this scenario, the lease is classified as a finance lease from the lessee's perspective.

A is incorrect. The firm leased equipment with the asset's present value of $81,575 while the asset's fair value is $97,000. According to the criteria for a finance lease, the present value of the lease payments should equal or exceed substantially all of the fair value of the asset. In this case, the present value of the lease payment ($81,575) is 84% of the fair value of the asset, which does not meet the criteria for a finance lease. Therefore, this lease would not be classified as a finance lease from the lessee's perspective.

C is incorrect. The firm leased machinery for $100,000 and promised that the machinery would be returned to the lessor at the maturity of the lease. This scenario does not meet any of the criteria for a finance lease. Specifically, the lease does not transfer ownership of the underlying asset to the lessee, nor does the lessee have the option to purchase the underlying asset. Furthermore, the lease term does not cover a major part of the asset’s useful life, and the present value of the lease payments does not equal or exceed substantially all of the fair value of the asset. Therefore, this lease would not be classified as a finance lease from the lessee's perspective.

CFA Level I, Topic 4—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.61 The financial data of a UniLateral Equipments for the year 2014 is provided in the following table:

Net Income	700
Depreciation Expense	57
Decrease in Acc. Rec.	49
Increase in Inventory	36
Interest Expense	100
Increase in Capital Expenditure	180
Debt Issued	450
Debt Repaid	330

Assuming a tax rate of 40% for the firm, the free cash flow to equity (FCFE) for the year 2014 is *closest to*:

A. $650.

B. $710.

C. $770.

The Free Cash Flow to Equity (FCFE) is a measure of the amount of cash that could be potentially distributed to the shareholders of a company, after all expenses, reinvestment, and debt repayments have been taken into account. The formula for calculating FCFE is as follows:

FCFE = CFO - Fixed capital investment + Net borrowing

Where:

Cash Flow from Operating Activities (CFO) is calculated as Net income + Depreciation + Decrease in accounts receivable - Increase in inventory. In this case, CFO = $700 + $57 + $49 - $36 = $770.

Net borrowing is calculated as Bond issued - Bond repaid. In this case, Net borrowing = $450 - $330 = $120.

Fixed capital investment is the Increase in capital expenditure, which in this case is $180.

Substituting these values into the FCFE formula, we get FCFE = $770 - $180 + $120 = $710.

A is incorrect. This option underestimates the FCFE by not correctly accounting for the net borrowing and the adjustments for depreciation and changes in working capital. The calculation seems to have overlooked the impact of net borrowing and changes in working capital on the FCFE. This results in a lower FCFE value of $650, which is not accurate.

C is incorrect. This option overestimates the FCFE by not properly deducting the capital expenditures and/or incorrectly calculating the net borrowing or changes in working capital. It seems to have either added the capital expenditures instead of subtracting them, or miscalculated the net borrowing or changes in working capital. This results in a higher FCFE value of $770, which does not accurately reflect the cash available to equity shareholders after accounting for all necessary expenses and adjustments.

CFA Level I, Topic 4 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5b: calculate and interpret free cash flow to the firm,

free cash flow to equity, and performance and coverage cash flow ratios.

Q.62 Johnna Reynolds took the CFA Level I exam last week. She signed the CFA Institute pledge and though she has obeyed all provisions related to exam rules. However, as she was exiting the exam room, a proctor heard Reynolds state to another candidate, ''This exam had nothing to do with the CFA practice questions!'' For this reason, the exam proctor reported Johnna Reynolds for violating Standard VII(A): Conduct as participants in CFA Institute programs. Has Reynolds violated Standard VII(A): Conduct as participants in CFA Institute programs?

A. No, because Standard VII(A): Conduct as participants in CFA Institute programs allows for negative opinions to be expressed by members and candidates.

B. Yes, because Standard VII(A): Conduct as participants in CFA Institute programs disallows candidates from speaking to one another for at least twelve hours after taking an exam.

C. Yes, because Standard VII(A): Conduct as participants in CFA Institute programs clearly states that members and candidates cannot disparage the reputation of the CFA Institute by stating a negative opinion.

Option A is the correct answer because Standard VII(A): Conduct as participants in CFA Institute programs does not prohibit members and candidates from expressing their opinions about the exams. The primary concern of this standard is to maintain the integrity and security of the exams and the conduct of the participants during the exam process. Johnna Reynolds' statement that the exam content differed from the practice questions is an expression of her opinion and does not constitute a violation of the standard. This standard does not aim to suppress the freedom of speech or the expression of personal views of the candidates. Instead, it focuses on ensuring that the conduct of the participants during the exam process is ethical and does not compromise the integrity of the exams.

B is incorrect. The standard does not contain any such rule. The focus of Standard VII(A) is on ethical conduct, such as not cheating or divulging exam content, rather than restricting communication between candidates after the exam. Therefore, Reynolds' discussion with another candidate after the exam does not violate this standard. The standard does not aim to isolate candidates from each other after the exam but to ensure that they do not engage in unethical practices such as sharing confidential exam content.

C is incorrect. The CFA Institute's standards focus on maintaining integrity and professionalism. They do not restrict the expression of personal opinions, even if negative, as long as they are expressed in a professional manner. Therefore, Reynolds' comment about the exam's relevance to practice questions does not inherently disparage the reputation of the CFA Institute. The standard does not aim to censor negative opinions but to ensure that they are expressed in a professional and respectful manner.

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 Mandy Elmar, CFA, has been researching Xoom Corp. Elmar was almost done with her research and was planning to get the report typed today and delivered to the clients the next day. However, this morning, Elmar lost her folder, which had all the Xoom Corp's documents. In a panicked state, she called the management of Xoom Corp who, sent her their company projections. Although Elmar did not remember the exact forecast from her report, she knew they were lower than management's projections. Therefore, Elmar reduced the forecast provided by the management of Xoom by 15%. She also used graphs and charts from another report a colleague performed on Xoom 2 years earlier. Elmar managed to finish the report and submitted it on time to the clients. Elmar has *most likely*:

A. Violated Standard V(A) – Diligence and Reasonable Basis, Standard I(C) – Misrepresentation, and Standard V(C) – Record retention.

B. Violated Standard I(C) – Misrepresentation, Standard III(D) – Performance Presentation, and Standard III(E) – Preservation Of Confidentiality.

C. Violated Standard V(A) – Diligence and Reasonable Basis, Standard I(B) – Independence and Objectivity, and Standard III(E) – Preservation Of Confidentiality.

The first violation is of Standard V(A) – Diligence and Reasonable Basis. This standard requires that members and candidates exercise diligence, independence, and thoroughness in analyzing investments, making investment recommendations, and taking investment actions. Elmar failed to meet this standard when she lost her original research and instead of redoing it, she used the company's projections, which she knew were higher than her original estimates, and reduced them by 15%. This action shows a lack of diligence and thoroughness in her analysis and recommendations.

B is incorrect. Standard III(D) requires that members and candidates present performance information that is fair, accurate, complete, and compliant with applicable laws and regulations. Elmar did not present any performance information in her report, so this standard was not violated. Standard III(E) requires that members and candidates keep information about current, former, and prospective clients confidential unless the information concerns illegal activities, disclosure is required by law, or the client permits disclosure. There is no evidence in the scenario that suggests Elmar disclosed any confidential information, so this standard was not violated either.

C is incorrect. The Standard I(B) – Independence and Objectivity requires that members and candidates maintain independence and objectivity in their professional activities. There is no evidence in the scenario that suggests Elmar was influenced by others or that her objectivity was compromised in any way. Therefore, this standard was not violated.

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.64 Jason Ali, CFA, is a senior fixed-income analyst at a research firm. Ali overlooks three junior analysts who directly report to him. The junior officers work together as a team to generate research reports, which are reviewed by Ali upon completion. For their current assignment, the analysts are covering a corporate bond issued by Maxwell lndustrials. Unbeknownst to Ali and the two other analysts, Lisa Douglas, one of the junior analysts, has insider information concerning an unannounced positive earnings surprise. This information was shared by a corporate executive for the purposes of enticing traders to purchase the issue. Based on this information, Douglas presses the other analysts to issue a buy recommendation providing no valid justification for her decision. The report is completed and released with a buy recommendation. As Douglas' supervisor, Ali is *most likely* in violation of the CFA Institute Standards of Professional Conduct because he:

A. acted on material nonpublic information.

B. did not disclose the insider information to his team members.

C. issued a recommendation that lacked a reasonable and adequate basis.

Ali as a senior fixed-income analyst and supervisor failed to ensure that the research report had a reasonable and adequate basis before it was released. This is a violation of the CFA Institute Standards of Professional Conduct, specifically Standard V(A): Diligence and Reasonable Basis. This standard requires members and candidates to support their research recommendations with a reasonable and adequate basis. In this case, the 'buy' recommendation was not backed by a reasonable and adequate basis, and Ali, as the supervisor, failed to check for this during his review of the report. This lack of diligence and failure to ensure compliance with the standards by Douglas, who was under his authority, led to the violation.

A is incorrect. The insider information received by Douglas is indeed material and nonpublic, as it was exclusively shared by Maxwell executives with the intention of enticing trading. However, there is no evidence to suggest that Ali was aware of this information. As such, he could not have acted on material nonpublic information. Therefore, Ali is not in violation of Standard II(A): Material Nonpublic Information in this regard. It is important to note that acting on material nonpublic information is a serious violation of the CFA Institute Standards of Professional Conduct, but in this case, Ali did not have access to this information and hence, could not have acted on it.

B is incorrect. Disclosing material nonpublic information to team members is not in line with Standard II(A): Material Nonpublic Information. The standard requires that Douglas should make reasonable efforts to achieve public dissemination of the information. If that is not possible, she should communicate the information only to the designated supervisor and compliance personnel within the member's or candidate's firm. In this case, Douglas did not disclose the information to her team members, which is in line with the standard. Therefore, Ali is not in violation of the standard for not disclosing the insider information to his team members since he did not have prior knowledge.

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 Financial advisors at Asda manage individual clients' investments. To identify the most appropriate portfolio for any client, Asda uses a model that analyzes a range of simulated portfolios and comes up with a probability of achieving different levels of returns. A portfolio that gives the highest probability of achieving the client's minimum required return is selected. The Advisors at Asda are *most likely*:

A. not in violation of any standard.

B. violating Standard III (C) – Suitability.

C. violating Standard I (C) – Misrepresentation.

The violation occurs because the advisors are only selecting a portfolio that gives the highest probability of achieving the minimum required return specified by the client. This approach is overly simplistic and does not take into account the full range of a client's needs and circumstances. The CFA Institute's Standards of Professional Conduct require that investment professionals take into account a client's entire financial situation, investment knowledge, risk tolerance, and investment objectives when making recommendations. By focusing solely on the probability of achieving a minimum return, the advisors are not fully considering these other important factors. This could lead to the recommendation of unsuitable investments, which is a violation of Standard III (C) – Suitability.

A is incorrect. As explained above, the advisors' approach of only considering the probability of achieving a minimum return when selecting a portfolio is a violation of Standard III (C) – Suitability. This standard requires investment professionals to consider a client's entire financial situation, investment knowledge, risk tolerance, and investment objectives when making recommendations. By not doing so, the advisors are failing to meet their professional obligations and are therefore in violation of this standard.

C is incorrect. There is no evidence in the question to suggest that the advisors are misrepresenting their services, qualifications, or performance. Misrepresentation involves providing false or misleading information, or failing to disclose necessary information. The advisors' approach of only considering the probability of achieving a minimum return when selecting a portfolio may be overly simplistic and a violation of Standard III (C) – Suitability, but it does not constitute misrepresentation.

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.66 Which of the following is *least likely* part of Standard I – Professionalism?

A. Market Manipulation.

B. Independence and Objectivity

C. Knowledge of the Law and Misrepresentation.

Standard I - Professionalism, as outlined in the CFA Institute's Code of Ethics and Standards of Professional Conduct, encompasses several key elements, including Knowledge of the Law, Independence and Objectivity, Misrepresentation, and Misconduct. However, Market Manipulation is not included in this standard. Instead, it falls under the purview of Standard II - Integrity of Capital Markets, which deals with issues related to market manipulation, such as the dissemination of false information, trading on material non-public information, and other manipulative practices that can distort prices and mislead market participants.

B is incorrect. Independence and Objectivity is indeed a part of Standard I - Professionalism. Specifically, it is covered under Standard I(B), which stipulates that finance professionals should use reasonable care and judgment to achieve and maintain independence and objectivity in their professional activities. They should not offer, solicit, or accept any gift, benefit, compensation, or consideration that could be expected to compromise their own or another's independence and objectivity.

C is incorrect. Knowledge of the Law and Misrepresentation are also part of Standard I - Professionalism. Standard I(A) Knowledge of the Law requires finance professionals to understand and comply with all applicable laws, rules, and regulations of any government, regulatory organization, licensing agency, or professional association governing their professional activities. In the event of conflict, they must comply with the stricter law, rule, or regulation. Misrepresentation is covered under Standard I(C), which prohibits finance professionals from knowingly making any misrepresentations relating to investment analysis, recommendations, actions, or other professional activities.

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.67 Which of the following is the *least likely* motivation for the creation of the GIPS?

A. Improving the services offered to clients.

B. Standardizing the performance presentation for facilitating comparison.

C. Increasing the intervention of the government in the investment industry.

The Global Investment Performance Standards (GIPS) were not created with the intention of increasing government intervention in the investment industry. The GIPS were developed by the CFA Institute, a global association of investment professionals, with the primary goal of promoting ethical and transparent practices in investment performance reporting. This was done to ensure fair representation and full disclosure of investment performance, thereby fostering trust among investors and promoting a healthy investment environment.

The GIPS are voluntary standards that are based on the principles of fair representation and full disclosure. They provide a framework for investment firms to present their performance in a manner that is consistent and comparable across firms and countries. This helps investors to make informed decisions and promotes transparency and accountability in the investment industry. The GIPS are not a form of government regulation, but rather a self-regulatory initiative by the investment industry itself. Therefore, the creation of the GIPS does not involve increasing government intervention in the investment industry.

A is incorrect. Improving the services offered to clients is indeed a motivation for the creation of the GIPS, but it is not the least likely motivation. The GIPS were created to promote transparency and comparability in investment performance reporting, which ultimately benefits clients by providing them with accurate and reliable information to make informed investment decisions. However, this does not mean that the GIPS were created to increase government intervention in the investment industry, which is the least likely motivation.

B is incorrect. Standardizing the performance presentation for facilitating comparison is one of the main motivations for the creation of the GIPS. The GIPS provide a framework for investment firms to present their performance in a consistent and comparable manner. This facilitates comparison across firms and countries, helping investors to make informed decisions. However, this does not mean that the GIPS were created to increase government intervention in the investment industry, which is the least likely motivation.

CFA Level 1, Topic 10 – Ethics, Learning Module 4 – Introduction to the Global 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.68 Justin Scott, CFA, is an analyst and covers Amond Corp. In one of his recent meetings with the management of Amond Corp, Scott received non-material financial data. Using this information provided by management and his knowledge of the industry and competitors, Scott thinks that Amond is likely to make a tender offer to one of its competitors. If Scott's analysis is correct, this will materially impact Amond Corp's shareholders. Which of the following statements is *most accurate*?

A. Scott should publish the report.

B. Scott should not disseminate any information until the tender offer is made public.

C. Scott should send a copy of the report to the Management of Amond Corp for verification.

Option A aligns with the mosaic theory, which is a method of analysis used by stock analysts to gather information about a corporation's financial prospects without breaching the laws. The mosaic theory involves collecting public, non-material, and non-public information to determine the value of a security. In this case, Scott has used non-material information provided by the management of Amond Corp and his knowledge of the industry and competitors to reach a conclusion. This conclusion is not a violation of any standard as it is based on non-material information and his own analysis. Therefore, Scott is allowed to publish the report.

B is incorrect. This is not necessary as Scott's conclusion is based on non-material information and his own analysis, not on insider or material non-public information. The mosaic theory allows analysts to use non-material non-public information in their analysis. Therefore, there is no need for Scott to wait until the tender offer is made public to disseminate his analysis.

C is incorrect. This option suggests that Scott should send a copy of the report to the Management of Amond Corp for verification. However, this is not necessary and could potentially lead to a conflict of interest. Scott's analysis is based on his own understanding of the industry and the non-material information provided by the management. It is not the management's role to verify his analysis. Furthermore, sending the report for verification could potentially lead to the management influencing the report, which could compromise its objectivity and independence.

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.69 Vin Wisely, CFA, is employed by Wise Corp to provide investment advice to pension plan participants. Wisely realizes that the stock of Wise Corp is one of the investment options for the plan participants. However, he believes that investing in Wise Corp stock is too risky for a pension plan and advises the employees not to invest in Wise Corp. The company treasurer tells Wisely that he is violating his fiduciary duty to the Company by giving such advice. He also tells him that he could lose his job if he continues.
Wisely should *most likely*:

A. Continue to advise employees to sell the stock of Wise Corp.

B. Continue giving his "Sell" recommendation but mentioning the differing opinion of the treasurer.

C. Inform employees about the conflict of interest and stop advising them on the stock of Wisely Corp.

Vin Wisely, as a CFA, is primarily responsible for providing sound investment advice to the pension plan participants. His duty is to ensure that the advice he gives is in the best interest of his clients, regardless of his employment with Wise Corp. This is in line with the CFA Institute's Code of Ethics and Standards of Professional Conduct, which emphasizes the importance of loyalty, prudence, and care. Wisely's recommendation to avoid investing in Wise Corp stock, despite it being an investment option, is based on his professional judgment that it is too risky for a pension plan. This is why option A, which suggests that Wisely should continue to advise employees to sell the stock of Wise Corp, is the correct answer.

B is incorrect. This option suggests that Wisely should continue giving his "Sell" recommendation but also mention the differing opinion of the treasurer. However, this would be inappropriate as the treasurer is not an investment advisor and his opinion does not have to be mentioned. Furthermore, Wisely's primary duty is to the plan participants, not to the treasurer or the company. His advice should be based on his professional judgment and not influenced by the opinions of non-professional individuals. Therefore, mentioning the treasurer's differing opinion could potentially confuse the plan participants and lead them to make investment decisions that are not in their best interest.

C is incorrect. This option suggests that Wisely should inform employees about the conflict of interest and stop advising them on the stock of Wise Corp. However, this would be a violation of his duty as an investment advisor. Wisely has been employed to provide investment advice to the plan participants and he should not stop doing so just because there is a potential conflict of interest. Instead, he should manage this conflict in a way that ensures his advice remains in the best interest of his clients. Therefore, stopping his advice on the stock of Wise Corp would not be the most appropriate course of action.

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

Q.70 Blair Noir, CFA, is an analyst in the healthcare sector. Noir recently attended a meeting with the management of a company under her coverage. In the meeting, management expressed extremely positive views about a drug that is in the development stage. Based on the management's views, Noir stated in her report: "In the coming years, the Company will see a significant growth in sales." Which of the following statements is *most accurate* regarding Standard V(B) – Communication with Clients and Prospective Clients?

A. Noir has violated Standard V(B) – Communication with Clients and Prospective Clients as she presented management's statement as an opinion.

B. Since Noir relied on the management's statement as facts, she has violated Standard V(B) – Communication with Clients and Prospective Clients.

C. Noir is not in violation of Standard V(B) – Communication with Clients and Prospective Clients as she had a reasonable basis for her statement.

Blair Noir, CFA, has indeed violated Standard V(B) – Communication with Clients and Prospective Clients. The violation occurred when she failed to distinguish between fact and opinion in her communication. The statement she made in her report, "In the coming years, the Company will see a significant growth in sales," was based solely on the management's views, which were expressed during a meeting. These views, while positive, were not substantiated by any concrete facts or data. Noir took these views as facts, which is a clear violation of Standard V(B). This standard requires members to clearly distinguish between facts and opinions in their communications. It is crucial for analysts to verify the information they receive, especially when it forms the basis of their recommendations to clients and prospective clients. In this case, Noir should have sought factual evidence to support the management's optimistic views about the drug in development before making such a definitive statement in her report.

A is incorrect. The violation occurred because Noir failed to distinguish between fact and opinion, not because she presented the management's views as an opinion. She took the management's views as facts without any supporting evidence, which is a clear violation of the standard.

C is incorrect. The standard requires members to distinguish between facts and opinions in their communications. Noir's statement was based solely on the management's views, which were not substantiated by any concrete facts or data. Therefore, it cannot be said that she had a reasonable basis for her statement.

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.71 Leena McCarroll and Eric Smith are friends and work for the same investment management firm. McCarroll is a CFA® level II candidate. While introducing herself to the clients, she usually mentions that she expects to pass the CFA® level II exam in June. On his business card, Erick Smith mentions that he has passed both levels I and II CFA® exams at his first attempts, which is a fact. Are Leena McCarroll and Eric Smith most likely in violation of any standard?

A. Neither Leena McCarroll nor Eric Smith is in violation of any standard.

B. Only Leena McCarroll is in violation of Standard VII(B) – Reference to CFA Institute, the CFA Designation, and the CFA® Program.

C. Both Leena McCarroll and Eric Smith are in violation of Standard VII(B) – Reference to CFA Institute, the CFA Designation, and the CFA® Program.

Option B is the correct answer because it correctly identifies that only Leena McCarroll is in violation of Standard VII(B) – Reference to CFA Institute, the CFA Designation, and the CFA® Program. The reason for this is that McCarroll, by stating that she expects to pass the CFA® level II exam in June, is implying a level of certainty about a future event that is beyond her control. This is a violation of the standard because it could potentially mislead clients or other stakeholders about her qualifications and abilities. The CFA Institute's standards are designed to promote integrity and transparency in the investment profession, and making such presumptive statements about future exam results undermines these objectives.

A is incorrect. As explained above, McCarroll's statement about her expected exam results does constitute a violation of Standard VII(B). It's important to note that the standards apply to all members and candidates of the CFA Program, regardless of their current level or status. Therefore, McCarroll's violation cannot be overlooked or dismissed.

C is incorrect. While it is true that McCarroll is in violation, as explained above, Smith is not. Smith's statement on his business card that he has passed both levels I and II of the CFA® exams at his first attempts is a factual statement about past events. The standards do not prohibit members or candidates from stating factual information about their exam results. Therefore, Smith's statement does not constitute a violation of the standard.

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.72 Which of the following is *least likely* expected from a member with fiduciary responsibility for a pension plan?

A. The member should always act in the interest of plan participants

B. The member should make judgments from the perspective of the total portfolio.

C. In the case of a proxy fight, the member should provide support to the sponsor's management.

According to Standard III(A)– Loyalty, Prudence, and Care, a fiduciary should analyze the proposal of the management and should provide support to the management in the event of a proxy fight only if it is beneficial to the plan participants. The fiduciary's primary responsibility is to the plan participants, not to the sponsor's management. Therefore, the fiduciary should not automatically support the management in a proxy fight, but should instead consider the best interests of the plan participants. This could mean supporting the management, but it could also mean opposing the management if that is what is best for the plan participants.

A is incorrect. This is a fundamental principle of fiduciary responsibility. The fiduciary has a duty of loyalty to the plan participants, which means that the fiduciary must act in the best interests of the plan participants at all times. This includes making investment decisions that are in the best interests of the plan participants, and not making decisions that are in the fiduciary's own best interests or the interests of the sponsor's management.

B is incorrect. The fiduciary must consider the entire portfolio when making investment decisions, not just individual investments. This means that the fiduciary must consider the risk and return characteristics of the entire portfolio, and how each investment fits into the overall portfolio. The fiduciary must also consider the needs and objectives of the plan participants, and how the portfolio can best meet those needs and objectives.

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

Q.73 Aisun Almas, CFA, has been managing the portfolio of Mrs. Sanem for the past year. Almas was able to earn good returns for Mrs. Sanem and requested that Mrs. Sanem tell her friends about the above-average returns that she could earn on her portfolio. Is Almas *most likely* in violation of Standard III(D) – Performance Presentation?

A. No, Almas is not violating the standard.

B. Yes, Almas is violating the standard as the message does not pass the test of completeness.

C. Yes, Almas is violating the standard as she cannot request that her client talk about the portfolio performance to others.

Option B is the correct answer because Standard III(D) – Performance Presentation of the CFA Institute's Code of Ethics and Standards of Professional Conduct requires that members and candidates must communicate investment performance information fairly, accurately, and completely. This standard applies to both written and oral communications. In the given scenario, Almas has only managed Mrs. Sanem's portfolio for a year, which is a relatively short period of time. Therefore, the performance data for this period does not pass the test of completeness. The standard requires that performance information should be presented in a manner that is fair, accurate, and complete, and should not be misleading. A one-year performance data might not provide a comprehensive view of Almas's investment management skills and could potentially mislead other potential clients.

A is incorrect. As mentioned above, Standard III(D) requires that performance information should be presented in a manner that is fair, accurate, and complete. Almas's presentation of her one-year performance data does not meet the requirement of completeness, and thus, she is in violation of the standard. Therefore, option A is incorrect because it incorrectly states that Almas is not violating the standard.

C is incorrect. The standard does not prohibit members and candidates from requesting their clients to talk about their portfolio performance to others. What the standard requires is that any performance information communicated should be fair, accurate, and complete. In the given scenario, Almas's request to Mrs. Sanem to talk about her portfolio performance to others does not in itself constitute a violation of the standard. Therefore, option C is incorrect because it incorrectly identifies a non-existent violation of the standard.

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./em>

Q.74 Ignacio Dawson is an investment advisor at Larson Securities Inc. Hubert Padilla, a high-net-worth client, offered Dawson a 2% profit sharing each year on achieving a return above 20%, to which Dawson agrees. When Padilla asked about brokerage, Dawson advises Padilla to shift his brokerage Towards Willis Brokers as they are the best in town in terms of pricing and service quality. When Padilla left, Dawson wrote an email to his employer regarding his compensation arrangement with Padilla. The next day, Dawson received a cash check in the name of Larson Securities from Willis Brokers for introducing the new client to them. Dawson has most likely violated Standard IV(B) – Additional Compensation Arrangements by:

A. failing to disclose Padilla about Larson's arrangement with Willis Brokers.

B. accepting Padilla's offer before obtaining permission from his employer.

C. failing to disclose Padilla regarding his firm's arrangement with Willis and failing to disclose his profit-sharing arrangement prior to obtaining consent from his employer.

The first part of the violation pertains to Dawson's failure to disclose his firm's arrangement with Willis Brokers to Padilla. This is a violation of Standard IV(B) – Additional Compensation Arrangements. The CFA Institute's Standards of Professional Conduct requires that members and candidates must not accept gifts, benefits, compensation, or consideration that competes with or might reasonably be expected to create a conflict of interest with their employer's interest unless they obtain written consent from all parties involved. In this case, Dawson failed to inform Padilla about the referral arrangement between his firm, Larson Securities, and Willis Brokers. This lack of transparency could potentially influence Padilla's decision to shift his brokerage, as he might perceive this as a conflict of interest.

A is incorrect. While it is true that Dawson failed to disclose his firm's arrangement with Willis Brokers to Padilla, this option does not fully capture the extent of Dawson's violations. It only addresses one aspect of the violation, ignoring the fact that Dawson also accepted a profit-sharing arrangement with Padilla without obtaining consent from his employer. This is a significant omission, as it is a clear violation of Standard IV(B) – Additional Compensation Arrangements. Therefore, while option A is partially correct, it does not provide a comprehensive answer to the question.

B is incorrect. This option only addresses Dawson's acceptance of Padilla's offer before obtaining permission from his employer. While this is indeed a violation of Standard IV(B) – Additional Compensation Arrangements, it does not account for Dawson's failure to disclose his firm's arrangement with Willis Brokers to Padilla. This omission is significant, as it represents a violation of Standard VI(C) – Referral Fees. Therefore, while option B is partially correct, it does not fully address the question's scope, which includes both violations committed by Dawson.

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.75 Dan Walton, CFA, is a supervisor of a research analyst team at Pioneer Investing. Walton noticed that Eva Peters developed a new model and started trading based on the new model without testing it. Walton asks Peters to stop trading immediately. When Walton enquired further into the situation, he realized that the company has no policy or guidelines for testing new models. What is the *most appropriate* action to be taken by Walton in this situation?

A. Walton should fire Peters for not testing the model.

B. Walton should report Peters to the Compliance Team.

C. Walton should encourage the firm to develop guidelines for the testing of new models.

Option C addresses the root cause of the problem, which is the lack of guidelines for testing new models. Walton noticed that Eva Peters started trading based on a new model without testing it. However, upon further investigation, he realized that the company has no policy or guidelines for testing new models. This is a significant oversight on the part of the company, as it leaves room for potential errors and risks associated with untested models. Therefore, the most appropriate action for Walton to take in this situation is to encourage the firm to develop guidelines for testing new models. This aligns with Standard V(A)– Diligence and Reasonable Basis, which recommends that investment professionals should have a reasonable and adequate basis, supported by appropriate research and investigation, for any investment analysis, recommendation, or action.

A is incorrect. Firing Peters for not testing the model would not be an appropriate action in this situation. While it is true that Peters started trading based on an untested model, it is also important to note that the company did not have any guidelines or policy in place for testing new models. Therefore, it would be unfair to penalize Peters for the company's oversight. Furthermore, firing Peters would not solve the underlying problem, which is the lack of guidelines for testing new models.

B is incorrect. Reporting Peters to the Compliance Team would also not be an appropriate action in this situation. Similar to option A, this action would be penalizing Peters for the company's oversight. Moreover, reporting Peters to the Compliance Team would not address the root cause of the problem, which is the lack of guidelines for testing new models.

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

Q.76 Cloe Vendetti, CFA, is a business strategist at WQS investments, an investment firm known for hiring investment managers who have the CFA designation or candidates. Due to this, Cloe claims that her firm offers superior returns compared to other firms in the industry in a recent press statement. Historically, the firm has offered its clients above-average returns. Under the CFA Institute Code and Standards, Cloe's claim:

A. did not violate the CFA Institute Code and Standards by claiming superior returns.

B. did not violate CFA Institute Code and Standards because historical returns have been above average.

C. should have not guaranteed superior returns because their managers have CFA designations.

Cloe Vendetti, a CFA and business strategist at WQS investments, made a claim that her firm offers superior returns compared to other firms in the industry. This claim is in violation of the CFA Institute Code and Standards, specifically Standard VII(B) - Responsibilities as a CFA Institute Member or CFA Candidate - Reference to CFA Institute, the CFA Designation, and the CFA Program. The violation lies in the fact that she attributed the superior returns to the fact that the firm's managers are CFA members and candidates. This is a misrepresentation and overstatement of the meaning or implications of membership in the CFA Institute or holding the CFA designation.

While it is true that the firm has historically offered above-average returns, this should not be tied to the fact that the investment firm's managers are CFA candidates and members. The CFA designation is a mark of knowledge and competence in the field of finance and investment, but it does not guarantee superior returns. The performance of an investment firm depends on a multitude of factors, including market conditions, the firm's investment strategy, and the individual decisions of its managers. Therefore, it is misleading to attribute the firm's superior returns solely to the CFA designation of its managers.

Option A is incorrect. The claim made by Cloe is in violation of the CFA Institute Code and Standards. According to Standard VII(B), members and candidates must not misrepresent or overstate the implications of membership in the CFA Institute or holding the CFA designation. By claiming that her firm offers superior returns because its managers are CFA members and candidates, Cloe has violated this standard. The CFA designation does not guarantee superior returns, and it is misleading to suggest otherwise.

Option B is incorrect. While it is true that the firm has historically offered above-average returns, this does not justify Cloe's claim. Stating the firm's historical returns is acceptable, but guaranteeing these returns in the future is a violation of the CFA Institute Code and Standards. The performance of an investment firm is subject to risks inherent in investing, and future returns cannot be guaranteed based on past performance.

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.77 Marco Triaelli, CFA, works for a large bank in New York City. He has recently been arrested for participating in a non-violent protest against capitalism. Has Triaelli *most likely* violated any CFA Institute Code and Standards?

A. Yes, Triaelli has violated Standard IV(A) – Duties to Employer.

B. Yes, Triaelli has violated Standard I(D) – Misconduct.

C. No, Triaelli has not violated any CFA Institute Code and Standards.

The correct answer is option C, stating that Triaelli has not violated any CFA Institute Code and Standards. The CFA Institute's Code and Standards are primarily concerned with the professional conduct of its members. They are designed to ensure that members act with integrity, competence, diligence, respect, and in an ethical manner with the public, clients, prospective clients, employers, employees, colleagues in the investment profession, and other participants in the global capital markets.

These standards do not prohibit members from participating in non-violent protests. In fact, the right to peaceful protest is a fundamental human right that is recognized and protected by international law. This includes protests against capitalism. Therefore, Triaelli's participation in a non-violent protest against capitalism does not constitute a violation of the CFA Institute's Code and Standards.

Furthermore, the fact that Triaelli works for a large bank does not automatically mean that he cannot participate in a protest against capitalism. His employment status does not restrict his right to express his personal views and beliefs, as long as he does so in a manner that is not violent or disruptive to the public order.

A is incorrect. Standard IV(A) – Duties to Employer, primarily deals with the responsibilities of members towards their employers. This includes loyalty, prudence, and care, additional compensation arrangements, responsibilities of supervisors, and so on. Triaelli's participation in a non-violent protest does not fall under any of these categories.

B is incorrect. Standard I(D) – Professional Misconduct, pertains to members engaging in any professional conduct involving dishonesty, fraud, deceit, or misrepresentation, or any act that reflects adversely on their professional reputation, integrity, or competence. Triaelli's participation in a non-violent protest does not involve any of these elements.

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 Laura Haldon, CFA, has worked for a full-service brokerage firm. She recently met with a client and informed them that her firm could provide the services they need after understanding all the requirements. Has Haldon *most likely* violated Standard I (C) – Misrepresentation given the information mentioned above?

A. Yes, Haldon cannot make such commitments.

B. No, Haldon is not in violation as this was only oral communication.

C. No, Haldon is not in violation if her commitment was based on facts.

Option C aligns with the Standard I (C) - Misrepresentation of the CFA Institute's Code of Ethics and Standards of Professional Conduct. According to this standard, a CFA charterholder or candidate must not knowingly make any misrepresentations relating to investment analysis, recommendations, actions, or other professional activities. In the given scenario, Laura Haldon, CFA, has made a commitment to her client that her firm can provide the services they need. If this commitment is based on facts, meaning that her firm indeed has the capabilities and resources to deliver the services as promised, then she has not violated the standard. She has merely communicated the factual capabilities of her firm to the client, which is an essential part of her professional duties. The mode of communication, whether oral or written, does not affect the application of the standard. The key factor is the truthfulness and accuracy of the information provided.

A is incorrect. As a CFA charterholder, she is expected to communicate factual information about her firm's capabilities to her clients. If her firm indeed has the resources and capabilities to provide the services as promised, then her commitment is not a misrepresentation. The standard does not prohibit making commitments; it prohibits making false or misleading commitments.

B is incorrect. The Standard I (C) - Misrepresentation applies to all forms of communication, whether oral or written. The key factor is not the mode of communication but the truthfulness and accuracy of the information communicated. If Laura's commitment was based on facts, she has not violated the standard, regardless of whether the communication was oral or written.

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

Q.79 Aly Nabil, CFA, covers the real estate sector of the Middle East. Emar Group, a Real Estate company in Dubai, has gotten a few phone calls from Nabil, who is trying to estimate the company's value. Emar runs 878 Hotel in Dubai and recently offered Nabil a trip to Dubai and stay at 878 at Emar Group's expense. Which of the following is the *most appropriate* action that Nabil should take not to violate any CFA Institute Code and Standards?

A. Aly should decline the offer.

B. Aly should accept the offer and mention it in his research report.

C. Aly should accept the offer and inform his supervisor about the offer.

Aly should decline the offer. This is because according to the CFA Institute Code and Standards, specifically Standard I (B)- Independence and Objectivity, analysts are not permitted to accept gifts from companies that they are covering. This is to ensure that their analysis and judgement are not influenced by any external factors or personal benefits. Accepting such an offer could potentially compromise Nabil's independence and objectivity in his analysis of Emar Group. It could create a conflict of interest where Nabil might feel obligated to provide a more favorable analysis of the company due to the hospitality received. Therefore, to maintain his professional integrity and adhere to the CFA Institute Code and Standards, Nabil should decline the offer.

B is incorrect. While it suggests that Aly should disclose the offer in his research report, it still involves accepting the offer which is against the CFA Institute Code and Standards. Even if the offer is disclosed, it does not eliminate the potential conflict of interest or the risk of compromising Nabil's independence and objectivity. The act of accepting the offer itself is a violation of the standards, regardless of whether it is disclosed or not.

C is incorrect. Similar to option B, this option also involves accepting the offer which is a violation of the CFA Institute Code and Standards. Informing the supervisor about the offer does not negate the fact that accepting the offer could compromise Nabil's independence and objectivity. The potential conflict of interest still exists and it could influence Nabil's analysis of Emar Group.

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 Ravi Mehra is an Indian citizen working in India for the US branch of a Canadian bank. Referral fees are allowed in the U.S. and Canada but not in India. If the company offers referral fees, what is the *most likely* action to be taken by Ravi Mehra, CFA?

A. Mehra should not accept the referral fees.

B. Mehra should accept the referral fees and disclose the referral fees.

C. Mehra should accept the referral fees, and there is no requirement to make any disclosure as referral fees are allowed in US and Canada.

Ravi Mehra, being an Indian citizen working in India, is bound by the laws of his home country, even though he is working for the US branch of a Canadian bank. According to Standard I(A)- Knowledge of the Law, in situations where there are conflicting laws, the strictest of the laws should be adhered to. In this case, the Indian law, which prohibits referral fees, is stricter than the laws of the US and Canada, which allow referral fees. Therefore, Mehra should abide by the Indian law and not accept the referral fees. This is why option A is the correct answer.

Even though Mehra is working for the US branch of a Canadian bank, he is still an Indian citizen working in India. Therefore, he is bound by the laws of his home country. The Indian law, which is stricter than the laws of the US and Canada, prohibits referral fees. Therefore, Mehra should not accept the referral fees, even if they are offered by the company. Accepting the referral fees would be a violation of the Indian law, and hence, a violation of Standard I(A)- Knowledge of the Law.

B is incorrect. This option would still be a violation of the Indian law, which prohibits referral fees. Even if Mehra discloses the referral fees, he would still be in violation of the law. According to Standard I(A)- Knowledge of the Law, in situations where there are conflicting laws, the strictest of the laws should be adhered to. In this case, the Indian law is stricter than the laws of the US and Canada, and hence, should be followed.

C is incorrect. This option would be a violation of the Indian law, which prohibits referral fees. Even if the referral fees are allowed in the US and Canada, Mehra, being an Indian citizen working in India, is bound by the laws of his home country. Therefore, he should not accept the referral fees, regardless of whether there is a requirement to disclose them or not.

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

Q.81 Consider the following statements about the role of composites in performance presentation: Statement I: Composites help in presenting a firm’s performance under various asset classes. Statement II: Composites help evaluate a firm’s performance in a single statistic that enables comparison across firms. Statement III: Composites help the investor to evaluate if a firm is GIPS compliant. Which of the above statement(s) about composite is/are *most likely* accurate?

A. I only.

B. I & II only.

C. I, II & III.

Composites indeed play a significant role in presenting a firm's performance under various asset classes. Composites are groupings of independent discretionary portfolios that represent similar investment strategies or objectives. They provide a comprehensive view of a firm's performance under different asset classes, allowing investors to understand the firm's performance in a more nuanced and detailed manner. This is particularly useful when investors are trying to assess the firm's performance in specific asset classes, as it allows them to compare the firm's performance in those asset classes with its overall performance.

B is incorrect. Composites do not help to evaluate a firm's performance in a single statistic that enables comparison across firms. While composites do provide a comprehensive view of a firm's performance under various asset classes, they do not condense this information into a single statistic that can be used for comparison purposes. Each composite represents a different investment strategy or objective, and therefore, each composite needs to be evaluated separately. Comparing a firm's performance based on a single statistic would not provide an accurate or comprehensive view of the firm's performance.

C is incorrect. The Global Investment Performance Standards (GIPS) are a set of standardized, industry-wide ethical principles that guide investment firms on how to calculate and present their investment results to prospective clients. While composites can provide useful information about a firm's performance, they do not provide information about whether the firm is adhering to these standards. Compliance with GIPS is determined through a separate process that involves a thorough review of the firm's policies and procedures.

CFA Level 1, Topic 10 – Ethics, Learning Module 4 – Introduction to the Global Performance Standards (GIPS), LOS 4c: Explain the construction and purpose of composites in performance reporting.

Q.82 When a firm is being verified for Compliance with GIPS, which of the following is a verifier most likely to do? I. A verifier must attest that the firm's procedures and processes for performance presentation are in accordance with GIPS.
II. A verifier should clearly distinguish the composites for which the verification is done and not done.

A. Only I.

B. Only II.

C. Both I and II.

The correct answer is option A because a verifier's primary role in compliance with GIPS (Global Investment Performance Standards) is to attest that the firm's procedures and processes for performance presentation are in accordance with GIPS. This involves a comprehensive evaluation of the firm's policies, procedures, and data to ensure they meet the standards set by GIPS. The verifier examines the firm's performance measurement processes, calculation methodologies, and disclosure practices to ensure they are consistent with GIPS. This is a critical aspect of the verification process as it ensures that the firm's performance presentations are fair, accurate, and fully disclosed.

The verifier's role is to attest that the firm's procedures and processes for performance presentation are in accordance with GIPS. This is a mandatory requirement for verification and is a key aspect of the verifier's role. The verifier must ensure that the firm's performance presentations are accurate, complete, and fair, and that they comply with the GIPS standards. This involves a thorough review of the firm's performance measurement processes, calculation methodologies, and disclosure practices.

B is incorrect. Verification is a firm-wide process and not done on individual composites. The verifier's role is to ensure that the firm as a whole is in compliance with GIPS, not to distinguish between individual composites. The verifier does not have the responsibility to identify which composites have been verified and which have not. This is a misunderstanding of the verifier's role and responsibilities under GIPS.

C is incorrect. While it is true that a verifier must attest that the firm's procedures and processes for performance presentation are in accordance with GIPS (as stated in option A), it is not true that a verifier should clearly distinguish the composites for which the verification is done and not done (as stated in option B).

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.83 Amir Karimili, CFA, has been very vocal about his views on the CFA® exam testing policies. Karimili claims that "Because there are a lot of CFA charterholders, I believe that the CFA Institute deliberately fails students to save the prestige of CFA® charter from dilution." Which of the following is *most accurate* about Karimili's behavior?

A. Karimili has not violated any CFA Institute Code and Standards.

B. Karimili has violated Standard V(B) – Communication with Clients and Prospective Clients.

C. Karimili has violated Standard VII(A) – Conduct as Members and Candidates in the CFA® Program.

Option A is the correct answer because Amir Karimili, as a CFA charterholder, is allowed to express his personal views about the CFA Institute or Program. The CFA Institute Code and Standards do not prohibit members and candidates from expressing their opinions, as long as they do not misrepresent facts or engage in any conduct that compromises the integrity of the CFA Institute, the CFA Program, or the CFA exam. In this case, Karimili is expressing his belief that the CFA Institute deliberately fails students to maintain the prestige of the CFA charter. This is a personal opinion and does not constitute a violation of any standard.

B is incorrect. Standard V(B) – Communication with Clients and Prospective Clients, requires members and candidates to make reasonable efforts to ensure that investment analysis recommendations, actions, and other professional activities are based on sound principles and appropriate information. It also requires them to present such information fairly and accurately, avoiding any misrepresentation. In this case, Karimili is not communicating with clients or prospective clients, but expressing his personal opinion about the CFA Institute's testing policies.

C is incorrect. Standard VII(A) – Conduct as Members and Candidates in the CFA Program, requires members and candidates to not engage in any conduct that compromises the reputation or integrity of the CFA Institute, the CFA designation, or the CFA exam. It also requires them to not engage in any conduct that could undermine the public's trust in the CFA Program. In this case, Karimili is expressing his personal opinion, which does not compromise the reputation or integrity of the CFA Institute, the CFA designation, or the CFA exam.

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.84 Which of the following forms of referral fees, compensation, consideration, or benefit earned when issuing a recommendation should *most likely* be disclosed?

A. Only cash considerations.

B. Only considerations in the form of cash or soft dollars.

C. Considerations in the form of cash, soft dollars or in kind.

The considerations in the form of cash, soft dollars or in kind should most likely be disclosed when issuing a recommendation are in accordance with Standard VI(C) – Referral Fees of the CFA Institute's Standards of Professional Conduct. The standard stipulates that all forms of referral fees, compensation, consideration, or benefit earned when issuing a recommendation should be disclosed. This includes fees that are paid in cash, soft dollars, and in kind. The rationale behind this standard is to ensure transparency and to avoid any potential conflicts of interest that may arise from undisclosed benefits. By disclosing all forms of consideration, the advisor is able to maintain the trust and confidence of their clients, thereby upholding the integrity of the profession.

A is incorrect. This option suggests that only cash considerations should be disclosed. However, this is not in line with Standard VI(C) – Referral Fees, which clearly states that all forms of consideration, not just cash, should be disclosed. This includes soft dollars and in-kind benefits. By only disclosing cash considerations, an advisor would be withholding important information from their clients, potentially leading to a breach of trust and a violation of the standard.

B is incorrect. While it is true that these forms of consideration should be disclosed, this option is still incorrect as it omits in-kind benefits. According to Standard VI(C) – Referral Fees, all forms of consideration, including in-kind benefits, should be disclosed. By omitting in-kind benefits, an advisor would not be fully transparent with their clients, potentially leading to a breach of trust and a violation of the standard.

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.85 Which of the following statements are components of the CFA Institute Code of Ethics?

I. Act with integrity, competence, diligence, respect, and in an ethical manner with the public, clients, prospective clients, employers, employees, colleagues in the investment profession, and other participants in the global capital markets.
II. Preserve the confidentiality of information communicated by clients, prospects, or employers about investment matters.
III. Practice and encourage others to practice professionally and ethically to reflect credit on themselves and the profession.

A. Only I.

B. Only I and III.

C. I, II, and III.

The Code of Ethics is a set of principles that guide the professional conduct of investment professionals. It is designed to ensure that they act with integrity, competence, diligence, respect, and in an ethical manner with all stakeholders in the investment profession and the global capital markets. This is clearly reflected in statement I.

Statement III also aligns with the Code of Ethics as it encourages professionals to practice ethically and professionally, thereby reflecting credit on themselves and the profession. This is an important aspect of the Code as it not only guides individual behavior but also promotes the overall reputation and credibility of the investment profession.

A is incorrect. This option only includes statement I, which, while being a component of the Code of Ethics, does not fully represent the Code. The Code of Ethics is not just about individual conduct but also about promoting ethical practices within the profession, as reflected in statement III. Therefore, choosing only statement I is not a comprehensive representation of the Code of Ethics.

C is incorrect. Statement II is not a component of the Code of Ethics. While preserving the confidentiality of client information is an important aspect of professional conduct, it is not part of the Code of Ethics as outlined by the CFA Institute. Instead, it is part of the Standard of Professional Conduct, which is a separate set of guidelines that governs the behavior of investment professionals. Therefore, including statement II in the answer is incorrect.

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

Q.86 David Liam, CFA, manages portfolios for several wealthy clients. Liam met with Mr. Goel, one of his clients, over lunch. Liam advises Mr. Goel to double his investment in JKF Corp as the operational restructuring is expected to bring in higher profitability. To not violate Standard V – Investment Analysis, Recommendation, and Action, what should Liam *most likely* do when he reaches his office?

A. David Liam should record the details of his meeting and investment recommendation.

B. David Liam should first verify the suitability of the investment and then execute the order.

C. David Liam should identify other clients for whom investment in JKF is suitable and inform them about the expected increase in profitability.

Option A is the correct answer because it aligns with Standard V(C) – Record Retention of the CFA Institute's Code of Ethics and Standards of Professional Conduct. This standard requires members to document all the recommendations and communications with clients. In the given scenario, David Liam, CFA, has made an investment recommendation to his client, Mr. Goel, during a lunch meeting. As per the standard, Liam should record the details of this meeting and the investment recommendation he made. This is crucial for maintaining transparency, accountability, and for future reference. It also helps in case of any disputes or misunderstandings that may arise in the future regarding the investment recommendation.

B is incorrect. The suitability of the investment should have been considered by Liam before making the recommendation to Mr. Goel. As a CFA charterholder, Liam is expected to conduct a thorough analysis and consider the suitability of an investment for a client before making any recommendations. Therefore, the action of verifying the suitability of the investment and then executing the order after the recommendation has been made is not in line with the standards. The standards require that the suitability analysis be done prior to making the recommendation, not after.

C is incorrect. While it may seem like a good practice to identify other clients for whom the investment in JKF Corp is suitable and inform them about the expected increase in profitability, this action does not align with Standard V – Investment Analysis, Recommendation, and Action. Instead, it falls under Standard III(B) – Fair Dealing. This standard requires members to deal fairly and objectively with all clients when providing investment analysis, making investment recommendations, taking investment action, or engaging in other professional activities. Therefore, identifying other suitable clients and informing them about the investment opportunity in JKF Corp after making the recommendation to Mr. Goel does not comply with Standard V.

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.87 When introducing herself to a potential client, Jhansu Haldon usually says, "I was awarded a CFA degree in 2015." Haldon is *most likely*:

A. not in violation of any standard in mentioning this.

B. in violation of Standard VII(A) – Conduct as Members and Candidates in the CFA® Program.

C. in violation of Standard VII(B) – Reference to CFA Institute, the CFA® designation, and the CFA® Program.

Jhansu Haldon's statement of being awarded a CFA degree in 2015 is a violation of Standard VII(B) – Reference to CFA Institute, the CFA® designation, and the CFA® Program. This is because the CFA® charter is not a degree, but a professional credential. The CFA Institute awards the CFA® charter to individuals who have passed three levels of exams covering areas such as accounting, economics, ethics, money management, and security analysis. The CFA® charter is a globally recognized credential that provides a strong foundation of advanced investment analysis and real-world portfolio management skills. It is not a degree, but a professional designation that certifies the competence and integrity of financial analysts. Misrepresenting the CFA® charter as a degree is a violation of Standard VII(B), which requires members and candidates to make appropriate and accurate reference to the CFA Institute, the CFA® designation, and the CFA® Program.

A is incorrect. The statement that Haldon is not in violation of any standard in mentioning this is incorrect. As explained above, Haldon's reference to the CFA® charter as a degree is a violation of Standard VII(B). This standard requires members and candidates to make appropriate and accurate reference to the CFA Institute, the CFA® designation, and the CFA® Program. Misrepresenting the CFA® charter as a degree is not an appropriate or accurate reference to the CFA Institute, the CFA® designation, or the CFA® Program.

B is incorrect. The statement that Haldon is in violation of Standard VII(A) – Conduct as Members and Candidates in the CFA® Program is incorrect. Standard VII(A) requires members and candidates to act with integrity and maintain the dignity and respect of the CFA Institute. Haldon's misrepresentation of the CFA® charter as a degree does not fall under this standard. Instead, it is a violation of Standard VII(B), which requires appropriate and accurate reference to the CFA Institute, the CFA® designation, and the CFA® Program.

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.88 Jennifer Lively, CFA, manages accounts for WS Capital. When transacting any trades in her client's accounts, Lively ensures that she does not trade in her mother's account, who is also a client, until all the other clients have been allowed to trade. Is Lively's approach to trading in her mother's account *most appropriately* in line with Standard VI (B) – Priority of Transaction?

A. No, Lively should not trade in her mother's account at all.

B. No, Lively should treat her mother's account like any other client account.

C. Yes, Lively gives all her clients enough opportunity to trade before trading in her mother's account.

According to Standard VI (B) – Priority of Transaction, in the CFA Institute's Code of Ethics and Standards of Professional Conduct, it is stated that investment professionals should make reasonable efforts to avoid any real or potential conflict of interest situations with their clients. In this context, Jennifer Lively, CFA, should treat her mother's account just like any other client account. This means that she should not delay trading in her mother's account until all other clients have been allowed to trade. By doing so, she is putting her mother's account at a disadvantage, which is not in line with the standard. The standard requires that all clients be treated equally and fairly, regardless of their relationship with the investment professional. Therefore, Lively should not differentiate her mother's account from other client accounts in terms of trading.

A is incorrect. The statement that Lively should not trade in her mother's account at all is not in line with Standard VI (B) – Priority of Transaction. The standard does not prohibit investment professionals from managing accounts of family members. Instead, it requires that these accounts be treated just like any other client accounts. Therefore, Lively can trade in her mother's account, but she should ensure that she treats it like any other client account, without giving it any disadvantage or advantage. The suggestion that she should not trade in her mother's account at all is an extreme interpretation of the standard and is not what the standard requires.

C is incorrect. The statement that Lively gives all her clients enough opportunity to trade before trading in her mother's account might seem fair at first glance. However, according to Standard VI (B) – Priority of Transaction, this approach is not appropriate. The standard requires that all client accounts be treated equally and fairly, without any discrimination. By delaying trading in her mother's account until all other clients have been allowed to trade, Lively is putting her mother's account at a disadvantage, which is not in line with the standard. Therefore, this approach is not most appropriately in line with the standard.

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

Q.89 Eva Watson, CFA, is a manager at Fern Investments. Watson's compensation includes a base salary and a percentage of fees generated by the firm. It also includes a performance bonus if the clients' return is 200 bps higher than the benchmark. Watson did not disclose the compensation arrangement in a meeting with a prospective client. Watson has *most likely*:

A. not violated Standard VI(A) – Disclosure of Conflicts by not disclosing the compensation.

B. violated Standard VI(A) – Disclosure of Conflicts by not disclosing the performance bonus.

C. not violated Standard VI(A) – Disclosure of Conflicts by not disclosing the bonus arrangement as there is no inherent conflict of interest in the bonus.

Compensation linked to the performance of the portfolio may encourage the manager of the portfolio to take more risk. This is a potential conflict of interest that should be disclosed to prospective clients. The CFA Institute's Standards of Professional Conduct require that members and candidates must make full and fair disclosure of all matters that could reasonably be expected to impair their independence and objectivity or interfere with their duties to their clients, prospective clients, and employer. In this case, Watson's performance bonus could potentially influence her investment decisions, and thus, it should have been disclosed.

A is incorrect. T The CFA Institute's Standards of Professional Conduct require that members and candidates must disclose their basic compensation arrangements. This is because such arrangements could potentially influence their professional judgment and create a conflict of interest. In this case, Watson's compensation arrangement, which includes a base salary and a percentage of fees generated by the firm, could potentially influence her investment decisions, and thus, it should have been disclosed.

C is incorrect. The CFA Institute's Standards of Professional Conduct require that members and candidates must disclose all bonus arrangements. This is because such arrangements could potentially influence their professional judgment and create a conflict of interest. In this case, Watson's bonus arrangement, which is contingent on the clients' return being 200 bps higher than the benchmark, could potentially influence her investment decisions, and thus, it should have been disclosed.

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./em>

Q.90 Paul Teshima is preparing a research report on a new drug called ABXV IV in the oncology industry. He gets in touch with a few scientists and medical professionals working in oncology and obtains information about competing oncology treatments. Most of these drugs are in the pre-clinical development phase, which is public information. In his research report, Teshima concludes that ABXV IV might have some competing drugs coming into the market in the next few years if the pre-clinical and clinical trials prove successful. Has Teshima *most likely* violated any CFA Institute Code and Standards?

A. No, Teshima is not in violation of any CFA Institute Code and Standards.

B. Yes, Teshima has violated the CFA Institute Code and Standards of Material Nonpublic Information.

C. Yes, Teshima has violated the CFA Institute Code and Standards by not performing due diligence to confirm the reliability of the information.

The CFA Institute Code and Standards allow analysts to expand their knowledge through interaction with industry experts. This is a common practice in the industry and is considered a part of the due diligence process. In this case, Teshima has obtained information about competing oncology treatments from scientists and medical professionals working in the field. This information is about drugs that are in the pre-clinical development phase, which is public information. Therefore, it cannot be classified as material non-public information. Teshima has used this information to conclude that ABXV IV might have some competing drugs coming into the market in the next few years if the pre-clinical and clinical trials prove successful. This conclusion is based on the information he has obtained and his analysis of it, which is a part of his job as a research analyst. **B is incorrect**. Material non-public information is information that is not available to the public and that could have a significant impact on the price of a security if it were made public. In this case, the information about the competing drugs is public information, as it is about drugs that are in the pre-clinical development phase. Therefore, Teshima has not violated the CFA Institute Code and Standards of Material Nonpublic Information. **C is incorrect**. Teshima has obtained the information from scientists and medical professionals working in the field of oncology, who are considered reliable sources. He has then used this information to make a conclusion about the potential competition for ABXV IV. This shows that he has performed due diligence in his research. Therefore, Teshima has not violated the CFA Institute Code and Standards by not performing due diligence to confirm the reliability of the information. ***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.***
