

Level I of the CFA® Exam

Mock Questions with Answers - Mock Exam 2027 #1 - First
Session (Corporate Issuers, Ethical and Professional Standards,
Quantitative Methods, Economics & Financial Statement
Analysis)

Offered by AnalystPrep

Last Updated: Oct 9, 2026

Q.1 The covariance between the returns of Funds X and Y is 0.0060. Their return standard deviations are 10% and 12%, respectively. The correlation between the two funds is *closest to*:

A. 0.05

B. 0.50

C. 0.72

The correct answer is B.

Formula:

$$\rho(X, Y) = \frac{\text{Cov}(X, Y)}{[\sigma(X)\sigma(Y)]}$$

Where: $\rho(X, Y)$ is the correlation between X and Y, $\text{Cov}(X, Y)$ is their covariance, and $\sigma(X)$ and $\sigma(Y)$ are their return standard deviations.

$$\rho(X, Y) = \frac{0.0060}{0.10 \times 0.12} = 0.50$$

A correlation of 0.50 indicates a positive but imperfect linear relationship, so combining the funds can still provide diversification benefits.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 5 - Statistical Characteristics of Asset Returns LOS 5c: calculate, interpret, and evaluate covariance and correlation

Q.2 The one-year spot rate is 3.2%, and the two-year spot rate is 4.1%. Both rates use annual compounding. The one-year forward rate one year from today is *closest* to:

- A. 3.2%
- B. 4.1%
- C. 5.0%

The correct answer is C.

Formula:

$$(1 + S_2)^2 = (1 + S_1)(1 + f_{1,1})$$

Where: S_1 is the one-year spot rate, S_2 is the two-year spot rate, and $f_{1,1}$ is the one-year forward rate beginning one year from today.

$$f_{1,1} = (1.041^2 / 1.032) - 1 = 5.0\%$$

Cash flow additivity and the no-arbitrage condition require the two-year spot investment to produce the same terminal value as consecutive investments at the one-year spot rate and the implied one-year forward rate.

A is incorrect because 3.2% is the one-year spot rate, not the forward rate beginning in one year.

B is incorrect because 4.1% is the annualized two-year spot rate, not the implied one-year forward rate.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 4 - The Time Value of Money in Finance LOS 4c: explain the cash flow additivity principle and its importance for the condition of no arbitrage, and explain its use in calculating implied forward interest rates, forward exchange rates, and option values

Q.3 An investment firm trains an algorithm using borrower records for which the subsequent default outcome is already known. The algorithm will estimate default probabilities for new borrowers. This application is *best described* as:

- A. artificial intelligence.
- B. supervised machine learning.
- C. unsupervised machine learning.

The correct answer is B.

Supervised machine learning uses labeled training data. Here, each historical borrower record includes a known outcome - default or no default - which the algorithm uses to learn a mapping from borrower characteristics to default probability.

A is incorrect because artificial intelligence is a broad umbrella term and is less precise than supervised machine learning for this task.

C is incorrect because unsupervised learning analyzes unlabeled data to identify structure, such as clusters, rather than learning from known target outcomes.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 11 - Introduction to Financial Data Science LOS 11a: describe how big data, machine learning, and artificial intelligence are used in financial data science, fintech, and investment management

Q.4 Using monthly excess returns, an analyst estimates a market-model regression for a stock. The covariance between the stock and market excess returns is 0.018, and the variance of market excess returns is 0.015. The stock's estimated beta is *closest* to:

A. 0.83

B. 1.20

C. 1.50

The correct answer is B.

Formula:

$$\hat{\beta} = \text{Cov}(\text{stock excess return, market excess return}) / \text{Var}(\text{market excess return})$$

Where: β is the estimated stock beta; an excess return is the asset return minus the risk-free rate.

$$\hat{\beta} = 0.018 / 0.015 = 1.20$$

A beta of 1.20 indicates that the stock's excess return is estimated to change by 1.20 percentage points for a 1 percentage point change in the market excess return.

A is incorrect because it reverses the numerator and denominator.

C is incorrect because it divides covariance by market standard deviation rather than by market variance.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 10 - Applications of Simple Linear Regression in Finance LOS 10d: calculate and interpret the variable estimates of the capital asset pricing model (CAPM)

Q.5 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.6 Asset A has a return standard deviation of 12%, Asset B has a return standard deviation of 18%, and their return correlation is 0.25. The weight of Asset A in the two-asset global minimum-variance portfolio is *closest* to:

- A. 25%
- B. 50%
- C. 75%

The correct answer is C.

Formula:

$$w(A) = [\sigma(B)^2 - \text{Cov}(A, B)] / [\sigma(A)^2 + \sigma(B)^2 - 2 \text{Cov}(A, B)]$$

Where: $w(A)$ is Asset A's minimum-variance weight, $\sigma(A)$ and $\sigma(B)$ are return standard deviations, and $\text{Cov}(A, B)$ is return covariance.

$$\text{Cov}(A, B) = \rho(A, B)\sigma(A)\sigma(B) = 0.25 \times 0.12 \times 0.18 = 0.0054$$

$$w(A) = (0.18^2 - 0.0054) / (0.12^2 + 0.18^2 - 2 \times 0.0054) = 0.75$$

A is incorrect because it reverses the calculated allocation between the two assets.

B is incorrect because equal weights are not generally minimum variance when asset volatilities differ.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 8 - The Return and Risk of a Financial Portfolio LOS 8b: describe, calculate, and interpret the minimum-variance portfolio and portfolios that lie on the efficient frontier

Q.7 A researcher tests whether a strategy's population mean annual return differs from 6.0%. A sample of 64 observations has a mean of 7.4%. The population standard deviation is known to be 4.8%. Based on a two-tailed test, the null hypothesis is:

- A. rejected at both 1% and 5%.
- B. rejected at 5% but not at 1%.
- C. not rejected at either 1% or 5%.

The correct answer is B.

Formula:

$$z = \frac{\bar{x} - \mu_0}{\frac{\sigma}{\sqrt{n}}}$$

Where: $\bar{x}$ is the sample mean, μ_0 is the hypothesized population mean, σ is the known population standard deviation, and n is the sample size.

$$z = \frac{7.4 - 6.0}{\frac{4.8}{\sqrt{64}}} = 2.33$$

For a two-tailed test, the critical absolute z-values are approximately 1.96 at the 5% significance level and 2.58 at the 1% level. Because 2.33 exceeds 1.96 but not 2.58, the null is rejected at 5% but not at 1%.

A is incorrect because the test statistic does not exceed the 1% critical value.

C is incorrect because the test statistic exceeds the 5% critical value.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 7 - Estimation and Hypothesis Testing LOS 7b: explain hypothesis testing and its components, including statistical significance, Type I and Type II errors, and the power of a test; construct appropriate hypothesis tests; and interpret the results

Q.8 Before reviewing a warning signal, an analyst estimates a 20% probability that an issuer's credit quality will deteriorate. The signal occurs for 70% of issuers whose credit quality deteriorates and for 15% of issuers whose credit quality does not deteriorate. If the signal occurs, the updated probability of deterioration is *closest* to:

- A. 46.7%
- B. 53.8%
- C. 70.0%

The correct answer is B.

Formula:

$$P(D|S) = P(S|D)P(D)/[P(S|D)P(D) + P(S|D^c)P(D^c)]$$

Where: D is credit deterioration, S is the warning signal, and D^c is no credit deterioration.

$$P(D|S) = (0.70 \times 0.20)/[(0.70 \times 0.20) + (0.15 \times 0.80)] = 53.8\%$$

A is incorrect because it does not normalize the joint probability of deterioration and a signal by the total probability of receiving the signal.

C is incorrect because 70.0% is the probability of a signal conditional on deterioration, not the posterior probability of deterioration conditional on a signal.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 6 - Statistical Distributions for Financial Asset Prices and Returns LOS 6d: formulate investment problems through Bayesian updating

Q.9 A company's shares trade at EUR 46.00. The next annual dividend is expected to be EUR 2.40, and investors require a return of 8.5%. Assuming dividends grow at a constant rate indefinitely, the implied growth rate is *closest to*:

- A. 3.28%
- B. 5.22%
- C. 13.72%

The correct answer is A.

Formula:

$$P_0 = D_1/(r - g), \text{ so } g = r - D_1/P_0$$

Where: P_0 is the current share price, D_1 is the next-period dividend, r is the required return, and g is the constant dividend growth rate.

$$g = 8.5\% - (2.40/46.00) = 3.28\%$$

B is incorrect because 5.22% is the dividend yield, D_1/P_0 , rather than the implied growth rate.

C is incorrect because it adds the dividend yield to the required return instead of subtracting it.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 4 - The Time Value of Money in Finance LOS 4b: calculate and interpret the implied return of fixed-income instruments and required return and implied growth of equity instruments given their present value and cash flows

Q.10 A float-adjusted market-capitalization-weighted index contains only two stocks. At the start of the period, Stock A has a float-adjusted market value of USD 180 million and Stock B has a float-adjusted market value of USD 120 million. During the period, A returns 9% and B returns -3%. The index return is *closest to*:

- A. 3.0%
- B. 4.2%
- C. 6.0%

The correct answer is B.

Formula:

$$R(\text{index}) = \Sigma(w_i R_i)$$

Where: w_i is security i's beginning float-adjusted market-value weight, and R_i is security i's holding-period return.

The beginning weights are $180/300 = 60\%$ for Stock A and $120/300 = 40\%$ for Stock B.

$$R(\text{index}) = (0.60 \times 9\%) + (0.40 \times -3\%) = 4.2\%$$

A is incorrect because it is the simple average of the two security returns and ignores their market-value weights.

C is incorrect because it adds the two security returns without weighting or averaging them: $9\% + (-3\%) = 6\%$.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 3 - Benchmarking Returns LOS 3b: describe the choices and the implications of the different weighting methods used in index construction and management, and calculate, interpret, and explain the value and the returns of an index

Q.11 A portfolio earns 18% during the first year. Immediately after the year-end valuation, an investor contributes a large amount to the portfolio. During the second year, the portfolio earns -6%. Compared with the portfolio's time-weighted rate of return, its money-weighted rate of return is *most likely*:

- A. lower.
- B. equal.
- C. higher.

The correct answer is A.

Formula:

$$\text{TWR} = \sqrt{(1 + R_1)(1 + R_2)} - 1$$

Where: R_1 and R_2 are the portfolio returns in Years 1 and 2, respectively.

The time-weighted return gives equal proportional importance to each subperiod return and is unaffected by the timing or size of external cash flows. The money-weighted return places greater weight on performance during periods when more capital is invested.

Because the investor makes a large contribution immediately before the -6% second-year return, the weaker performance applies to a larger amount of capital. Therefore, the money-weighted return is lower than the time-weighted return.

B is incorrect because the two measures would generally be equal only when external cash flows are absent or their timing has no meaningful effect.

C is incorrect. A contribution before the stronger first-year return, rather than before the weaker second-year return, would tend to make the money-weighted return higher.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 3 - Benchmarking Returns LOS 3a: calculate and compare money-weighted and time-weighted rates of return

Q.12 An analyst estimates the following components of the required return on a five-year corporate bond: real risk-free rate of 1.4%, expected inflation of 2.2%, default risk premium of 1.0%, liquidity premium of 0.5%, and maturity premium of 0.3%. The bond's required return is *closest to*:

- A. 3.6%
- B. 4.9%
- C. 5.4%

The correct answer is C.

Formula:

$$\text{Required Return} = \text{Real Risk Free Rate} + \text{Expected Inflation} + \text{Risk Premiums}$$

Where: Risk premiums compensate investors for risks such as default, liquidity, and maturity risk.

$$\text{Required Return} = 1.4\% + 2.2\% + 1.0\% + 0.5\% + 0.3\% = 5.4\%$$

A is incorrect. because it includes only the real risk-free rate and expected inflation and omits all three risk premiums.

B is incorrect. because it omits the 0.5% liquidity premium.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 1 - Returns of Financial Assets and Instruments LOS 1b: describe, compare, and interpret required rates of return, risk-free rates, risk premia, and inflation

Q.13 An investor purchases a share for USD 52.00, receives a dividend of USD 1.30, and sells the share one year later for USD 56.50. The investor's holding-period return is *closest to*:

- A. 8.7%
- B. 10.3%
- C. 11.2%

The correct answer is C.

Formula:

$$\text{Holding Period Return} = \frac{P_1 - P_0 + D_1}{P_0}$$

Where: P_0 is the purchase price, P_1 is the sale price, and D_1 is the dividend received during the holding period.

$$\text{Holding Period Return} = \frac{56.50 - 52.00 + 1.30}{52.00} = 11.2\%$$

A is incorrect because it measures only the capital gain, $(56.50 - 52.00)/52.00$, and excludes the dividend.

B is incorrect because it divides the total gain of USD 5.80 by the ending price rather than by the beginning price.

CFA Level 1, Topic 2 - Quantitative Methods, Learning Module 2 - Types of Financial Returns LOS 2a: calculate, compare, and interpret different types of returns for financial assets, instruments, and indicators

Q.14 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 measures how quickly a company sells its inventory and is calculated as cost of goods sold divided by average inventory. When the economy recovers from a prolonged contraction, demand typically increases, causing firms to sell down existing inventories before rebuilding stock. As a result, COGS rises faster than average inventory, leading to an increase in 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.15 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.16 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.17 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.18 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.19 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.20 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.21 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.22 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.23 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.24 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.25 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.26 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.

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

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

CFA Level 1, Topic 2, Economics, Learning Module 5- Introduction to Geopolitics, LOS 15a: Describe geopolitics from a cooperation versus competition perspective.

Q.27 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.28 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

Q.29 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.
