Level I of the CFA® 2025 Exam

Questions with Answers - Equity

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Q.99 When investing in the stock markets, what is *most likely* the initial margin?

A. The portfolio's total value.

B. The investment's total value.

C. The minimum amount of equity required by an investor.

The correct answer is **C.**

The initial margin refers to the minimum amount of equity that an investor is required to provide when purchasing securities on margin. This requirement is set by regulatory bodies such as the Federal Reserve in the United States, as well as by individual brokerage firms, and is designed to protect both the investor and the brokerage firm from the potential losses that can occur in a leveraged transaction.

The initial margin requirement ensures that the investor has a stake in the investment and provides a buffer against market fluctuations. By requiring a certain percentage of the purchase price as the initial margin, regulatory authorities and brokerage firms aim to mitigate the risk of loss due to a decline in the value of the securities purchased on margin.

A is incorrect. Suggesting that the initial margin is the portfolio's total value is misleading. The portfolio's total value encompasses all the investments held by an investor, including cash, stocks, bonds, and other securities. The initial margin, however, specifically refers to the minimum equity contribution required when purchasing securities on margin, not the total value of an investor's portfolio.

B is incorrect. The initial margin requirement is a regulatory and risk management tool, ensuring that the investor has sufficient skin in the game and that the leverage used does not exceed prudent levels.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (f) Calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call.

Q.100 A stop-sell order is often placed when a trader:

A. wants to enter a long position.

B. wants to limit the loss on a long position.

C. wants to double down on a long position.

The correct answer is **B.**

A stop-sell order, also known as a stop-loss order, is a trading strategy used to limit potential losses on an investment. It is a directive to sell a security when it reaches a specific price point, known as the stop price. This mechanism is particularly useful in managing risk and protecting investment capital in volatile markets. When the market price of a security drops to the stop price, the stop-sell order is triggered and executed, thereby capping the investor's loss.

A is incorrect. Wanting to enter a long position involves buying a security with the expectation that its price will rise over time. A stop-sell order does not facilitate this objective; instead, it is a risk management tool used to limit potential losses on existing positions. Entering a long position would typically involve a buy order, not a stop-sell order, which is designed to execute a sale when a security's price falls to a certain level.

C is incorrect. Doubling down on a long position means purchasing additional shares of a security that an investor already owns, with the expectation that its price will rebound and increase. This strategy is used to lower the average cost per share of the investment, potentially leading to higher gains if the price indeed increases. A stop-sell order, on the other hand, is a protective measure to exit a position and limit losses when the price of a security is falling, not to acquire more shares at a lower price.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (g) Compare execution, validity, and clearing instructions.

Q.101 An investor buys 100 shares of a stock on a margin at $146 a share using an initial leverage ratio of 2. At what stock price will he receive a margin call if the maintenance margin requirement for the position is 40%?

A. $58.40

B. $116.80

C. $121.67

The correct answer is **C.**

To determine at what stock price an investor will receive a margin call, we need to understand the relationship between the initial leverage ratio, the maintenance margin requirement, and the stock price. The initial leverage ratio of 2 means that for every dollar of equity, the investor is borrowing another dollar, effectively doubling the potential investment but also the risk. The maintenance margin requirement of 40% is the minimum percentage of the total value of the securities that must be maintained as equity to avoid a margin call.

Given the initial leverage ratio of 2, the investor puts up half of the investment as equity. Therefore, for a stock bought at $146 a share, the equity contribution is $73 per share ($0.5 \times \$146$). The maintenance margin requirement dictates that the equity must always be at least 40% of the market value of the stock. If the stock price falls, the equity as a percentage of the stock value decreases. A margin call occurs when this percentage falls below the maintenance margin requirement.

$$\begin{aligned}
\text{Leverage ratio } &= \frac{1}{2} = 0.5\\
\text{Initial equity per share} &= 0.5 \times \$146 = \$73\\
\frac{(\$73 + \text{P} - \$146)}{\text{P}} &= 0.40\\
\$73 + \text{P} - \$146 &= 0.40\text{P}\\
\$73 - \$146 &= \text{-}0.60\text{P}\\
-\$73 &= \text{-}0.60\text{P}\\
\text{P} &= 121.67
\end{aligned}$$

Note that the leverage ratio is the ratio of the position's value to the value of the equity investment and indicates how many times larger a position is than the equity that supports it.
The maximum leverage ratio associated with a position financed by the minimum margin requirement is one divided by the minimum margin requirement, which in this case is 0.5, i.e., 1/2.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (f) Calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call.

Q.806 A stock is selling for $50. An investor's valuation model estimates its intrinsic value to be $40. Based on his estimate, he would *most likely* place a:

A. short-sale order.

B. stop order to buy the security.

C. market order to buy the security.

The correct answer is **A.**

When an investor's valuation model estimates the intrinsic value of a stock to be lower than its current market price, it indicates that the stock is overvalued. In this scenario, where the stock is selling for $50 but is estimated to be worth only $40, the investor would most likely consider the stock to be overpriced compared to its intrinsic value. A rational response to this assessment is to place a short-sale order.

A short sale involves borrowing shares of the stock and selling them at the current market price with the expectation that the price will decrease. Later, the investor plans to buy back the same number of shares at a lower price to return to the lender, profiting from the difference. This strategy is based on the belief that the stock's price will decline, aligning with the investor's valuation.

B is incorrect. A stop order is designed to limit an investor's loss on a security position. It becomes active only when the stock reaches a specified price, known as the stop price. In the context of believing that a stock is overvalued, placing a stop order to buy would not align with the investor's strategy. The investor's goal is to profit from the stock's price decline, not to set a condition for purchasing the stock at a potentially higher price in the future.

C is incorrect. A market order is an order to buy or sell a stock at the best available current price. It does not consider the investor's assessment of the stock being overvalued. If the investor places a market order to buy the stock at its current price of $50, which is above the estimated intrinsic value of $40, it contradicts the investor's valuation. The investor's objective is to profit from the expected decrease in the stock's price, not to acquire the stock at a price considered overvalued.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (e) Compare positions an investor can take in an asset.

Q.808 Which of the following is a security that entitles the holder to buy the underlying stock of the issuing company at a fixed price called the exercise price until the expiry date?

A. A warrant.

B. A common stock.

C. A preferred share.

The correct answer is **A.**

A warrant is a financial instrument that gives the holder the right, but not the obligation, to buy the underlying stock of the issuing company at a predetermined price, known as the exercise price, until a specified expiry date. This characteristic makes warrants particularly attractive to investors who anticipate the underlying stock's price will increase in the future, allowing them to purchase the stock at a price lower than the market value.

B is incorrect. Common stock represents ownership in a company and entitles the holder to vote at shareholders' meetings and receive dividends. Unlike warrants, owning common stock does not provide the right to buy more shares at a fixed price in the future.

C is incorrect. Preferred shares are a type of equity that often has priority over common stock in dividend payments and upon liquidation but typically does not come with voting rights. Like common stock, preferred shares do not grant the holder the right to purchase additional shares at a predetermined price.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (c) Describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes.

Q.809 Which assets give its owner the right to buy or sell an asset at a specific exercise price at some specified time in the future?

A. A swap contract.

B. An option contract.

C. A forward contract.

The correct answer is **B.**

An option contract grants its owner the right, but not the obligation, to buy (in the case of a call option) or sell (in the case of a put option) an underlying asset at a predetermined price (known as the exercise price or strike price) on or before a specified date.

A is incorrect. A swap contract is a financial derivative that entails two parties exchanging cash flows or other financial instruments over a specified time period. These exchanges are based on a predetermined notional principal amount. Swaps are used primarily for hedging purposes to manage exposure to fluctuations in interest rates, currency exchange rates, or commodity prices.

C is incorrect. A forward contract is a customized contract between two parties to buy or sell an asset at a specified price on a future date. Forward contracts are over-the-counter (OTC) derivatives, meaning they are negotiated directly between parties without going through an exchange.

The key characteristic of a forward contract is its obligation for both the buyer and the seller to execute the transaction at the agreed-upon price and date, making it different from an option, which grants the right but not the obligation to execute the trade.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (c) Describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes.

Q.810 Which of the following does *least likely* act as a financial intermediary?

A. Issuers.

B. Brokers.

C. Insurance companies.

The correct answer is **A.**

Issuers do not typically act as financial intermediaries. Instead, they are entities that create and sell securities to finance their operations. This process involves the direct transfer of funds from investors to the issuer, without the need for an intermediary to facilitate the transaction.

Issuers are primarily involved in raising capital for their own needs, such as funding projects, expanding operations, or refinancing existing debts. They do this by issuing financial instruments like stocks, bonds, and warrants directly to investors.

B is incorrect. Brokers indeed act as financial intermediaries. They play a pivotal role in the financial markets by executing buy and sell orders for their clients, who may be individuals or institutions. Brokers facilitate transactions between buyers and sellers, ensuring liquidity and efficiency in the markets.

They do not own the securities they trade on behalf of their clients, which distinguishes their role as intermediaries rather than direct participants in the capital raising process.

C is incorrect. Insurance companies are essential examples of financial intermediaries. They collect premiums from policyholders and pool those funds to pay out claims as they arise. This process involves the transformation of risk, as insurance companies underwrite policies to protect against a wide range of potential losses, from health-related expenses to property damage.

Their role as intermediaries comes from their ability to pool resources from a large number of policyholders and redistribute them in the form of claims payments, thereby facilitating the efficient allocation of risk within the economy.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (d) Describe types of financial intermediaries and services that they provide.

Q.811 In which of the following types of markets do stocks *most likely* trade at any time the market is opened?

A. Call markets.

B. Exchange markets.

C. Continuous markets.

The correct answer is **C.**

In continuous markets, stocks are available for trading at any given time during market hours. This characteristic allows for a high level of liquidity and flexibility for traders and investors, enabling them to execute trades based on real-time information and market conditions.

Continuous markets are designed to facilitate immediate order execution, which is crucial in today's fast-paced financial environment where prices can fluctuate significantly within short periods. The ability to trade at any moment the market is open provides participants with the opportunity to respond swiftly to news, earnings reports, and economic indicators.

A is incorrect. Call markets operate on a different principle, where trades are not executed continuously but at specific times when buy and sell orders are aggregated and matched at predetermined intervals.

This system can lead to less liquidity and slower reaction times to market changes compared to continuous markets. In call markets, participants must wait until the next call period to execute their trades, which can be disadvantageous in rapidly changing market conditions.

B is incorrect. Exchange markets refer to the broader category of marketplaces where securities, commodities, derivatives, and other financial instruments are traded. While exchange markets can be either continuous or call markets, the term itself does not specify the trading mechanism.

Some exchange markets operate as call markets, and others as continuous markets. The key distinction lies in the trading mechanism (continuous vs. call) rather than the market type (exchange market).

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (i) Define primary and secondary markets and explain how secondary markets support primary markets.

Q.813 A financial intermediary buys a stock and then resells it a few days later at a higher price. Which intermediary would this *most likely* describe?

A. A dealer.

B. A broker.

C. An arbitrageur.

The correct answer is **A.**

A dealer is the financial intermediary most likely to buy a stock and then resell it a few days later at a higher price. Dealers operate by purchasing assets to add to their inventory with the intention of selling these assets at a profit. This business model relies on the dealer's ability to forecast market movements accurately and capitalize on short-term price fluctuations.

By holding an inventory of securities, dealers provide liquidity to the market, allowing for more efficient trading. Their profit comes from the spread between the buying and selling prices of securities. This activity is distinct from that of brokers or arbitrageurs, as it involves taking on the risk associated with owning the securities in inventory.

B is incorrect. Brokers do not buy securities for their inventory; instead, they act as intermediaries between buyers and sellers. Their primary function is to facilitate transactions for clients, earning a commission for their services.

Brokers do not take positions in the securities they trade on behalf of their clients, which differentiates their role from that of dealers. By misunderstanding the fundamental function of brokers, this option fails to accurately describe the activities associated with buying and reselling stocks for a profit.

C is incorrect. Arbitrage involves buying and selling the same security simultaneously in different markets to take advantage of price discrepancies. This strategy is predicated on the principle of risk-free profit that arises from market inefficiencies, without the need to forecast market movements or hold an inventory of securities.

Arbitrageurs contribute to market efficiency by exploiting these price differences, thereby helping prices in different markets converge. The description of buying a stock and reselling it at a higher price does not align with the arbitrage strategy, as it involves taking on market risk and holding an inventory, unlike the risk-free and simultaneous transactions characteristic of arbitrage.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (d) Describe types of financial intermediaries and services that they provide.

Q.814 Which of the following would *least likely* be an objective of market regulations?

A. To reduce accounting standards.

B. To prevent investors from using inside information in securities trading.

C. To make it easier for investors to compare the performance of different firms.

The correct answer is **A.**

Market regulations are designed to enhance the transparency, fairness, and efficiency of financial markets. They aim to protect investors, ensure fair trading practices, and maintain confidence in the financial system. One of the primary objectives of market regulations is to establish and uphold high-quality accounting standards.

These standards ensure that financial statements are accurate, reliable, and comparable across different firms and industries. By requiring companies to adhere to rigorous accounting practices, market regulations help reduce information asymmetry, making it easier for investors to make informed decisions.

B is incorrect. Preventing investors from using inside information in securities trading is indeed a key objective of market regulations. Insider trading undermines market integrity and fairness, as it allows individuals with access to non-public, material information to gain an unfair advantage over other investors.

This ensures that all market participants have equal access to information and that securities prices reflect all publicly available information, thereby maintaining market efficiency and investor confidence.

C is incorrect. Making it easier for investors to compare the performance of different firms is another important objective of market regulations. By enforcing disclosure requirements and accounting standards, regulations ensure that companies provide comprehensive, accurate, and comparable financial information.

This enables investors to assess the financial health and performance of different firms effectively, facilitating informed investment decisions. Comparability of financial information is essential for the efficient allocation of capital and for maintaining a level playing field among investors, which are both fundamental goals of market regulations.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (l) describe objectives of market regulation.

Q.815 Which of the following is *most likely* similar to a short position in the underlying asset?

A. Buying a put.

B. Buying a call.

C. Writing a put.

The correct answer is **A.**

Buying a put option is most similar to taking a short position in the underlying asset. When an investor buys a put option, they acquire the right, but not the obligation, to sell the underlying asset at a predetermined price (strike price) within a specific timeframe.

This strategy is beneficial when the investor anticipates a decline in the asset's price. If the asset's price decreases below the strike price, the value of the put option increases, allowing the investor to sell the asset at a higher price than its current market value. This mechanism mirrors the profit potential of a short position, where the investor profits from the decrease in the asset's price.

B is incorrect. Buying a call option gives the investor the right, but not the obligation, to buy the underlying asset at a predetermined price within a specific timeframe. This strategy is typically employed when the investor anticipates an increase in the asset's price, which is the opposite of the motive behind a short position. In a short position, the investor aims to profit from a decline in the asset's price, making buying a call option fundamentally different in its market outlook and profit mechanism.

C is incorrect. Writing a put option involves the investor selling a put option, which obligates them to buy the underlying asset at the strike price if the option is exercised by the buyer. This strategy can be profitable if the asset's price remains stable or increases, as the writer would keep the premium received from selling the put option. However, this does not align with the characteristics of a short position, where the investor aims to profit from a decrease in the asset's price.

Writing a put option exposes the investor to potential losses if the asset's price declines significantly, contrary to the profit motive of a short position. Therefore, writing a put option is not similar to taking a short position in the underlying asset.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (c) Describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes.

Q.1122 A small investor just bought 100 shares of UYA on margin. The share price of UYA at the time of purchase was $50, the initial margin requirement is 50%, and the maintenance margin is 30%. Given this information, the margin call trigger price is *closest to*:

A. $31.25.

B. $35.71.

C. $79.

The correct answer is **B.**

To determine the margin call trigger price, we must understand the relationship between the initial margin requirement, the maintenance margin, and the price at which the stock was purchased. The formula to calculate the trigger price for a margin call is given by:

$$\begin{aligned}\text{Trigger price} &= \text{Initial purchase price} \times \frac{1-\text{Initial margin}}{1-\text{Maintenance margin}}\\ &= \$50 \times \frac{(1-0.5)}{(1-0.3)}\\ &= \$35.71\end{aligned}$$

The investor will receive a margin call when the stock price falls to $35.71.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (f) Calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call.

Q.1124 Which of the following *most likely* describes a pure auction market?

A. A market that consists of individual dealers who are assigned specific securities.

B. A market in which participants submit their bid and ask prices to a central location.

C. A market where buying and selling parties are brought together through the activities of a broker.

The correct answer is **B.**

A pure auction market, also known as an order-driven market, is characterized by the direct interaction of buy and sell orders in a centralized location. In this type of market, buyers and sellers submit their bids and asks, respectively, without the need for market makers or dealers.

The prices of securities are determined purely by the supply and demand dynamics as represented by these bids and asks. This system ensures transparency and can lead to more efficient pricing since all market participants have access to the same information regarding buy and sell orders.

A is incorrect. This option describes a dealer market, not a pure auction market. In a dealer market, also known as a quote-driven market, dealers or market makers provide liquidity by buying and selling securities from their own inventory.

They profit from the spread between the buying price (bid) and the selling price (ask). This structure is fundamentally different from a pure auction market, where transactions occur directly between buyers and sellers based on their submitted orders, without intermediaries holding an inventory of securities.

C is incorrect. This describes a brokered market. In a brokered market, brokers act as intermediaries to match buyers with sellers. They do not necessarily operate in a centralized location where bids and asks are openly submitted and matched.

Instead, brokers may seek out potential buyers or sellers individually or use electronic systems to match trades. This process can lack the transparency and direct interaction of bids and asks that are hallmarks of a pure auction market.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (j) Describe how securities, contracts, and currencies are traded in quote-driven, order-driven, and brokered markets.

Q.1125 Which of the following is *least accurate* regarding efficient markets?

A. In an efficient market, it isn't easy to find inaccurately priced securities.

B. In an efficient market, the time frame required for security prices to reflect any new information is concise.

C. In an efficient market, securities may be mispriced, and trading these securities can offer positive risk-adjusted returns.

The correct answer is **C.**

In an efficient market, the concept of securities being mispriced and offering the opportunity for positive risk-adjusted returns contradicts the foundational principles of market efficiency. The Efficient Market Hypothesis (EMH) posits that at any given time, security prices fully reflect all available information.

This hypothesis is built on the premise that markets are rational and that new information is quickly and accurately incorporated into security prices, leaving no room for consistent abnormal returns through trading on such information. Therefore, the assertion that securities may be mispriced and that trading these securities can offer positive risk-adjusted returns is least accurate as it directly conflicts with the essence of an efficient market.

A is incorrect. All available information is already reflected in the prices of securities. This characteristic is a direct implication of the Efficient Market Hypothesis, which suggests that it is not possible to consistently achieve higher returns than average market returns on a risk-adjusted basis by exploiting information that is already reflected in prices.

B is incorrect. This option also accurately describes a feature of efficient markets. In an efficient market, the time frame required for security prices to adjust and reflect any new information is very short. This rapid adjustment is due to the market participants' quick response to new information, ensuring that security prices are always an accurate reflection of all available information.

This efficiency in information processing means that attempting to trade on new information with the expectation of generating abnormal returns is unlikely to be successful, as prices adjust almost instantaneously to reflect this information.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (k) Describe characteristics of a well-functioning financial system.

Q.1127 An investor buys 300 shares of XYZ at the market price of $200 on full margin. The initial margin requirement is 30%, and the maintenance margin requirement is 20%. If the shares are later sold at $250 per share, the margin transaction return is *closest to*:

A. 3.33%.

B. 25%.

C. 83.33%.

The correct answer is **C.**

$$\begin{aligned}
\text{Cash Return} &= \frac{(300 \times 250)}{(300 \times 200)} - 1 \\
&= 25\% \\
\text{Leverage Factor} &= \frac{1}{\text{Initial Margin \%}} = \frac{1}{0.30} \\
&= 3.33 \\
\text{Margin Transaction Return} &= \text{All Cash Return} \times \text{Leverage Factor} \\
&= 3.33 \times 0.25 \\
&= 83.33\%
\end{aligned}$$

Another way of doing this is as shown below.
Gain from the sale of shares:

$$= 300 \times (250 - 200) = 15,000$$

Initial margin requirement (Money out of the investors pocket)

$$= 0.3 \ \times (300 \times 200) = 18,000$$

Return from the trade

$$= \frac{15,000}{18,000} = 0.8333$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (f) Calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call.

Q.1128 Which of the following statements is *least likely* accurate?

A. Good-on-close orders are also called market-on-close orders.

B. Fill or kill (FOK) orders are the same as good-on-close orders.

C. Immediate or cancel (IOC) orders attempt to execute the entire order. Any portion not filled immediately gets canceled.

The correct answer is **B.**

FOK orders are distinct from good-on-close orders in that they require immediate execution in their entirety. If the order cannot be fully executed at the moment it is placed, it is canceled altogether.

This contrasts with good-on-close orders, which are executed at the end of the trading day regardless of market conditions. FOK orders are used by traders who are looking for a quick execution at a specific price and are not willing to wait for the market to potentially move against them. This urgency and the requirement for complete fulfillment differentiate FOK orders from good-on-close orders.

A is incorrect. Good-on-close orders, also known as market-on-close orders, are instructions to buy or sell a security at the best available price at the close of the trading day. This type of order ensures that the transaction is executed at the final price of the day, which can be beneficial for investors looking to capitalize on the closing price of a security.

These orders are particularly useful for large institutional investors who wish to minimize the impact of their trades on the market price of a security. By executing at the close, they can avoid causing significant price movements during the trading day.

C is incorrect. Immediate or cancel (IOC) orders and good-on-close orders serve different purposes and operate under different conditions. IOC orders are designed to be executed as quickly as possible. Any portion of an IOC order that cannot be filled immediately is canceled, unlike good-on-close orders, which are held until the market close.

The primary objective of an IOC order is to ensure rapid execution, making it suitable for traders who prioritize speed and are willing to forego a portion of their order to avoid adverse price movements. This contrasts with the objective of good-on-close orders, which is to capture the closing price of a security.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (g) Compare execution, validity, and clearing instructions.

Q.1130 Which of the following is *least likely* one of the three main functions of a financial system?

A. To allocate capital to its most effective uses.

B. To help people achieve their purposes in using the financial system.

C. To facilitate the discovery of the rate of return where aggregate savings equal aggregate borrowings.

The correct answer is **A.**

The three primary functions of a financial system are:

1. To help people achieve their purpose in using the financial
2. To facilitate the discovery of the rate of return where aggregate savings equal aggregate borrowings.
3. To allocate capital to its most efficient uses. A financial system allocates capital to its most EFFICIENT, not its most effective uses.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (a) Explain the main functions of the financial system.

Q.1131 Which of these agents provide brokerage services to large traders?

A. Block Brokers.

B. Trade Brokers.

C. Large Enterprise Brokers.

The correct answer is **A.**

Block Brokers specialize in handling large trades that may not be easily accommodated in the regular market due to their size. These trades often involve a significant number of shares that, if executed in the open market all at once, could significantly impact the stock's price. Block Brokers have the expertise and network to discreetly find counterparties for these large transactions, minimizing market impact and securing the best possible terms for their clients.

This service is crucial for institutional investors and other large traders who need to execute substantial orders without adversely affecting market prices. By providing a platform where large blocks of shares can be traded privately, Block Brokers facilitate liquidity and efficiency in the financial markets for these large transactions.

B is incorrect. Trade Brokers generally refer to a broader category of brokers who facilitate buying and selling securities for clients but do not specifically focus on large trades. While they may handle transactions of various sizes, they do not specialize in the unique challenges and strategies associated with executing large orders that Block Brokers do.

C is incorrect. The term Large Enterprise Brokers implies a large corporations or enterprises, but it does not accurately reflect the specialized role of brokers who manage large, individual trades in the market.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (d) Describe types of financial intermediaries and services that they provide.

Q.1630 Which of the following is *least likely* a function of the financial system?

A. Determine inflation rates.

B. Allocate capital efficiently.

C. Allow entities to save and borrow money

The correct answer is **A.**

The financial system plays a crucial role in the economy by facilitating the efficient allocation of resources, enabling savings and borrowing, and determining interest rates. However, the determination of inflation rates is primarily the outcome of broader economic activities and policies rather than a direct function of the financial system itself.

Inflation rates are influenced by factors such as monetary policy, supply and demand dynamics, and changes in the cost of goods and services. While the financial system can impact these factors indirectly through the influence of interest rates and credit availability, it does not directly set or determine inflation rates.

B is incorrect. Allocating capital efficiently is indeed a primary function of the financial system. The financial system facilitates the transfer of funds from savers, who have excess funds, to borrowers, who require funds for various purposes such as investment, consumption, or business expansion.

This allocation process is crucial for economic development and growth, as it ensures that resources are directed towards their most productive uses. Financial markets and institutions, including banks, stock markets, and bond markets, play a key role in this process by assessing the risk and return of different investment opportunities and making funds available to those with promising projects or needs.

C is incorrect. Allowing entities to save and borrow money is another fundamental function of the financial system. By providing a mechanism for savings, the financial system enables individuals, businesses, and governments to set aside funds for future use. Similarly, by offering various borrowing options, it allows these entities to access needed funds for immediate use, whether for consumption, investment, or operational purposes.

This function is essential for smoothing consumption over time, financing investment projects, and supporting economic activity and growth. Financial institutions such as banks, credit unions, and lending agencies are integral to this process, offering a range of saving and borrowing products to meet the diverse needs of the economy.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (a) Explain the main functions of the financial system.

Q.1631 When is a financial system *best* at performing its roles?

A. When the markets are illiquid.

B. When transaction costs are low.

C. When information is not readily available.

The correct answer is **B.**

A financial system is at its best performance when transaction costs are low. Low transaction costs mean that it is cheaper for investors to buy, sell, and trade assets. This efficiency encourages more trading and investment, which in turn increases liquidity and market participation.

Lower transaction costs also mean that a larger portion of an investment's return is retained by the investor, rather than being consumed by fees and other costs. This can lead to a healthier financial market with more active participants and a greater volume of transactions, contributing to the overall stability and efficiency of the financial system.

A is incorrect. Illiquid markets are not indicative of a financial system performing its roles effectively. Liquidity is a crucial aspect of a healthy financial system, as it ensures that assets can be quickly bought or sold in the market without causing a significant change in their price.

High liquidity facilitates the efficient allocation of resources and risk, enabling investors to easily enter and exit positions. Illiquid markets, on the other hand, can lead to higher transaction costs and may deter investment, thereby hindering the financial system's ability to support economic growth and stability.

C is incorrect. The availability of information is fundamental to the efficient functioning of financial markets. When information is readily available, it allows investors to make informed decisions, contributing to the proper pricing of assets and the efficient allocation of resources.

A lack of information, or information asymmetry, can lead to market failures such as moral hazard and adverse selection, which can undermine the integrity of the financial system and lead to inefficiencies. Therefore, a financial system performs best when information is transparent and accessible to all market participants.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (a) Explain the main functions of the financial system.

Q.1633 On which of the following markets do options and commodities *most* often trade?

A. Exchanges.

B. Real money market.

C. Over-the-counter (OTC) market.

The correct answer is **A.**

Options and commodities most often trade on exchanges. Exchanges, such as the Chicago Board of Trade (CBOT) for commodities and the Chicago Board Options Exchange (CBOE) for options, provide a centralized, regulated, and transparent platform for trading these financial instruments. These platforms ensure that trading is conducted in an orderly manner, with clear pricing information and standardized contract terms.

This structure helps in mitigating the risk of counterparty default and ensures fair trading practices. Furthermore, exchanges facilitate liquidity and price discovery, which are crucial for the efficient functioning of financial markets. By providing a venue where buyers and sellers can meet and trade based on current market information, exchanges play a vital role in the financial ecosystem.

B is incorrect. The real money market primarily deals with short-term debt instruments such as Treasury bills, commercial paper, and certificates of deposit, rather than options and commodities. These markets are characterized by high liquidity and low risk, focusing on instruments that have maturities of less than one year. While the real money market is crucial for short-term financing and investment, it does not typically facilitate the trading of options and commodities.

C is incorrect. While the Over-the-Counter (OTC) market does facilitate the trading of a wide variety of financial instruments, including derivatives and commodities, it is not the primary market for options and commodities trading. The OTC market is decentralized and consists of a network of dealers who trade directly with each other.

Although it offers flexibility in terms of contract customization and can accommodate instruments that may not meet the listing requirements of formal exchanges, the OTC market lacks the same level of regulation, transparency, and liquidity as exchanges. This can lead to higher counterparty risk and less efficient price discovery compared to exchange-traded options and commodities.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (j) Describe how securities, contracts, and currencies are traded in quote-driven, order-driven, and brokered markets.

Q.1634 Markets of immediate delivery are referred to as:

A. spot markets.

B. capital markets.

C. secondary markets.

The correct answer is **A.**

Spot markets are where transactions are settled immediately, or "on the spot," which means that the delivery of the asset or commodity traded occurs almost instantaneously upon execution of the trade. This characteristic distinguishes spot markets from other types of financial markets where settlement may occur at a future date.

In spot markets, the price agreed upon is known as the spot price, which is the current market price at which an asset can be bought or sold for immediate delivery. Spot markets are prevalent in commodities, foreign exchange, and securities trading, providing a mechanism for price discovery and immediate trade execution.

B is incorrect. Capital markets refer to the broad spectrum of tradeable assets that include long-term debt and equity instruments. Unlike spot markets, capital markets are primarily concerned with raising capital by dealing in shares, bonds, and other long-term investments.

These markets play a crucial role in the economy by facilitating the transfer of capital from investors to entities that need funding for various purposes, such as expansion, projects, or operations. The distinction between capital markets and spot markets lies in the nature of the assets traded and the immediacy of settlement. Capital markets focus on long-term securities that do not require immediate settlement, unlike transactions in spot markets.

C is incorrect. It highlights the role of secondary markets in providing liquidity and enabling price discovery for existing financial assets. Unlike spot markets, which are characterized by the immediate delivery of the asset being traded, secondary markets may involve assets that were issued at an earlier date and do not necessarily involve immediate settlement.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (b) Describe classifications of assets and markets.

Q.1636 Which of the following is *least likely* a type of fixed income securities?

A. Warrants.

B. Commercial paper.

C. Repurchase agreement.

The correct answer is **A.**

Warrants are financial derivatives that give the holder the right, but not the obligation, to buy a company's stock at a specified price before the warrant expires. Unlike fixed income securities, which provide investors with a regular income stream through interest payments, warrants are speculative instruments that depend on the underlying stock's price movements. They do not offer interest payments or guarantee a return, making them significantly different from traditional fixed income securities such as bonds or notes.

B is incorrect. Commercial paper is indeed a type of fixed income security. Commercial paper refers to short-term, unsecured promissory notes issued by corporations to finance their short-term liabilities, such as payroll or inventory costs. They typically have maturities of less than 270 days and offer a fixed interest rate to investors, making them an integral part of the money market and a fixed income instrument.

C is incorrect. Repurchase agreements, or repos, are also considered a form of fixed income security. In a repurchase agreement, one party sells a security to another party with an agreement to repurchase it at a later date for a higher price. The difference between the sale and repurchase price represents the interest. Repos are used for short-term borrowing and lending, often overnight, and are backed by collateral, usually in the form of government securities. This mechanism of secured lending and borrowing makes repurchase agreements a part of the fixed income securities landscape.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (c) Describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes.

Q.1637 John Dapper is an investor who has just purchased shares of Grande Investments, a pooled investment vehicle, on the New York Stock Exchange (NYSE). Grande Investments is *most likely*:

A. not a mutual fund.

B. an open-end mutual fund.

C. a closed-end mutual fund.

The correct answer is **C.**

Grande Investments, being a pooled investment vehicle that John Dapper has purchased shares of on the New York Stock Exchange (NYSE), is most likely a closed-end mutual fund. Closed-end mutual funds are distinct in their structure and operation compared to other types of investment funds. They are launched through an initial public offering (IPO) to raise capital, after which the shares are traded on a stock exchange similar to individual stocks.

This trading on the secondary market allows investors to buy and sell shares among themselves, with the market price of the shares being influenced by supply and demand dynamics. This characteristic is what distinguishes closed-end funds from open-end funds, as the latter do not trade on an exchange and are bought and sold at the net asset value (NAV) directly from the fund.

A is incorrect. Suggesting that Grande Investments is not a mutual fund overlooks the fact that it is described as a pooled investment vehicle. Mutual funds, whether open-end or closed-end, are types of pooled investment vehicles where investors' money is aggregated to invest in a diversified portfolio of securities. The key difference lies in how shares of the fund are bought and sold, not in the fundamental nature of being a mutual fund.

B is incorrect. Stating that Grande Investments is an open-end mutual fund contradicts the information that its shares were purchased on the NYSE. Open-end mutual funds do not trade on stock exchanges. Instead, their shares are issued and redeemed by the fund itself based on the NAV, which is calculated at the end of each trading day. Investors in open-end funds buy shares directly from the fund and sell them back to the fund, rather than trading them with other investors on an exchange.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (b) Describe classifications of assets and markets.

Q.1638 Which of the following funds have special provisions allowing the conversion of fund's shares into portfolio securities?

A. Hedge funds.

B. Mutual funds.

C. Exchange-traded funds.

The correct answer is **C.**

Exchange-traded funds (ETFs) have unique characteristics that distinguish them from other types of investment funds, one of which is the ability for investors to convert the fund's shares into a proportionate share of the underlying portfolio securities.

This feature is particularly beneficial for large institutional investors who may prefer to hold the actual securities for various reasons, including tax efficiency or specific investment mandates. The process, known as "in-kind" redemptions, allows these investors to avoid the potential capital gains taxes that could be triggered by selling shares of the ETF. This mechanism also helps to keep the ETF's share price closely aligned with its net asset value (NAV).

A is incorrect. Hedge funds are private investment vehicles that do not typically allow for the conversion of fund shares into portfolio securities. Hedge funds are known for their use of sophisticated strategies, including leverage, derivatives, and short selling. Investors in hedge funds usually have less liquidity than those in ETFs or mutual funds, with restrictions on withdrawals to certain periods, such as quarterly or annually.

The structure of hedge funds does not facilitate the direct exchange of shares for underlying securities, as their strategies and holdings are often complex and not transparent.

B is incorrect. Mutual funds, while offering a diversified portfolio like ETFs, do not allow investors to convert shares directly into the underlying portfolio securities. Mutual funds are structured to allow investors to buy and sell shares at the fund's NAV, calculated at the end of the trading day.

This structure does not support the "in-kind" redemptions feature that ETFs offer. Instead, when investors wish to redeem their shares, the mutual fund must sell securities to raise the necessary cash, a process that can potentially lead to capital gains distributions to the remaining investors and impact the fund's NAV.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (d) Describe types of financial intermediaries and services that they provide.

Q.1639 Which of the following statements regarding block brokers is *correct*?

A. Block brokers can place small orders.

B. Block brokers are involved in placing large orders.

C. Block brokers do not conceal the intentions of their clients which helps in moving the market.

The correct answer is **B.**

Block brokers specialize in handling large orders for their clients, which typically involve a significant number of shares. They play a crucial role in the financial markets by facilitating these large transactions in a manner that minimizes market impact. When a large order is placed in the market without any precautions, it can significantly affect the stock's price, either by driving it up if the order is to buy or pushing it down if the order is to sell.

Block brokers use various strategies, such as breaking down a large order into smaller ones and strategically timing these orders, to prevent such market movements. This approach helps in concealing the full extent of the transaction from the market until it is completed, thereby protecting the client's interests and preventing potential price manipulation by other market participants.

A is incorrect. While it is technically possible for block brokers to place small orders, this is not their primary function or area of specialization. Block brokers are specifically known for their ability to manage large orders in a way that minimizes their impact on the market. The statement does not accurately reflect the unique value proposition and expertise of block brokers, which lies in their handling of large, potentially market-moving orders.

C is incorrect. In reality, one of the key roles of block brokers is to precisely conceal these intentions to prevent adverse market movements. By strategically breaking down large orders and using other techniques, block brokers aim to mask the true size and direction of their clients' trades from the broader market.

This discretion is critical in ensuring that large orders do not lead to unfavorable price movements that could harm the client's interests. The statement contradicts the fundamental practices and objectives of block brokers in the financial markets.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (d) Describe types of financial intermediaries and services that they provide.

Q.1641 Which of the following traders will buy an asset from one market and sell it in another market without taking any risk?

A. An arbitrageur.

B. A broker-dealer.

C. A primary dealer.

The correct answer is **A.**

An arbitrageur is a trader who exploits price discrepancies between markets to make a profit without taking on risk. This strategy, known as arbitrage, involves simultaneously buying and selling an asset in different markets to take advantage of differing prices for the same asset. The key to arbitrage is that it is considered risk-free; the arbitrageur knows the prices in both markets beforehand and can execute the buy and sell orders at the same time, locking in a guaranteed profit.

This is possible due to inefficiencies in the markets that cause the same asset to be priced differently in two places. These inefficiencies can be due to a variety of factors, including differences in market liquidity, information availability, or even transaction costs.

B is incorrect. A broker-dealer acts as both a broker (buying and selling securities on behalf of clients) and a dealer (buying and selling securities for their own account). While broker-dealers play a crucial role in the financial markets by providing liquidity and facilitating transactions, their activities involve taking on risk.

As dealers, they hold inventory of securities and are exposed to the risk of price movements. As brokers, they may also face execution risk, where there is a risk that they cannot buy or sell a security at the quoted price due to rapid market movements. Therefore, unlike arbitrageurs, broker-dealers do not operate in a risk-free environment.

C is incorrect. A primary dealer is a type of financial institution, such as a bank or securities brokerage, that has been approved to trade securities directly with the government, typically in the context of government debt instruments. Primary dealers are an integral part of the government securities market, helping to underwrite new debt issues and provide a secondary market for these securities.

While primary dealers facilitate the smooth functioning of the government securities market and may engage in various trading strategies, they do not inherently buy and sell assets in different markets without taking any risk. Their activities can involve significant risk, including interest rate risk, credit risk, and market risk, depending on their positions and market conditions.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (d) Describe types of financial intermediaries and services that they provide.

Q.1642 Which one of these is *most likely* relevant example of a short-sell trade on a stock?

A. Sell the asset now with the obligation to repurchase it in the future.

B. Borrow and sell the asset now, with the obligation to buy back the asset in the future.

C. Buy a put option on the asset now with the right but not the obligation to repurchase the asset in the future.

The correct answer is **B.**

Option B accurately describes the process of a short-sell trade on a stock. In a short sale, an investor borrows shares of a stock from a broker and sells them on the open market at the current price. The investor's goal is to buy back the same number of shares at a lower price in the future, return the borrowed shares to the broker, and pocket the difference as profit.

This strategy is predicated on the belief that the stock's price will decline, allowing the investor to repurchase the shares at a lower cost. The obligation to buy back the asset in the future is a critical component of short selling, as it ensures that the borrowed shares are returned to the lender. This process involves a high level of risk, as the potential for loss is theoretically unlimited if the stock's price rises instead of falls.

A is incorrect. While option A mentions selling the asset now with the obligation to repurchase it in the future, it omits the crucial detail of borrowing the asset before selling it. In financial markets, you cannot sell what you do not own unless you have first borrowed it.

This distinction is fundamental to the concept of short selling, which specifically involves the sale of borrowed securities. The act of borrowing before selling is what differentiates short selling from other trading strategies and is essential for understanding the mechanics and risks associated with short positions in the stock market.

C is incorrect. Buying a put option on an asset gives the holder the right, but not the obligation, to sell the underlying asset at a predetermined price before the option expires. This strategy can be used to speculate on the decline of an asset's price or to hedge against potential losses in a long position. However, it does not involve borrowing and selling the asset, which is the defining characteristic of a short sale.

While holding a put option may reflect a bearish outlook similar to that of a short seller, the mechanisms, risks, and potential outcomes of these two strategies are distinct. A put option involves paying a premium for the right to sell, and the maximum loss is limited to this premium, unlike in short selling, where the potential for loss can be much greater.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (e) Compare positions an investor can take in an asset.

Q.1643 A trade in which an investor borrows funds from a broker to buy assets is called a:

A. long position.

B. short position.

C. leveraged position.

The correct answer is **C.**

A leveraged position occurs when an investor borrows money to finance the purchase of assets. This strategy allows the investor to increase the potential return on investment by using borrowed funds to gain a larger exposure to a particular asset than would be possible using only their own funds.

The cost of borrowing these funds is typically represented by the call money rate, which is the interest rate paid on the borrowed funds. Leveraging can amplify both gains and losses, making it a higher-risk investment strategy that relies on the assumption that the returns from the investment will exceed the cost of borrowing.

A is incorrect. A long position refers to the purchase of an asset with the expectation that its value will increase over time. When an investor takes a long position, they are essentially expressing confidence in the asset's future performance, hoping to sell it at a higher price than the purchase price.

This concept is fundamentally different from leveraging, as taking a long position does not inherently involve borrowing funds to finance the purchase. Instead, it simply means owning an asset outright, with the investor's capital at risk being limited to the amount invested.

B is incorrect. A short position involves borrowing an asset, typically securities, from a broker and selling it on the open market at its current price. The investor then aims to buy back the same number of shares or assets at a lower price in the future, return them to the lender, and pocket the difference as profit.

This strategy is predicated on the expectation that the asset's price will decline, allowing the investor to profit from the decrease in value. Unlike a leveraged position, which involves borrowing money to buy assets, a short position involves borrowing the assets themselves with the intention of profiting from a fall in their price. This distinction highlights the different risk and return profiles associated with short selling compared to leveraging.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (f) Calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call.

Q.1644 Muhammad Umar is a fund manager who wants to purchase 5,000 stocks of Wellington Inc. at the current price of $92. If the initial margin required to open up a leveraged position is 35%, the leverage ratio is *closest to*:

A. 2.86

B. 3.10

C. 4.45

The correct answer is **A.**

The leverage ratio can be calculated by taking the inverse of the initial margin requirement. The initial margin is the percentage of the investment's total value that must be covered with the investor's own money.

The leverage ratio is calculated as:

$$\text{Leverage ratio} = \frac{1}{0.35} = 2.86$$

This calculation shows that for every dollar of equity, the investor is borrowing approximately $2.86.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (f) Calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call.

Q.3591 An investment bank offers its customers the option to carry out leveraged trades. If the investors are required to maintain a margin of 20% and pay a commission of 0.25% of the trade value, then the leverage ratio for the trade is *closest to*:

A. 4.94.

B. 5.

C. 5.06.

The correct answer is **B.**

The leverage ratio for a trade is determined by the inverse of the margin requirement. In this case, with a margin requirement of 20%, the leverage ratio can be calculated as follows:

$$\begin{aligned} \text{Leverage ratio} &= \frac{1}{\text{Margin requirement}} \\ &= \frac{1}{20\%} \\ &= 5 \end{aligned}$$

This calculation does not directly incorporate the commission of 0.25% of the trade value, as the commission affects the cost of the trade rather than the leverage ratio itself. The leverage ratio essentially indicates how much an investor can borrow to make a trade, relative to their own capital.

A 20% margin requirement means that the investor must provide at least 20% of the total trade value, allowing them to leverage or borrow up to 5 times their own investment.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (f) Calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call.

Q.3592 An investment bank offers its customers the option to carry out leveraged trades. The investors must maintain a margin of 30% and pay a commission of 0.25% of the trade value. If an investor intends to carry out a trade of 2,000 shares, each with a price per share of $30, the total investment required for the trade is *closest to*:

A. $17,850.

B. $18,150.

C. $42,150.

The correct answer is **B.**

To calculate the total investment required for the trade, we must consider both the margin requirement and the commission fee. The margin requirement is a percentage of the total value of the trade that the investor must have in their account to open the position. The commission is a fee charged by the brokerage firm for executing the trade. In this scenario, the margin requirement is 30%, and the commission is 0.25% of the trade value.

$$\begin{aligned}\text{Total funds required to acquire the shares} &= 2,000 \times \$30\\ &= \$60,000\\ \text{Margin required for the trade} &= \$60,000 \times 30\%\\ &= \$18,000\\ \text{Commission} &= \$60,000 \times 0.25\%\\ &= \$150\\ \text{Total investment required for the trade} &= \$18,000 + \$150\\ &= \$18,150\end{aligned}$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (f) Calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call.

Q.3594 An equity investor is bullish on a particular stock. He buys 20 futures contracts on the stock currently trading at $40/share on full margin. The broker requires its clients to maintain an initial margin of 35% and a maintenance margin of 25%.
If one futures contract equals 1,000 shares, then the maximum share price at which the margin call will get triggered is *closest to*:

A. $34.66.

B. $36.

C. $37.

The correct answer is **A.**

To determine the maximum share price at which a margin call will be triggered for an equity investor who has bought futures contracts on margin, we need to understand the concept of margin requirements in futures trading. The initial margin is the percentage of the purchase price that must be paid upfront, and the maintenance margin is the minimum account balance that must be maintained. If the account balance falls below this level, a margin call is triggered, requiring the investor to deposit additional funds to bring the account balance back up to the initial margin level.

$$\text{Margin call price on a long position} = p_0\left(\frac{1-\text{initial margin}}{1-\text{maintenance margin}}\right)$$

where p_0 is the initial price of the stock.

$$\text{Margin call price} = 40\left(\frac{1-0.35}{1-0.25}\right) = \$34.66$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (f) Calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call.

Q.3595 A trader has purchased 2000 shares of a non-dividend-paying firm on margin at a price of \$80 per share. The leverage ratio is 2.5. Six months later, the trader sells these shares at \$90 per share. Ignoring the interest paid on the borrowed amount and the transaction costs, the return to the trader during the six months is *closest to*:

A. 12.5%

B. 15%

C. 31.25%

The correct answer is **C.**

The return is 31.25 percent. If the position had been unleveraged, the return would be 12.5% = $\frac{(90-80)}{80}$. Because of leverage, the return is 31.25% = 2.5 × 12.5%.
We can also look at it from the following perspective: the equity contributed by the trader (the minimum margin requirement) is $40\% = 100\% \div 2.5$. The trader contributed \$32 = 40% of \$80 per share. The gain is \$10 per share, resulting in a return of 31.25% = $\frac{10}{32}$.

We can also look at it in the perspective below.

$$\text{Max leverage ratio} = \frac{1}{\text{Initial margin requirement}} = \frac{1}{2.5} = 0.4$$

Therefore, the amount contributed by the trader for the purchase of the 2,000 shares is

$$0.4 \times (2000 \times 80) = 64,000$$

Gain from the sale of shares

$$= 2,000 \times (90 - 80) = 20,000$$

The return

$$\frac{20,000}{64,000} = 0.3125$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (f) describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes.

Q.3596 An equity analyst tracks the Information Technology (IT) sector. His analysis indicates that Value Information Technology Limited has excellent growth prospects. However, he concludes that its shares are currently slightly overvalued. If the analyst wants to buy the shares, he is *most likely* to place a:

A. limit order.

B. market order.

C. immediate or cancel order.

The correct answer is **A.**

Placing a limit order is the most suitable action for an equity analyst who believes that the shares of Value Information Technology Limited are currently overvalued but has excellent growth prospects. A limit order allows the analyst to specify a maximum purchase price for the shares, ensuring that he does not pay more than he believes the shares are worth. This strategy is particularly effective in situations where the analyst expects the market price of the shares to decrease to a more reasonable level in the future.

By setting a limit order, the analyst can potentially buy the shares at a lower price, aligning with his valuation and growth prospects assessment. This approach demonstrates a prudent and strategic method of investing, where the analyst's in-depth analysis and valuation guide the decision-making process, ensuring investments are made at favorable prices.

B is incorrect. Accepting the sell order without informing the client about the recent change in the firm's recommendation would not align with the ethical standards of fair dealing. This approach would disregard the importance of ensuring that the client's decisions are based on the most current and relevant information. In the dynamic and often volatile investment landscape, recommendations can change rapidly based on new data or market developments. Failing to communicate these changes before executing a sell order could lead to the client making a less informed decision, potentially affecting their investment outcomes negatively.

C is incorrect. It is contrary to the firm's recommendation and would not be in the best interest of the client. Investment professionals are required to act in their clients' best interests, providing them with objective advice and respecting their autonomy in decision-making. By refusing to execute the order based on the firm's current recommendation, the professional would be prioritizing the firm's interests over the client's, which is contrary to the principles of fairness and objectivity in investment management.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (h) Compare market orders with limit orders.

Q.3597 The market price and net asset value of ETFs converge because:

A. ETFs are open-end funds.

B. Authorized participants have the option to trade directly with the ETF.

C. Authorized participants can redeem ETFs from the fund at the market price.

The correct answer is **B.**

The convergence of the market price and net asset value (NAV) of Exchange-Traded Funds (ETFs) is primarily facilitated by the role of Authorized Participants (APs). APs are typically large financial institutions that have the ability to trade directly with the ETF. This unique mechanism allows APs to create or redeem shares of the ETF in exchange for the underlying assets. When the market price of an ETF deviates from its NAV, APs can arbitrage the difference, thus bringing the prices back into alignment.

For instance, if the market price of an ETF is higher than its NAV, APs can purchase the underlying assets, exchange them for new ETF shares, and sell those shares at the higher market price. Conversely, if the market price is below the NAV, APs can buy ETF shares in the market and redeem them with the ETF for the underlying assets, which they can then sell. This process ensures that the market price of ETF shares does not stray significantly from the NAV over time.

A is incorrect. ETFs are not open-end funds; they are structured as open-end investment companies but trade on exchanges like stocks. The primary distinction lies in how shares are traded. Open-end funds do not have their shares traded on the open market, and their NAV is calculated at the end of each trading day. In contrast, ETFs trade throughout the trading day at market prices that can fluctuate. This trading characteristic of ETFs does not directly contribute to the convergence of market price and NAV.

C is incorrect. While it is true that Authorized Participants can redeem ETF shares, they do so at the NAV, not at the market price. The ability to redeem at the NAV is crucial for the arbitrage mechanism that helps keep the ETF's market price in line with its NAV. If APs were to redeem at the market price, this would not necessarily encourage the alignment of the two prices, as the arbitrage opportunity relies on the difference between the market price and the NAV.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (c) Describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes.

Q.3598 Which of the following financial instruments is *least likely* traded in an exchange market?

A. Options.

B. Futures.

C. Forwards.

The correct answer is **C.**

Forwards are financial instruments that are least likely to be traded on an exchange market. Forward contracts are agreements to buy or sell an asset at a specified future time at a price agreed upon today. Unlike futures and options, forwards are typically customized contracts between two parties and are traded over-the-counter (OTC).

This customization allows for specific terms to be negotiated directly between the buyer and seller, including the quantity of the asset and the settlement date. However, this direct negotiation and lack of standardization mean that forwards do not benefit from the liquidity and transparency provided by exchange markets. Furthermore, the OTC nature of forwards introduces counterparty risk, as there is no central clearinghouse to guarantee the performance of the contract.

A is incorrect. Options are financial derivatives that give the buyer the right, but not the obligation, to buy (in the case of a call option) or sell (in the case of a put option) an underlying asset at a specified price on or before a certain date.

Options are widely traded on various exchanges, providing liquidity, transparency, and reduced counterparty risk due to the presence of a clearinghouse that guarantees the contracts. The standardized nature of exchange-traded options facilitates ease of trading and valuation, making them popular instruments among investors.

B is incorrect. Futures are standardized contracts to buy or sell a specific quantity of a commodity or financial instrument at a predetermined price at a specified time in the future. Like options, futures contracts are traded on exchanges, which provide a regulated and transparent marketplace for these instruments.

The standardization of futures contracts, along with the presence of a clearinghouse, reduces counterparty risk and increases liquidity, making futures a popular choice for hedging, speculating, and arbitrage opportunities. The exchange-traded nature of futures contracts ensures that prices are publicly available, contributing to market transparency and efficiency.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (c) Describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes.

Q.3599 Financial intermediaries securitize assets by creating Special Purpose Vehicles (SPVs) because:

A. it increases overall return.

B. SPVs decrease the liquidity of securitized assets.

C. it protects the SPV in case the financial intermediary goes bankrupt.

The correct answer is **C.**

Creating Special Purpose Vehicles (SPVs) for the securitization of assets is a strategic move by financial intermediaries to ensure that the assets are legally and financially insulated from the parent company, particularly in the event of bankruptcy.

The primary rationale behind this strategy is to safeguard the interests of investors by ensuring that the assets held within the SPV are not accessible to the creditors of the parent company should it face financial distress. This legal separation enhances the security of the investment, making it more attractive to potential investors who are assured that their investments are protected against the bankruptcy risks of the originating financial intermediary.

A is incorrect. While it might seem intuitive that creating SPVs could lead to an increase in overall return due to the potential for risk segmentation and the creation of new financial products, this is not the primary purpose or a guaranteed outcome of SPV creation.

The establishment of an SPV is primarily a legal and financial structuring decision aimed at asset protection and bankruptcy remoteness, rather than directly aiming to enhance returns. The returns on investments in securitized assets are influenced by a variety of factors including the performance of the underlying assets, market conditions, and investor demand, rather than the mere existence of an SPV.

B is incorrect. Contrary to decreasing the liquidity of securitized assets, SPVs often play a crucial role in enhancing the liquidity of these assets. By pooling various types of assets and issuing securities that are backed by these asset pools, SPVs transform otherwise illiquid assets into securities that can be more easily traded in the financial markets.

This process not only broadens the investor base by catering to different risk and return preferences through the creation of various tranches of securities but also enhances the overall liquidity of the underlying assets. The increased liquidity is beneficial for both the original asset owners, who can more easily finance their operations, and for investors, who gain access to a wider range of investment opportunities with varying risk and return profiles.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (d) describe types of financial intermediaries and services that they provide.

Q.3600 An investor places an ‘immediate or cancel’ sell order for 20 contracts at a limit price of \$41.50. The current pending orders in the market are given in the following exhibit.

Exhibit 1: Pending orders

Counterparty	Contract size	BUY/SELL ORDER	Price
A	10	BUY	\$41.00
B	5	BUY	\$42.00
C	10	BUY	\$43.00
D	5	SELL	\$44.00
E	5	SELL	\$45.00
F	10	SELL	\$46.00

The number of contracts that get filled and the average trade price, respectively, are *closest to*:

A. Number of contracts = 15, Average trade price = \$42.33.

B. Number of contracts =20, Average trade price = \$42.25.

C. Number of contracts =15, Average trade price = \$42.67.

The correct answer is **C.**

The sell order is filled with the counterparty, which offers the highest 'buy price'.

Contract	Price	Offered By
10	\$43.00	C
5	\$42.00	B

As the price offered by A is below \$41.50, no more order gets filled. As the order placed by the investor is an 'immediate or cancel' order, the unfilled contracts, i.e., five contracts, are canceled immediately in the absence of any favorable quotes.
Number of contracts filled = 15

Average trade price $= \frac{\$43 \times 10 + \$42 \times 5}{15} = \$42.67$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (j) describe how securities, contracts, and currencies are traded in quote-driven, order-driven, and brokered markets.

Q.3601 If a currency transaction is carried out on Wednesday, September 8th, 2017, then the trade settlement will *most likely* happen on:

A. September 9th, 2017.

B. September 10th, 2017.

C. September 11th, 2017.

The correct answer is **B.**

The standard settlement timeframe for foreign exchange (FX) spot transactions is T+2, meaning two business days from the trade date. Given that the currency transaction in question was carried out on Wednesday, September 8th, 2017, the settlement would most likely happen on Friday, September 10th, 2017.

This is because the T+2 settlement rule applies to business days, excluding weekends and public holidays. Therefore, counting two business days from Wednesday brings us to Friday of the same week, assuming there are no public holidays in between.

A is incorrect. This option suggests that the settlement would occur on September 9th, 2017, which is only one business day after the transaction. This does not comply with the T+2 settlement rule applicable to FX spot transactions.

C is incorrect. It includes a weekend. The T+2 rule specifies two business days, and since weekends are not considered business days, this option extends beyond the standard settlement period for an FX spot transaction conducted on a Wednesday.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (g) Compare execution, validity, and clearing instructions.

Q.3602 An oil producer is worried that the price of crude oil may soon decrease. To hedge his risk, the crude oil producer must:

A. buy a futures crude oil contract.

B. sell a forward crude oil contract.

C. buy a forward crude oil contract.

The correct answer is **B.**

To hedge against the potential decrease in crude oil prices, the oil producer should opt to sell a forward crude oil contract. This strategy allows the producer to lock in a selling price for the oil at today's rates, thereby securing a guaranteed price at which they can sell their oil in the future, regardless of potential market price declines.

Selling a forward contract serves as a financial hedge, providing the producer with a form of insurance against falling prices. By entering into this contract, the producer agrees to sell a specified amount of oil at a predetermined price at a future date. This move is prudent for producers who are concerned about price drops that could reduce their revenue. By locking in a price now, they can ensure a certain level of income, making their financial planning more predictable and secure.

A is incorrect. Buying a futures crude oil contract would not serve the oil producer's goal of hedging against a price decrease. Futures contracts, like forward contracts, allow for the purchase or sale of an asset at a future date, but they are standardized and traded on exchanges. If the producer buys a futures contract, they are committing to purchasing oil at a set price in the future, which is counterproductive when their objective is to sell oil at today's price to hedge against a potential decrease.

This action would expose the producer to the risk of having to buy oil at a potentially higher price than the market rate at the time of the contract's execution, which does not align with the goal of mitigating the risk of falling oil prices.

C is incorrect. Buying a forward crude oil contract implies that the producer intends to purchase oil at a predetermined price in the future, which is not the producer's intention. Producers who anticipate a decrease in oil prices would not look to buy more oil at today's prices; instead, they aim to sell their existing or future oil production at current prices to avoid the risk of selling at lower prices later.

Buying a forward contract would be a strategy used by consumers or companies that need to secure a supply of oil at a known price to manage their costs, not by producers looking to hedge against price declines.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (c) Describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes.

Q.3603 A currency trader wants to sell the Australian dollar against the US dollar. He requested a quote from a dealer and received the quote as indicated in Exhibit 1.

Exhibit 1: AUD/USD Quote

AUD/USD	0.776/0.779

The rate at which the trader will sell the Australian dollar to the dealer is *closest to*:

A. 0.7760.

B. 0.7775.

C. 0.7790.

The correct answer is **A.**

A market maker provides two quotes for currency trades – the bid and the ask. The 'bid' price is the price at which the market maker is willing to buy the currency, and the 'ask' is the price at which the market maker is willing to sell the currency. Therefore, the currency trader will sell the Australian dollar at 0.7760.
Note: The bid is always lower than the ask and is always the first quoted price. A trader will sell at the bid price and buy at the ask price.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (g) Compare execution, validity, and clearing instructions.

Q.3604 The main advantage of issuing shares through shelf registration is:

A. it lowers transaction costs.

B. it allows corporations the flexibility to issue shares when required.

C. it allows unreliable corporations to issue shares in the secondary market.

The correct answer is **B.**

Shelf registration provides corporations with the flexibility to issue shares when required, which is a significant advantage in dynamic financial markets. This method allows companies to register securities without having to immediately sell them. Instead, the registered securities can be sold in portions within a three-year period following the initial registration.

This flexibility is crucial for corporations as it enables them to respond quickly to favorable market conditions or capital needs without undergoing the lengthy process of a new registration each time. By having the ability to issue shares at opportune times, companies can optimize their capital structure and funding strategies more efficiently.

A is incorrect. While it might seem that shelf registration could lower transaction costs due to its streamlined process, this is not its primary advantage. The main purpose of shelf registration is to provide flexibility in timing and amount of the securities to be issued.

Although there might be some cost savings in terms of reduced legal and underwriting fees over time, these are not the primary focus or the main advantage of shelf registration. The process still incurs significant costs, including those associated with SEC review and compliance, making the reduction of transaction costs a secondary benefit rather than a primary advantage.

C is incorrect. Shelf registration is not designed to allow unreliable corporations to issue shares in the secondary market. In fact, the ability to use shelf registration is typically limited to issuers that meet specific regulatory criteria, demonstrating their reliability and compliance with securities laws.

Regulatory authorities, such as the Securities and Exchange Commission (SEC) in the United States, require issuers to meet certain standards, including a history of timely financial reporting and adherence to governance standards. This ensures that only companies deemed reliable and transparent by the regulatory authority can take advantage of shelf registration. The misconception that it allows unreliable corporations to issue shares overlooks the stringent regulatory requirements and oversight involved in the shelf registration process.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (i) Define primary and secondary markets and explain how secondary markets support primary markets.

Q.3605 Which of the following statements is/are *most likely* accurate?

I. In a 'best effort offering,' the underwriters buy an issue and use their best effort to sell the issue to investors.
II. In an 'underwritten offering,' the underwriters buy an issue and then attempt to sell the issue to investors.
III. A 'best effort offering' is the most common type of offering.

A. II

B. I & III

C. II & III

The correct answer is **A.**

Statement II accurately describes an 'underwritten offering,' where the underwriters purchase the issue from the issuer and then attempt to sell it to investors. This process involves a significant commitment from the underwriter, as they assume the risk of buying the securities and potentially not selling them at a profit.

The underwriter's profit comes from the spread between the price paid to the issuer and the price at which the securities are sold to investors. This method is commonly used because it provides the issuer with a guaranteed amount of capital from the sale of the securities, making it a preferred choice for many issuers.

B is incorrect. Statement I misrepresents the nature of a 'best effort offering.' In this type of offering, underwriters agree to sell as much of the issue as possible, but they do not commit to purchasing the entire issue themselves. Instead, they act as agents for the issuer, using their best efforts to sell the securities to investors.

There is no guarantee to the issuer of how much capital will be raised, as the underwriters do not assume the risk of buying unsold shares. This arrangement is less risky for underwriters compared to an underwritten offering, as they are not obligated to purchase any unsold securities.

C is incorrect. Statement III incorrectly identifies a 'best effort offering' as the most common type of offering. In reality, 'underwritten offerings' are more prevalent in the market. Underwritten offerings provide issuers with a certain degree of financial security by ensuring a specific amount of capital will be raised, assuming the underwriter can sell the securities. This guarantee is attractive to many issuers, making underwritten offerings a more common choice compared to best effort offerings, where the amount of capital raised can be uncertain.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (i) Define primary and secondary markets and explain how secondary markets support primary markets.

Q.3606 Michael Bugatti, a large Wall Street bank trader, wants to buy 500,000 shares of apples right before Q4 earnings. However, he is afraid that high-frequency algorithms might front-run him and offer slightly higher prices than his large order. To avoid this, Bugatti can *most likely* use a/an:

A. iceberg order.

B. all-or-nothing order.

C. good-till-canceled order.

The correct answer is **A.**

A large lot is broken into smaller-sized orders in an iceberg order to hide the actual order quantity. The smaller parts are either visible or hidden, with the latter becoming visible after the former order has been executed. The entire order size is not displayed using an iceberg order, thereby preventing other traders/dealers/algorithms from quoting higher prices.
B is incorrect. In an all-or-nothing order, the order has to be either filled or canceled. Partial fills are not allowed.

C is incorrect. In a good till canceled order, the order is open for trade up until it is canceled.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (g) Compare execution, validity, and clearing instructions.

Q.3607 A technical analyst has 100 shares of LOLO, which are currently trading at $40.32. The chart structure indicates that once the share price crosses the $50.58 mark, the share price is expected to reach $71.86. If the technical analyst wants to purchase 100 more shares of LOLO once its price reaches $50.58, then he must *most likely* use a:

A. market order.

B. stop buy order at $50.58.

C. limit buy order at $50.58.

The correct answer is **B.**

A technical analyst looking to purchase 100 more shares of LOLO once its price reaches $50.58 should use a stop buy order at $50.58. A stop buy order is specifically designed to be executed at a specified price or better after a given stop price has been reached or passed.

This type of order is particularly useful for traders who wish to enter the market at a price above the current market price, anticipating that the stock's price will continue to rise once it crosses a certain threshold. In this scenario, setting a stop buy order at $50.58 ensures that the order will only be executed if the stock price reaches or exceeds $50.58, aligning with the analyst's strategy based on the chart structure's indication.

A is incorrect. A market order is an order to buy or sell a security immediately at the best available current price. It does not specify a price and thus offers no control over the entry price. In the context of the analyst's strategy, using a market order would result in the immediate purchase of the shares at the current market price of $40.32, which does not align with the intention to buy at or above $50.58 based on the technical analysis.

C is incorrect. A limit buy order at $50.58 would instruct the broker to buy the stock only at $50.58 or lower. This type of order is used when the buyer is looking to purchase a stock at a specific price or better, ensuring that they do not pay more than a certain price.

However, in the scenario described, the analyst's strategy is to buy the stock specifically as it rises to $50.58, indicating a bullish outlook that expects the stock price to increase further beyond this point. A limit buy order at $50.58 could potentially not be executed if the stock price surpasses $50.58 without retracing back to that exact price or lower, thus not aligning with the analyst's intended strategy based on the chart structure's predictions.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (g) Compare execution, validity, and clearing instructions.

Q.3867 The segregated cash flows from securitized assets are called:

A. Tranches

B. Dark pools

C. Special purpose entities

The correct answer is **A.**

Tranches are the segregated cash flows from securitized assets, which are essentially slices or portions of a financial product that can be sold to investors. The concept of tranches is particularly prevalent in the context of structured finance and securitization, where a pool of financial assets—such as mortgages, loans, or bonds—is divided into various segments based on risk, maturity, or other characteristics.

This segmentation allows investors to select parts of the financial product that best match their risk tolerance, investment horizon, and return objectives. By investing in different tranches, investors can tailor their investment portfolios according to their specific preferences and needs. The structuring of tranches enables the creation of securities with varying degrees of risk and return, making it possible to attract a broader range of investors. This diversification of risk and customization of investment options are key reasons why tranches are a critical component of securitized assets.

B is incorrect. Dark pools refer to private financial forums or exchanges for trading securities, primarily stocks, where the transactions are executed away from the public eye. The primary characteristic of dark pools is their lack of transparency, as the details of the trades, such as the identities of the traders and the exact trade sizes, are not disclosed until after the transactions have been completed. Dark pools are more about the venue and manner of trading rather than the structuring of financial products.

C is incorrect. Special Purpose Entities (SPEs) are legal entities created for a specific objective, often to isolate financial risk. SPEs are commonly used in complex financial transactions, including securitizations, to separate certain assets and liabilities from the parent company.

While SPEs play a crucial role in the securitization process by holding the assets being securitized, the term itself does not refer to the segregated cash flows from these assets. Instead, SPEs serve as the structural foundation that holds the assets and issues the tranches of securities to investors. Therefore, this option does not accurately describe the segregated cash flows from securitized assets.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (c) Describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes.

Q.3870 What is a *most likely* benefit of a corporation issuing new securities in a private placement instead of an initial public offering?

A. Lower cost of capital.

B. Cheaper offering costs.

C. More liquidity for investors.

The correct answer is **B.**

Issuing new securities through a private placement instead of an initial public offering (IPO) offers the benefit of cheaper offering costs for the corporation. Private placements are transactions made directly between the issuer and a select group of investors, typically institutional or accredited investors. This method is less costly because it involves fewer regulatory requirements and lower underwriting fees compared to an IPO.

The Securities and Exchange Commission (SEC) imposes stringent disclosure and registration requirements on companies looking to go public through an IPO, which can significantly increase the costs associated with the offering. Additionally, marketing and roadshow expenses in an IPO can further escalate the total costs. In contrast, a private placement bypasses many of these expenses, making it a more cost-effective way for companies to raise capital.

A is incorrect. Securities issued in a private placement are typically less liquid and sold to a smaller pool of investors, these investors may demand a higher return on their investment to compensate for the additional risk and lower liquidity. This can lead to a higher cost of capital for the issuer compared to securities issued in an IPO, where the potential for greater liquidity and a larger pool of investors can lead to more competitive pricing and potentially lower the cost of capital.

C is incorrect. More liquidity for investors is not a benefit associated with private placements. Liquidity refers to the ease with which securities can be bought or sold in the market without affecting their price. Securities issued in a private placement are generally not traded on public exchanges and are subject to transfer restrictions, making them less liquid than securities issued in an IPO.

IPOs allow companies to list their shares on public exchanges, where they can be bought and sold by a wide range of investors, thereby providing greater liquidity. In contrast, the limited pool of investors and the restrictions on the transfer of privately placed securities result in lower liquidity for investors.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 1: Market Organization and Structure, LOS (i) Define primary and secondary markets and explain how secondary markets support primary markets.

Learning Module 2: Security Market Indices

Q.103 A Dow Jones ETF was $117 exactly one year ago. It is now at $128 and has paid a $3 dividend. The Dow Jones ETF's price return is *closest to*:

A. 8.6%.

B. 9.4%.

C. 11.9%.

The correct answer is **B.**

Price return doesn't include dividend payment. (Only the total return includes it)
Therefore;

$$\frac{128-117}{117}=9.4\%$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (b) Calculate and interpret the value, price return, and total return of an index.

Q.104 A price-weighted index is composed of 3 stocks. Stock A is trading at $221, stock B at $51 and stock C at $42. One year later, stock A is now worth $159, stock B is $71, and stock C is $45. The total return for this index is *closest to*:

A. -12.42%.

B. -14.18%.

C. 18.15%.

The correct answer is **A.**

The total return can be calculated as follows:

$$T_0 = \frac{(\$221 + \$51 + \$42)}{3} = 104.6667$$

$$T_1 = \frac{(\$159 + \$71 + \$45)}{3} = 91.6667$$

$$\text{Total return} = \frac{(91.6667 - 104.6667)}{104.6667} = -12.42\%$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (b) Calculate and interpret the value, price return, and total return of an index.

Q.106 An equal-weighted index is composed of 3 stocks. Stock A is trading at $53, stock B at $75 and stock C at $81. One year later, stock A is now worth $41, stock B is $76, and stock C is $128. The total return for this index is *closest to*:

A. 12.24%.

B. 81.99%.

C. 166.50%.

The correct answer is **A.**

In an equal-weighted index, we assume that we put the same amount of money in each stock.

$$\text{Stock A's return} = \frac{(41-53)}{53} = -22.64\%$$

$$\text{Stock B's return} = \frac{(76-75)}{75} = 1.33\%$$

$$\text{Stock C's return} = \frac{(128-81)}{81} = 58.02\%$$

$$\text{Equal-weighted return} = \frac{(-22.64\% + 1.33\% + 58.02\%)}{3} = 12.24\%$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (e) Calculate and analyze the value and return of an index given its weighting method.

Q.107 A capitalization-weighted index is composed of 2 stocks. Stock A is trading for \$75, and stock B is trading for \$51. If there are 6 million shares outstanding in stock A, and 13 million shares outstanding in stock B, then the index value is *closest to*:

A. 47.59

B. 58.58

C. 60.70

The correct answer is **C.**

The index value is obtained by adding up the market value of the stocks in an index, whereas the market value of a capitalization-weighted index is obtained by dividing the price of a share by the number of the stock's outstanding shares.
Recall that in market-capitilization weight of security i is:

$$w_i^W = \frac{Q_i P_i}{\sum_{j=1}^{N} Q_j P_j}$$

Where:
w_i = fraction of the portfolio that is allocated to security i or weight of security i
Q_i = number of shares outstanding of security i
P_i = share price of security i.
N = number of securities in the index.

$$\text{Stock A's market capitalization} = \$75 \times 6{,}000{,}000 \text{ shares} = \$450{,}000{,}000$$

$$\text{Stock B's market capitalization} = \$51 \times 13{,}000{,}000 \text{ shares} = \$663{,}000{,}000$$

$$\text{Index value} = \frac{\$75 \times \$450{,}000{,}000}{\$450{,}000{,}000 + \$663{,}000{,}000} + \frac{\$51 \times \$663{,}000{,}000}{\$450{,}000{,}000 + \$663{,}000{,}000}$$
$$= 30.32 + 30.38$$
$$= 60.70$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (e) Calculate and analyze the value and return of an index given its weighting method.

Q.108 An index with a fundamental weighting has:

A. a value tilt.

B. an earnings tilt.

C. a market capitalization tilt.

The correct answer is **A.**

An index with a fundamental weighting is designed to reflect the economic footprint of companies rather than their market capitalization. This approach often leads to a value tilt because it emphasizes companies that are undervalued relative to their fundamental characteristics, such as earnings, dividends, or sales. By focusing on these intrinsic values, a fundamental index aims to provide a more accurate representation of a company's economic significance and potential for long-term growth.

This method contrasts with market capitalization-weighted indexes, where companies with higher market values have a larger influence on the index's performance, potentially skewing it towards overvalued companies. The fundamental weighting approach seeks to mitigate this by allocating weights based on economic size and value, thus offering a potentially more stable and representative index composition that may appeal to investors looking for value investment opportunities.

B is incorrect. Suggesting that an index with a fundamental weighting has an earnings tilt is partially correct but incomplete. While earnings can be a component of fundamental analysis, a fundamental weighting approach encompasses a broader range of financial metrics beyond just earnings. These can include sales, book value, cash flow, and dividends, among others. .

C is incorrect. Market capitalization weighting bases the weight of each company in the index on its market value, which can lead to a concentration in larger companies that may not necessarily reflect their fundamental economic value. In contrast, fundamental weighting deliberately moves away from market capitalization as the sole determinant of weight, aiming instead to allocate weights based on a company's economic fundamentals.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.818 A Finance student wants to create an index with the stock he bought in a paper trading account. The notes from his record show the following:
Initial price - Stock A: $10; Stock B: $15
Current price - Stock A: $15; Stock B: $30

Assuming an initial index value of 105, the equal-weighted index value for the two stocks is now *closest to*:

A. 75

B. 150

C. 183.75

The correct answer is **C.**

$$\text{Price change in Stock A} = \frac{(15 - 10)}{10} = 50\%$$
$$\text{Price change in Stock B} = \frac{(30 - 15)}{15} = 100\%$$
$$\text{Percentage change in the index} = \frac{(50\% + 100\%)}{2} = 75\%$$
$$\text{New index value} = 105 \times (1 + 75\%) = 183.75\%$$

Tip: Remember that for equal-weighted indices, you calculate the individual returns of the given securities then divide those individual returns by the number of securities given.

CFA Level I, Topic 6 - Equity, Learning Module 2: Security Market Indices. LOS (e): Calculate and analyze the value and return of an index given its weighting method.

Q.819 The market float of a stock is best described as its:

A. total outstanding shares.

B. shares available to domestic investors.

C. outstanding shares excluding those held by controlling shareholders.

The correct answer is **C.**

The market float of a stock is best described as the number of outstanding shares excluding those held by insiders, controlling shareholders, and other locked-in parties. This metric is crucial for investors as it provides a clearer picture of the stock's liquidity and potential volatility. Shares that are not part of the market float are typically not available for trading on the open market, which means they do not contribute to the stock's liquidity.

The market float is a more accurate representation of the shares that are actively traded, influencing both the ease with which investors can buy or sell shares and the stock's price movements. A higher market float generally indicates better liquidity, making it easier for investors to enter or exit positions without significantly impacting the stock price. Conversely, a low market float can lead to higher volatility due to the limited supply of shares available for trading.

A is incorrect. The total outstanding shares include all shares issued by the company, including those held by insiders, controlling shareholders, and other entities that may not freely trade their shares on the open market. The market float specifically excludes these shares, focusing only on those available for public trading, which is a critical distinction for investors assessing a stock's liquidity and volatility.

B is incorrect. The concept of market float is not limited by geographical boundaries or investor nationality. Instead, it encompasses all shares that are freely tradable by the public, regardless of the investors' location. The key factor determining whether shares are part of the market float is their availability for public trading, not the investors' domestic or international status.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.820 Most of the widely used global security indices are:

A. price-weighted.

B. equal-weighted.

C. market-capitalization weighted.

The correct answer is **C.**

Most of the widely used global security indices are market-capitalization weighted. This method involves weighting each component of the index according to its market capitalization, adjusted for float, which represents the proportion of shares publicly available for trading. The rationale behind using market capitalization as a weighting mechanism is that it reflects the total market value of a company's outstanding shares, providing a more accurate representation of its size and influence in the market.

This approach ensures that larger companies have a greater impact on the index's performance, which is considered a more realistic measure of the market's movements. Float-adjusted market capitalization further refines this by considering only shares available to the public, excluding those held by insiders, governments, or other restricted entities, thus offering a clearer picture of market dynamics.

A is incorrect. A high stock price does not necessarily correlate with a company's overall market value. Therefore, while some indices, like the Dow Jones Industrial Average, are price-weighted, they are not representative of the most widely used global security indices.

B is incorrect. Equal-weighted indices assign the same weight to each stock in the index, regardless of the company's size or market value. This approach treats all companies equally, giving smaller companies the same influence as larger ones. While this can highlight the performance of smaller companies and offer a different perspective on the market, it does not accurately reflect the overall market dynamics dominated by larger companies. Consequently, equal-weighted indices are less common among the major global security indices, which tend to favor a market-capitalization-weighted approach to better represent market movements.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.821 The returns of hedge fund indices are *most likely*:

A. biased upward.

B. biased downward.

C. similar to other indices.

The correct answer is **A.**

The returns of hedge fund indices are most likely biased upward. This phenomenon can be attributed to several factors inherent in the reporting and compilation of hedge fund performance data. One of the primary reasons for this bias is the voluntary nature of performance reporting in the hedge fund industry. Hedge funds that perform well are more inclined to report their performance, while those that perform poorly or fail may opt not to disclose their results. This selective reporting leads to what is known as survivorship bias, where the aggregated performance data reflects only the funds that have survived and chosen to report, inherently skewing the average performance upwards.

Another contributing factor to the upward bias is the issue of backfill bias (or instant history bias), which occurs when a hedge fund decides to start reporting to a database and is allowed to include historical performance data. Funds that have performed well in the past are more likely to take advantage of this and start reporting, adding their positive historical returns to the database and thus further inflating the perceived average performance of hedge funds.

B is incorrect. The voluntary nature of performance reporting and the presence of survivorship and backfill biases contribute to an upward bias in reported hedge fund returns. Poorly performing funds are less likely to report their performance, and the aggregation of data from reporting funds does not accurately represent the entire hedge fund universe, leading to an overestimation of average performance.

C is incorrect. Unlike many traditional investment indices, which may have more standardized and mandatory reporting requirements, hedge fund indices suffer from voluntary reporting biases that can significantly distort the perception of their performance. The comparison is not straightforward due to the different nature of reporting and compilation methodologies used in hedge fund indices versus other types of investment indices.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (k) Describe indexes representing alternative investments.

Q.822 Which of the following is *not* a real estate index category?

A. Appraisal index.

B. Initial sales index.

C. Repeat sales index.

The correct answer is **B.**

An initial sales index is not recognized as a category within real estate indices. Real estate indices are essential tools for tracking the performance of property markets. They provide valuable insights into market trends, helping investors make informed decisions. The recognized categories of real estate indices include appraisal indices, repeat sales indices, and Real Estate Investment Trust (REIT) indices. Each of these categories serves a specific purpose and is constructed using different methodologies to capture various aspects of the real estate market.

A is incorrect. Appraisal indices are a legitimate category of real estate indices. They are based on the valuations provided by professional appraisers. These indices are particularly useful for capturing the value changes in real estate properties over time. Appraisal indices are often used for commercial real estate and can provide insights into market trends, although they may be subject to appraisal bias and lag, reflecting the appraisers' opinions rather than actual transaction prices.

C is incorrect. Repeat sales indices are a recognized category of real estate indices. These indices track the price changes of the same property over different transactions. This method helps in understanding how the value of specific properties changes over time, providing a more accurate reflection of market trends by eliminating the need to account for differences between properties. The Case-Shiller index is a well-known example of a repeat sales index, widely used to track residential real estate prices in the United States.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (k) describe indexes representing alternative investments.

Q.823 When creating a security market index, the target market:

A. is usually a broadly defined asset class.

B. determines the number of securities to be included in the index.

C. determines the investment universe and the securities available for inclusion in the index.

The correct answer is **C.**

The target market plays a crucial role in determining the investment universe and the securities available for inclusion in a security market index. This decision is foundational in the creation of an index as it sets the boundaries and criteria for what securities can be considered for inclusion.

The target market can be defined based on various factors such as asset class, geographic region, market capitalization, or industry sector. By defining the investment universe, the target market essentially dictates the pool of securities from which the index can be constructed.

A is incorrect. While it is true that the target market can be a broadly defined asset class, this statement does not fully capture the role of the target market in determining the investment universe and the specific securities eligible for inclusion in the index. The target market's definition is more nuanced and can encompass a wide range of criteria beyond just asset class.

B is incorrect. The statement that the target market determines the number of securities to be included in the index is misleading. While the target market definition influences the pool of eligible securities, the actual selection and number of securities included in an index are determined by the index's methodology. This methodology may include criteria such as liquidity, market capitalization thresholds, and weighting schemes.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (g) Describe uses of security market indexes.

Q.824 Given the following information:

Stock A

Beginning price: 10$

Ending price: 14$

Total dividend in the period: 1$

The total return of the index is *closest to*:

A. 10%.

B. 40%.

C. 50%.

The correct answer is **C.**

The total return of Stock A can be calculated by considering both the capital gains (or losses) and the dividends received during the period. The formula for total return is given by:

$$\text{Total return} = \frac{(\text{Endingprice} + \text{Dividends} - \text{Beginningprice})}{\text{Beginningprice}}$$

Applying the given values for Stock A:

$$\text{Total return} = \frac{(14 + 1 - 10)}{10} = 50\%$$

This calculation shows that the total return, which includes both the price appreciation from $10 to $14 and the $1 dividend, amounts to a 50% return on the initial investment.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (b) Calculate and interpret the value, price return, and total return of an index.

Q.825 Given the following information for a 2-stock index for the year 2016:
<u>Stock A</u>
Beginning price: 10$
Ending price: 14$
Total dividend in the period: 1$

<u>Stock B</u>
Beginning price: 10$
Ending price: 13$
Total dividend in the period: 1$

The equally weighted price return of the index is *closest to*:

A. 35%.

B. 40%.

C. 50%.

The correct answer is **A.**

When calculating an index's return using the price return method, we ignore the income(in the form of interest and dividends) generated by the assets in the portfolio.

$$\text{Stock A} = \frac{(14-10)}{10} = 40\%$$
$$\text{Stock B} = \frac{(13-10)}{10} = 30\%$$
$$\text{Price return of the index} = \frac{(30\% + 40\%)}{2} = 35\%$$

Tip: Remember that for equal-weighted indices, you calculate the individual returns of the given securities then divide those individual returns by the number of securities given. Also, remember not to include the dividends since this is a price return and not a total return calculation.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (b) Calculate and interpret the value, price return, and total return of an index.

Q.826 Given the following information for a 3-stock index for the year 2016:
<u>Stock A</u>
Beginning price: 10$
Ending price: 14$
Total dividend in the period: 1$

<u>Stock B</u>
Beginning price: 10$
Ending price: 13$
Total dividend in the period: 1$

<u>Stock C</u>
Beginning price: 10$
Ending price: 12$
Total dividend in the period: 1$

The total return of this equal-weight index is *closest to*:

A. 30%.

B. 35%.

C. 40%.

The correct answer is **C.**

The total return considers the income generated by the assets in the portfolio in the form of interest and dividends. Also, equal weight is a type of weighting that gives the same weight or importance to each stock in a portfolio or index fund.

$$\text{Stock A:} \frac{(14+1-10)}{10} = 50\%$$

$$\text{Stock B:} \frac{(13+1-10)}{10} = 40\%$$

$$\text{Stock C:} \frac{(12+1-10)}{10} = 30\%$$

$$\text{The total return for the index } = \frac{(30\% + 40\% + 50\%)}{3} = 40\%$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (b) Calculate and interpret the value, price return, and total return of an index.

Q.827 The value of a price return index and a total return index consisting of identical equal-weighted dividend-paying equities will be equal:

A. only at inception.

B. at inception and on rebalancing dates.

C. at inception and on reconstitution dates.

The correct answer is **A.**

The value of a price return index and a total return index consisting of identical equal-weighted dividend-paying equities will be equal only at inception. This is because at the inception of both indices, the starting values are set to be the same for comparison purposes.

A price return index measures the performance of the stocks based solely on the changes in their market prices, excluding dividends. On the other hand, a total return index reflects the performance of the stocks considering both the capital gains (price increases) and the dividends paid out to shareholders.

As time progresses, the total return index will start to diverge from the price return index because it reinvests dividends back into the index, thus capturing the compound interest effect of those dividends. This reinvestment leads to a higher value of the total return index compared to the price return index, which does not account for dividends.

B is incorrect. Rebalancing involves adjusting the weights of the components in the index, which could occur due to changes in market capitalization or to maintain the index's investment strategy. While rebalancing might temporarily align the values of both indices, it does not account for the ongoing accumulation of reinvested dividends in the total return index, which leads to a divergence in values over time. Therefore, rebalancing does not ensure equality in the values of the price return and total return indices.

C is incorrect. Reconstitution refers to the process of changing the constituents of the index, which might happen due to various criteria such as mergers, acquisitions, or significant changes in the companies' market capitalizations. Similar to rebalancing, reconstitution does not address the fundamental difference between price return and total return indices regarding dividend treatment. The total return index will continue to outperform the price return index over time due to the reinvestment of dividends, making their values unequal post-inception, regardless of reconstitution events.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (b) Calculate and interpret the value, price return, and total return of an index.

Q.828 Which of the following index weighting methods *most likely* requires the most frequent rebalancing?

A. Price-weighting.

B. Equal-weighting.

C. Market-capitalization weighting.

The correct answer is **B.**

Equal-weighted indices require the most frequent rebalancing to maintain equal weights across all constituent stocks. As stock prices fluctuate, the percentage of each stock in the index changes, necessitating regular adjustments (typically quarterly) to realign each stock's weighting back to equal proportions.

B is correct. In a price-weighted index, the weight of each stock is based on its price per share, so changes in stock prices directly impact their relative weights within the index. However, this type of index automatically adjusts as stock prices change, and does not require rebalancing in the traditional sense. Adjustments are necessary primarily when structural changes such as stock splits or changes in index composition occur.

C is incorrect. Market-capitalization weighted indices adjust naturally to changes in stock prices and the total market capitalization of the constituent companies. While these indices do require rebalancing, it is generally less frequent compared to equal-weighted indices. Rebalancing is mainly needed to reflect significant changes in market cap due to corporate actions or to accommodate changes in the composition of the index.

CFA Level I, Topic 6 - Equity, Learning Module 2: Security Market Indices. LOS (f): Describe rebalancing and reconstitution of an index.

Q.1126 Which of the following statement is *least likely* accurate?

A. A price return index only reflects the prices of constituent securities.

B. The values of both a price return index and a total return index are not the same at inception.

C. A total return index reflects prices and assumes reinvestment of all income received since inception.

The correct answer is **B.**

Typically, both a price return index and a total return index start with the same value at inception (such as 1000 or 100). The divergence in their values occurs over time. A total return index includes the reinvestment of dividends and other income along with the price changes of the securities, while a price return index includes only the price changes. However, at the point of inception, there is no difference in value since no dividends or income have been accumulated or reinvested yet.

A is incorrect. This option correctly identifies that a price return index only reflects the prices of constituent securities. It measures the capital gains or losses of the securities within the index, excluding any income generated from dividends or interest. This characteristic is fundamental to understanding the difference between a price return index and a total return index, making this statement accurate and relevant to distinguishing between the two types of indices.

C is incorrect. This option accurately describes a total return index, which not only reflects the prices of its constituent securities but also assumes the reinvestment of all income received since inception, such as dividends and interest. This reinvestment aspect is what differentiates a total return index from a price return index, as it captures the total return of the index constituents, including both capital gains and income returns.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (b) Calculate and interpret the value, price return, and total return of an index.

Q.1172 What is the simplest method to weigh an index and the one used by Charles Dow to construct the Dow Jones Industrial Average?

A. Price-weighting.

B. Fundamental weighting.

C. Market-capitalization weighting

The correct answer is **A.**

The simplest method to weigh an index, as used by Charles Dow for the construction of the Dow Jones Industrial Average (DJIA), is the price-weighting method. This method assigns weights to each constituent security in the index based on its price. The formula for calculating the weight of each security in a price-weighted index is given by:

$$\frac{\text{Price of the constituent security}}{\text{Sum of all prices of the constituent securities in the index}}$$

This approach implies that stocks with higher prices have a greater impact on the index's performance, regardless of the company's size or the number of shares outstanding. The DJIA is one of the most well-known examples of an index that uses price weighting, making it straightforward to calculate and understand.

B is incorrect. It requires the analysis of financial statements and the application of specific criteria to determine the weights of the constituent securities. Fundamental weighting is not the method used by Charles Dow for the DJIA, as it involves a more sophisticated analysis of company fundamentals rather than a straightforward calculation based on stock prices.

C is incorrect. Market-capitalization weighting, also known as cap-weighting, assigns weights to securities in an index based on the total market value of their outstanding shares (share price multiplied by the number of shares outstanding).

This method reflects the relative size of companies within the index, with larger companies having a greater impact on the index's performance. While market-capitalization weighting is widely used in many modern indices, it is not the method employed by Charles Dow for the DJIA.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (c) Describe the choices and issues in index construction and management.

Q.1173 Which of the following is *least likely* a drawback of equal-weighting?

A. Simple to construct at the initiation.

B. Securities that constitute the largest fraction of the target market value are underrepresented.

C. After the index is constructed and the prices of constituent securities change, the index is no longer equally weighted.

The correct answer is **A.**

The simplicity in construction stems from the straightforward approach of allocating an equal amount of capital to each constituent security at the inception of the index or portfolio. This method does not require complex calculations or adjustments based on market capitalization or other factors, making it accessible and easy to implement for portfolio managers.

The equal-weighting strategy ensures that no single security has a disproportionate impact on the portfolio's performance at the outset, promoting diversification and potentially reducing the risk associated with heavy concentration in a few large-cap stocks.

B is incorrect. Equal-weighting assigns the same weight to all securities, regardless of their market capitalization. As a result, large-cap stocks, which might have a significant impact on the market's overall movement, have the same influence as smaller-cap stocks within the equal-weighted portfolio.

This can lead to a divergence in performance between the equal-weighted portfolio and market-cap-weighted benchmarks, especially in market environments where large-cap stocks outperform.

C is incorrect. The value of each security in the portfolio will change at different rates due to market movements, causing some securities to occupy a larger or smaller proportion of the portfolio than others over time. To maintain an equal-weighted structure, the portfolio requires frequent rebalancing, which can lead to higher transaction costs and tax implications.

This rebalancing process is necessary to realign the portfolio back to its equal-weighted distribution, ensuring that the strategy's intended diversification benefits and risk profile are preserved.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.1174 Which of the following is *most likely* a primary disadvantage of market capitalization-weighting?

A. Constituent securities are held in proportion to their value in the target market.

B. Its simplicity and failure to take into account other factors such as the volume of shares sold.

C. Constituent securities whose prices have risen the most (or fallen the most) have a greater (or lower) weight in the index.

The correct answer is **C.**

The primary disadvantage of market capitalization-weighting is that it can lead to a concentration of the index in a few large companies whose stock prices have increased significantly. This weighting method calculates the weight of each constituent security in the index based on its market capitalization, which is the product of the security's price and the number of shares available.

As a result, securities whose prices have risen the most gain a greater weight in the index, potentially making the index less representative of the overall market or sector it aims to measure. This can skew the index's performance, especially if a few large companies perform exceptionally well or poorly compared to the broader market.

It also means that as a company's stock price increases, an index fund tracking the index will automatically buy more of that stock at higher prices, which could exacerbate the concentration risk and potentially lead to higher volatility in the index.

A is incorrect. Holding constituent securities in proportion to their value in the target market is actually a characteristic of market capitalization-weighting, not a disadvantage. This method ensures that the index reflects the relative sizes of companies within the market or sector it represents. While this approach has its drawbacks, such as potentially leading to concentration in a few large stocks, it is not inherently a disadvantage but rather a fundamental aspect of how market capitalization-weighted indexes are constructed.

B is incorrect. The criticism that this method fails to take into account other factors, such as the volume of shares sold, points to a broader discussion about the limitations of market capitalization-weighting. While it is true that this method does not consider factors like trading volume, liquidity, or fundamental company metrics, these are not typically considered primary disadvantages.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.1175 What do you call this method that attempts to address the disadvantages of market-capitalization weighting by using measures of a company's size that are independent of its security price?

A. Optimal Weighting.

B. Fundamental Weighting.

C. Market-capitalization weighting method.

The correct answer is **B.**

Fundamental weighting is a method that seeks to overcome the limitations associated with market-capitalization weighting by utilizing metrics of a company's size that do not depend on its stock price. This approach involves weighting the constituent securities of an index or portfolio based on fundamental company data such as book value, cash flow, earnings, dividends, revenues, and the number of employees.

The rationale behind this method is to provide a more balanced representation of a company's economic footprint, rather than its market value, which can be influenced by market sentiment and other transient factors. By focusing on these fundamental aspects, investors can potentially achieve a more stable and diversified portfolio that may better reflect the underlying economic value of the constituent companies.

A is incorrect. Optimal weighting refers to the process of determining the best weight allocation among different assets in a portfolio to achieve a specific objective, such as minimizing risk or maximizing return, given certain constraints.

This concept is fundamentally different from fundamental weighting, which does not primarily focus on optimizing portfolio performance based on risk-return characteristics but rather on selecting weights based on company fundamentals.

C is incorrect. Market-capitalization weighting method weights each constituent security in a portfolio or index based on its market capitalization, which is the product of the company's share price and the total number of its outstanding shares.

This method can lead to portfolios where larger companies constitute a more significant portion of the investment, potentially overshadowing smaller companies regardless of their economic fundamentals. This approach contrasts with fundamental weighting, which seeks to mitigate the influence of stock prices on the portfolio's composition by focusing on fundamental economic indicators.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.1177 Which of the following statement regarding reconstitution is *most likely* accurate?

A. Reconstitution does not create turnover in an index.

B. Reconstitution is similar to a portfolio manager deciding to change the securities in his or her portfolio.

C. Reconstitution is necessary because the weights of the constituent securities change as their market prices change.

The correct answer is **B.**

Reconstitution refers to the process of changing the constituent securities in an index, which is akin to a portfolio manager deciding to change the securities in their portfolio. This process is essential in maintaining the relevance and accuracy of the index. As market conditions change, some securities may no longer meet the criteria for inclusion in the index, while others may become eligible.

By periodically reviewing and adjusting the composition of the index, its administrators ensure that it continues to reflect the segment of the market it is intended to represent. This practice is crucial for investors who rely on indices as benchmarks or as the basis for index funds and exchange-traded funds (ETFs).

A is incorrect. When securities are added or removed from an index, funds and other investment vehicles that track this index must buy or sell shares of the respective companies to mirror the index's new composition. This activity generates turnover, which refers to the buying and selling of securities, leading to transaction costs and potential tax implications for investors. Therefore, reconstitution directly contributes to turnover within an index, contrary to what option A suggests.

C is incorrect. Changing market values of the constituent securities can cause their proportions in the index to deviate from the intended weights. While rebalancing and reconstitution are related in that they both aim to maintain the integrity and relevance of the index, they address different aspects of index management.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (f) Describe rebalancing and reconstitution of an index.

Q.1178 Which of the following is *least likely* a major use of market indices?

A. Market indices act as proxies for measuring and modeling returns.

B. Market indices act as proxies for asset classes in asset allocation models.

C. Market indices measure the overall performance of the economy as a whole.

The correct answer is **C.**

Security market indices may not accurately reflect the overall attitude of investors or the 'market' because the indices consist of only a few of the stocks traded in the market. The main uses of market indices are to:

1. Serve as proxies for measuring risk and return
2. Serve as proxies for asset classes
3. Gauge market sentiments
4. Model portfolios for index and exchange-traded funds.
5. Benchmark active managers

A is incorrect. Market indices are indeed used as proxies for measuring and modeling returns. They provide a convenient and effective way to track the performance of specific market segments, industries, or the market as a whole.

By comparing the performance of individual investments or portfolios against relevant market indices, investors and analysts can gauge the relative performance of these investments. This helps in assessing the effectiveness of investment strategies and in making informed decisions.

B is incorrect. Market indices also act as proxies for asset classes in asset allocation models. Asset allocation is a key component of investment strategy, involving the distribution of investments across various asset classes to achieve a desired risk-return profile.

Market indices representing different asset classes, such as equities, bonds, or commodities, provide a reference point for the performance of these classes. This allows investors to model their portfolios based on the performance of these indices, facilitating strategic asset allocation and diversification.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (g) Describe uses of security market indexes.

Q.1179 A security market index represents the:

A. risk of a security market.

B. value of the security market as a whole.

C. value of a given security market, market segment, or asset class.

The correct answer is **C.**

A security market index is a statistical measure that reflects the composite value of a selected group of stocks, which represents a significant portion of the market or a specific sector of the economy. The purpose of a security market index is to provide investors and analysts with an indicator of the overall market performance and trends.

It allows for comparisons between the performance of individual securities or portfolios and the market or sector as a whole. By tracking a market index, investors can gauge the health of the market or sector it represents, making it a crucial tool for investment decision-making.

A is incorrect. Suggesting that a security market index represents the risk of a security market is misleading. While market indices can be used to infer certain market risks, such as volatility by observing the fluctuations in the index value over time, they primarily serve as a measure of market performance and not directly of risk.

Risk assessment involves a more complex analysis, including factors such as market volatility, economic indicators, and individual security performance, which cannot be solely determined by an index.

B is incorrect. Stating that a security market index represents the value of the security market as a whole is too broad and imprecise. While it is true that some indices aim to reflect the overall market, such as broad market indices (e.g., S&P 500, which represents a significant portion of the U.S. equity market), not all indices serve this purpose.

Many indices are designed to track specific sectors of the economy, market segments, or asset classes (e.g., technology stocks, small-cap stocks, or bonds). Therefore, saying that an index represents the value of the entire security market overlooks the diversity and specificity of indices available to investors.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (a) Describe a security market index.

Q.1645 Which of the following is *least likely* used in the calculation of the return on security market indices?

A. Total returns.

B. Price returns.

C. After-tax returns.

The correct answer is **C.**

Given the complexity and individual variability in tax implications, security market indices typically do not incorporate after-tax returns in their calculations. Instead, indices focus on pre-tax price and total returns to provide a standardized measure of performance that is applicable to a broad investor base, without the need to account for the myriad of individual tax considerations.

When calculating the return on security market indices, the focus is typically on either price returns or total returns. Price return indices consider only the changes in the prices of the constituent securities, ignoring any income generated from these securities, such as dividends.

On the other hand, total return indices account for both the price changes and the income from the constituent securities, assuming that this income is reinvested in the index. This approach provides a more comprehensive view of the performance of the securities within the index.

A is incorrect. They provide a complete picture of the performance of the securities within the index. This method includes both the capital gains (or losses) from price changes and the income generated from the securities, such as dividends or interest payments. By assuming the reinvestment of this income, total return indices accurately reflect the true performance of the index over time.

B is incorrect. Price returns are also used in the calculation of the return on security market indices, albeit providing a more limited perspective than total returns. Price returns focus solely on the changes in the prices of the constituent securities, without accounting for any income generated from these securities. While this approach simplifies the calculation, it may not fully capture the overall performance of the index, especially in markets where income from securities plays a significant role in total returns.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (b) Calculate and interpret the value, price return, and total return of an index.

Q.1646 Which of the following questions is *least likely* considered in the construction and management of market indices?

A. How often should the index be rebalanced?

B. What is the target market the index is intended to measure?

C. Which securities among the high-performing securities should be included?

The correct answer is **C.**

Market indices are designed to provide a snapshot of the market or a specific segment of the market, reflecting its overall performance and characteristics. Including only high-performing securities would introduce a significant bias, making the index unrepresentative of the market it aims to measure.

Indices should include a range of securities that accurately reflect the market's composition, including both high and low-performing securities, to ensure a balanced and accurate representation.

A is incorrect. The frequency of rebalancing is a critical consideration in the construction and management of market indices. Rebalancing refers to the process of realigning the weightings of the securities within the index. This is necessary to maintain the index's intended representation of the market, as the value of individual securities changes over time due to market movements.

Deciding how often to rebalance involves a trade-off between reflecting market changes accurately and minimizing transaction costs and market impact. Therefore, the question of rebalancing frequency is highly relevant to index construction and management.

B is incorrect. Determining the target market that the index is intended to measure is fundamental to its construction. The target market defines the scope and focus of the index, guiding the selection of securities to be included. It determines whether the index will represent a broad market, such as a national economy, or a specific sector, such as technology or healthcare.

The target market also influences other key decisions, such as the criteria for including securities and the weighting methodology. Without a clear understanding of the target market, it would be impossible to construct an index that serves its intended purpose of providing meaningful insights into market performance.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (c) Describe the choices and issues in index construction and management.

Q.1647 Which of the following is *most likely* a disadvantage of price-weighted indices?

A. Its construction is too simple.

B. The percentage changes in the price of low-priced securities have a greater impact.

C. The percentage changes in the price of high-priced securities have a greater impact.

The correct answer is **C.**

The primary disadvantage of a price-weighted index is that the percentage changes in the price of high-priced securities have a disproportionately greater impact on the index's overall value. In a price-weighted index, each component stock contributes to the index based on its price per share, rather than its total market capitalization. This means that companies with higher stock prices have more influence on the index's movements, regardless of their actual size or the total value of shares outstanding.

This can lead to a situation where the index's performance is skewed by the movements of a few high-priced stocks, rather than reflecting a more balanced view of the market as a whole. This characteristic of price-weighted indices can distort the perception of market trends and diminish the index's utility as a benchmark for investors.

A is incorrect. The simplicity of the construction of price-weighted indices is often cited as an advantage rather than a disadvantage. The method involves simply adding up the prices of the constituent stocks and dividing by a divisor, which is adjusted for stock splits and other corporate actions.

This simplicity can make price-weighted indices easier to understand for some investors. However, this simplicity also leads to the significant drawback mentioned above, where the index may not accurately reflect the market's movements due to its overemphasis on high-priced stocks.

B is incorrect. The index is calculated based on the price per share of the included stocks, without considering the total market capitalization. Therefore, a significant percentage change in a low-priced stock will have a much smaller impact on the index compared to a similar percentage change in a high-priced stock.

This characteristic can lead to misinterpretation of the market's overall direction, especially if a few high-priced stocks experience large price movements while the broader market remains relatively stable.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.1648 Which of the following is the *most appropriate* term for excluding shares held by owners and shares unavailable for foreign buyers while constructing a market-capitalization-weighted index?

A. Free float.

B. Index float.

C. Market float.

The correct answer is **A.**

The term "free float" refers to the shares of a company that are available for trading in the public markets. It excludes shares held by insiders, governments, or other restricted entities that are not available for purchase by the average investor.

When constructing a market-capitalization-weighted index, it is crucial to consider only the free float since it represents the portion of the company's shares that can actually influence the market based on supply and demand dynamics.

By focusing on the free float, the index provides a more accurate representation of the market's movements and valuations, as it reflects the trading activity of readily available shares. This approach ensures that the index is not disproportionately influenced by large holdings that are not actively traded, thereby offering a clearer picture of market trends and investor sentiment.

B is incorrect. The term "index float" is not a commonly used term within the context of market-capitalization-weighted indexes. While it might suggest a concept related to the calculation or adjustment of indexes, it does not specifically refer to the exclusion of shares held by insiders or unavailable for foreign buyers, which is the precise definition of free float.

C is incorrect. "Market float" is a broader term that could be interpreted in various ways, but it does not specifically denote the exclusion of shares held by insiders or shares that are not available for foreign buyers in the context of constructing a market-capitalization-weighted index.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.1649 Which of the following is *least likely* a market-capitalization weighted index?

A. S&P 500 Composite Index.

B. Dow Jones Industrial Average.

C. Financial Times Ordinary Share Index.

The correct answer is **B.**

The Dow Jones Industrial Average (DJIA) is not a market-capitalization weighted index but rather a price-weighted index. In a price-weighted index, companies are weighted based on their stock price rather than their total market capitalization.

This means that companies with higher stock prices have a more significant impact on the index's performance, regardless of their actual market size. This method can lead to a skewed representation of the market, as it does not account for the total value of a company's outstanding shares.

A is incorrect. The S&P 500 Composite Index is a market-capitalization weighted index. This means that each company's weight in the index is proportional to its market capitalization, which is calculated by multiplying the number of its outstanding shares by its per-share market value.

This method ensures that companies with higher market capitalizations have a greater impact on the index's performance. The S&P 500 is widely recognized for its representation of the U.S. equity market's large-cap sector, making it a benchmark for many investment products and strategies.

C is incorrect. The Financial Times Stock Stock Exchange index, also known as the FTSE 100, is a market-capitalization weighted index in the context of this question. It's important to clarify that the FTSE 100, like the S&P 500, weights its constituents based on market capitalization, reflecting the market value of the companies within the index.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.1650 Which of the following index weighting method is based on earnings, dividend, or cash flow?

A. Price weighting.

B. Equally weighting.

C. Fundamental weighting.

The correct answer is **C.**

Fundamental weighting is a method used in constructing stock indices where stocks are weighted based on fundamental company metrics such as earnings, dividends, or cash flows rather than their market prices. This approach aims to reflect the economic footprint of companies in the index, providing a measure that some argue is more representative of the market or sector's actual value.

By focusing on these underlying fundamentals, the index can potentially offer a more stable and less volatile measure of performance compared to traditional market capitalization-weighted indices. This method assumes that companies with stronger fundamentals are likely to perform better over the long term, making them more significant contributors to the index's overall performance.

A is incorrect. It does not consider the total market value or the economic size of the companies. For example, a company with a higher stock price but smaller market capitalization could disproportionately influence the index compared to a larger company with a lower stock price. This approach contrasts with fundamental weighting, which bases the index composition on economic factors rather than stock prices alone.

B is incorrect. Equal weighting assigns the same weight to every stock in the index, regardless of the company's size, price, or economic fundamentals. This method ensures that smaller companies have the same influence on the index as larger companies, potentially offering a more diversified exposure to the market or sector.

However, it does not consider the economic significance of companies based on their earnings, dividends, or cash flows. While equal weighting can reduce the concentration risk associated with large-cap stocks dominating the index, it does not specifically aim to reflect the economic value of companies as fundamental weighting does.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.1651 Using the following table, calculate the price-weighted one-month return for the index.

	Price on June 30, 2016	Price on July 31, 2016	Numbers of shares
Stock A	40	35	20,000
Stock B	18	25	10,000
Stock C	32	40	10,000
Stock D	25	20	15,000

A. 4.35%

B. 5.65%

C. 11.80%

The correct answer is **A.**

The price-weighted return for 30 June is

$$\frac{(40 + 18 + 32 + 25)}{4} = 28.75$$

And the price-weighted return for 31 July is

$$\frac{(35 + 25 + 40 + 20)}{4} = 30.$$

The one-month price-weighted return is

$$\frac{30}{28.75} - 1 = 4.35\%$$

. Alternatively, we could arrive at the same answer using the below method:

Price on June 30, 2016

$$40 + 18 + 32 + 25 = 115$$

Price on June 31, 2016

$$35 + 25 + 40 + 20 = 120$$

So that:

$$\text{Return} = \frac{120 - 115}{115} = 4.35\%$$

Tip: For price-weighted return, simply add the prices at each point, then get the return.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (e) Calculate and analyze the value and return of an index given its weighting method.

Q.1652 A hypothetical price-weighted index is comprised of four securities, whose information is given in the following table:

	Price on June 30, 2016	Price on July 31, 2016	Numbers of shares
Stock A	40	35	20,000
Stock B	18	25	10,000
Stock C	32	40	10,000
Stock D	25	20	15,000

Assuming that Stock C splits 2-for-1 on August 1st, 2016 and that there are no other changes in the prices of the securities, the new denominator for the index is *closest to*:

A. 3.33

B. 4.35

C. 5

The correct answer is **A.**

The 2-for-1 split of Stock C will decline the price of the stock to $\frac{40}{2} = 20$
Since the price-weighted index at the closure was $\frac{(35+25+40+20)}{4} = 30$, the new denominator will be adjusted for the split:

$$\frac{(35+25+20+20)}{D} = 30$$

$$D = \frac{(35+25+20+20)}{30} = 3.33$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (e) Calculate and analyze the value and return of an index given its weighting method.

Q.1653 Using the data given in the following table, calculate the market-capitalization-weighted return on the index. Assume June 30, 2016, as the base period and that the number of shares is constant over both periods.

	Price on June 30, 2016	Price on July 31, 2016	Numbers of shares
Stock A	40	35	20,000
Stock B	18	25	10,000
Stock C	32	40	10,000
Stock D	25	20	15,000

A. -1.5%

B. -3.5%

C. 1.5 %

The correct answer is **A.**

Using the market-capitalization weighted return method, the return in the base year is

$$(40 \times 20,000 + 18 \times 10,000 + 32 \times 10,000 + 25 \times 15,000) = 1,675,000.$$

The market cap-weighted return in July is

$$(35 \times 20,000 + 25 \times 10,000 + 40 \times 10,000 + 20 \times 15,000) = 1,650,000.$$

Hence, the market capitalization for the period is

$$\frac{1,650,000}{1,675,000} \times 100 = 98.50$$

and the market-capitalization weighted return is

$$\frac{98.5}{100} - 1 = -1.5\%$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (e) Calculate and analyze the value and return of an index given its weighting method.

Q.1654 Which of the following activities involves adding and subtracting the securities that make up an index?

A. Repricing.

B. Rebalancing.

C. Reconstructing.

The correct answer is **C.**

Reconstructing an index involves periodically reviewing and adjusting the composition of the index by adding and subtracting securities. This process ensures that the index accurately reflects the current market conditions and maintains its intended characteristics. For example, if a company's market capitalization grows significantly, it might be added to an index that tracks large-cap stocks.

Conversely, if a company's performance declines and it no longer meets the criteria for inclusion in the index, it may be removed. This ongoing process of reconstruction is crucial for maintaining the relevance and accuracy of the index, making it a valuable tool for investors and analysts who rely on it to gauge market trends and performance.

A is incorrect. Repricing refers to the practice of adjusting the strike price of employee stock options that are out of the money (i.e., the stock's current market price is lower than the option's strike price) to a lower strike price, making them more attractive and potentially valuable to employees. This practice is typically employed as a means to retain and motivate employees during periods when the company's stock price has declined.

B is incorrect. Rebalancing is the process of realigning the proportions of securities within a portfolio or index to their target weights. Over time, as some investments may perform better than others, the actual weight of each security in the portfolio or index can drift away from the target allocation. Rebalancing involves buying or selling securities to bring their weights back to the desired levels.

This process is essential for maintaining the risk profile and investment strategy of the portfolio or index. While rebalancing does involve adjusting the holdings within an index, it does not specifically entail adding or subtracting securities to reflect changes in the market or the criteria for index inclusion, distinguishing it from reconstructing.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (f) Describe rebalancing and reconstitution of an index.

Q.1655 A market index is *least likely* used:

A. to measure beta and risk-adjusted returns.

B. as a benchmark for measuring the performance of portfolios.

C. as a reflection of the management's sentiment of the companies whose securities are included in the index.

The correct answer is **C.**

Market indices are primarily used to gauge the overall performance and health of the financial markets or specific sectors within those markets.

The main uses of market indices are to:

- Benchmark active managers
- Serve as proxies for measuring risk and return
- Gauge market sentiments
- Serve as proxies for asset classes
- Model portfolios for index and exchange-traded funds.

However, they are not designed to reflect the management's sentiment of the companies whose securities are included in the index.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (a) Describe uses of security market indexes.

Q.1656 Which of the following is *least likely* a type of equity market index?

A. Russell 2000 Index

B. S&P 500 Bond Index

C. NASDAQ Composite Index

The correct answer is **B.**

This index is indeed a bond index, not an equity index. Equity market indices are designed to represent the performance of stocks or equities in the market. They provide a snapshot of the market's health and are used by investors to gauge the performance of their stock portfolios against the broader market.

The S&P 500 Bond Index, however, tracks the performance of public obligations of the U.S. government, municipal securities, corporate bonds, and other investment-grade fixed-income securities, making it distinct from equity indices which focus on stock market investments.

A is incorrect. It captures the performance of U.S. small-cap stocks, which are often more sensitive to economic changes than their large-cap counterparts. The inclusion of the Russell 2000 Index as an option in the question highlights the diversity of equity indices, which can range from those tracking the largest companies to those focusing on smaller, potentially more growth-oriented firms.

C is incorrect. The NASDAQ Composite Index is another example of an equity market index. It includes all the stocks listed on the NASDAQ stock market, making it a broad-based index that reflects the performance of more than 3,000 stocks.

It includes companies from various industries, but it is particularly well-known for its heavy concentration of technology stocks. This makes the NASDAQ Composite a crucial index for investors interested in the tech sector, further underscoring the variety of equity indices available to track different segments of the market.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (h) Describe types of equity indexes.

Q.1657 Which of the following is *most likely* a potential challenge faced by investors during the construction of fixed income securities indices?

A. A diverse universe of securities.

B. A lack of diverse investment vehicles.

C. Investment barriers imposed by authorities/government

The correct answer is **A.**

The construction of fixed income securities indices faces several challenges, with a diverse universe of securities being a significant one. The fixed-income market encompasses a wide range of securities issued by various entities such as public corporations, governments, government agencies, and private firms. Each of these issuers can produce a multitude of fixed-income securities, each with its unique characteristics such as maturity, interest rate, and credit quality.

This diversity results in a vast and complex universe of fixed-income securities, significantly larger than the universe of equity securities. To accurately represent a specific segment of the fixed-income market, an index must include thousands of different securities, which complicates the construction and maintenance of the index.

B is incorrect. The statement suggests that a lack of diverse investment vehicles is a challenge in constructing fixed income securities indices. However, the challenge is not the lack of diversity in investment vehicles but rather the overwhelming diversity and complexity of the fixed-income securities themselves. The vast array of fixed-income products available provides ample opportunities for diversification but complicates index construction and maintenance.

C is incorrect. While investment barriers imposed by authorities or governments can indeed pose challenges to investors, they are not the most significant challenge faced during the construction of fixed income securities indices. The primary challenge stems from the diverse and complex universe of fixed-income securities and the issues related to accurately representing this diversity in an index.

CFA Level I, Topic 6 - Equity, Learning Module 2: Security Market Indices. LOS (c): Describe the choices and issues in index construction and management.

Q.1658 Downie Jones is a hedge fund manager. He is analyzing different indices to compare the performance of hedge funds. Which one of these indices is *most appropriate* for Jones?

A. FTSE EPRA.

B. Morningstar Style Index.

C. HFRX Equal Weighted Strategies EUR Index.

The correct answer is **C.**

The HFRX Equal Weighted Strategies EUR Index is the most appropriate choice for Downie Jones to compare the performance of hedge funds. This index is specifically designed to measure the return on hedge funds, making it an ideal tool for Jones's analysis.

The HFRX Equal Weighted Strategies EUR Index encompasses a broad range of hedge fund strategies, providing a comprehensive overview of the hedge fund industry's performance. By using this index, Jones can accurately assess the effectiveness and profitability of different hedge fund strategies in comparison to the broader market.

A is incorrect. The FTSE EPRA/NAREIT Global Real Estate Index Series is designed to represent general trends in eligible real estate equities worldwide. Relevant to investors in global real estate securities, it focuses on publicly-traded Real Estate Investment Trusts (REITs) and real estate holding companies. While it provides valuable insights into the real estate sector, it is not tailored to the analysis of hedge funds.

B is incorrect. The Morningstar Style Index is designed to categorize equity portfolios based on their investment style, size, and value orientation. It offers a framework for evaluating and comparing traditional equity investments, including mutual funds and individual stocks. However, the Morningstar Style Index does not specifically address the unique characteristics and strategies of hedge funds.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (k) Describe indexes representing alternative investments.

Q.1659 Using the data given in the following table, calculate the market-capitalization weighted return on the index.

	Price on June 30, 2016	Price on July 31, 2016	Numbers of shares
Stock A	40	50	20,000
Stock B	18	25	10,000
Stock C	32	40	10,000
Stock D	25	30	15,000

A. 20.96%

B. 25.37%

C. 29.88%

The correct answer is **B.**

Using the market-capitalization weighted return method the return in the base year is $(40 \times 20,000 + 18 \times 10,000 + 32 \times 10,000 + 25 \times 15,000) = 1,675,000$.

Market cap-weighted return on July 31 is $(50 \times 20,000 + 25 \times 10,000 + 40 \times 10,000 + 30 \times 15,000) = 2,100,000$.

Hence, the market capitalization for the period is $\frac{2,100,000}{1,675,000} \times 100 = 125.37$ and the market-capitalization weighted return is $\frac{125.37}{100} - 1 = 25.37\%$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.3608 An equal-weighted index consists of the following stocks:

	Starting Price	Ending Price	Dividends
Stock A	20.00	22.00	0.75
Stock B	15.00	18.00	1.00
Stock C	30.00	33.00	1.50
Stock D	13.00	11.00	2.00

The total return of the index is *closest to*:

A. 12.85%.

B. 13.85%.

C. 14.85%.

The correct answer is **B.**

	Starting Price	Ending Price	Dividends	Return
Stock A	20.00	22.00	0.75	$(22+0.75-20)/20 = 13.75\%$
Stock B	15.00	18.00	1.00	$(18+1-15)/15 = 26.67\%$
Stock C	30.00	33.00	1.50	$(33+1.50-30)/30 = 15.00\%$
Stock D	13.00	11.00	2.00	$(11+2-13)/13 = 0.00\%$

As the index is an equal-weighted index:

$$\text{Total index return} = \frac{1}{4} \times 13.75\% + \frac{1}{4} \times 26.67\% + \frac{1}{4} \times 15.00\% + \frac{1}{4} \times 0.00\% = 13.85\%$$

Tip: Remember that for equal-weighted indices, you calculate the individual returns of the given securities then divide those individual returns by the number of securities given. Also, remember to add dividends since it's a total return index.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.3609 The composition of a price-weighted index is given in the following exhibit:

Exhibit 1: Price-Weighted Index

	Price - Beginning of period	Price - End of period
Stock A	\$40	\$38
Stock B	\$20	\$22
Stock C	\$35	\$40
Stock D	\$26	\$20
Stock E	\$50	\$55
Stock F	\$22	\$25

The return generated during the period by the index is *closest to*:

A. 3.6%.

B. 4.6%.

C. 5.6%.

The correct answer is **A.**

	Price - Beginning of period	Weight in the index	Return generated during the period
Stock A	\$40	$40/193 = 20.73\%$	$(38-40)/40 = -5\%$
Stock B	\$20	$20/193 = 10.36\%$	$(22-20)/20 = 10.00\%$
Stock C	\$35	$35/193 = 18.13\%$	$(40-35)/35 = 14.29\%$
Stock D	\$26	$26/193 = 13.47\%$	$(20-26)/26 = -23.08\%$
Stock E	\$50	$50/193 = 25.91\%$	$(55-50)/50 = 10.00\%$
Stock F	\$22	$22/193 = 11.40\%$	$(25-22)/22 = 13.64\%$
Total	\$193		

The return generated by the index during the period can be calculated as under:

	Weight in the index (X)	Return generated during the period (Y)	$(X * Y)$
Stock A	20.73%	−5%	−1.04%
Stock B	10.36%	10.00%	1.04%
Stock C	18.13%	14.29%	2.59%
Stock D	13.47%	−23.08%	−3.11%
Stock E	25.91%	10.00%	2.59%
Stock F	11.40%	13.64%	1.55%
Total			3.63%

A shorter way of arriving at the same answer is shown below.
Steps 1. Add the prices at the beginning of the period and divide the sum by the number of securities given.

$$\frac{\$\,(40+20+35+26+50+22)}{6} = 32.17$$

2. Add the prices at the end of the period and divide the sum by the number of securities given.

$$\frac{\$(38+22+40+20+55+25)}{6} = 33.33$$

3. Divide step 2 by step 1, and subtract one from the answer

$$\frac{33.33}{32.17} - 1 = 0.036058 \approx 3.6\%$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (e) Calculate and analyze the value and return of an index given its weighting method.

Q.3611 Which of the following is *least likely* accurate for a market capitalization weighted index?

A. The rebalancing of the index is not required.

B. Index investing is similar to momentum investing.

C. Index investing results in an accumulation of undervalued stocks.

The correct answer is **C.**

For a market-capitalization weighted index:

- With the change in security price, the security weight changes. Hence, rebalancing is not required.
- Momentum strategy is a strategy in which traders acquire stocks moving in one direction (generally increasing price). In a market-capitalization-weighted index, the weight of securities increases with a price increase. Hence, index investing is similar to a momentum strategy.
- The weight of securities increases with a price increase. Hence, index investing may result in the accumulation of overvalued stocks.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) compare the different weighting methods used in index construction.

Q.3612 Which of the following is *most likely* correct regarding fixed-income indices?

A. The turnover in equity indices exceeds that of fixed-income indices.

B. As compared to fixed-income indices, index investing is easier in the case of equity indices.

C. The high level of liquidity in fixed-income securities makes the pricing of fixed income indices easier than that of equity indices.

The correct answer is **B.**

Index investing is generally easier in the case of equity indices compared to fixed-income indices. This is primarily due to the inherent characteristics of the securities that make up these indices. Equity indices consist of stocks, which typically have higher liquidity and are traded more frequently on major exchanges.

This liquidity facilitates easier replication of the index by investors or fund managers, making index investing more straightforward. In contrast, fixed-income securities, such as bonds, may not be traded as frequently, and the market for these securities can be less transparent, leading to challenges in accurately replicating the index.

A is incorrect. The statement that the turnover in equity indices exceeds that of fixed-income indices is not accurate. Fixed-income indices often experience higher turnover than equity indices. This higher turnover is due to the nature of fixed-income securities, where bonds mature and new issues come to market regularly.

As a result, fixed-income indices need to be updated more frequently to reflect the changing composition of the bond market, leading to higher turnover compared to equity indices.

C is incorrect. The assertion that the high level of liquidity in fixed-income securities makes the pricing of fixed-income indices easier than that of equity indices is misleading. In reality, fixed-income securities, especially those outside of highly liquid government bonds, can exhibit lower levels of liquidity compared to stocks.

This lower liquidity can make it more challenging to obtain accurate and timely pricing information for fixed-income securities, complicating the pricing of fixed-income indices. Equity securities, being generally more liquid and traded on centralized exchanges, allow for more straightforward and transparent pricing, making the pricing of equity indices less complex.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (j) Describe types of fixed-income indexes.

Q.3613 The majority of hedge fund indices are:

A. price-weighted indices.

B. equal-weighted indices.

C. fundamental-weighted indices.

The correct answer is **B.**

Most hedge fund indices are constructed as equal-weighted indices. This method of index construction ensures that each hedge fund within the index contributes equally to the overall performance metric, regardless of the size or capital under management of the individual funds.

This approach is particularly suitable for hedge fund indices because it aims to provide a more representative measure of the average performance of funds within the index, without allowing larger funds to disproportionately influence the outcome. Equal weighting is beneficial in the hedge fund context because it avoids bias towards larger funds, which might not necessarily reflect the performance of the sector as a whole.

A is incorrect. The price of a hedge fund's shares is not a relevant metric for assessing its performance. Hedge funds are investment vehicles that aim for absolute returns, and their performance is typically evaluated based on returns or other risk-adjusted measures, rather than share prices.

C is incorrect. Fundamental-weighted indices use company data such as earnings, dividends, sales, or book value to determine the weight of each component in the index. This approach is more common in equity indices, where the underlying assumption is that these fundamentals can provide insight into the company's future performance.

However, for hedge funds, which may employ a wide range of investment strategies across different asset classes, such fundamentals are not directly applicable. Hedge fund indices focus on the performance of the funds themselves, rather than the fundamental characteristics of the underlying investments. Therefore, fundamental weighting is not a suitable method for constructing hedge fund indices.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.3614 The components of a price-weighted index are given in exhibit 1.

Exhibit 1: Price-weighted Index

	Share Price	Market Capitalization
Stock A	$92.16	$123 million
Stock B	$52.73	$167 million
Stock C	$98.12	$35 million
Stock D	$12.03	$188 million
Stock E	$35.67	$163 million
Stock F	$12.54	$158 million

If a portfolio manager wants to beat this index, the strategy that would give him the highest probability of beating the index would be to:

A. overweight Stock C.

B. overweight Stock D.

C. underweight Stock D.

The correct answer is **A.**

In a price-weighted index, the index's value is determined by the average price of the constituent stocks, meaning that stocks with higher prices have a more significant impact on the index's performance.

Therefore, to increase the probability of outperforming such an index, a portfolio manager should focus on stocks with higher prices that are likely to perform well. Stock C, with a share price of $98.12, is one of the highest-priced stocks in the given exhibit.

By overweighting Stock C in the portfolio, the manager increases the portfolio's sensitivity to the performance of high-priced stocks, which can lead to a higher probability of outperforming the price-weighted index if Stock C's price appreciates.

B is incorrect. Overweighting Stock D, which has a share price of \$12.03, would not be the most effective strategy for outperforming a price-weighted index. Despite its large market capitalization, the low share price of Stock D means it has less influence on the index compared to higher-priced stocks.

Therefore, focusing on Stock D would not leverage the characteristic of a price-weighted index where higher-priced stocks have more impact on the index's performance.

C is incorrect. Underweighting Stock D in the portfolio would not directly contribute to outperforming the price-weighted index. While it might reduce the portfolio's exposure to a lower-priced stock, which has less influence on a price-weighted index, the key to outperforming the index lies in overweighting stocks with higher prices that have a greater potential to appreciate.

Simply underweighting Stock D does not address the strategic approach needed to leverage the price-weighted index's characteristics effectively.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes,

LOS (h) Describe types of equity indexes.

Q.3615 The components of a market-capitalization index are given in exhibit 1.

Exhibit 1: Market-capitalization Index

Company	Stock Price	Shares Outstanding
AAA	\$100.32	100 million
BBB	\$80.96	160 million
CCC	\$72.17	35 million
DDD	\$66.13	180 million

If a portfolio manager wants to beat this index, the strategy that would *most likely* give him the highest probability of beating the index would be to:

A. overweight Stock AAA.

B. overweight Stock BBB.

C. overweight Stock DDD.

The correct answer is **B.**

$$\text{Market capitalization}_{\text{AAA}} = \$100.32 \times 100 \text{ million} = \$10.03 \text{ billion}$$

$$\text{Market capitalization}_{\text{BBB}} = \$80.96 \times 160 \text{ million} = \$12.95 \text{ billion}$$

$$\text{Market capitalization}_{\text{CCC}} = \$72.17 \times 35 \text{ million} = \$2.53 \text{ billion}$$

$$\text{Market capitalization}_{\text{DDD}} = \$66.13 \times 180 \text{ million} = \$11.90 \text{ billion}$$

As its market capitalization is the largest, stock BBB will have the largest weight in the index. Therefore, if the portfolio manager wants to have the highest probability of beating the index, he must overweight Stock BBB in his portfolio.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (h) Describe types of equity indexes.

Q.3616 The performance of commodity indices can be different from that of the underlying commodities because:

A. the indices consist of futures contracts.

B. the indices also have an equity component.

C. the indices overweight certain commodities.

The correct answer is **A.**

Commodity indices often do not mirror the exact performance of the underlying commodities primarily because these indices are composed of futures contracts. Futures contracts are standardized agreements to buy or sell a commodity at a predetermined price at a specific time in the future.

The pricing of these contracts incorporates expectations about the future supply and demand of the commodity, as well as the cost of carry, which includes storage costs, insurance, and interest rates. These factors can cause the performance of the commodity index, which is based on futures contracts, to diverge from the spot price movements of the commodities themselves.

This divergence can be particularly pronounced during periods of market stress or when there are significant changes in the supply and demand dynamics of the underlying commodities.

B is incorrect. This option incorrectly suggests that the presence of an equity component in commodity indices is a primary reason for the performance difference between the indices and the underlying commodities.

While it is true that some investment products may blend commodities with equities to achieve certain investment objectives, pure commodity indices typically do not contain equity components. Their performance difference from the underlying commodities is mainly due to the use of futures contracts, not equities.

C is incorrect. Overweighting certain commodities within an index can indeed affect its performance compared to a more evenly distributed index or the broader commodity market. However, this is not the primary reason why the performance of commodity indices can differ from that of the underlying commodities.

The core reason lies in the nature of the instruments used to construct the indices—futures contracts—and the various factors influencing futures pricing, such as the cost of carry and market expectations about future price movements.

Overweighting is more related to the index construction methodology and its impact on performance relative to other indices or investment benchmarks, rather than the fundamental difference in performance caused by the use of futures contracts.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (k) Describe indexes representing alternative investments.

Q.3617 Which of the following does the return on commodity indices reflect?

I. The risk-free interest rate.
II. The changes in futures contract prices.
III. The roll yield.

A. I.

B. II & III.

C. I, II & III.

The correct answer is **C.**

The return on commodity indices is a multifaceted concept that encompasses several components, including:

i. the risk-free interest rate,
ii. changes in futures contract prices, and
iii. the roll yield.

Each of these elements plays a crucial role in determining the overall return that investors might expect from investing in commodity indices.

The **risk-free interest rate** is a fundamental component of the return on commodity indices. It represents the return that investors can expect to earn on an investment that is considered free from credit risk.

In the context of commodity indices, the risk-free rate is relevant because the collateral required to hold futures positions typically earns this rate. Therefore, the risk-free interest rate directly influences the total return that investors receive from their investment in commodity indices.

Changes in futures contract prices are another critical factor that affects the return on commodity indices. Commodity indices are often constructed using futures contracts on various commodities. As the prices of these futures contracts change due to fluctuations in the underlying commodity prices, the value of the commodity index also changes.

This means that investors in commodity indices are exposed to the price volatility of the commodities included in the index, and changes in futures contract prices can lead to gains or losses for the investors.

The **roll yield** is an additional component of the return on commodity indices that arises from the process of rolling futures contracts. When futures contracts approach their expiration dates, they must be replaced with new contracts with later expiration dates to maintain the investment position.

The roll yield refers to the gain or loss that results from this rolling process, depending on the structure of the futures curve. If the futures curve is in contango (future prices are higher than spot prices), rolling into more expensive contracts can result in a negative roll yield.

Conversely, if the futures curve is in backwardation (future prices are lower than spot prices), rolling into cheaper contracts can generate a positive roll yield.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (k) Describe indexes representing alternative investments.

Q.3618 An equity analyst wants to create an index to measure the yields of US T-Bills. Which of the following is *most likely* the primary issue in creating such an index?

A. The index will be difficult to price.

B. The index will require frequent reconstitution.

C. Creating an index of fixed income security is not possible.

The correct answer is **B.**

The primary issue in creating an index to measure the yields of US T-Bills is the need for frequent reconstitution. US Treasury Bills (T-Bills) are short-term government securities with maturities of less than one year. Due to their short maturity period, T-Bills are redeemed and reissued frequently. An index tracking the yields of such securities would need to be updated regularly to reflect the issuance of new T-Bills and the redemption of maturing ones. This frequent reconstitution is necessary to ensure that the index accurately reflects the current yield environment of US T-Bills. Moreover, the process of reconstitution involves selecting which T-Bills to include in the index, which can be a complex task given the variety of T-Bills issued with different maturities throughout the year.

A is incorrect. While pricing can be a challenge in creating fixed income indices due to the over-the-counter nature of many fixed income markets, this is not the primary issue for an index of US T-Bills. T-Bills are highly liquid, widely traded securities, and their prices are readily available. The U.S. Department of the Treasury regularly publishes T-Bill yields, making it relatively straightforward to price an index based on these securities.

C is incorrect. It is entirely possible to create an index of fixed income securities, including US T-Bills. Numerous fixed income indices exist, tracking various segments of the bond market, including government, corporate, and municipal bonds. These indices serve as benchmarks for the performance of fixed income investments and are used by investors to gauge the health of the bond market.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (j) Describe types of fixed-income indexes.

Q.3619 In fundamentally weighted multi-market indices, the securities are weighted based on:

A. market capitalization while the country weight in the index is based on its GDP.

B. market capitalization while the country weight in the index is based on its domestic currency exchange rate compared to a basket of currencies.

C. market capitalization while the country weight in the index is based on the number of constituent securities that originate from this country.

The correct answer is **A.**

In fundamentally weighted multi-market indices, securities are weighted based on their market capitalization, while the weight of each country within the index is determined by its Gross Domestic Product (GDP). This approach aims to provide a more economically representative view of the global markets, as it considers the economic size and output of each country rather than just the market value of its companies.

By using GDP as a weighting factor, these indices can offer a broader perspective on global economic activity, potentially leading to a more diversified and balanced investment portfolio. This method acknowledges that countries with larger economies can have a more significant impact on the global market, regardless of the market capitalization of their individual securities.

B is incorrect. This option suggests that the country weight in the index is based on its domestic currency exchange rate compared to a basket of currencies. This method would introduce a high level of volatility and currency risk into the index, which is not the objective of fundamentally weighted indices.

The use of currency exchange rates would also not accurately reflect the economic size or output of a country, which is better represented by GDP. Therefore, this approach is not used in fundamentally weighted multi-market indices.

C is incorrect. This option proposes that the country weight in the index is based on the number of constituent securities that originate from the country. While this method might reflect the diversity of companies within a country's market, it does not account for the economic size or significance of the country on a global scale.

A country with a large number of small companies could be overweighted compared to a country with fewer but much larger companies. This would not provide an accurate representation of the global economy, which is why GDP is a preferred measure for weighting countries in fundamentally weighted multi-market indices.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (d) Compare the different weighting methods used in index construction.

Q.3871 The market float of a stock is *best* described as its:

A. Total outstanding shares.

B. Shares available to domestic investors.

C. Outstanding shares excluding those held by controlling shareholders.

The correct answer is **C.**

The market float of a stock is best described as the number of shares that are available for trading by the general public, excluding those held by insiders, controlling shareholders, and other locked-in parties. This is because the market float provides a more accurate representation of the liquidity and availability of the stock in the open market.

Shares that are held by controlling shareholders are often not traded frequently, as these shareholders tend to hold onto their shares for longer periods. The higher the market float, the more shares are available for trading, which typically leads to better liquidity and less price manipulation by large trades.

A is incorrect. Total outstanding shares refer to all shares currently issued by a company, including those held by controlling shareholders and restricted stock. This figure does not accurately reflect the number of shares available for public trading, as it includes shares that may not be readily sold or bought in the market. These do not provide an accurate representation of the stock's liquidity or how easily it can be traded in the open market.

B is incorrect. Shares available to domestic investors might exclude international shares but does not necessarily account for shares held by controlling shareholders or restricted stock. While the domestic versus international distinction can affect the accessibility of shares for certain investors, it does not directly relate to the availability of shares for trading by the general public, regardless of the investors' location.

The key factor in determining market float is whether the shares are locked in or freely tradable, not the geographic location of the investors.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (c) Describe the choices and issues in index construction and management.

Q.3876 The performance of commodity indices:

A. Reflects the risk-free interest rate.

B. Is affected solely by changes in commodity prices.

C. Is identical to the performance of underlying commodities.

The correct answer is **A.**

The performance of commodity indices is influenced by several factors, including:

i. the risk-free interest rate,
ii. changes in futures prices, and
iii. the roll yield.

This multifaceted influence means that the indices' performance can diverge significantly from that of the underlying physical commodities. The risk-free interest rate plays a crucial role because it affects the cost of carrying futures contracts.

These contracts are financial instruments used to buy or sell a commodity at a predetermined price at a specific time in the future. The pricing of these contracts incorporates the risk-free rate, which is the theoretical return of an investment with no risk of financial loss. This rate influences the futures prices and, consequently, the performance of commodity indices.

B is incorrect. This option posits that the performance of commodity indices is affected solely by changes in commodity prices. While changes in commodity prices are indeed a critical factor, they are not the sole determinant of the indices' performance.

The indices are based on futures contracts, which means their performance also depends on the risk-free interest rate and the roll yield. The interaction between these elements can lead to scenarios where the indices' performance diverges from the actual movement in commodity prices.

C is incorrect. Claiming that the performance of commodity indices is identical to the performance of underlying commodities ignores the complexity of how these indices are constructed and operate. Commodity indices are not direct investments in physical commodities but rather in futures contracts related to those commodities.

The performance of these indices is thus influenced by factors beyond the physical commodities' price movements, including the risk-free interest rate and the roll yield. These additional components can cause the indices' performance to diverge from that of the underlying commodities, making this option inaccurate.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (k) Describe indexes representing alternative investments.

Q.3877 Most of the widely used global security indices are:

A. Price-weighted.

B. Equal-weighted.

C. Market capitalization-weighted.

The correct answer is **C.**

Most of the widely used global security indices are market capitalization-weighted. This method involves weighting each component of the index according to its market capitalization, adjusted for float, which represents the proportion of shares available for trading by the general public.

The rationale behind using market capitalization as a weighting mechanism is that it reflects the total market value of a company's outstanding shares, providing a more accurate representation of its size and influence in the market. This approach ensures that companies with a larger market capitalization have a greater impact on the index's performance, which is considered a more realistic measure of the market's movements.

A is incorrect. Price-weighted indices assign weights based on the price of a company's shares, rather than its total market capitalization. In a price-weighted index, a stock with a higher price per share will have a greater influence on the index's performance, regardless of the company's overall size or market value.

This can lead to a distortion in the representation of the market, as smaller companies with high stock prices might exert undue influence over the index, overshadowing larger companies with more modest share prices. This method is not as widely used for global security indices due to its potential for misrepresentation of market dynamics.

B is incorrect. Equal-weighted indices assign the same weight to each stock in the index, regardless of the company's size or market capitalization. This approach treats all companies equally, giving the same importance to smaller companies as to larger ones.

While this can provide a more diversified index and reduce the dominance of large-cap stocks, it does not accurately reflect the market's structure, where larger companies naturally have a greater impact on market movements.

Equal weighting can also lead to higher turnover and associated costs, as the index must be rebalanced frequently to maintain equal weights.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 2: Security Market Indexes, LOS (c) Describe the choices and issues in index construction and management.

Q.109 Which of the following statements regarding market efficiency is *least likely* accurate?

A. There are three forms of market efficiency: weak, semi-strong, and strong.

B. In an efficient market, the prices of stocks will slowly adjust to new information.

C. An efficient capital market reflects all of the information about its securities, including risk.

The correct answer is **B.**

According to the Efficient Market Hypothesis (EMH), in an efficient market, stock prices adjust instantaneously and fully to new information. This means that as soon as new information becomes available, it is immediately reflected in the stock prices. The rationale behind this is that in an efficient market, all participants have access to information at the same time and act on it quickly, leading to immediate price adjustments. .

A is incorrect. The Efficient Market Hypothesis (EMH) proposes three forms of market efficiency: weak, semi-strong, and strong. The weak form suggests that all past trading information is already reflected in stock prices, and thus, technical analysis cannot be used to achieve superior gains.

The semi-strong form posits that all publicly available information is reflected in stock prices, making fundamental analysis ineffective for predicting future price movements. The strong form asserts that all information, both public and private, is fully reflected in stock prices, indicating that no one can consistently achieve higher returns.

C is incorrect. All relevant information is already incorporated into the prices of securities. The inclusion of risk in the information set is crucial because it affects the required return on an investment. Investors need to understand the risk associated with securities to make informed decisions, and in an efficient market, this risk is already factored into the prices.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (c) Explain factors that affect a market's efficiency.

Q.1001 Which of the following is *least likely* accurate about intrinsic values?

A. Intrinsic values are uncertain.

B. Intrinsic values keep on changing.

C. Intrinsic values are higher than the market value.

The correct answer is **C.**

Intrinsic value is an estimate of what an asset is worth, based on a detailed analysis of fundamentals. It can be higher, equal to, or lower than the market value at any given time. The market value is the price at which an asset trades in the market, which can be influenced by a wide range of factors, including investor sentiment, market trends, and external economic conditions, not just its fundamentals.

The discrepancy between market value and intrinsic value forms the basis for investment decisions in value investing, where investors seek to buy assets when their market price is below their calculated intrinsic value and sell them when their market price exceeds their intrinsic value. This approach is predicated on the belief that the market will eventually recognize the true value of the asset, leading to a convergence of market and intrinsic values over time.

A is incorrect. The statement that intrinsic values are uncertain is accurate. The calculation of intrinsic value involves various assumptions, estimates, and models that can vary significantly among different analysts and investors. Factors such as future cash flows, growth rates, and discount rates are inherently uncertain and subject to change.

This uncertainty is a fundamental characteristic of intrinsic value, making it a variable and sometimes contentious figure within financial analysis. The uncertainty does not detract from the concept of intrinsic value but rather highlights the complexity and subjective nature of valuing assets.

B is incorrect. Intrinsic values fluctuate over time as new information becomes available, economic conditions change, and as the underlying assumptions used in valuation models are updated. For instance, changes in a company's earnings forecasts, interest rates, or market conditions can lead to adjustments in the calculated intrinsic value of a company's stock.

This dynamic nature of intrinsic value reflects the reality of financial markets and the economy, where conditions are constantly evolving. Therefore, investors and analysts must regularly review and update their valuations to reflect the most current information and assumptions.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (b) Contrast market value and intrinsic value.

Q.1002 When the number of investors in a market increases, the market *most likely* becomes:

A. less efficient.

B. more efficient.

C. as efficient as before/no change.

The correct answer is **B.**

Increasing the number of investors in a market typically leads to higher market efficiency. Market efficiency refers to the extent to which market prices reflect all available, relevant information.

A more efficient market is one where information is quickly disseminated and accurately reflected in stock prices, allowing for more informed and rational investment decisions. The presence of more participants in the market enhances the efficiency for several reasons.

Firstly, with more investors, there is a greater likelihood that new information will be quickly incorporated into stock prices. This is because a larger pool of investors increases the chances that at least some of them will have access to and act upon new information promptly.

Secondly, a higher number of participants also leads to increased trading volume, which can reduce bid-ask spreads and make it easier for investors to enter or exit positions at prices close to the market consensus. This liquidity is a key component of an efficient market.

The factors that make a market efficient are:

1. A large number of market participants.
2. The free availability of information.
3. Fewer restrictions on trading, such as allowing short-selling.
4. Lower transaction costs.

A is incorrect. The suggestion that an increase in the number of investors makes a market less efficient is not supported by the principles of market efficiency. In fact, the opposite is true; more participants generally enhance the flow of information and its incorporation into stock prices, contributing to efficiency rather than detracting from it.

C is incorrect. Stating that the efficiency of a market remains unchanged with an increase in the number of investors overlooks the dynamic nature of markets. Markets are not static, and changes in the number of participants can significantly impact how information is processed and reflected in prices.

An increase in market participants typically improves efficiency by enhancing liquidity and the speed at which information is reflected in stock prices.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (c) Explain factors that affect a market's efficiency.

Q.1003 Which of the below is *least likely* a characteristic of an efficient market?

A. Lower transaction costs.

B. Few market participants.

C. Fewer restrictions on trading.

The correct answer is **B.**

Few market participants characterize an inefficient market. An efficient market will have a large number of market participants.

The factors that make a market efficient are:

1. Lower transaction costs.
2. The free availability of information.
3. A large number of market participants.
4. Fewer restrictions on trading, such as allowing short-selling.

A is incorrect. Lower transaction costs are indeed a characteristic of an efficient market. Lower costs encourage trading and investment, as investors are more likely to buy and sell securities when the cost of doing so is minimal. This increased trading activity contributes to the market's liquidity and ensures that security prices more accurately reflect the latest information available.

C is incorrect. Fewer restrictions on trading, such as the allowance of short selling and the absence of barriers to entry and exit, are characteristics of an efficient market. These conditions encourage participation from a wide range of investors and facilitate the smooth flow of information into market prices. Restrictions on trading can hinder the market's ability to adjust to new information, leading to prices that do not fully reflect available information.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (c) Explain factors that affect a market's efficiency.

Q.1004 Price changes are independent from one period to another in which form(s) of market efficiency?

A. Strong form efficiency only.

B. Semi-strong and strong form efficiency only.

C. Weak, semi-strong, and strong form efficiency.

The correct answer is **C.**

This independence of price changes is a fundamental aspect of the EMH, as it implies that no information, including past prices, can be used to predict future prices with accuracy. This is because all known information is already reflected in current prices, making it impossible to achieve consistent excess returns.

In weak form efficiency, current asset prices are believed to fully incorporate all historical price and volume information. This implies that past price movements or patterns cannot be used to predict future price movements.

In semi-strong form efficiency, current asset prices are thought to reflect all publicly available information, including historical price and volume information as well as all public information such as financial statements and news reports.

Finally, in strong form efficiency, asset prices are considered to reflect all information, both public and private, meaning that no one can consistently achieve higher returns.

A is incorrect. It suggests that price changes are independent only in strong form efficiency. This is not accurate, as independence of price changes from one period to another is a characteristic of all forms of market efficiency, not just the strong form.

B is incorrect. It limits the independence of price changes to semi-strong and strong form efficiency only. This overlooks the fact that even in weak form efficiency, past prices and volume information are considered to have no predictive power over future prices. Therefore, the independence of price changes is a feature inherent in all forms of market efficiency, not just the semi-strong and strong forms.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1005 An investor can achieve positive risk-adjusted returns on average by using the fundamental analysis trading strategy in which of the following forms of market efficiency?

A. Weak form efficiency only.

B. Strong form efficiency only.

C. Weak and semi-strong form efficiency only.

The correct answer is **A.**

Investors can use fundamental analysis to achieve positive risk-adjusted returns only in the weak form of market efficiency.

In the semi-strong and strong forms of market efficiency, investors can neither use fundamental analysis nor technical analysis to achieve superior gains. The prices in strong form efficient markets reflect public and private information, whereas those in semi-strong efficient markets reflect publicly available information.

The table below summarizes the possibility of earning abnormal returns through various strategies and active management, assuming different types of market efficiency.

	Technical Analysis	Fundamental Analysis	Insider Trading	Active Management
Weak	No	Yes	Yes	Yes
Semi-strong	No	No	Yes	No
Strong	No	No	No	No

B is incorrect. As seen in the table above, an investor cannot earn abnormal profits by using a trading strategy in the strong form of market efficiency. An investor in the strong form of market efficiency can earn abnormal returns by being lucky.

C is incorrect. As seen in the table above, an investor cannot earn abnormal profits by using fundamental analysis in the semi-strong form of market efficiency. An investor in the semi-strong form of market efficiency can earn abnormal returns by using insider trading.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1006 Fundamental analysis is *most likely* based on which of the following?

A. Cost of information.

B. Trading and analysis.

C. Earnings and dividends.

The correct answer is **C.**

Fundamental analysis is a method used by investors to determine the intrinsic value of a security. This approach involves examining related economic, financial, and other qualitative and quantitative factors. Fundamental analysts study anything that can affect the security's value, from macroeconomic factors such as the state of the economy and industry conditions to microeconomic factors like the effectiveness of the company's management.

The core of fundamental analysis lies in evaluating a company's future earnings and dividends, which are crucial indicators of its financial health and potential for growth. Earnings reflect the company's profitability, while dividends represent the portion of profits distributed to shareholders. These elements are essential for investors aiming to make long-term investments based on the company's performance and prospects.

A is incorrect. The cost of information refers to the expenses associated with acquiring data necessary for making investment decisions. While access to relevant and timely information is crucial for various investment strategies, it is not the foundation of fundamental analysis. Fundamental analysis primarily focuses on evaluating a company's intrinsic value through its financial statements, earnings, dividends, and other economic indicators, rather than the cost associated with obtaining this information.

B is incorrect. Trading and analysis encompass a broad range of activities that investors undertake to make investment decisions. While trading strategies and technical analysis might consider price movements and market trends, fundamental analysis digs deeper into a company's financial health and market position.

Therefore, trading and analysis, especially those based on technical indicators, do not constitute the core of fundamental analysis, which is more concerned with earnings, dividends, and other financial metrics that indicate a company's underlying value.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.1007 Semi-strong form of markets in developed countries are:

A. efficient.

B. inefficient.

C. can not be ascertained.

The correct answer is **A.**

The semi-strong form of market efficiency posits that all publicly available information is already reflected in stock prices. This includes, but is not limited to, past trading information, financial statements, news releases, and other public disclosures. The semi-strong form is a component of the Efficient Market Hypothesis (EMH), which asserts that it is impossible to consistently achieve higher returns than average by using any information that the public already knows, because stock prices already incorporate and reflect all relevant information.

Event studies have found that stock prices adjust quickly and accurately to new information, leaving little to no opportunity for investors to earn abnormal returns by trading on that information once it is released. This rapid adjustment of stock prices to new information suggests that markets in developed countries are efficient in the semi-strong sense.

B is incorrect. Suggesting that semi-strong form markets in developed countries are inefficient contradicts the fact that these markets efficiently incorporate all publicly available information into stock prices. The efficiency of these markets is demonstrated through the inability of investors to consistently achieve abnormal returns by trading on public information, as prices adjust almost instantaneously to reflect new data.

C is incorrect. While it might seem prudent to claim that the efficiency of semi-strong form markets in developed countries cannot be ascertained due to potential variations in market structure, regulation, and transparency, the overwhelming evidence from event studies and other empirical research supports the conclusion that these markets are, in fact, efficient in the semi-strong form. This efficiency is a testament to the sophisticated nature of developed markets, where information dissemination is rapid and regulatory frameworks support transparency and fair trading.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1008 Which of the following calendar anomalies *least likely* exists anymore?

A. Turn-of-the-year effect.

B. Turn-of-the-month effect.

C. Both turn-of-the-year and turn-of-the-month effects.

The correct answer is **B.**

The turn-of-the-month effect, which suggests that stock returns are higher on the last and first few days of the month, is considered to no longer exist in current financial markets. This conclusion is based on extensive research and analysis of market data over recent years.

The turn-of-the-month effect was once a recognized calendar anomaly, where empirical evidence suggested that returns during these specific days were abnormally high compared to the rest of the month. The increased efficiency means that any potential for abnormal profits is quickly arbitraged away, leading to the disappearance of the turn-of-the-month effect.

A is incorrect. The turn-of-the-year effect, also known as the January effect, where stocks, especially those of small-cap companies, have historically shown higher returns in January compared to other months, still shows some evidence of existence. This effect has been attributed to tax-loss selling in December, with investors selling losing positions for tax purposes and reinvesting in January, thus driving up prices.

C is incorrect. Stating that both the turn-of-the-year and turn-of-the-month effects no longer exist is inaccurate. While the turn-of-the-month effect is widely considered to have dissipated due to increased market efficiency, the turn-of-the-year effect, although diminished, still shows some level of persistence.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (f) Describe market anomalies.

Q.1009 The effect when we find out that firms with poor stock returns over the previous 3-5 years continue posting poor returns, whereas firms with good returns over the previous 3-5 years continue posting good returns is *most likely* known as?

A. Anomaly effect.

B. Momentum effect.

C. Overreaction effect.

The correct answer is **B.**

The momentum anomaly refers to the empirically observed tendency for rising asset prices to rise further and falling prices to keep falling. Stocks with strong past performance continue to outperform stocks with poor past performance in the next period.

It is termed an anomaly because in finance theory, an increase in asset price, in and of itself, should not warrant a further increase in asset price unless it is backed up by new information or changes in demand and supply. The momentum anomaly suggests investors should buy past "winners" while selling past "losers."

A is incorrect. An anomaly is an exception to the notion of market efficiency. An anomaly presents itself when a change in the price of an asset or security cannot be directly linked to current relevant information known in the market. The momentum and overreaction effects are all examples of market anomalies.

C is incorrect. The overreaction anomaly goes contrary to the momentum anomaly. It refers to the empirically observed tendency of stocks to exhibit long-term reversals in returns. Stocks that have performed poorly in the past three to five years demonstrate superior performance over the next three to five years compared to stocks that have performed well in the past. The overreaction anomaly suggests buying past losers while selling past winners.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (f) Describe market anomalies.

Q.1011 Investors tend to be:

A. less risk-averse when faced with potential gains.

B. less risk-averse when faced with potential losses.

C. more risk-averse when faced with potential gains.

The correct answer is **A.**

Investors tend to be less risk-averse when faced with potential gains. This behavior is rooted in the psychological principle of loss aversion, which is a key concept in behavioral finance.

Loss aversion suggests that the pain of losing is psychologically about twice as powerful as the pleasure of gaining. Therefore, when investors are presented with potential gains, they are more willing to take risks, hoping to capitalize on these gains. This inclination towards accepting higher risks in the pursuit of potential gains illustrates a fundamental aspect of human behavior in financial decision-making.

B is incorrect. This option incorrectly suggests that investors become more cautious or risk-averse when the potential for gains is presented. In reality, the prospect of gains often encourages investors to take on more risk, contrary to what is suggested by this option.

The principle of loss aversion and various studies in behavioral finance have shown that the potential for gains can lead to risk-seeking behavior, as the allure of the gains outweighs the fear of losses in the decision-making process.

C is incorrect. This option suggests that investors become less risk-averse or more willing to take risks when faced with potential losses. This is contrary to the established understanding of investor behavior under the influence of loss aversion. When confronted with potential losses, investors tend to become more risk-averse, not less.

They are more likely to avoid risks in an attempt to prevent further losses. This behavior is driven by the psychological impact of losses being more significant than that of equivalent gains, making investors more cautious in scenarios involving potential losses.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (g) Describe behavioral finance and its potential relevance to understanding market anomalies.

Q.1162 Which of the following statements regarding strong-form market efficiency is *most likely* accurate?

A. Investors will often use the dividend discount model.

B. Investors may try to develop an independent estimate of intrinsic value.

C. Investors will usually accept market prices as accurately reflecting intrinsic values.

The correct answer is **C.**

This form of market efficiency suggests that no investor can consistently achieve higher returns than another investor with the same amount of invested capital because all available information is already incorporated into stock prices.

Therefore, investors operating under the assumption of strong-form efficiency would naturally accept market prices as accurately reflecting the intrinsic values of securities. This acceptance is based on the belief that it is impossible to consistently outperform the market through stock selection or market timing, as any information that could potentially influence a stock's price is already factored in.<.p>

A is incorrect. The use of the dividend discount model (DDM) is more characteristic of investors who believe they can identify mispriced stocks based on public information or their analysis of a company's future dividends.

In a strong-form efficient market, the premise is that all information, including insights that could be derived from the DDM, is already reflected in the stock's current price. Therefore, the utility of employing the DDM or similar valuation models to find undervalued stocks is negated under the assumption of strong-form efficiency.

B is incorrect. The effort to develop an independent estimate of a security's intrinsic value is predicated on the belief that the market price may not fully reflect the true value of the security, allowing for the possibility of achieving superior returns through detailed analysis.

However, in a strong-form efficient market, such efforts are deemed futile as it is assumed that all information, including insider or private information, is already incorporated into the market price.

Thus, the concept of independently estimating intrinsic values is inconsistent with the principles of strong-form market efficiency, where market prices are considered the best available estimates of intrinsic values.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1165 In which form(s) of market efficiency does the market price *most likely* reflect past market data, public information, and private information?

A. Strong form.

B. Semi-strong form.

C. Semi-strong and strong form.

The correct answer is **A.**

Markets are strong form efficient when prices reflect all relevant information at any point in time, including private information.

The table below summarizes the different types of information reflected in the three forms of market efficiency.

Forms of Market Efficiency	Past Market Data	Public Information	Private Information
Weak	✓		
Semi-Strong	✓	✓	
Strong	✓	✓	✓

B is incorrect. The table above shows that the market price in the semi-strong form of market efficiency reflects past market data and publicly available information, but not private information.

C is incorrect. The market price in the semi-strong form of market efficiency does not reflect private information.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1166 Which of the following statements is *most likely* accurate regarding the weak form of market efficiency?

A. Security prices fully reflect all past market data.

B. Security prices reflect all publicly known and available information.

C. Security prices reflect past market data, publicly known and private information.

The correct answer is **A.**

The weak form of the EMH asserts that stock prices reflect all the information that can be derived by examining market trading data, such as the historical prices.

The table below summarizes the different types of information reflected security prices in the three forms of market efficiency.

Forms of Market Efficiency	Past Market Data	Public Information	Private Information
Weak	✓		
Semi-Strong	✓	✓	
Strong	✓	✓	✓

B is incorrect. The table above shows that it is in the semi-strong and strong form of market efficiency, not the weak form, where security prices reflect publicly known and available information. The weak form of market efficiency reflects only past market data.

C is incorrect. As seen in the table above, security prices reflect past market data, publicly known and private information in the strong, and not in the weak, form of market efficiency.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1167 The process of examining publicly available information and formulating forecasts to estimate the intrinsic value of assets is *most likely* known as?

A. Technical analysis.

B. Historical analysis.

C. Fundamental analysis.

The correct answer is **C.**

Fundamental analysis involves a comprehensive review of available information regarding a company's or asset's financial health, market position, and potential for future growth to estimate its intrinsic value. This method is grounded in the belief that the market may not always reflect the true value of an asset, allowing investors to make informed decisions based on their assessments.

Fundamental analysts look at various factors, including earnings, expenses, assets, and liabilities, as well as broader economic indicators and industry trends. This approach is contrasted with technical analysis, which focuses on price movements and trading volumes to forecast future price trends.

A is incorrect. Technical analysis differs significantly from fundamental analysis. While fundamental analysis seeks to determine an asset's intrinsic value based on financial and economic indicators, technical analysis is based on the premise that historical price movements and volume data can be used to predict future price trends.

Technical analysts use charts and other tools to identify patterns and signals that suggest future movements. This method does not consider the underlying financial condition or market position of the company, which is a central focus of fundamental analysis.

B is incorrect. Historical analysis involves examining past events or trends to understand or interpret them. It can be a component of both fundamental and technical analysis but, on its own, does not constitute a comprehensive approach to predicting future asset values based on publicly available information.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.1168 If markets are inefficient, the difference between the intrinsic value and the market value of a company's security is *most likely*:

A. zero.

B. always positive.

C. dependant on whether the stock is overvalued or undervalued.

The correct answer is **C.**

In inefficient markets, the difference between the intrinsic and market value of a company's security largely depends on whether the stock is overvalued or undervalued.

If undervalued (market price is less than the intrinsic value), the difference (intrinsic value-market value) will be positive.

If overvalued (market price is greater than the intrinsic value), the difference (intrinsic value-market value) will be negative.

If correctly valued (market price equals intrinsic value), the difference will be zero.

A is incorrect. The difference between the intrinsic value and the market value is zero when the intrinsic value equals the market value, which is usually not the case in inefficient markets because the market prices do not accurately reflect the intrinsic values of the securities.

B is incorrect. The difference between the intrinsic and market values of a company's security in inefficient markets is not always positive. It is positive in cases where the market price is less than the intrinsic value (security is undervalued)

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (b) Contrast market value and intrinsic value.

Q.1169 If markets are semi-strong efficient, standard fundamental analysis will yield abnormal trading profits that are *most likely*:

A. positive.

B. negative.

C. equal to zero.

The correct answer is **C.**

In the context of semi-strong efficient markets, the hypothesis posits that all publicly available information is already reflected in stock prices. This includes historical data, financial reports, news releases, and any other publicly accessible information. The semi-strong form of market efficiency is a component of the Efficient Market Hypothesis (EMH), which asserts that it is impossible to consistently achieve higher returns than the average market returns on a risk-adjusted basis by using any information that is publicly available.

Given this premise, standard fundamental analysis, which involves evaluating a company's financial statements, market position, and potential for future growth to determine its stock's intrinsic value, would not yield abnormal trading profits in a semi-strong efficient market. This is because the intrinsic value identified through fundamental analysis would already be incorporated into the current stock price due to the market's efficiency in processing public information. Therefore, any investment strategy based on publicly available information would not consistently outperform the market, leading to abnormal trading profits being equal to zero.

A is incorrect. It suggests that positive abnormal trading profits can be achieved through standard fundamental analysis in semi-strong efficient markets. This contradicts the semi-strong form of the Efficient Market Hypothesis, which asserts that all publicly available information is already reflected in stock prices. Therefore, it is not possible to consistently generate positive abnormal profits by exploiting publicly available information.

B is incorrect. It implies that negative abnormal trading profits are the most likely outcome of standard fundamental analysis in semi-strong efficient markets. While it is true that investors might not consistently outperform the market, the semi-strong efficiency suggests that investors would, on average, earn a return that is commensurate with the market return for a given level of risk. The hypothesis does not inherently lead to negative abnormal profits; instead, it indicates that abnormal profits, whether positive or negative, would be difficult to achieve on a consistent basis due to the market's efficiency in processing public information.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1170 Suppose a market is in the semi-strong form of market efficiency. In that case, the risk-adjusted returns of a passively managed portfolio relative to an actively managed portfolio are *most likely*:

A. equal.

B. lower.

C. higher.

The correct answer is **C.**

In the context of semi-strong form market efficiency, all publicly available information is already reflected in stock prices. This implies that any attempt to outperform the market by selecting securities based on publicly available information is unlikely to yield superior results, once fees and expenses are accounted for.

Therefore, on a risk-adjusted basis, passively managed portfolios, which typically incur lower costs and aim to replicate the performance of a market index, are likely to outperform actively managed portfolios.

A is incorrect. The assertion that the risk-adjusted returns of a passively managed portfolio are equal to those of an actively managed portfolio overlooks the impact of costs and fees. Active management often involves higher transaction costs, management fees, and potentially other expenses related to research and analysis.

These costs can significantly erode the gross returns of an actively managed portfolio, making it difficult for such portfolios to match, let alone exceed, the performance of a passively managed portfolio on a net, risk-adjusted basis.

B is incorrect. Stating that the risk-adjusted returns of a passively managed portfolio are lower relative to an actively managed portfolio contradicts the principles of semi-strong form market efficiency.

This form of market efficiency states that it is not possible to consistently achieve higher returns through active management strategies that rely on publicly available information, due to the fact that such information is already reflected in stock prices.

When the costs associated with active management are considered, including higher fees for active management and transaction costs, the net returns of actively managed portfolios are likely to be lower than those of passively managed portfolios.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1171 A stock is said to be overvalued if its market price is:

A. less than its book value.

B. less than its intrinsic value.

C. greater than its intrinsic value.

The correct answer is **C.**

A stock is considered overvalued when its market price exceeds its intrinsic value. The intrinsic value of a stock is a theoretical value calculated based on fundamental analysis, which includes factors such as earnings, dividends, and growth rates, among others. It represents an estimate of the true value of a company's equity.

When the market price of a stock is higher than this calculated intrinsic value, it suggests that the stock is trading at a premium compared to its actual worth. This situation can occur due to various reasons, including speculative trading, market optimism, or overestimation of the company's growth prospects.

A is incorrect. Suggesting that a stock is overvalued if its market price is less than its book value is a misunderstanding of valuation concepts. The book value of a company is calculated from the balance sheet as the difference between the company's total assets and total liabilities. It represents the net asset value of the company according to its financial statements.

While book value can be a useful metric for valuation, especially for asset-intensive companies, it does not directly determine whether a stock is overvalued or undervalued. Stocks can trade above or below book value based on factors such as growth prospects, profitability, and market conditions.

B is incorrect. In fact, the opposite is true. A stock is considered undervalued when its market price is below its intrinsic value. This discrepancy can occur when the market has not fully recognized the company's potential or when temporary factors depress the stock price.

Undervalued stocks are often targeted by value investors, who believe that the market will eventually adjust the price upwards to reflect the company's true worth. Therefore, the condition of a stock being undervalued is an opportunity for investors rather than an indication of overvaluation.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (b) Contrast market value and intrinsic value.

Q.1660 An informationally efficient capital market is *most likely* defined as a market in which security prices:

A. fully reflect all the publicly available security information.

B. fully reflect all the available information about the security.

C. fully reflect all the available and inside information about the security.

The correct answer is **A.**

In an informationally efficient capital market, security prices fully, rationally, and quickly reflect all publicly available information.

This concept is central to the Efficient Market Hypothesis (EMH), which posits that it is impossible to consistently achieve higher returns on a risk-adjusted basis than the market average by using any information that the market already knows.

The rationale behind this is that the prices of securities in such a market immediately adjust to new information, making it impossible to exploit any information for abnormal gains.

B is incorrect. It suggests that an informationally efficient market is one where prices reflect all available information about the security, not specifying the nature of the information. This definition is too broad and encompasses both public and private (or insider) information.

However, the Efficient Market Hypothesis, particularly in its semi-strong form, specifically refers to public information. Therefore, this option does not accurately capture the essence of an informationally efficient market as defined by prevailing financial theories.

C is incorrect. It implies that for a market to be informationally efficient, security prices must reflect all available and inside information about the security. This description aligns more closely with the strong form of the Efficient Market Hypothesis, which is a theoretical extreme and not widely observed in practice.

Most financial regulations and ethical standards prohibit trading based on insider information, making it unrealistic for market prices to fully reflect such information legally. Therefore, while this option might describe an idealized version of market efficiency, it does not accurately represent the commonly accepted definition of an informationally efficient capital market.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.1661 Fatima Al-Mukhtar is an investment manager who invests in the informationally efficient capital market of Libya. Assuming that Al-Mukhtar only invests in mid-cap Libyan stocks, which of the following investment styles will *most likely* result in the highest returns?

A. Active management.

B. Passive management.

C. Both methods will result in the same net returns

The correct answer is **B.**

In an informationally efficient capital market, such as the one in Libya where Fatima Al-Mukhtar invests, the most suitable investment style to achieve higher returns is passive management. The Efficient Market Hypothesis (EMH) posits that all available information is already reflected in stock prices.

Therefore, it becomes challenging for investors to consistently outperform the market through active management strategies that rely on stock selection and market timing. Passive management, on the other hand, involves mimicking the performance of a market index by holding a diversified portfolio of stocks without attempting to pick "winners" or time the market.

This strategy benefits from lower transaction costs and management fees, which can significantly erode returns in active management.

A is incorrect. Active management in an informationally efficient market is unlikely to result in higher returns compared to passive management. Active managers attempt to outperform the market by exploiting short-term price fluctuations and mispriced securities.

Moreover, the higher transaction costs, including brokerage fees, and management fees associated with active management strategies, further diminish the net returns to investors. Therefore, despite the effort and resources expended in active management, it does not guarantee superior returns in an efficient market.

C is incorrect. While it might seem intuitive that both active and passive management would result in the same net returns in an efficient market, this is not the case when considering the impact of costs.

Passive management inherently incurs lower costs due to its buy-and-hold strategy and lower turnover.

Active management, by its nature, involves more frequent trading and higher turnover, leading to higher transaction costs and management fees. These costs can significantly impact the net returns investors receive.

Therefore, even in an efficient market, the lower-cost approach of passive management is more likely to result in higher net returns compared to active management.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.1665 Which form of market hypothesis *most likely* suggests that current market prices fully reflect all information from public and private sources?

A. Weak form market efficiency.

B. Strong form market efficiency.

C. Semi-strong form market efficiency.

The correct answer is **B.**

The strong form of market efficiency hypothesis posits that all information, whether public or private (insider information), is fully reflected in current market prices. This form of the hypothesis asserts that no investor can consistently achieve higher returns than the market average by using any information, as all information is already incorporated into stock prices.

This includes non-public information, making it impossible for insiders to consistently benefit from trading on such information. The strong form of market efficiency is the most inclusive among the three forms, suggesting that markets are perfectly efficient and that it is not possible to "beat the market" through any means of analysis or access to information.

A is incorrect. The weak form of market efficiency suggests that all past trading information, including stock prices and volumes, is fully reflected in current market prices. According to this hypothesis, technical analysis, which relies on historical price and volume data, cannot consistently outperform the market.

However, it does not account for the information that is not contained in past trading data, such as fundamental analysis based on public financial statements or private insider information. Therefore, the weak form does not support the idea that current market prices reflect all information from both public and private sources.

C is incorrect. Any new public information is quickly incorporated into stock prices. However, unlike the strong form, the semi-strong form does not assert that private or insider information is reflected in market prices, distinguishing it from the strong form's broader claim.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1666 According to the efficient market hypothesis (EMH), which of the following forms of market efficiencies will an investor *most likely* achieve positive risk-adjusted returns on average using fundamental analysis?

A. Weak form market efficiency.

B. Strong form market efficiency.

C. Semi-strong from market efficiency.

The correct answer is **A.**

Fundamental analysis analyzes the intrinsic value of a company's stock using micro and macroeconomic factors. It comprises three parts: Industry Analysis, Economic Analysis, and Company Analysis. Fundamental analysis relies on public data, for example, a company's historical earnings and profit margins, to predict future growth.

The semi-strong form of efficiency suggests that current security prices reflect all the past security market information and all publicly available information. An investor cannot achieve positive risk-adjusted returns on average by using fundamental analysis in the semi-strong and strong form of market efficiency because the security prices already reflect publicly available information.

An investor can only achieve positive risk-adjusted returns by using fundamental analysis in the weak form of market efficiency.

The table below summarizes the possibility of earning abnormal returns through various strategies and active management, assuming different types of market efficiency.

	Technical Analysis	Fundamental Analysis	Insider Trading	Active Management
Weak	No	Yes	Yes	Yes
Semi-strong	No	No	Yes	No
Strong	No	No	No	No

B is incorrect. Under strong form efficiency, all information, including insider information, is already reflected in stock prices. Therefore, fundamental analysis, which relies on publicly available information, cannot yield excess returns.

C is incorrect. In a semi-strong efficient market, all publicly available information is already incorporated into stock prices. Since fundamental analysis primarily uses public information to assess a stock's intrinsic value, it would not be possible to achieve positive risk-adjusted returns using this method in a semi-strong efficient market.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1667 Technical analysis is used to test if a market is weak-form efficient. Which of the below data sets is *most likely* required to conduct technical analysis?

A. Non-public material data.

B. Past (historic) prices and volumes data.

C. Current earnings, dividends, and accounting ratio data.

The correct answer is **B.**

Technical analysis is a method used by traders and investors to forecast the future price movements of securities based on past market data, primarily price and volume. The core premise behind technical analysis is that historical trading activity and price changes can be valuable indicators of a security's future price movements.

This approach is particularly relevant when testing for weak-form market efficiency, which posits that all historical price information is fully reflected in current market prices. Therefore, if technical analysis can consistently produce abnormal returns, it would suggest that the market is not weak-form efficient, as investors could leverage historical price and volume data to achieve returns that exceed those justified by the information available.

A is incorrect. Non-public material data, also known as insider information, is not relevant to technical analysis. Technical analysis solely relies on publicly available historical data, such as prices and volumes, and does not incorporate non-public or insider information. Utilizing non-public material data for trading is not only unethical but also illegal in many jurisdictions.

The effectiveness of technical analysis in predicting future price movements is based on the assumption that all relevant information, including historical prices and volumes, is already reflected in the market prices, making non-public information irrelevant to this analysis approach.

Past (historic) prices and volumes data are the primary inputs for technical analysis. This method analyzes patterns in this data to identify potential trading opportunities. Technical analysts believe that historical price movements and trading volumes can indicate future price trends.

C is incorrect. Current earnings, dividends, and accounting ratio data are primarily used in fundamental analysis, not technical analysis. Fundamental analysis assesses a security's intrinsic value by examining related economic, financial, and other qualitative and quantitative factors. This approach involves analyzing a company's financial statements, the health of the business, its competitive position, and the overall economy and market conditions.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.1668 Joe Timberlake is a trader who trades equities in the United Arab Emirates (UAE). Timberlake is consistently able to earn abnormal profits by using fundamental data, but when he uses only technical analysis, he isn't profitable. UAE's market efficiency is *most likely*?

A. Weak-form efficient.

B. Strong-form efficient.

C. Semi-strong form efficient.

The correct answer is **A.**

Fundamental analysis analyzes the intrinsic value of a company's stock using micro and macroeconomic factors. It comprises three parts: Industry Analysis, Economic Analysis, and Company Analysis. Fundamental analysis relies on public data, for example, a company's historical earnings and profit margins, to predict future growth. Traders cannot earn abnormal profits by using fundamental analysis if the security prices of the markets they trade in already reflect public information.

On the other hand, Technical analysis analyzes statistical trends, such as price movements and volume, to identify trading opportunities. Technical analysts use historical (past) trading activity and a security's price changes as valuable indicators of the security's future price movements.

The market is weak-form efficient if a trader can earn abnormal profits using fundamentals but not technical analysis. An investor cannot earn abnormal profits by using technical analysis in all forms of market efficiency.

The table below summarizes the possibility of earning abnormal returns through various strategies and active management, assuming different types of market efficiency.

	Technical Analysis	Fundamental Analysis	Insider Trading	Active Management
Weak	No	Yes	Yes	Yes
Semi-strong	No	No	Yes	No
Strong	No	No	No	No

B is incorrect. Strong-form efficiency asserts that stock prices reflect all information, both public and private (including insider information), making it impossible for investors to achieve abnormal profits through any analysis or information.

Timberlake's ability to earn abnormal profits through fundamental analysis contradicts the premise of strong-form efficiency, indicating that the UAE market does not operate under this level of efficiency.

C is incorrect. Semi-strong form efficiency suggests that stock prices incorporate all publicly available information, including historical trading data and fundamental analysis insights. If the UAE market were semi-strong form efficient, Timberlake would not be able to generate abnormal profits through fundamental analysis, as all such information would already be reflected in stock prices.

His success with fundamental analysis indicates that the market does not adjust instantaneously to new public information, which contradicts the semi-strong form efficiency hypothesis.

Q.1669 In which form of market efficiency will active management *most likely* earn consistent abnormal profits?

A. Weak form market efficiency.

B. Strong form market efficiency.

C. Semi-strong form market efficiency.

The correct answer is **A.**

Active management is when managers frequently buy and sell stocks in their portfolios to outperform a specific benchmark or index. Passive management, on the other hand, is when managers try to be at par with a specific index or benchmark performance. Active managers charge more fees as compared to passive managers because they have to manage the portfolio actively.

When markets are semi-strong or strong form efficient, security prices reflect all public and private information and no one has monopolistic access to information. Therefore, active management cannot consistently earn abnormal profits.

The table below summarizes the possibility of earning abnormal returns through various strategies and active management, assuming different types of market efficiency.

	Technical Analysis	Fundamental Analysis	Insider Trading	Active Management
Weak	No	Yes	Yes	Yes
Semi-strong	No	No	Yes	No
Strong	No	No	No	No

B is incorrect. Investors in the strong form of market efficiency cannot use any trading strategy to consistently earn abnormal profits because the security prices reflect all information. Investors can earn abnormal profits only by being lucky.

C is incorrect. Investors in the semi-strong form of market efficiency can earn abnormal profits only by using insider information.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.1670 The process of investigating data until a statistically significant relationship is found is *least likely* referred to as:

A. data mining.

B. data snooping.

C. market anomaly.

The correct answer is **C.**

Market anomaly refers to a situation where a security's or market's actual performance deviates from the expected outcome under the efficient market hypothesis. Market anomalies represent patterns or behaviors in financial markets that seem to contradict the notion of market efficiency, suggesting that investors can earn abnormally high returns.

Examples of market anomalies include the January effect, momentum, and value effect among others. Unlike data mining or snooping, market anomalies are observed phenomena that challenge existing financial theories rather than the process of searching for new patterns or relationships.

A is incorrect. Data mining involves analyzing large volumes of data to discover patterns and relationships that can inform decision-making. While it can be a powerful tool for uncovering useful insights, it is also susceptible to overfitting and finding spurious correlations if not conducted with proper statistical rigor.

B is incorrect. Similarly, data snooping refers to the practice of extensively searching through data in an attempt to find statistically significant relationships. It is akin to data mining and carries the same risks of overfitting and discovering relationships that do not hold in general. Data snooping can lead to the formulation of investment strategies or theories that appear sound based on historical data but fail to perform as expected in future periods.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (f) Describe market anomalies.

Q.1672 Which of the following is *most likely* a cross-sectional anomaly?

A. Value effect.

B. Earning surprises.

C. Day-of-the-week effect.

The correct answer is **A.**

Market anomalies are exceptions to the notion of market efficiency. They are present if a change in an asset or security price cannot be directly linked to current relevant information known in the market.

Market anomalies can be categorized into either time series anomalies, cross-sectional anomalies, or other anomalies.

Cross-sectional anomalies include the size effect and the value effect.

Time series anomalies include the calendar effect and the momentum/over-reaction effect.

Other anomalies include closed-end fund discounts; earnings surprise anomalies, and initial public offerings.

Anomalities explained

- *Size effect* - small companies (small-cap stocks) tend to outperform large companies (large-Cap stocks), contrary to what is expected in the market.

- *Value effect* – Value stocks (Stock with a below-average price to earnings and market book ratios and above-average dividend yields) have consistently outperformed growth stocks, which is contrary to how investors expect markets to perform.

- *Calendar effect* - There is significant differences in returns on different days, weeks, or months of the year. The most common calendar effect is the January effect (Stocks tend to outperform in January).

- *Momentum/Overreaction effect*< – The momentum effect refers to the empirically observed tendency for rising market prices to keep rising and falling market prices to keep falling. The momentum effect suggests that investors should buy past winners and sell past losers. On the other hand, the overreaction effect states that socks that have performed poorly in the past three to five years demonstrate superior performance over the next three to five years compared to stocks that have performed well in the past. The overreaction effect suggests that investors should buy past losers and sell past winners.

- *Closed-end fund discounts* – Sometimes, closed-end funds sell at a discount to their net asset value. Tax inefficiencies and expectations of manager underperformance may partially explain this anomaly.

- *Earnings surplus* – Stock prices tend to underreact to new information allowing for a momentum trading strategy to be potentially profitable.

- *Initial public offerings* – By purchasing stocks at their initial public offering, investors tend to earn excess returns.

B is incorrect. Earning surprises refers to the market's reaction to an earnings report that significantly deviates from the consensus expectations. While earning surprises can lead to immediate and significant price adjustments in the stock of the company reporting the surprise, this phenomenon is categorized under "other anomalies" rather than cross-sectional anomalies.

C is incorrect. The day-of-the-week effect is a type of time series anomaly, not a cross-sectional anomaly. It refers to the pattern where stock returns are affected by the day of the week, with Friday often showing higher average returns compared to other days, for example.

This anomaly is related to how returns vary over time rather than differences in returns across different stocks or sectors at a single point in time. The day-of-the-week effect challenges the efficient market hypothesis by suggesting that predictable patterns exist in stock returns over time, which could potentially be exploited for abnormal returns.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (f) Describe market anomalies.

Q.1674 Which of the following is the result of uninformed or less informed traders that watch and mimic the actions of other investors?

A. Loss aversion.

B. Momentum effect.

C. Information cascade.

The correct answer is **C.**

An information cascade occurs when individuals, in the absence of complete information, observe and emulate the actions of others, assuming that those others possess better information. This phenomenon is particularly prevalent in financial markets, where uninformed or less informed traders look to the behavior of their peers as a proxy for valuable information.

The assumption is that the actions of others are based on some knowledge they possess, which the observer does not. In the context of trading and investment, this can lead to a herd behavior, where investors collectively buy or sell stocks not based on fundamental analysis or personal conviction, but because they perceive others are doing so.

This can amplify trends in the market, sometimes irrespective of the underlying financial health of the assets in question, leading to bubbles or crashes. Information cascades highlight the importance of critical thinking and independent analysis in investment decisions, as relying solely on the actions of others can lead to suboptimal outcomes.

A is incorrect. Loss aversion refers to a psychological phenomenon where individuals prefer avoiding losses to acquiring equivalent gains. For example, the pain of losing $100 is more intense than the pleasure of gaining $100. This concept is a cornerstone of behavioral economics and explains why people might opt for decisions that minimize losses rather than maximize gains, even when the expected outcomes are mathematically equivalent.

It does not directly relate to the behavior of mimicking others due to a lack of information, but rather to the intrinsic value individuals place on gains and losses.

B is incorrect. The momentum effect is a phenomenon observed in financial markets where an asset price movement in one direction is likely to continue moving in that direction for some time. This effect can be driven by various factors, including investor psychology, where the perception of increasing value encourages more buying, further driving up the price.

While the momentum effect might be influenced by information cascades, as investors follow the actions of others, it is distinct in its focus on the continuation of price trends rather than the underlying cause of those trends being the imitation of others' actions without full information. The momentum effect is more about the persistence of price movements and less about the informational basis of investment decisions.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (g) Describe behavioral finance and its potential relevance to understanding market anomalies.

Q.2884 Shares of Fition Corp. are trading at $67 today while analysts expect the price of the shares to reach $72 in 1 year and pay a dividend of $1.50. Given a required rate of return of 14%, Shares of Fition Corp. are *most likely*:

A. Underpriced by $2.53.

B. Overpriced by $2.53.

C. Underpriced by $3.84.

The correct answer is **B.**

Using the one-year holding period DDM, the value of the stock today is the present value of any dividends during the year plus the present value of the expected price of the stock at the end of the year.

$$\text{Price} = \frac{\$72}{1.14} + \frac{\$1.5}{1.14} = \$64.47$$

A stock is considered overpriced when the intrinsic value of the stock is less than the current market price of a stock

Since the current value of the stock is $67, the stock is overpriced by $2.53.

A is incorrect. It suggests that the shares are underpriced by $2.53. This conclusion would imply that the intrinsic value of the shares is higher than the current market price, which contradicts our calculation. The intrinsic value, as calculated, is lower than the market price, indicating that the shares are overpriced, not underpriced.

C is incorrect. It suggests that the shares are underpriced by $3.84. The calculation based on the DDM shows that the shares are overpriced by $2.53, not underpriced by any amount. This option fails to accurately reflect the relationship between the market price and the intrinsic value of Fition Corp. shares.

CFA Level I, Topic 6 - Equity, Learning Module 8: Equity Valuation: Concepts & Basic Tools. LOS (e): Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.3620 Country A is an emerging economy. The country's financial market is characterized by a low number of market participants and high transaction costs. Concerned by the increased volatility in its equity markets, the government recently banned the short-selling of securities. The financial market of country A is *most likely*:

A. inefficient.

B. strong form efficient.

C. semi-strong form efficient.

The correct answer is **A.**

The financial market of Country A is most likely inefficient due to several key factors that are indicative of market inefficiency. An efficient market is characterized by certain features that facilitate the fair and transparent pricing of securities, based on all available information. These features include:

1. A large number of market participants.
2. The free availability of information.
3. Less restrictions on trading such as allowing short-selling.
4. Lower transactions costs.

In the case of Country A, the market is described as having a low number of participants and high transaction costs.

This scenario limits the diversity of opinions and valuations, making it difficult for securities to be priced accurately and fairly. Additionally, the high transaction costs discourage trading, reducing market liquidity and further hindering the efficient pricing of securities. The government's recent ban on short-selling introduces a significant restriction on trading practices, preventing investors from expressing negative views on securities.

The combination of these factors suggests that Country A's financial market lacks the characteristics of an efficient market, making it most likely inefficient.

B is incorrect. Strong form efficiency implies that all information, including public, private (insider), and historical information, is fully reflected in stock prices. The characteristics of Country A's market, such as high transaction costs and restrictions on trading practices, are inconsistent with strong form efficiency, which would not exhibit such barriers to information flow and trading.

C is incorrect. Semi-strong form efficiency suggests that all publicly available information is reflected in stock prices. However, the description of Country A's market indicates significant barriers to information flow and trading, such as high transaction costs and a ban on short-selling. These barriers would likely prevent the market from efficiently incorporating all publicly available information into stock prices, contradicting the premise of semi-strong form efficiency.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.3622 The *most likely* explanation of the "January Effect" is that:

A. tax-loss selling occurs in January.

B. tax-loss buying occurs in December.

C. tax-loss selling occurs in December.

The correct answer is **C.**

The "January Effect" refers to the observed seasonal increase in stock prices during the month of January. This phenomenon is most commonly attributed to tax-loss selling in December, where investors sell securities that have declined in value over the year to realize capital losses for tax purposes.

These losses can offset capital gains taxes owed on other investments. After selling these securities in December, investors often reinvest in the market in January, leading to increased demand and, consequently, higher stock prices. This pattern suggests a strategic behavior among investors to optimize their tax situation, which inadvertently impacts the stock market dynamics.

A is incorrect. The statement that tax-loss selling occurs in January is inaccurate. Tax-loss selling primarily takes place in December, before the end of the tax year for most investors. This strategy allows investors to claim capital losses on their tax returns, reducing their taxable income.

The effect of this selling pressure is typically seen in the form of lower stock prices in December, followed by a rebound in January as investors re-enter the market.

B is incorrect. The option suggesting that tax-loss buying occurs in December misinterprets the nature of the January Effect. While it is true that investors engage in transactions at the end of the year for tax purposes, the critical activity is selling, not buying, to realize losses.

The concept of tax-loss buying does not directly contribute to the January Effect. Instead, the rebound or increase in stock prices in January can be attributed to the reinvestment of funds from the sales made in December, as well as other investors entering the market to take advantage of lower prices, leading to an overall increase in demand and subsequently, stock prices.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (f) Describe market anomalies.

Q.3623 Which of the following is *most likely* an assumption of the efficient market hypothesis?

A. Investors behave irrationally.

B. Investors mainly invest in single stocks.

C. Successive stock price changes are independent of each other.

The correct answer is **C.**

The Efficient Market Hypothesis (EMH) states that all available information is fully reflected in stock prices, and as such, it is impossible to consistently achieve higher returns than the overall market through stock selection or market timing.

A key assumption of the EMH is that successive stock price changes are independent of each other. This means that the price movement of a stock at any given moment is not influenced by its past price movements. This assumption is crucial because it underpins the theory that it is not possible to predict future stock prices based on past prices, making it impossible to consistently outperform the market through analysis or prediction of trends.

A is incorrect. These irrationalities are viewed as random and thus cancel each other out. The EMH does not deny the existence of irrational behavior but posits that such behavior does not systematically influence market prices in a way that can be exploited for consistent profit.

B is incorrect. The assumption that investors mainly invest in single stocks is not aligned with the principles of the EMH. The EMH assumes that investors diversify their investments across a broad portfolio of assets. Diversification is a key strategy for managing risk, as it reduces the impact of the performance of any single investment on the overall portfolio.

By investing in a diversified portfolio, investors can achieve a more stable return over time, which is consistent with the rational behavior assumed by the EMH. The focus on portfolio investment rather than single stocks reflects the understanding that it is not possible to consistently pick "winning" stocks in an efficient market, as all known information is already reflected in stock prices.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (c) Explain factors that affect a market's efficiency.

Q.3624 For efficient market conditions to hold:

A. every market participant must be well informed.

B. a few market participants must be well informed.

C. the majority of market participants must be well informed.

The correct answer is **B.**

The efficient market hypothesis (EMH) posits that securities' prices in financial markets fully incorporate all available information. According to this theory, it is not necessary for every market participant to be well informed for a market to be efficient. Instead, the presence of a few well-informed participants is sufficient to ensure that any new information is quickly reflected in securities' prices.

These informed participants, through their trading activities, help adjust prices to reflect new information, thereby eliminating any profit-making opportunities that could arise from possessing this information. This process ensures that prices at any given time represent the true value of the securities, based on the currently available information.

A is incorrect. This option suggests that every market participant must be well informed for efficient market conditions to hold. However, the efficient market hypothesis does not require all participants to be well informed.

Instead, it relies on the idea that as long as there are some well-informed participants, they will act on new information in a way that quickly adjusts prices to reflect this information. The actions of these informed participants ensure market efficiency, even if the majority of market participants are not well informed.

C is incorrect. This option suggests that the majority of market participants must be well informed for the market to be efficient. Similar to option A, this is a misunderstanding of the efficient market hypothesis.

The key to market efficiency is not the proportion of informed participants but the presence of enough informed participants to act on and incorporate new information into prices. Even with a minority of participants being well informed, their trading activities based on new information can ensure that prices reflect all available information, thereby maintaining market efficiency.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (c) Explain factors that affect a market’s efficiency.

Q.3625 An equity research analyst is trying to test the efficient market hypothesis. He selects three similar mutual funds and compares the fund's return with the market return. Exhibit 1 summarizes the information collected by the analyst.

Exhibit 1: Return Generated

Period	Mutual Fund 1	Mutual Fund 2	Mutual Fund 3	Market
Year 1	12%	7%	11%	10%
Year 2	11%	14%	14%	13%
Year 3	9%	13%	10%	8%
Year 4	4%	11%	10%	9%

The analyst then makes the following comment:
"As return generated by Mutual Fund 3 has exceeded market return in all the four years, an investor must invest in Mutual Fund 3 to generate abnormal returns."

If the efficient market hypothesis holds, then an investor should *most likely* invest in:

A. Mutual Fund 1.

B. Mutual Fund 3.

C. any of the three mutual funds.

The correct answer is **C.**

The Efficient Market Hypothesis (EMH) states that all available information is already reflected in stock prices, and thus, it is impossible to consistently achieve higher returns than the overall market through stock selection or market timing.

According to EMH, any outperformance observed in one period is likely due to chance rather than skill, and it is improbable for any investor or fund manager to consistently beat the market over the long term. Therefore, if the EMH holds true, the choice of mutual fund should not significantly impact the expected returns, as all funds would, on average, perform in line with the market after adjusting for risk.

Option C is the correct choice because it aligns with the principles of the Efficient Market Hypothesis. EMH suggests that investors cannot consistently achieve returns higher than the market average through either the selection of individual securities or mutual funds, as prices fully reflect all available information.

A is incorrect. Choosing Mutual Fund 1 based on its past performance does not guarantee future returns. The EMH suggests that any above-market returns achieved by Mutual Fund 1 in certain periods are likely due to luck rather than the fund manager's ability to consistently predict or exploit market inefficiencies. Over time, the performance of Mutual Fund 1 is expected to align with market returns, making it no more attractive than any other fund from an EMH perspective.

B is incorrect. All known information is already reflected in asset prices. Therefore, the past performance of Mutual Fund 3 does not provide a reliable basis for expecting future outperformance.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.3626 If the efficient market hypothesis holds, an investor should *most likely*:

A. follow a "buy and hold" strategy.

B. invest in high beta stocks to generate abnormal returns.

C. frequently churn his portfolio to generate an abnormal return.

The correct answer is **A.**

If the Efficient Market Hypothesis (EMH) holds true, the most appropriate strategy for an investor is to adopt a "buy and hold" approach. The EMH posits that all available information is already reflected in stock prices, meaning that it is impossible to consistently achieve higher returns than the market average through stock selection or market timing.

Under the EMH, since prices are always fair, the best strategy for an investor is to buy a diversified portfolio of stocks and hold them over the long term. This approach minimizes transaction costs and avoids the pitfalls of trying to time the market or select undervalued stocks, which, according to the EMH, does not yield consistent above-market returns due to the efficient nature of the market.

B is incorrect. Investing in high beta stocks to generate abnormal returns is not a viable strategy under the Efficient Market Hypothesis. High beta stocks are more volatile and may offer higher returns, but the EMH suggests that these potential returns are already priced in based on available information.

Therefore, selecting high beta stocks in anticipation of abnormal returns does not align with the EMH, which posits that no investor can consistently achieve higher than market-average returns through any selection strategy due to market efficiency.

C is incorrect. Frequently churning a portfolio in an attempt to generate abnormal returns is counterproductive in an efficient market. The EMH asserts that since all available information is already reflected in stock prices, attempts to outperform the market through frequent buying and selling are unlikely to succeed and will incur higher transaction costs.

This strategy contradicts the principles of the EMH, which advocate for a more passive investment approach, recognizing that market prices are fair and reflect all known information.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.3627 During a presentation conducted by a research team in Albania, an equity research analyst makes the following comment:
"The majority of market participants do not keep track of the country's macroeconomic variables. Therefore, I believe that the stock prices will not fully reflect all available information."

Which of the following statements is *most* accurate?

If the efficient market hypothesis holds, then the stock prices will fully reflect all information:

A. if no market participants keep track of the country's macroeconomic variables.

B. if all market participants keep track of the country's macroeconomic variables.

C. even if only a few market participants keep track of the country's macroeconomic variables.

The correct answer is **C.**

The Efficient Market Hypothesis (EMH) states that stock prices fully incorporate all available information. This theory suggests that it is impossible to consistently achieve higher returns than the overall market because stock prices already reflect all known information.

According to EMH, even if only a few market participants are aware of certain macroeconomic variables or any other type of information, the actions of these informed participants will influence stock prices to reflect this information.

This is because these informed traders will buy or sell stocks based on their knowledge, which in turn will move the stock prices in a direction that reflects this information before others can act on it. Therefore, the market does not require every participant to be aware of all information for stock prices to fully reflect available information.

A is incorrect. The EMH relies on the premise that stock prices adjust to reflect new information as it becomes available. If no one is aware of or acts on macroeconomic variables, then this information cannot be reflected in stock prices. However, EMH asserts that it only takes a few informed participants to adjust their trading based on new information for stock prices to reflect this information.

B is incorrect. The EMH does not require all market participants to keep track of macroeconomic variables or any other type of information for stock prices to fully reflect all available information.

Instead, the hypothesis suggests that as long as there are some informed participants who act on their exclusive information, their trading activity is sufficient to adjust stock prices to reflect this information.

The presence of these informed traders ensures that stock prices incorporate all known information, even if the majority of market participants are not aware of it.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.3628 The shares of closed-end investment funds trade at a discount from its net asset value (NAV). This is *most likely* due to:

I. tax liabilities associated with unrealized capital gains and losses.
II. management fees.
III. the illiquidity of the fund's shares.

A. I & II

B. I & III

C. II & III

The correct answer is **B.**

The shares of closed-end investment funds often trade at a discount from their net asset value (NAV) primarily due to tax liabilities associated with unrealized capital gains and losses, and the illiquidity of the fund's shares.

Closed-end funds are unique in that they issue a fixed number of shares at an initial public offering, and these shares then trade on the open market. This structure can lead to the shares trading at a price that is different from the fund's NAV.

Investors may be concerned about the potential tax implications of these unrealized amounts, which can affect the desirability and thus the price of the fund's shares. Additionally, the illiquidity of the fund's shares, due to the fixed number of shares and potentially lower trading volumes compared to other securities, can make it more challenging for investors to buy or sell shares at their preferred prices, leading to a discount in the market price relative to the NAV.

A is incorrect. This option suggests that management fees are a primary reason for the discount in closed-end fund shares relative to their NAV. While management fees are a consideration for investors in any managed fund, they are not a distinguishing factor that would cause closed-end funds specifically to trade at a discount. Both closed-end and open-end funds incur management fees, and these fees are typically factored into the NAV of the fund.

C is incorrect. As explained, management fees are a common expense across both closed-end and open-end funds and are accounted for in the NAV calculation. The inclusion of management fees as a reason for the discount overlooks the more significant factors of tax liabilities associated with unrealized capital gains and losses, and the illiquidity of the fund's shares, which are more directly related to the trading discount observed in closed-end funds.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (f) Describe market anomalies.

Q.3629 If the markets are strong-form efficient, then investors can *most likely*:

A. generate abnormal returns based on public information.

B. generate abnormal returns based on private/insider information.

C. fail to generate abnormal returns based on private/insider information.

The correct answer is **C.**

In the context of strong-form market efficiency, it is considered that all information, whether public or private (insider information), is already reflected in stock prices. This implies that no investor, regardless of the information they possess, can consistently achieve returns that outperform the market average. Strong-form efficiency is the most stringent version of the Efficient Market Hypothesis (EMH), suggesting that markets are perfectly efficient and that it is impossible to achieve higher returns without assuming higher risk.

A is incorrect. Under strong-form efficiency, even public information cannot be used to generate abnormal returns. The premise of strong-form efficiency is that all information, including historical stock prices, public news, and even insider information, is already incorporated into stock prices. Therefore, using public information to achieve above-market returns would be futile since the market has already adjusted for this information.

B is incorrect. It suggests that investors can generate abnormal returns based on private or insider information. This contradicts the principle of strong-form market efficiency, which asserts that stock prices fully reflect all information, public and private. In a strong-form efficient market, even possessing insider information would not provide an investor with an advantage, as the market price would have already adjusted to reflect this information. The hypothesis posits that no one can consistently achieve higher returns on a risk-adjusted basis by using any information, as the market prices are always fair and fully informed.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (d) Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Q.3630 The financial markets of country AAA is classified as weak-form efficient. Which of the following is *most likely* correct regarding the financial markets of AAA?

A. Technical analysts can never generate abnormal returns.

B. Technical analysts can generate abnormal returns consistently.

C. Technical analysts cannot generate abnormal returns consistently.

The correct answer is **C.**

In a weak-form efficient market, such as that of country AAA, the prices of securities fully reflect all historical trading information. This classification implies that past price movements and volume data are incorporated into current stock prices, making it impossible for investors to achieve consistent abnormal returns through technical analysis.

Technical analysis involves the study of past market data, primarily price and volume, to forecast future price movements. Since all historical information is already reflected in stock prices in a weak-form efficient market, any attempt to use this information for predicting future price movements would not yield results better than random chance over time.

A is incorrect. This option suggests that technical analysts can never generate abnormal returns. While it is challenging to achieve consistent abnormal returns in a weak-form efficient market through technical analysis, it is not entirely impossible. There may be short-term anomalies or market inefficiencies that skilled analysts could exploit. However, these opportunities are rare and not consistent enough to rely on as a strategy for generating abnormal returns.

B is incorrect. All historical price and volume information is already reflected in the current market prices. Therefore, using technical analysis to predict future price movements and generate abnormal returns on a consistent basis is highly unlikely. The market's efficiency at incorporating past trading information into current prices negates the advantage that technical analysis might provide.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.3631 Which of the following will *least likely* increase market efficiency?

A. Reducing the securities transaction tax from 1.5% to 0.75%.

B. Allowing derivative transactions to be used only for hedging purposes.

C. Increasing the cap on foreign shareholding in domestic companies from 50% to 75%

The correct answer is **B.**

Option B, which suggests allowing derivative transactions to be used only for hedging purposes, would least likely increase market efficiency. Market efficiency is enhanced when there are fewer restrictions on trading activities, allowing for a more fluid and dynamic market environment.

Derivatives, such as options and futures, play a crucial role in the financial markets by providing mechanisms for risk management, price discovery, and speculative opportunities. Restricting their use solely to hedging purposes limits these functions, potentially reducing the liquidity and depth of the market.

This constraint could deter market participants, including speculators who contribute to market liquidity and efficiency by taking on risk from those looking to hedge. Moreover, derivatives are instrumental in the price discovery process, helping to reflect all available information in asset prices more accurately. Limiting their use could impede this process, thus detracting from market efficiency.

A is incorrect. Reducing the securities transaction tax from 1.5% to 0.75% is likely to increase market efficiency.

Transaction costs, including taxes, can significantly impact trading decisions and market participation. High transaction costs may deter trading and liquidity provision, leading to wider bid-ask spreads and less efficient price discovery.

By reducing the securities transaction tax, trading becomes more cost-effective, encouraging greater participation from both retail and institutional investors. This increased activity can enhance liquidity, narrow bid-ask spreads, and improve the market's ability to reflect new information in prices promptly, all of which are hallmarks of an efficient market.

C is incorrect. Increasing the cap on foreign shareholding in domestic companies from 50% to 75% is likely to increase market efficiency. This policy change would allow more foreign investment into the domestic market, broadening the investor base and increasing the amount of capital available for domestic companies.

A larger pool of investors, including those from different geographical regions with diverse perspectives and information, contributes to the market's depth and liquidity. Furthermore, foreign investors often bring additional scrutiny and demand for transparency, which can lead to better corporate governance and more accurate pricing of securities. By facilitating greater foreign participation, the market becomes more competitive and efficient in processing and reflecting information in asset prices.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (c) Explain factors that affect a market’s efficiency.

Q.3632 In an efficient market, the market price of an asset is *most likely*:

A. close to its intrinsic value.

B. equal to its intrinsic value.

C. perceived to be its intrinsic value.

The correct answer is **C.**

In an efficient market, the concept of intrinsic value plays a crucial role in understanding how assets are priced. The intrinsic value of an asset is a theoretical value that reflects all current and potential future information that could impact the asset's value. In an efficient market, it is assumed that all available information is already reflected in the market price of an asset.

Therefore, the market price is perceived by investors to accurately represent the asset's intrinsic value. This perception is crucial because it implies that the market operates under the assumption that prices are fair and reflect all known information, making it difficult to consistently achieve higher returns without taking on additional risk.

A is incorrect. Stating that the market price of an asset is close to its intrinsic value implies a degree of imprecision that is not characteristic of an efficient market. In an efficient market, the prices of assets are expected to fully incorporate all available information.

Therefore, suggesting that the price is only close to the intrinsic value undermines the concept of market efficiency, which posits that prices at any given moment are the best available estimates of intrinsic value.

B is incorrect. It suggests that the market price of an asset is exactly equal to its intrinsic value at all times. While this statement aligns closely with the concept of an efficient market, it overlooks the nuance that in practice, the market's perception of an asset's intrinsic value is what guides pricing.

The intrinsic value is a theoretical construct that cannot be precisely calculated due to the subjective nature of estimating future cash flows and the appropriate discount rate.

Therefore, in an efficient market, it is more accurate to say that the market price is perceived to be the intrinsic value, acknowledging the role of market participants' perceptions and the potential for minor, short-lived deviations from true intrinsic value.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.3633 The efficient market hypothesis states that portfolio managers can *most likely*:

A. beat the market consistently.

B. beat the market using insider information.

C. beat the market sometimes just by being lucky.

The correct answer is **C.**

The Efficient Market Hypothesis (EMH) posits that all available information is already reflected in stock prices, and thus, it is impossible to consistently achieve higher returns than the overall market through stock selection or market timing.

According to EMH, any excess returns achieved by portfolio managers can be attributed to luck rather than skill or insider information. This hypothesis is grounded in the belief that markets are efficient, and prices on traded assets, such as stocks, bonds, or property, already incorporate and reflect all known information.

A is incorrect. All available information is already factored into asset prices, consistently outperforming the market through either skill or analysis is virtually impossible. The hypothesis suggests that any instances of beating the market are more likely due to chance rather than any systematic or analytical advantage.

This is because any new information that could potentially be used to gain an advantage is quickly absorbed by the market, rendering it ineffective for consistent outperformance.

B is incorrect. While insider information might theoretically provide an advantage in an inefficient market, the Efficient Market Hypothesis, particularly in its strong form, asserts that even insider information is reflected in stock prices. Therefore, according to EMH, using insider information would not consistently lead to outperforming the market.

Moreover, trading on insider information is illegal in many jurisdictions and is considered unethical in the investment community. The premise of EMH is that markets are efficient to the extent that no information, public or private (insider), can give an investor a consistent edge over the market.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.3634 The slow adjustment of stock prices to an unexpected earnings announcement is *most* likely due to:

A. inefficient markets.

B. studies not taking into account the transaction costs and risk.

C. slow dissemination of information among the market participants.

The correct answer is **B.**

The slow adjustment of stock prices to unexpected earnings announcements is most likely due to studies not taking into account transaction costs and unsystematic risk. This perspective highlights the complexities involved in the price adjustment process following new information releases.

Transaction costs, including brokerage fees and taxes, can deter investors from immediately acting on new information, thereby delaying the price adjustment process. Additionally, unsystematic risk, which is specific to a company or industry, can further complicate investors' responses to earnings announcements.

Investors may need time to assess the implications of the new information on the company's risk profile, thus contributing to the slow adjustment of stock prices.

A is incorrect. Inefficient markets as a reason for the slow adjustment of stock prices to unexpected earnings announcements might seem plausible at first glance. However, this explanation overlooks the role of transaction costs and unsystematic risk in the price adjustment process.

While market inefficiency can contribute to delays in price adjustments, it is the overlooking of transaction costs and unsystematic risk in studies that more directly explains the observed slow adjustments. Market inefficiency might be a broader context in which these factors operate, but it is not the most direct cause.

C is incorrect. Slow dissemination of information among market participants is another potential explanation for the slow adjustment of stock prices to unexpected earnings announcements. However, this explanation does not fully account for the complexities involved in the adjustment process.

In today's digital age, information dissemination is relatively fast, and markets often react quickly to new information. The more nuanced issue lies in how transaction costs and unsystematic risk are factored into the decision-making process by investors. These elements can delay the incorporation of new information into stock prices, beyond the simple speed of information dissemination.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (f) Describe market anomalies.

Q.3635 Assume that you are a researcher conducting an empirical experiment on a trading strategy using time series of returns. You find statistical evidence that there are abnormal returns. Which of the following *most likely* be the name given to your finding?

A. Evidence of market anomaly.

B. Evidence of market inefficiency.

C. Evidence of future abnormal returns.

The correct answer is **A.**

Finding significant abnormal returns does not inherently imply that markets are inefficient or that the technique can be applied to future periods to achieve abnormal returns. Abnormal returns are called market anomalies since, rather than being the product of market inefficiency, they may result from the model used to forecast expected returns. They may also result from underestimating transaction costs or other expenses associated with executing the strategy.

Time series analysis includes the calendar effect and the momentum/overreaction effect; Cross-sectional analysis includes the size effect and the value effect.

Other anomalies include closed-end fund discounts, earnings surprises, and initial public offerings.

Anomalities explained

Size effect - small companies (small-cap stocks) tend to outperform large companies(large-cap stocks), contrary to what is expected in the market.

Value effect – Value stocks (Stocks with a below-average price to earnings and market book ratios and above-average dividend yields) have consistently outperformed growth stocks, which is contrary to how investors expect markets to perform.

Calendar effect - There are significant differences in returns on different days, weeks, or months of the year. The most common calendar effect is the January effect (Stocks tend to outperform in January).

Momentum/Overreaction effect – The momentum effect refers to the empirically observed tendency for rising market prices to keep rising and falling market prices to keep falling. The momentum effect suggests that investors should buy past winners and sell past losers.

The overreaction effect contradicts the momentum effect. The overreaction effect states that stocks that have performed poorly in the past three to five years demonstrate superior performance over the next three to five years compared to stocks that have performed well in the past. The overreaction effect suggests that investors should buy past losers and sell past winners.

Closed-end fund discounts – Sometimes, closed-end funds sell at a discount to their net asset value. Tax inefficiencies and expectations of manager underperformance may partially explain this anomaly.

Earnings surplus – Stock prices tend to underreact to new information allowing for a momentum trading strategy to be potentially profitable.

Initial public offerings – By purchasing stocks at their initial public offering, investors tend to earn excess returns.

B is incorrect. While evidence of market inefficiency might seem like a plausible conclusion from finding abnormal returns, it is not the most direct interpretation. Market inefficiency refers to a broader concept where prices do not always accurately reflect the value of an asset due to various factors such as transaction costs, restrictions on short selling, and information asymmetry.

Although finding abnormal returns could suggest inefficiencies, it is more accurately described as an anomaly, which is a specific instance or condition under which the general assumption of market efficiency fails.

C is incorrect. Evidence of future abnormal returns is a misleading interpretation of the findings. While discovering abnormal returns in historical data might suggest the potential for similar strategies to yield abnormal returns in the future, it does not guarantee such outcomes.

Financial markets are dynamic, and factors contributing to past anomalies may change or become well-known, leading to an adjustment in prices that eliminates the opportunity for abnormal returns.

Therefore, while the discovery of abnormal returns is significant, it should not be directly equated with the expectation of future abnormal returns without considering the changing market conditions and the possibility of adaptive market behavior.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (f) Describe market anomalies.

Q.3636 During a classroom discussion on efficient markets, a student makes the following comment:
"Dot-com bubble indicates that the market is not efficient. An efficient market would never bid the stock prices to such irrational levels."

Which of the following is the *most accurate* statement?

A. The comment made by the student is correct.

B. Efficient markets may under-react, but rarely never overreacts.

C. Efficient markets may overreact or under-react, but on average markets are efficient.

The correct answer is **C.**

The concept of market efficiency is central to understanding how prices of securities reflect available information. The Efficient Market Hypothesis (EMH) posits that securities' prices fully reflect all available information at any given time.

However, the occurrence of events such as the Dot-com bubble challenges the notion of market efficiency by suggesting that prices can deviate significantly from their intrinsic values due to investor irrationality or other factors.

The most accurate statement in this context is that efficient markets may overreact or under-react, but on average, markets are efficient. This perspective acknowledges the possibility of discrepancies in the short term while maintaining that, over the long term, prices tend to reflect the underlying fundamentals of securities.

A is incorrect. It suggests that the occurrence of the Dot-com bubble is definitive proof that markets are not efficient. While it's true that the Dot-com bubble involved significant overvaluation of stocks, particularly in the technology sector, this does not necessarily invalidate the concept of market efficiency.

The bubble can be seen as a result of speculative excesses and irrational exuberance, which, while they may lead to temporary mispricings, do not necessarily mean that the market is fundamentally inefficient.

B is incorrect. It suggests that efficient markets may under-react but rarely overreact. This statement underestimates the potential for markets to overreact to information, whether due to psychological biases, herd behavior, or other factors. Both overreactions and under-reactions can occur in efficient markets, reflecting the dynamic nature of information processing and investor behavior.

The key point is that, despite these short-term fluctuations, the market mechanism works to incorporate all available information into prices, leading to efficiency on average over the long term.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (e) Explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

Q.3637 The efficient market hypothesis *most likely* requires that:

A. the overall market must be rational.

B. every market participant must be rational.

C. only a few market participants must be rational.

The correct answer is **A.**

This option aligns with the principles of the EMH, which does not necessitate that every participant in the market behaves rationally. Instead, the hypothesis suggests that as long as there are enough rational participants who act on new information, the market will remain efficient. These rational participants help ensure that prices reflect all available information, thereby contributing to the market's efficiency. The presence of some irrational participants does not negate the hypothesis, as their impact is diluted by the actions of the rational majority.

B is incorrect. The statement that the overall market must be rational is a misunderstanding of the EMH. The hypothesis does not require that the market itself exhibits rationality as an entity. Instead, it is based on the idea that the collective actions of market participants, who are assumed to act on available information, lead to an efficient market where prices reflect all known information. The market's efficiency is a result of the aggregate of individual actions rather than an inherent characteristic of the market itself.

C is incorrect. The EMH does not require that all participants act rationally at all times. In fact, the hypothesis allows for irrational behavior by some market participants, as long as their actions are offset by rational decisions made by others. The key aspect of the EMH is that, on average, the market reflects all available information in the prices of securities, not that every individual makes rational decisions.

CFA Level I, Topic 6 - Equity, Learning Module 3: Market Efficiency. LOS (c): Explain factors that affect a market's efficiency.

Q.3638 After visiting one of the stores of a large retail corporation, Pharell Sanders, the general manager of Vizion Hedge Fund, makes the following comment:
"The store layout, cleanliness, and the prompt service show great attention to detail. I plan to invest in the company; if the company is well-organized, the investment opportunity has to be good."

Sanders is *most likely* exhibiting the:

A. narrow framing.

B. disposition effect.

C. representativeness bias.

The correct answer is **C.**

Representativeness bias is a cognitive bias where individuals make judgments about the probability of an event under uncertainty based on how much it resembles their existing stereotypes or patterns, rather than considering all relevant information.

In this scenario, Sanders equates the operational efficiency and aesthetic appeal of a single store with the overall investment potential of the company. This leap from operational characteristics to investment quality does not necessarily consider the company's financial health, market position, competitive advantages, or any other critical investment analysis metrics.

By relying on a heuristic that 'if a company is well-organized, the investment opportunity has to be good,' Sanders is potentially overlooking other crucial factors that determine an investment's success.

A is incorrect. Narrow framing refers to the tendency of individuals to view problems or decisions in isolation without considering the broader context or the impact on the overall portfolio.

In this case, Sanders's decision-making process does not specifically indicate that he is viewing the investment in isolation from a broader portfolio context. Instead, he is making an inference about the company's investment potential based on its operational characteristics, which is more indicative of representativeness bias.

B is incorrect. The disposition effect is the tendency of investors to sell assets that have increased in value while holding onto assets that have decreased in value. This behavior is driven by the psychological inclination to avoid realizing losses and to secure gains.

Sanders's decision to invest in the company based on his observations of the store does not reflect a preference for selling winning investments or holding losing ones. Instead, his decision-making process is influenced by his perception of the company's operational efficiency as a proxy for its overall investment potential, which aligns with representativeness bias.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (g) Describe behavioral finance and its potential relevance to understanding market anomalies.

Q.3639 Sarah Wallace, an equity research analyst, conducts an investor awareness program centered around the theme of "Behavioral Finance and the Art of Investing." An extract of her lecture is as shown below.
"Stock prices are governed by the random walk theory, which states that we cannot predict stock price movements. Therefore, stock prices are independent of each other; the price of a security tomorrow is independent of the security price today."

The behavioral bias *most likely* to be addressed by the lecture is the:

A. anchoring bias.

B. gambler's fallacy.

C. mental accounting.

The correct answer is **B.**

The gambler's fallacy is particularly relevant in the context of stock market investments, where some investors might believe that a stock that has been increasing or decreasing in value over a series of days is due for a reversal, despite the fact that each day's price movement is independent of the previous day's movements.

This bias can lead to suboptimal investment decisions, such as selling a stock after a series of gains due to the mistaken belief that a decline is imminent, or conversely, buying a stock after a series of losses under the assumption that a rebound is due.

A is incorrect. Anchoring bias refers to the tendency to rely too heavily on the first piece of information encountered (the "anchor") when making decisions. In the context of investing, this could manifest as an investor placing undue emphasis on the initial price at which they encountered a stock, which might influence their perception of subsequent price movements or valuation assessments.

While anchoring can affect investment decisions, it is not directly related to the belief in patterns of random events, which is the central theme of Wallace's lecture on the random walk theory and the independence of stock price movements.

C is incorrect. Mental accounting is a concept in behavioral finance where individuals categorize their money into different 'accounts' based on subjective criteria, such as the source of the money or its intended use. This can lead to irrational financial behaviors, such as treating money differently based on its origin (e.g., being more willing to spend "found" money than earned money) or failing to optimize the overall utility of their resources.

While mental accounting can influence how individuals allocate and perceive their investments, it does not specifically address the misconception about the predictability of stock price movements based on past trends, which is the focus of the gambler's fallacy and the subject of Wallace's lecture.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (g) Describe behavioral finance and its potential relevance to understanding market anomalies.

Q.3640 The shares of AAA Pharmaceuticals Limited made a lifetime high at $265. A week later, the company recently received a US FDA warning letter regarding deficiencies observed in the company's drug manufacturing processes. As a result, the shares of the company crashed and currently trade at around $120. Ankit Vishnu, a retail investor who tracks the company's shares, made the following comment:
"The share's price dropped from a lifetime high of $265 to $120, a drop of 55% making it a strong 'buy."

The behavioral bias exhibited by Vishnu is *most likely* the:

A. anchoring bias.

B. conservatism bias.

C. mental accounting bias.

The correct answer is **A.**

Ankit Vishnu's decision to consider the shares of AAA Pharmaceuticals Limited a strong 'buy' after a significant drop in price due to a US FDA warning letter is a classic example of anchoring bias. Anchoring bias occurs when an individual relies too heavily on an initial piece of information (the "anchor") when making decisions.

In this case, Vishnu is anchored to the stock's lifetime high of $265, using it as a reference point to evaluate the current price of $120 as attractively low, without adequately considering the substantial negative impact the FDA warning letter could have on the company's future earnings and stock price. This bias leads him to overlook the fundamental change in the company's outlook and potentially exposes him to significant investment risk.

B is incorrect. The statement that the share price dropped from a lifetime high of $265 to $120, a drop of 55%, making it a strong 'buy' is based on the anchoring bias, not conservatism bias. Conservatism bias refers to the tendency of individuals to insufficiently revise their beliefs when presented with new evidence.

In this scenario, Vishnu is not showing reluctance to update his beliefs in light of new information; rather, he is overly focused on the past high price as a benchmark for making investment decisions, which is indicative of anchoring bias.

C is incorrect. Mental accounting bias involves categorizing money into different accounts mentally and treating these accounts differently, affecting financial decision-making. Vishnu's decision-making process does not involve segregating his investments or money into different mental accounts but is instead influenced by his fixation on the stock's previous high price.

Therefore, his behavior does not demonstrate mental accounting bias but rather shows a clear example of anchoring bias, where the initial high price of the stock serves as the anchor for his investment decision, despite significant negative developments.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 3: Market Efficiency, LOS (g) Describe behavioral finance and its potential relevance to understanding market anomalies.

Q.3869 Volume information will *most likely* have predictive power on the future direction of security prices in which of the following forms of market efficiency?

A. Semi-strong.

B. Weak, semi-strong, and strong form.

C. Neither the weak, semi-strong nor the strong form.

The correct answer is **A.**

In the context of market efficiency, volume information can potentially have predictive power on the future direction of security prices in the semi-strong form of market efficiency. The semi-strong form of market efficiency posits that all publicly available information, including trading volume data, is already reflected in stock prices.

Investors who can analyze and interpret volume information swiftly, before it is fully reflected in the price, might gain an advantage. This does not contradict the semi-strong form of market efficiency as it acknowledges the role of new information in price adjustments.

B is incorrect. Suggesting that volume information has predictive power in weak, semi-strong, and strong forms of market efficiency is inaccurate.

In weak-form efficiency, prices reflect all past trading information including volume and price history, and it is believed that no amount of analysis of past price movements or trading volumes can provide an investment edge.

In strong-form efficiency, all information, both public and private (insider information), is already reflected in stock prices, leaving no room for any information, including volume, to provide predictive power on future price movements.

C is incorrect. Stating that volume information will have no predictive power in neither the weak, semi-strong, nor the strong form of market efficiency overlooks the nuances of how information is processed in different forms of market efficiency.

While it is true that in strong-form efficiency, all information is already priced in, making it impossible for volume information to offer any predictive power, the semi-strong form allows for the possibility that new public information (including volume data) can momentarily offer predictive insights before it is fully reflected in the price.

CFA Level I, Topic 6 - Equity, Learning Module 3: Market Efficiency. LOS (d): Contrast weak-form, semi-strong-form, and strong-form market efficiency.

Learning Module 4: Overview of Equity Securities

Q.110 LagRos Ltd. has total assets of $3.2 million and liabilities of $1.2 million. If its shares trade for $25, and 70,000 shares are outstanding in the open market, then LagRos' book value is most likely:

A. $1,750,000.

B. $2,000,000.

C. $3,200,000.

The correct answer is B.

Book value refers to the net difference between a company's assets and liabilities. It is the amount of money that shareholders of a company would receive if the company were to be liquidated. Book value is different from market value. Market value is the value of a company on the financial market, according to market participants. It is a company's worth determined by the total value of the company's outstanding shares in the market.

$$\begin{aligned}\text{Book value} &= \text{Total assets} - \text{Total liabilities}\\ &= \$3.2\text{ million} - \$1.2\text{ million}\\ &= \$2,000,000\end{aligned}$$

Book value doesn't take into account market prices. Market value does.

A is incorrect. It represents market value, i.e., the total value of the company's outstanding shares in the market.

C is incorrect. It represents the value of the company's assets.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (a) Describe characteristics of types of equity securities.

Q.111 Which of the following is *most likely* correct regarding callable common shares? Given callable common shares:

A. shareholders have the right to buy more shares at a pre-established price.

B. the company has the right to buy back the shares at a pre-established price.

C. shareholders have the right to sell back the shares at a pre-established price.

The correct answer is **B.**

Callable common shares are a specific type of equity security that grants the issuing company the right, but not the obligation, to repurchase the shares from shareholders at a predetermined price within a certain period.

This feature is often included in the share structure to provide the company with flexibility in managing its capital structure and to potentially retire shares when it is financially advantageous to do so. The predetermined price is usually set at the time of the share issuance and is intended to offer a level of protection to investors against the company calling the shares at an inopportune time.

This can be strategically beneficial for the company, for example, if the shares are trading below the call price and the company wishes to reduce the number of shares outstanding to increase earnings per share or if the company wants to adjust its capital structure.

A is incorrect. This option confuses callable common shares with rights offerings or warrants. In a rights offering, existing shareholders are given the right to purchase additional shares at a pre-established price, usually at a discount to the current market price.

This is done to raise additional capital while giving existing shareholders the opportunity to maintain their proportional ownership in the company. Warrants are similar in that they give the holder the right to buy the company's stock at a specified price before the expiry date. Neither of these instruments involves the company having the right to buy back shares.

C is incorrect. This option describes putable shares, not callable shares. Putable shares grant the shareholder the right, but not the obligation, to sell the shares back to the company at a predetermined price.

This feature is designed to protect the investor, allowing them to exit their investment at a known price if certain conditions are met or if the investor chooses to do so. While putable shares offer a form of downside protection to the shareholder, callable shares provide the company with strategic flexibility in managing its shares outstanding.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (a) Describe characteristics of types of equity securities.

Q.112 Which of these is/are *least likely* common characteristics of private equity securities?
I. Illiquid
II. Giving the company's management time to focus on long-term value creation
III. Liquid

A. III.

B. I & II.

C. II & III.

The correct answer is **A.**

The illiquid nature of private equity is a defining feature, contrasting sharply with the liquidity found in public equity markets where securities can be bought and sold with relative ease. The lack of liquidity in private equity is a critical consideration for investors, as it impacts their ability to exit investments and realize gains within a short timeframe. Therefore, identifying liquidity as the least likely characteristic of private equity securities is accurate.

B is incorrect. Private equity investments are not traded on public exchanges, making them difficult to sell quickly. This illiquidity is a fundamental aspect of private equity, as it allows investors and company management to focus on long-term growth and value creation without the pressures of short-term market fluctuations. The illiquid nature of these investments requires investors to commit their capital for extended periods, typically several years, which aligns with the strategic goals of private equity.

C is incorrect. One of the primary advantages of private equity investment is that it provides company management with the opportunity to concentrate on long-term value creation. Without the constant scrutiny and performance pressures from public market investors, private equity-backed companies can pursue strategic initiatives, invest in research and development, and undertake restructuring or expansion efforts that may take time to yield financial results. This focus on long-term growth is a key feature of private equity investing.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (c) Compare and contrast public and private equity securities.

Q.115 Which of the following statements is *least likely* accurate?

A. Management actions can directly influence book value.

B. Management actions have an indirect impact on market value.

C. Management actions do not influence book value or market value.

The correct answer is **C.**

Management decisions and actions have a significant impact on both the book value and the market value of a company. Book value, which represents the net asset value of a company, can be directly affected by management through decisions that alter the company's assets and liabilities. For instance, decisions related to capital expenditure, acquisitions, or debt management can lead to changes in the company's assets and liabilities, thereby affecting its book value.

Similarly, management actions can indirectly influence the market value of a company, which reflects the collective perceptions of investors about the company's future prospects. Strategic decisions, financial performance, and future outlook communicated by the management can influence investor sentiment and, consequently, the market price of the company's shares.

A is incorrect. Management decisions regarding investments, asset disposals, or changes in financial structure directly impact the assets and liabilities on the balance sheet, thereby affecting the book value. For example, if a company's management decides to sell a significant asset, this would directly reduce the company's total assets and, assuming liabilities remain constant, decrease the book value.

B is incorrect. The market value of a company is determined by investor perceptions and expectations about the company's future earnings and growth potential. Management decisions related to strategic direction, financial management, and operational efficiency can influence these perceptions. Conversely, poor management decisions can lead to a loss of investor confidence and a decrease in market value.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (g) Contrast the market value and book value of equity securities.

Q.977 Putable common shares will *most likely* benefit the:

A. firm.

B. brokers.

C. shareholders.

The correct answer is **C.**

Putable common shares provide a significant benefit to shareholders by offering them the right to sell their shares back to the issuing company at a predetermined price. This feature is particularly advantageous in scenarios where the market price of the shares falls below this predetermined price, allowing shareholders to limit their potential losses.

Essentially, putable shares act as a form of protection for investors, offering them a way to exit their investment without incurring significant losses in a declining market. This safety net can make putable common shares an attractive investment option, as it provides a measure of security against market volatility and downturns.

A is incorrect. While issuing putable common shares might seem beneficial to a firm by potentially making its shares more attractive to investors, it primarily benefits the shareholders. For the firm, this feature can represent a financial obligation, as it requires the company to buy back shares at the predetermined price, which could be higher than the market price.

This obligation can lead to cash outflows that the firm might not have anticipated, especially if a large number of shareholders decide to exercise their put options during a market downturn. Therefore, while putable shares can be a strategic tool for companies to attract investors, the direct financial benefit is skewed towards the shareholders rather than the firm itself.

B is incorrect. Brokers may indirectly benefit from the trading of putable common shares due to the potential for increased transactions and, consequently, commissions. However, the primary and direct benefit of putable common shares is to the shareholders, not the brokers.

The put option embedded in these shares is a protective feature for the shareholders, allowing them to sell their shares back to the company under specific conditions. While brokers facilitate these transactions, the intrinsic value and protection offered by putable common shares are designed with the shareholders' interests in mind, not the brokers'.

Therefore, stating that brokers are the primary beneficiaries of putable common shares overlooks the direct financial safeguard these shares provide to the shareholders.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (a) Describe characteristics of types of equity securities.

Q.978 YULU Company floated 1000 callable common shares in 2014. In 2015, the company exercised its call options on 200 shares at $15. The current market price of the shares is $18. Which of the following is *least accurate* about the firm's decision to exercise its call rights on the 200 shares?

A. The firm will incur losses of $600.

B. The firm will be able to reissue shares at a higher price.

C. The decision will reduce the dividends the company has to pay in subsequent years.

The correct answer is **A.**

The decision by YULU Company to exercise its call options on 200 shares at $15, when the current market price is $18, is a strategic financial move. This action allows the company to repurchase shares at a predetermined price, which is lower than the market value, thus potentially leading to financial benefits for the company.

B is incorrect. The statement that the firm will be able to reissue shares at a higher price is accurate and reflects one of the potential benefits of exercising call options. By repurchasing shares at the call price of $15, the company has the opportunity to reissue or resell these shares at the current market price of $18 or higher, depending on market conditions. This ability to capitalize on the difference between the call price and the market price can lead to increased capital for the company.

C is incorrect. The decision to exercise call options and repurchase shares will indeed reduce the dividends the company has to pay in subsequent years. By reducing the total number of shares outstanding, the company decreases the dividend obligations, assuming the dividend per share remains constant. This reduction in dividend payments can lead to cost savings and improved financial flexibility for the company. However, upon closer examination, this option accurately describes a financial benefit of exercising call options on shares.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (f) Explain the role of equity securities in the financing of a company's assets.

Q.979 The type of private investment that is a hybrid of debt and equity is *most likely*:

A. mezzanine financing.

B. initial public offering

C. private investment in public equity.

The correct answer is **A.**

Mezzanine financing represents a unique form of capital that serves as a bridge between debt and equity, making it an essential tool for companies in transition or seeking growth without diluting ownership. This type of financing is particularly beneficial for companies that are in a phase of rapid expansion, such as launching new products or acquiring other businesses.

Mezzanine financing provides flexibility to the borrower, as it typically involves less stringent repayment terms compared to traditional loans and offers lenders the option to convert their debt into equity in the event of default. This conversion option is a critical feature that distinguishes mezzanine financing from other forms of capital, providing a safety net for lenders while offering potential upside from equity participation.

The structure of mezzanine financing often includes subordinated debt, preferred equity, and warrants, which collectively create a hybrid financial instrument that addresses the specific needs of growing companies.

B is incorrect. An initial public offering (IPO) represents a significant milestone for private companies, marking their transition to publicly traded entities. This process involves offering shares of the company to the public for the first time, thereby raising capital from a broad base of investors. While an IPO can provide substantial funds for growth and expansion, it fundamentally differs from mezzanine financing in its structure and implications for the company.

C is incorrect. Private Investment in Public Equity (PIPE) is a financing mechanism where investors purchase shares of a publicly traded company directly from the company at a discount to the current market price. This approach allows public companies to raise capital quickly and with fewer regulatory hurdles compared to traditional public offerings.

PIPE deals involve investing in public companies, whereas mezzanine financing is typically associated with private companies seeking growth capital without going public. Additionally, PIPE transactions are purely equity-based, providing investors with immediate ownership stakes in the company, unlike mezzanine financing, which offers a hybrid of debt and equity with conversion options.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (f) Explain the role of equity securities in the financing of a company's assets.

Q.982 The market value of a firm's equity *most likely* reflects:

A. its operating results.

B. its financial decisions.

C. expectations of its future performance.

The correct answer is **C.**

The market value of a firm's equity is a reflection of the collective expectations of its future performance by investors. This valuation is dynamic and incorporates all publicly available information, including past performance, current conditions, and future prospects.

The market value is determined through the trading of the firm's shares in the stock market, where each share's price is a direct reflection of investor sentiment regarding the company's future earnings and growth potential. Investors analyze a wide range of factors, including industry trends, economic indicators, and company-specific news, to form their expectations.

A is incorrect. While operating results, such as revenue, profit margins, and cash flow, are important indicators of a company's current financial health, they do not directly determine the market value of a firm's equity. Operating results are historical data that investors use as part of their analysis to form expectations about the company's future performance. However, the market value is more influenced by these future expectations rather than past performance alone.

B is incorrect. Financial decisions, such as capital structure, dividend policy, and investment choices, can influence a firm's risk profile and potential for growth, which in turn can affect investor perceptions and expectations. However, the market value of a firm's equity is not a direct reflection of these decisions.

Instead, it encapsulates investors' reactions to these decisions in the context of future performance expectations. While this decision impacts the firm's financial structure, the market value of its equity will ultimately reflect how investors assess the potential success of the expansion and its impact on future earnings.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (g) Contrast the market value and book value of equity securities.

Q.984 Which of the following is *least likely* a reason why companies opt for private equity?

A. To make acquisitions.

B. To take a private company public.

C. To fund the development of new technology.

The correct answer is **B.**

Private equity refers to capital investment made into companies that are not publicly traded. The primary goal of private equity is to generate returns through various strategies, including restructuring, improving operational efficiency, and driving growth, often with a longer-term investment horizon.

One of the key characteristics of private equity is its focus on private companies or taking public companies private, rather than taking private companies public. This process, known as a public-to-private transaction, involves buying out all of a public company's shares, thereby delisting it from public stock exchanges.

The rationale behind such transactions often includes removing the pressures of quarterly earnings reports and providing the company with more flexibility to implement long-term strategies without the scrutiny of public investors. Therefore, using private equity to take a private company public contradicts the typical use cases for private equity funds, which are more aligned with direct investments in private companies or buyouts of public companies.

A is incorrect. Private equity firms can provide the necessary capital and strategic support for such transactions. Acquisitions can be a critical component of a company's growth strategy, allowing it to expand its market presence, diversify its product offerings, or acquire new technologies.

Private equity firms bring not only capital but also expertise in structuring and financing deals, operational improvements, and strategic planning, making them valuable partners in the acquisition process. This collaboration can enable companies to pursue larger or more strategic acquisitions than they might be able to finance through traditional means such as bank loans or public equity markets.

C is incorrect. Funding the development of new technology is another key reason companies seek private equity investment. In sectors such as technology, biotechnology, and renewable energy, the development and commercialization of new products or services can require significant upfront investment, often before generating any revenue.

Private equity can provide the patient capital needed to support research and development activities, scale operations, and bring innovations to market. Unlike venture capital, which typically focuses on early-stage companies with high growth potential, private equity can support companies at various stages of development, including more mature companies looking to innovate or pivot their business models.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (c) Compare and contrast public and private equity securities.

Q.985 In the case of a share denominated in foreign currency, the appreciation of the foreign currency *most likely*:

A. increases the returns.

B. not affect the returns.

C. decreases the returns.

The correct answer is **A.**

When a share is denominated in a foreign currency, the appreciation of that currency relative to the investor's local currency will most likely increase the returns on that investment. This is because the value of the foreign currency increases, making the returns when converted back into the local currency higher than they would have been without the appreciation.

For instance, if an investor from the United States invests in a company listed in Europe and the Euro appreciates against the US Dollar, when the investor converts the dividends or sale proceeds back into US Dollars, they will receive more dollars for each Euro than they would have before the appreciation. This increase in the exchange rate effectively boosts the investment's return in the investor's local currency.

B is incorrect. The appreciation or depreciation of a foreign currency directly affects the returns of shares denominated in that currency for investors holding a different local currency. The change in exchange rates alters the value of dividends and capital gains when they are converted back into the investor's local currency, making it incorrect to suggest that the returns would not be affected.

C is incorrect. The appreciation of the foreign currency relative to the investor's local currency increases the value of returns when they are converted back into the local currency, thereby increasing the overall returns on the investment.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (d) Describe methods for investing in non-domestic equity securities.

Q.987 Global Depository Receipts (GDR) are *most likely* denominated in:

A. USD.

B. the local currency of the firm.

C. the local currency of the buyer.

The correct answer is **A.**

Global Depository Receipts (GDRs) are financial instruments used by companies to facilitate the trading of their shares in foreign markets. They are typically denominated in US dollars (USD), which is a widely accepted currency in international financial transactions. This denomination in USD allows investors from different countries to invest in foreign companies without the need to deal with the complexities of currency conversion.

GDRs are issued by an international depository bank, representing the ownership of a certain number of shares in a foreign company. The use of USD as the denomination currency makes GDRs an attractive option for investors looking to diversify their portfolios internationally without the added risk of currency fluctuations.

B is incorrect. Suggesting that GDRs are denominated in the local currency of the firm is a misunderstanding of how these instruments are structured. While the underlying shares represented by the GDRs are indeed of companies based in various countries, the GDRs themselves are designed to be traded on international markets.

Denominating them in the local currency of the issuing company would complicate transactions for international investors, who would then have to navigate currency exchange rates and conversions. The use of USD as the denomination currency avoids these complications, making GDRs more accessible and attractive to a global audience.

C is incorrect. While this approach might seem to offer convenience to investors, it would introduce significant complexity and inefficiency into the trading and settlement of GDRs. Investors come from various countries with different currencies, and denominating GDRs in each investor's local currency would be impractical. The standard practice of using USD as the denomination currency for GDRs addresses this issue by providing a common and stable currency that facilitates international investment and trading.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (d) Describe methods for investing in non-domestic equity securities.

Q.1770 Which of the following is *most likely* an appropriate statement regarding the ownership interest of common shareholders?

A. They have a residual claim after debt holders and preferred shareholders.

B. They have a residual claim before debt holders and preferred shareholders.

C. They have a residual claim after debt holders and before preferred shareholders.

The correct answer is **A.**

Common shareholders have a residual claim on the assets of a company, which means they are entitled to the company's assets only after all other claims have been satisfied. This includes the claims of debt holders and preferred shareholders.

In the event of a company's liquidation, debt holders are paid first, as their claims are secured by the company's assets. Following the satisfaction of all debt-related claims, preferred shareholders receive their share, given their preference over common shareholders in the distribution of assets.

Only after these obligations are met do common shareholders receive any remaining assets. This hierarchical structure ensures that the riskier investments, represented by common shares, are rewarded last, reflecting their higher risk compared to debt instruments and preferred shares.

B is incorrect. Suggesting that common shareholders have a residual claim before debt holders and preferred shareholders contradicts the established hierarchy of claims in a company's capital structure. Debt holders, being creditors, have a priority claim on the company's assets, especially in cases of liquidation.

This is followed by preferred shareholders, who have a preferential claim over common shareholders but do not typically enjoy the same voting rights. This option misrepresents the fundamental principles of corporate finance and the legal framework governing corporate liquidation processes.

C is incorrect. This option inaccurately places common shareholders' claims after debt holders but before preferred shareholders. In reality, preferred shareholders have a higher claim on assets than common shareholders, primarily due to the preferential nature of their shares. Preferred shares often come with fixed dividends and have priority over common shares in asset distribution upon liquidation.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (e) Compare the risk and return characteristics of different types of equity securities.

Q.1771 Which of the following parties *most likely* benefits from callable shares when the market price is greater than the call price?

A. Callable equity holders.

B. Callable equity issuing firms.

C. Debtholders of callable equity issuing firms.

The correct answer is **B.**

When the market price is greater than the call price, callable equity issuing firms are the parties that most likely benefit. Callable shares provide the issuing firm with the option, but not the obligation, to repurchase shares at a predetermined call price.

This feature is particularly advantageous when the market price exceeds the call price, as it allows the firm to repurchase shares at a lower cost than the current market value. This action can lead to several benefits for the firm, including reducing the number of shares outstanding, which may increase earnings per share and potentially boost the stock price.

Additionally, by repurchasing shares at the call price, the firm can avoid paying higher dividends on those shares in the future, thus saving on dividend payments. Furthermore, if the firm believes its stock is undervalued, repurchasing shares can signal confidence to the market, potentially leading to a positive reevaluation of the stock.

A is incorrect. While callable equity holders have the potential to benefit from an increase in the stock price, they are at a disadvantage when the shares are called at a price lower than the current market value. This scenario results in a loss of potential gains for the equity holders, as they are forced to sell their shares back to the company at the predetermined call price, which is lower than the market price. Therefore, the benefit primarily accrues to the issuing firm rather than the callable equity holders.

C is incorrect. Debtholders of callable equity issuing firms are generally not directly affected by the call feature of equity shares. The call feature pertains to the equity side of the firm's capital structure and does not impact the terms or conditions of the firm's debt. Debtholders' primary concern would be the firm's ability to meet its debt obligations, which is influenced by factors such as the firm's overall financial health, cash flow, and profitability, rather than the specifics of its equity structure. While the firm's actions to repurchase shares could indirectly affect its financial flexibility, this does not directly benefit or harm debtholders in the context of callable shares.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (a) Describe characteristics of types of equity securities.

Q.1772 Which of the following is *most likely* a similarity between common shares and preferred shares?

A. Both have voting rights.

B. Both can have put and call features.

C. Both make fixed periodic payments.

The correct answer is **B.**

These features add flexibility and potential financial benefits for the shareholders. A put feature allows shareholders to sell their shares back to the issuing company at a predetermined price, which can be particularly advantageous in a declining market.

Conversely, a call feature enables the company to buy back shares from investors at a predetermined price, which can be beneficial for the company if it wants to reduce the number of shares in circulation and potentially increase the value of remaining shares. These features are mechanisms that can be embedded in the terms of both common and preferred shares, providing strategic options for both the shareholders and the issuing companies.

A is incorrect. This option suggests that both common and preferred shares have voting rights, which is not accurate. Typically, common shares grant voting rights to shareholders, allowing them to vote on corporate matters, including the election of the board of directors.

In contrast, preferred shares usually do not come with voting rights, which is one of the key distinctions between the two types of equity. This difference reflects the trade-off between the potential for higher dividends associated with preferred shares and the influence over corporate governance afforded by common shares.

C is incorrect. This option implies that both common and preferred shares make fixed periodic payments, which is misleading. Preferred shares are known for providing fixed dividend payments, which are typically paid out before any dividends are distributed to common shareholders.

However, common shares do not guarantee fixed periodic payments. Dividends on common shares are variable and depend on the company's profitability and the decisions made by its board of directors.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (b) Describe differences in voting rights and other ownership characteristics among different equity classes.

Q.1773 What is *most likely* the appropriate advantage of participating preferred shares?

A. Participating preferred shares can be exchanged for common stocks at the conversion ratio.

B. Any dividends that are not paid for participating preferred shares accumulate for the next period.

C. Investors in participating preferred shares receive an extra dividend if the firm's profits exceed a specified limit.

The correct answer is **C.**

A preferred share is a share that guarantees its owner fixed dividend payments. The dividends of preferred shares are paid before the dividends of ordinary shares can be paid.

There are four major types of preference shares: Participating, Cumulative, Convertible, and Callable shares.

- Participating – Holders of participating preference shares receive an additional amount of money (extra dividend) if the firm exceeds its financial goals for that financial year.

- Cumulative – Cumulative shares protect investors against downturns in the company profits. The shareholders of cumulative preference shares receive unpaid dividends before any other shareholders' dividends can be paid. Assume that a company that pays its preference shareholders a dividend of $20 per year per share suffers losses for five years and is, thus, unable to make dividend payments. Assuming that it makes profits on the 5th year, the company will have to pay the accumulated $80 dividends per share to cumulative preference shareholders before paying dividends to other shareholders.

- Convertible – Convertible shares give the shareholder the choice of converting their preferred shares to common shares. Preference shareholders will convert their shares to common shares when the market value of common shares increases. By converting their shares to common shares, they give up the benefit of receiving a fixed dividend. Once converted to common shares, the shares cannot be converted back to preference shares.

- Callable shares – Callable shares give the issuing company the right to buy back ("call") their shares at a pre-determined price. Companies will exercise this right when the market price of their shares is higher than the pre-determined price.

A is incorrect. While conversion is a feature of convertible preferred shares, it is not characteristic of participating preferred shares. Convertible preferred shares allow shareholders to convert their preferred shares into a predetermined number of common shares, usually at the discretion of the shareholder. However, it does not relate to the distribution of extra dividends based on company profits, which is the defining advantage of participating preferred shares.

B is incorrect. This option describes cumulative preferred shares, not participating preferred shares. Cumulative preferred shares have the feature where unpaid dividends accumulate and must be paid out before dividends can be distributed to common shareholders. This ensures that shareholders of cumulative preferred shares are protected against periods when the company might not be able to distribute dividends.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (a) Describe characteristics of types of equity securities.

Q.1775 Stratton VCs is a venture capital firm that invests in different stages of a firm. In which of the following stages will Stratton *least likely* invest its funds?

A. Late-stage.

B. Seed investing stage.

C. Mezzanine financing stage.

The correct answer is **A.**

Venture capital firms like Stratton VCs play a crucial role in the growth and development of companies by providing necessary funding at various stages of a company's lifecycle. These stages range from the very early seed stage, where the company might only have an idea or a prototype, to later stages where the company is expanding its market presence or scaling operations.

The least likely stage for a venture capital firm to invest in is the late-stage. This is primarily because, by the late stage, companies are often looking towards public markets for funding or are already generating sufficient revenue and profits that do not necessitate venture capital investment.

Venture capital is inherently risk-tolerant and seeks higher returns through equity or ownership stakes in companies that are in their nascent or growth phases. Late-stage companies typically do not offer the high-risk, high-reward profile that venture capitalists seek.

B is incorrect. It suggests that venture capital firms like Stratton VCs would least likely invest in the seed investing stage. This is not accurate. The seed stage is actually one of the primary stages where venture capitalists invest.

At this stage, companies are in their infancy, often pre-revenue, and require capital to develop their product or service. Venture capitalists provide this early-stage funding in exchange for equity, betting on the company's future growth and success.

The seed stage represents a significant opportunity for venture capitalists to enter at the ground level and potentially reap substantial rewards as the company grows.

C is incorrect. It implies that venture capital firms would least likely invest in the mezzanine financing stage. This is also inaccurate. Mezzanine financing is a late-stage funding option that helps prepare a company for an initial public offering (IPO) or a significant private equity investment. It is a hybrid of debt and equity financing, often used by companies to bridge the gap between venture capital funding and public offering or sale.

Venture capitalists may participate in mezzanine financing to help a company in its final growth phase before an exit, such as an IPO, where the venture capitalist can realize returns on their investment. While not as common as early-stage investments, mezzanine financing is still within the realm of venture capital activity.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (f) Explain the role of equity securities in the financing of a company's assets.

Q.1776 Arabco, an oil exploring public limited company, is under financial distress due to declining oil prices. To receive quick financing, Arabco has decided to sell part of its equity to private investors. Which of the following types of investment procedures *most likely* describes this situation?

A. Mezzanine financing.

B. Leveraged buyout (LBO).

C. Private investment in public equity (PIPE).

The correct answer is **C.**

Arabco's decision to sell part of its equity to private investors due to financial distress caused by declining oil prices is most accurately described by Private Investment in Public Equity (PIPE). PIPE is a financing option where private investors purchase shares of a publicly traded company directly from the company at a discount to the current market price.

This method is particularly appealing to companies in need of quick financing without the extensive regulatory requirements and time-consuming processes associated with public offerings. In situations where a company is facing financial challenges or is in need of immediate capital infusion, PIPE transactions offer a viable solution by providing quick access to funds while allowing the company to remain publicly traded.

This approach is beneficial for both the company, which receives the necessary capital, and the private investors, who acquire shares at a discounted rate with the potential for significant returns if the company recovers.

A is incorrect. Mezzanine financing is a hybrid form of financing that combines elements of debt and equity financing. It typically involves the issuance of debt that can be converted into equity in the event of a default, or it may include warrants or options to purchase equity at a later date.

Mezzanine financing is often used by companies looking to finance growth or acquisitions without diluting current shareholders' equity significantly. It is not the most suitable description for Arabco's situation, as the company is specifically looking to sell equity directly to private investors to address its immediate financial distress.

B is incorrect. A Leveraged Buyout (LBO) involves the acquisition of a company using a significant amount of borrowed money (leverage) to meet the cost of acquisition. The assets of the company being acquired and those of the acquiring company are often used as collateral for the loans.

LBOs are typically executed by private equity firms aiming to take a public company private, improve its financial performance, and eventually sell it for a profit. This strategy is not applicable to Arabco's scenario, as the company is seeking to raise funds by selling equity to private investors rather than being acquired through a leveraged buyout.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (f) Explain the role of equity securities in the financing of a company's assets.

Q.1777 Farah Jan is an investment analyst. She is evaluating methods of investing in non-domestic equity securities, and she has identified some of the obstacles of direct financing. Which of the following is *least likely* a disadvantage of direct financing?

A. The foreign stock exchange may be illiquid.

B. Investors must be familiar with the regulations of foreign markets.

C. Investments and returns are denominated in the local currency of the investor.

The correct answer is **C.**

In the context of direct financing, especially when investing in non-domestic equity securities, the primary concern is the currency risk associated with investments and returns being denominated in a foreign currency, not the local currency.

When investments are made directly in foreign markets, the returns are typically subject to exchange rate fluctuations, which can either positively or negatively affect the investment outcome when converted back to the investor's local currency. Therefore, having investments and returns denominated in the local currency would actually mitigate this currency risk, making it an advantage rather than a disadvantage.

A is incorrect. The illiquidity of foreign stock exchanges is a genuine concern for investors engaging in direct financing. Illiquid markets can make it difficult to execute trades without affecting the price of the security, leading to potentially higher transaction costs and making it challenging to enter or exit positions.

This illiquidity can significantly impact investment strategies, especially for those requiring the flexibility to quickly adjust positions in response to market changes.

B is incorrect. Familiarity with the regulations of foreign markets is indeed a critical factor and a potential obstacle for investors considering direct financing in non-domestic equity securities. Different countries have varying regulatory environments, including rules regarding foreign ownership, taxation, and reporting requirements.

These regulations can significantly affect the feasibility and attractiveness of investment opportunities. Investors must navigate these complexities to ensure compliance and optimize their investment strategies, making this a notable disadvantage of direct financing.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (d) Describe methods for investing in non-domestic equity securities.

Q.1778 Which of the following depository receipts is *most likely* issued outside of the United States and denominated in US dollars?

A. Global Depository Receipt.

B. American Depository Receipt.

C. Basket of listed depository receipts.

The correct answer is **A.**

Global Depository Receipts (GDRs) are financial instruments used by companies to facilitate the trading of their shares in foreign markets. GDRs are particularly significant for companies looking to attract investment from regions outside their home country. They are issued outside of the United States but are denominated in US dollars, making them an attractive option for investors looking to invest in foreign companies without the complications of currency conversion and the associated risks.

GDRs allow investors to gain exposure to foreign markets while providing companies with access to a broader investor base. The fact that GDRs are denominated in US dollars is a critical feature, as the US dollar is widely regarded as a global currency, thus providing a level of stability and familiarity to investors. This characteristic of GDRs facilitates international trade in securities by simplifying transactions for investors who prefer or are required to deal in US dollars.

B is incorrect. ADRs are issued by US depositary banks and represent a certain number of shares in a foreign company. They allow US investors to invest in non-US companies without dealing with the complexities of foreign markets and currencies, as ADRs are traded on US exchanges and are denominated in US dollars. However, unlike GDRs, ADRs are issued within the United States, making them distinct from GDRs, which are issued outside the US.

C is incorrect. The option refers to a collection or portfolio of depository receipts, which can include both ADRs and GDRs, among others, and is typically traded as a single entity on stock exchanges. This option does not specifically address the question of being issued outside of the United States and denominated in US dollars.

While a basket of listed depository receipts can provide investors with diversified exposure to foreign companies, it does not directly answer the question regarding the issuance location and currency denomination. Therefore, it is not the most accurate answer to the question posed.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (d) Describe methods for investing in non-domestic equity securities.

Q.1779 Which of the following is the *least risky* type of equity for an investor?

A. Non-cumulative common stock.

B. Preferred stock with a put feature.

C. Preferred stock with a call feature.

The correct answer is **B.**

Preferred stocks with a put feature are considered the least risky type of equity for an investor because they provide an additional layer of security. The put feature allows the investor to sell the stock back to the issuing company at a predetermined price, which can protect the investor from significant losses if the stock's market price falls below this level.

This feature essentially sets a floor on the potential loss an investor can face, as they have the option to exit their investment at the put price regardless of how low the market price may drop. This safety net is particularly valuable in volatile or declining markets, where the risk of loss is higher. The ability to sell the stock back to the issuer at a known price provides a measure of liquidity and price stability that is not available with other types of equity.

A is incorrect. It lacks the protective mechanisms that preferred stocks offer. Non-cumulative common stockholders are last in line to receive dividends, and in the event of the company's liquidation, they are the last to be paid after all debts and preferred shareholders have been settled.

Additionally, non-cumulative common stock does not guarantee dividend payments, and if the company decides not to pay dividends in a given period, those dividends are not owed to the shareholders in the future. This lack of dividend protection and prioritization in the capital structure increases the risk for investors holding non-cumulative common stock.

C is incorrect. Preferred stock with a call feature is riskier than preferred stock with a put feature from the investor's perspective. The call feature allows the issuing company to repurchase the stock from the shareholders at a predetermined price before the stock's maturity date.

This feature can limit the upside potential for investors, as the company may choose to call the stock during favorable market conditions, forcing investors to sell back their shares potentially at a price lower than the market value or the value they could have realized if they held onto the stock longer.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (a) Describe characteristics of types of equity securities.

Q.1780 Prion Corp is a public limited company that manufactures lifeboats. Sadin Nigaro is an equity analyst who is evaluating the equity of Piron Corp. She has summarized the most important financial information of the company in the following table:

Total Assets	$575 million
Total liabilities	$225 million
Revenue during the year	$101 million
Number of shares outstanding	8.75 million
Market capitalization	$393.75 million

Using the given data, the per-share book value of equity of the company is *closest to*:

A. $40.

B. $45.

C. $66.

The correct answer is **A.**

Book value is the net value of a firm's assets, obtained by subtracting total liabilities from total assets. It represents the amount of money that shareholders will receive if the company were to be liquidated.

$$\text{Book value} = \text{Total Assets - Total liabilities}$$
$$\text{Book value per share} = \frac{(\$575,000,000 - \$225,000,000)}{8,750,000 \text{ shares}} = \$40/\text{share}.$$

$40/share implies that shareholders will receive $40 for every share they hold if the company gets liquidated.

B is incorrect. It represents the market value per share, obtained by dividing the market capitalization by the total number of shares outstanding.

C is incorrect. It has been obtained by dividing total assets by the total number of outstanding shares. Book value is obtained by subtracting total liabilities from total assets, then dividing the result by the total number of outstanding shares.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (g) Contrast the market value and book value of equity securities.

Q.1781 Prion Corp is a public limited company that manufactures lifeboats. Sadin Nigaro is an equity analyst who is evaluating the equity of Piron Corp. She has summarized the most important financial information of the company in the following table:

Total Assets	$575 million
Total liabilities	$225 million
Revenue during the year	$101 million
Number of shares outstanding	8.75 million
Market capitalization	$393.75 million

Using the given data, the per-share market value of equity of the company is *closest to*:

A. $40.

B. $45.

C. $65.70.

The correct answer is **B.**

Market value is the value of a company on the financial market, according to market participants. It is a company's worth determined by the total value of the company's outstanding shares in the market. It is obtained by multiplying the total number of outstanding shares by the current market price of the shares.

$$
\begin{aligned}
\text{Market value per share} &= \frac{\text{Total market capitalization}}{\text{Number of shares outstanding}} \\
&= \frac{\$393,750,000}{8,750,000 \text{ shares}} \\
&= \$45/\text{share}
\end{aligned}
$$

A is incorrect. It represents book value, obtained by dividing the net asset value (total assets-total liabilities) by the total number of outstanding shares.

C is incorrect. It has been obtained by dividing total assets by the total number of outstanding shares.

CFA Level I, Topic 6 - Equity, Learning Module 4: Overview of Equity Securities. LOS (g): Distinguish between the market value and book value of equity securities.

Q.1782 Using the data given below, calculate Piron Corp's price-to-book value of the equity.

Total Assets	\$575 million
Total liabilities	\$225 million
Revenue during the year	\$101 million
Number of shares outstanding	\$8.75 million
Market capitalization	\$393.75 million

A. 1.125

B. 1.6

C. 1.75

The correct answer is **A.**

The price-to-book value of equity is calculated as the Market value (or Price of equity) divided by the Book value of equity.

$$\text{Book value} = \text{Total Assets - Total liabilities}$$
$$\text{Book value per share} = \frac{(\$575,000,000 - \$225,000,000)}{8,750,000 \text{ shares}} = \$40/\text{share}.$$

$$\begin{aligned}\text{Market value per share} &= \frac{\text{Total market capitalization}}{\text{Number of shares outstanding}}\\ &= \frac{\$393,750,000}{8,750,000 \text{ shares}}\\ &= \$45/\text{share}\end{aligned}$$

$$\begin{aligned}\text{Price-to-book value} &= \frac{\text{Market value}}{\text{Book value of equity}}\\ &= \frac{\$45}{\$40}\\ &= 1.125\end{aligned}$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (g) Contrast the market value and book value of equity securities.

Q.1783 Parco Inc. is a public limited company from Turkey. Parco is the market leader in plastic hanger manufacturing. Using the data provided in Parco Inc.'s balance sheet, calculate the return on Parco's equity at the end of 2016.

Net Income for 2016	$5 million
Total Shareholders' Equity for 2016	$65 million
Net Income for 2015	$8 million
Total Shareholders' Equity for 2015	$75 million
Number of shares outstanding	7 million

A. 6.67%

B. 7.14%

C. 7.7%

The correct answer is **B.**

The return on equity (ROE) is a significant financial metric that measures a company's ability to generate profits from its shareholders' equity. The formula for calculating ROE is given by:

$$\text{ROE} = \frac{Net Income}{Average Shareholders' Equity)}$$

Therefore:

$$\text{ROE of Parco} = \frac{\$5,000,000}{\left(\frac{(\$65,000,000+\$75,000,000)}{2}\right)} = 7.14\%$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (h) Compare a company’s cost of equity, its (accounting) return on equity, and investors’ required rates of return.

Q.1784 Given the following table, what will *most likely* happen to the intrinsic value of Parco's equity if the required rate of return increases?

Net Income for 2016	$5 million
Total Shareholders' Equity for 2016	$65 million
Net Income for 2015	$8 million
Total Shareholders' Equity for 2015	$75 million
Number of shares outstanding	7 million

A. The intrinsic value will increase.

B. The intrinsic value will decrease.

C. The intrinsic value will remain unchanged.

The correct answer is **B.**

The intrinsic value of a company's equity is fundamentally linked to the present value of its expected future cash flows. When calculating this present value, the required rate of return acts as the discount rate. An increase in the required rate of return means that future cash flows are discounted more heavily, which, in turn, reduces the present value of these cash flows.

Given the direct relationship between the present value of future cash flows and the intrinsic value of equity, an increase in the required rate of return will lead to a decrease in the intrinsic value of Parco's equity.

This relationship can be illustrated through the basic present value formula:

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

where PV is the present value, CF is the future cash flow, r is the discount rate (or required rate of return in this context), and n is the number of periods. As r increases, the denominator of the fraction becomes larger, resulting in a smaller PV.

This principle applies to the valuation of equity, where future net incomes (or other relevant cash flows) are discounted back to their present value using the required rate of return. An increase in this rate diminishes the present value of future net incomes, thereby reducing the intrinsic value of equity.

A is incorrect. The suggestion that the intrinsic value will increase with an increase in the required rate of return contradicts the fundamental principles of time value of money and discounting. Higher discount rates reduce the present value of future cash flows, not increase them.

C is incorrect. The assertion that the intrinsic value will remain unchanged despite an increase in the required rate of return fails to account for the basic mechanics of discounting future cash flows. The intrinsic value of equity is sensitive to changes in the discount rate; it is not a static figure that remains unaffected by variations in the required rate of return. This option ignores the dynamic nature of equity valuation, which is influenced by changes in market conditions, including shifts in the required rate of return.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (h) Compare a company’s cost of equity, its (accounting) return on equity, and investors’ required rates of return.

Q.3540 AVEX Ltd. is a construction company that primarily deals in the residential construction segment. The company is planning to venture into the commercial real estate sector and has identified an upcoming project. A financial analyst working in the company's corporate finance department uses the company's weighted average cost of capital (WACC) as the discount rate to calculate the commercial real estate project's net present value (NPV). While doing so, the financial analyst is *most likely* to assume that:

A. residential and commercial real estate projects have different levels of risk.

B. residential and commercial real estate projects have identical levels of risk.

C. commercial real estate projects have a higher level of risk than residential real estate projects.

The correct answer is **B.**

When AVEX Ltd., a construction company primarily involved in residential construction, plans to venture into the commercial real estate sector, using the company's weighted average cost of capital (WACC) as the discount rate for calculating the net present value (NPV) of a commercial real estate project inherently assumes that the new project will have a risk profile similar to the company's existing projects.

This assumption is crucial because WACC is calculated based on the company's current capital structure, which reflects the risk associated with its existing operations. If the company's operations are primarily in residential construction, the WACC is tailored to the risk level of residential projects. Therefore, applying the same WACC to a commercial real estate project implies that the financial analyst views the risk levels of residential and commercial real estate projects as identical.

A is incorrect. Suggesting that residential and commercial real estate projects have different levels of risk contradicts the premise of using the company's WACC as the discount rate. The WACC is a reflection of the company's overall risk, derived from its existing business model and operations.

If the company's operations are changing significantly, such as venturing into a new sector with potentially different risk characteristics, the WACC might not accurately reflect the new project's risk. However, the question's context implies that the analyst is applying the company's existing WACC, which assumes similar risk levels across projects.

C is incorrect. It suggests that commercial real estate projects inherently have a higher level of risk than residential real estate projects. While it's possible for different types of projects to have varying risk profiles, the use of the company's WACC as the discount rate for the NPV calculation does not make such a distinction.

The WACC is a composite rate that reflects the cost of capital based on the company's current risk profile and capital structure. By using the WACC, the analyst is assuming that the commercial project will align with the company's existing risk level, which is based on its history in residential construction. This approach does not account for any potential differences in risk between residential and commercial projects.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (h) Compare a company's cost of equity, its (accounting) return on equity, and investors' required rates of return.

Q.3641 Harry Olsen holds 200 shares of Enric Corporation. If there are two vacancies on Enric Corporation's board, and Enric Corporation allows cumulative voting, then the maximum number of votes that Olsen can cast for a single nominee for the board of directors is *closest to*:

A. 100.

B. 200.

C. 400.

The correct answer is **C.**

In the context of cumulative voting, Harry Olsen can allocate his votes in a flexible manner across the candidates for the board of directors. Cumulative voting is a system that allows shareholders to concentrate their voting power. If a shareholder owns 200 shares and there are two vacancies on the board, the total number of votes that the shareholder can cast is calculated by multiplying the number of shares by the number of vacancies. Therefore, the formula for calculating the total votes in a cumulative voting scenario is:

$$TotalVotes = NumberofShares \times NumberofVacancies$$

Given that Harry Olsen holds 200 shares and there are two vacancies, the calculation is as follows:

$$TotalVotes = 200 \times 2 = 400$$

This means Harry Olsen has a total of 400 votes that he can distribute in any way he sees fit, including casting all 400 votes for a single nominee if he chooses. This flexibility is a key feature of cumulative voting, designed to enhance the voting power of minority shareholders and allow them to have a greater impact on the election of directors.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (c) Compare and contrast public and private equity securities.

Q.3642 A firm acquired through a leveraged buy-out will *most likely* be converted into a:

A. public company.

B. private company.

C. debt-free company.

The correct answer is **B.**

A leveraged buy-out (LBO) is a financial transaction where a company is acquired primarily using borrowed funds, with the assets of the company being acquired often serving as collateral for the loans. The structure of an LBO is designed to allow companies or investors to make large acquisitions without having to commit a significant amount of capital.

Following an LBO, the acquired company typically becomes a private entity if it was public prior to the transaction. This transition allows the new owners to restructure the company outside of the public eye, streamline operations, and potentially improve its financial performance without the pressure of public market expectations.

A is incorrect. Converting an acquired firm into a public company contradicts the typical outcome of an LBO. One of the primary objectives of an LBO is to take a public company private, not the other way around.

This allows the acquiring entity to work on improving the company’s value away from the scrutiny and regulatory requirements of public markets. Making a company public immediately after an LBO would not only be counterproductive but also unlikely due to the significant debt load typically assumed in the process, which would be unattractive to public market investors.

C is incorrect. A firm acquired through an LBO will most likely not become a debt-free company. In fact, the opposite is true; the essence of an LBO involves leveraging the acquired company with significant amounts of debt. The strategy behind an LBO is to use the company's future cash flows to pay down this debt over time, ideally leaving the company with a solid financial structure.

However, immediately following the LBO, the company will have a higher debt load than prior to the acquisition. The goal is to manage and reduce this debt over time, not to eliminate it instantly through the acquisition process.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (c) Compare and contrast public and private equity securities.

Q.3643 Which of the following American depositary receipts (ADRs) *least likely* requires SEC registration?

A. RULE 144A.

B. LEVEL II sponsored.

C. LEVEL III sponsored.

The correct answer is **A.**

An American depositary receipt (ADR) represents a negotiable security that signifies an ownership interest in the shares of a non-U.S. company trading in U.S. financial markets. Among the options provided, Rule 144A ADRs are the least likely to require registration with the Securities and Exchange Commission (SEC).

Rule 144A allows for the private placement of securities with qualified institutional buyers, thereby exempting these ADRs from the public registration requirements that typically apply under U.S. securities laws.

This exemption facilitates a more streamlined process for foreign companies to access U.S. capital markets without undergoing the comprehensive registration process mandated by the SEC for public offerings.

B is incorrect. In reality, Level II ADRs must adhere to SEC registration and reporting requirements. These ADRs are listed on U.S. stock exchanges, and as such, they are subject to a higher level of regulatory scrutiny compared to Rule 144A ADRs.

The companies issuing Level II ADRs must file a Form 20-F annually, which is the equivalent of the Form 10-K filed by U.S. domestic companies. This requirement ensures that investors have access to detailed information about the financial health and operations of the foreign company, thereby promoting transparency and investor protection.

C is incorrect. Level III sponsored ADRs involve the highest level of engagement with U.S. capital markets among the ADR categories. These ADRs not only require SEC registration but also allow the issuing foreign company to raise capital through a public offering of the ADRs in the United States.

The registration process for Level III ADRs includes the submission of a Form F-1, which is the registration statement for foreign issuers intending to make a public offering of securities in the U.S. This comprehensive registration process is designed to provide U.S. investors with extensive disclosure about the foreign issuer, including financial statements, risk factors, and information about the business and its management.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (d) Describe methods for investing in non-domestic equity securities.

Q.3644 An exchange-traded fund (ETF) is *most likely* classified as a/an:

A. American depository receipt.

B. active investment instrument.

C. passive investment instrument.

The correct answer is **C.**

An exchange-traded fund (ETF) is most accurately classified as a passive investment instrument. ETFs are designed to track the performance of a specific index, such as the S&P 500 or the NASDAQ, providing investors with a diversified portfolio in a single transaction.

Unlike actively managed funds, where fund managers make decisions on buying and selling individual stocks in an attempt to outperform the market, ETFs aim to replicate the performance of their respective indices. This passive management strategy minimizes the costs associated with frequent trading and active management fees, making ETFs a cost-effective investment option for those looking to achieve market returns.

A is incorrect. American Depository Receipts (ADRs) are not related to the structure or purpose of ETFs. ADRs are a way for U.S. investors to invest in foreign companies by purchasing shares that represent a claim to a specific number of foreign stock shares held in a depositary.

ADRs trade on U.S. exchanges and are subject to U.S. trading regulations, but they represent ownership in companies outside the U.S. This mechanism is fundamentally different from ETFs, which are investment funds traded on stock exchanges and typically track the performance of a specific index.

B is incorrect. While there are actively managed ETFs, the vast majority of ETFs are passive investment instruments. Active investment instruments, such as actively managed mutual funds, involve a fund manager making decisions on the fund's holdings in an attempt to outperform a benchmark index.

This active management approach contrasts with the passive strategy of most ETFs, which seek to replicate the performance of an index without attempting to outperform it. The primary goal of a passive ETF is to provide investors with a return that closely mirrors the return of the tracked index, before fees and expenses, rather than trying to beat the market through active management.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (d) Describe methods for investing in non-domestic equity securities.

Q.3868 Which party *most likely* benefits from callable shares when the market price is greater than the call price?

A. Callable equity holders.

B. Callable equity issuing firms.

C. Debt holders of callable equity issuing firms.

The correct answer is **B.**

When the market price of shares is greater than the call price, the issuing firms of callable equity are the ones who benefit the most. Callable shares provide the issuing firm with the option, but not the obligation, to repurchase or "call" these shares at a predetermined price within a certain period. This feature is particularly advantageous for the firm when the market price of its shares exceeds the call price.

In such scenarios, the firm can repurchase shares at the lower call price, effectively reducing the amount of outstanding equity and potentially increasing the value of remaining shares due to the reduced supply. This action can also lead to a positive signal in the market about the firm's financial health and future prospects, as it implies the firm is willing and able to spend capital to buy back shares.

Moreover, by calling the shares, the firm can reduce the dilution of ownership and control, which can be particularly valuable for existing management and shareholders who wish to maintain their stake and influence in the company.

A is incorrect. The holders of callable shares are at risk of having their shares repurchased by the issuing firm at the call price, which is lower than the current market price. This means that equity holders lose the opportunity to sell their shares at the higher market price, potentially missing out on additional gains.

Furthermore, the callable feature introduces uncertainty for the shareholders, as they cannot predict when or if their shares will be called, making it a less attractive option for investors looking for stability or planning to hold shares as a long-term investment.

C is incorrect. Debt holders of callable equity issuing firms are generally not directly affected by the firm's decision to call shares. The calling of shares primarily impacts the equity side of the firm's balance sheet by reducing the number of shares outstanding.

While there can be indirect effects on the firm's financial structure and potentially its creditworthiness, the direct benefits or disadvantages of calling shares at a price above the call price are not typically borne by debt holders.

Debt holders are more concerned with the firm's ability to meet its debt obligations, which is influenced by its overall financial health and cash flows rather than the specific actions it takes regarding callable equity.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (a) Describe characteristics of types of equity securities.

Q.3874 Greenex Inc.'s option-free perpetual preferred stock is currently selling in the market for \$945.63. The annual dividend rate is quoted at 5.5%, and the par value of the stock is \$1,000. If the stock is fairly valued, the required rate of return should be *closest to*:

A. 0.052

B. 0.055

C. 0.0582

The correct answer is **C.**

If the stock is fairly valued, the intrinsic value should be equal to the current market price of \$945.63.

$$\begin{aligned}\text{Intrinsic value} &= \frac{\text{Annual dividend}}{r}\\ &= \frac{\$55}{\$945.63}\\ &= 5.82\%\end{aligned}$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (h) Compare a company's cost of equity, its (accounting) return on equity, and investors' required rates of return.

Q.3950 Which of the following is *least likely* a characteristic of preferred shares?

A. Fixed preferred dividend payment with no maturity date.

B. Priority of dividend payment before common shareholders.

C. Failure to pay a preferred dividend is considered a default.

The correct answer is **C.**

Preferred shares are a type of equity, not debt, and while they often offer dividends that are expected to be paid before any dividends are distributed to common shareholders, the failure to pay these dividends does not constitute a legal default.

Unlike bond interest payments, which if missed can lead to default and potential bankruptcy proceedings, preferred dividends can be suspended in times of financial difficulty without triggering a default. This characteristic allows companies greater flexibility in managing their cash flow under challenging financial conditions.

A is incorrect. Preferred shares typically offer fixed dividend payments, which are determined at the time of issuance and remain constant. Additionally, preferred shares generally do not have a maturity date, meaning they remain outstanding indefinitely unless the issuing company decides to redeem them.

This lack of maturity date distinguishes preferred shares from bonds, which have specified repayment dates. The fixed dividend payments and indefinite life make preferred shares an attractive option for investors seeking stable income and long-term investment opportunities.

B is incorrect. Preferred shareholders have a priority over common shareholders when it comes to the payment of dividends. In the event of liquidation, preferred shareholders also rank above common shareholders in the claim on assets, although they stand behind debt holders.

This priority in dividend payments ensures that preferred shareholders receive their dividends before any dividends can be distributed to common shareholders, providing a level of income security. However, it's important to note that while preferred shareholders have priority over common shareholders, this does not guarantee the payment of dividends, as the company may decide to suspend dividend payments under certain circumstances without being considered in default.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 4: Overview of Equity Securities, LOS (a) Describe characteristics of types of equity securities.

Learning Module 5: Company Analysis: Past and Present

Q.4239 Which of the following information is *most likely* contained in the analysis of new information section of subsequent company research reports?

A. Analysts updated recommendations.

B. Adjustments to prior forecasts based on new data.

C. Disclosures, disclaimers, and other legal requirements.

The correct answer is **B.**

The analysis of the new information section of subsequent company research reports contains the following information:

- Comparison of quarterly results to projections
- Interpretation of new data
- Adjustments to prior forecasts based on new data

A is incorrect. Analysts updated recommendation is contained in the recommendation section of the subsequent company research reports, together with the summary of changes from the prior recommendation and supporting explanations for any changes.

C is incorrect. A. Disclosures, disclaimers, and other legal requirements are contained in the front matter of the subsequent company research reports. Other items found in this section include the analysts' names, issuer names, security and exchange identifiers, analysts' recommendations, current security prices, and analysts' target prices.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (a): Describe the elements that should be covered in a thorough company research report.

Q.4240 The structure, content, and tone of a company research report depend on the analyst's setting. Which of the following is *most likely* the typical structure of a "sell-side report"?

A. An extensive initial report followed by shorter reports on specific topics or updates

B. A short initial report followed by extensive reports on specific topics or updates

C. A single extensive report covering all topics and updates

The correct answer is **A.**

The typical structure of a "sell-side report" is an extensive initial report followed by shorter reports on specific topics or updates. Sell-side analysts work for brokerage firms, and their reports are typically distributed to the firm's clients. The initial report is usually extensive and provides a comprehensive analysis of the company, including its business model, industry position, financial performance, and valuation. This report serves as a foundation for understanding the company and its investment potential.

Following the initial report, sell-side analysts provide shorter reports that focus on specific topics or updates. These updates could be related to recent company news, earnings releases, changes in the industry, or any other factors that could impact the company's performance and valuation. The purpose of these updates is to keep investors informed about any significant changes that could affect their investment decisions.

B is incorrect. A short initial report followed by extensive reports on specific topics or updates is not the typical structure of a sell-side report. While sell-side analysts do provide updates on specific topics, these updates are usually shorter and more focused than the initial report. The initial report is the most comprehensive and provides the foundation for understanding the company and its investment potential.

C is incorrect. A single extensive report covering all topics and updates is not the typical structure of a sell-side report. While the initial report is usually extensive, it is not intended to cover all topics and updates. Sell-side analysts provide regular updates to keep investors informed about any significant changes that could affect their investment decisions. These updates are typically shorter and more focused than the initial report.

CFA Level I, Equity, Learning Module 5: Company Analysis: Past and Present. LOS (a): Describe the elements that should be covered in a thorough company research report.

Q.4241 Which of the following is *most likely* the primary audience for analysts' reports solely for internal distribution?

A. Those who are unfamiliar with the issuer or security.

B. Those who are already familiar with the issuer or security.

C. External clients.

The correct answer is **B.**

The primary audience for analysts' reports solely for internal distribution is those who are already familiar with the issuer or security. These reports are typically prepared by analysts within a company or organization and are intended for internal use only. Analysts' reports that are intended just for internal distribution to an audience that is already familiar with the issuer may be much shorter and given verbally or through a few presentation slides.

A is incorrect. While analysts' reports can certainly be useful for those who are unfamiliar with the issuer or security, the primary audience for reports solely for internal distribution is not those who are unfamiliar. These reports are typically more detailed and technical and are intended for those who already have a certain level of knowledge and understanding of the issuer or security.

C is incorrect. Analysts' reports are solely for internal distribution and are not intended for external clients. These reports are typically confidential and are intended to inform decision-making within the organization. They are not typically shared with external clients, who would instead receive reports intended for external distribution.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company's business model.

Q.4242 Which of the following is *most likely* the term for an extensive initial report when an analyst begins covering a security?

A. Initiating coverage report.

B. Initial analysis report.

C. Primary coverage report

The correct answer is **A.**

The term for an extensive initial report, when an analyst begins covering a security, is called an Initiating Coverage Report. This is the first report that an analyst or a brokerage firm produces when they start following a new company or security. The initiating coverage report provides a comprehensive analysis of the company or security, including its business model, industry position, financial health, and future prospects.

It also includes a recommendation on whether to buy, sell, or hold the security. The initiating coverage report is a crucial tool for investors as it provides them with an in-depth understanding of the company or security and helps them make informed investment decisions. It is also a way for the analyst or brokerage firm to establish their expertise and credibility in the market.

B is incorrect. An Initial Analysis Report is not a standard term used in the financial industry. While it could theoretically refer to a first-time analysis of a company or security, it is not the specific term used when an analyst begins covering a new security.

C is incorrect. A Primary Coverage Report is also not a standard term used in the financial industry. It could be confused with the term 'primary research', which refers to the process of collecting data directly from the source, as opposed to analyzing data collected by someone else (secondary research). However, it is not the term used for the initial report produced by an analyst when they start covering a new security.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company’s business model.

Q.4243 Which of the following is *most likely* the nature of updates after the “initiating coverage” report?

A. They are typically longer and more detailed than the initial report

B. They are typically shorter and focus on specific topics or updates

C. They are typically the same length as the initial report

The correct answer is **B.**

Updates after the “initiating coverage” report are typically shorter and focus on specific topics or updates. The initiating coverage report is a comprehensive document that provides a detailed analysis of a company, including its business model, industry position, financial performance, and future prospects. It is intended to provide a thorough understanding of the company and its potential investment value.

After the initial report, subsequent updates are usually shorter and focus on specific topics or updates, such as quarterly earnings results, changes in management, or significant business developments. These updates are intended to keep investors informed about any significant changes that may affect the company’s investment value. They are not intended to reiterate the comprehensive analysis provided in the initiating coverage report, but rather to supplement it with timely and relevant information.

A is incorrect. Updates after the “initiating coverage” report are not typically longer and more detailed than the initial report. The initial report is usually the most comprehensive document, providing a detailed analysis of the company. Subsequent updates are typically shorter and focus on specific topics or updates.

C is incorrect. Updates after the “initiating coverage” report are not typically the same length as the initial report. The initial report is usually a comprehensive document, while subsequent updates are typically shorter and focus on specific topics or updates.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (a): Describe the elements that should be covered in a thorough company research report.

Q.4244 Which of the following is *most likely* the primary purpose of company and industry analysis in forming a view of an issuer's future financial results?

A. To predict the exact future earnings and cash flows.

B. To provide a mathematical model for future financial results.

C. To support and justify the analyst's forward-looking views.

The correct answer is **C.**

The primary purpose of company and industry analysis in forming a view of an issuer's future financial results is to support and justify the analyst's forward-looking views. Company and industry analysis involves a detailed examination of a company's financial statements, its competitive position in the industry, and the overall health of the industry. This analysis helps an analyst to form an opinion about the company's future financial performance.

The analyst uses this information to make predictions about the company's future earnings, cash flows, and other financial results. These predictions are not exact, but they are based on the analyst's understanding of the company and its industry. The analysis provides the evidence and reasoning that support these predictions. Therefore, the main purpose of company and industry analysis is to provide a solid foundation for the analyst's forward-looking views about a company's financial future.

A is incorrect. While company and industry analysis does involve making predictions about a company's future earnings and cash flows, the purpose of this analysis is not to predict the exact future earnings and cash flows. Predicting exact future financial results is impossible due to the inherent uncertainty in business and economic conditions.

B is incorrect. Company and industry analysis does not provide a mathematical model for future financial results. While quantitative methods are used in the analysis, the purpose of the analysis is not to create a mathematical model but to understand the company's financial condition and prospects. The analysis involves a combination of quantitative and qualitative methods, and the results are interpreted in the context of the company's specific situation and the conditions in its industry.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): determine a company's business model.

Q.4245 Which of the following is *most likely* the primary difference between “sell-side reports” and reports for internal distribution?

A. The audience they are intended for

B. The financial models they use

C. The companies they cover

The correct answer is **A.**

The primary difference between “sell-side reports” and reports for internal distribution is the audience they are intended for. Sell-side reports are produced by analysts working for brokerage firms, investment banks, and other financial institutions that sell securities and other investment products to investors. These reports are intended for external distribution to clients and potential clients of the firm, with the aim of persuading them to buy or sell certain securities.

Reports for internal distribution are intended for use within the organization that produces them. These reports are used for decision-making purposes by the management of the organization and are not intended for external distribution. The content of these reports may be similar to that of sell-side reports, but the audience and purpose are different.

B is incorrect. Both sell-side reports and reports for internal distribution may use similar financial models. The choice of financial models depends on the purpose of the analysis and the nature of the securities or companies being analyzed, not on whether the report is intended for external or internal distribution.

C is incorrect. Both sell-side reports and reports for internal distribution can cover any company, sector, or market, depending on the needs and interests of the audience. The choice of companies to cover is not a primary difference between these types of reports.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company’s business model.

Q.4246 Which of the following is *most likely* is the primary purpose of updates to a recommendation after the analyst receives new information or conducts additional analyses?

A. To provide a new mathematical model

B. To provide an update based on new information and analyses or a change in the analyst's recommendation

C. To provide a new initiating coverage report

The correct answer is **B.**

The primary purpose of updates to a recommendation after the analyst receives new information or conducts additional analyses is to provide an update based on new information and analyses or a change in the analyst's recommendation. In the dynamic world of finance, new information can significantly impact the valuation and prospects of a company. Therefore, it is crucial for analysts to update their recommendations when they receive new information or conduct additional analyses.

This ensures that investors have the most current and accurate information to base their investment decisions on. The updated recommendation can either confirm the previous recommendation or suggest a change, depending on the impact of the new information or analysis. This process is a key part of the analyst's role and is essential for maintaining the credibility and usefulness of their research.

A is incorrect. While a new mathematical model may be part of an update to a recommendation, it is not the primary purpose of such updates. The main aim is to provide updated information and analysis to investors, which may or may not involve a new mathematical model.

C is incorrect. An initiating coverage report is a detailed report that an analyst writes when they start covering a new company. While this report may be updated as new information becomes available, the primary purpose of updates to a recommendation is not to provide a new initiating coverage report. Instead, it is to provide updated information and analysis based on new information or additional analyses.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company's business model.

Q.4247 The initial step in industry and company analysis is determining a company's business model. This process helps in summarizing the key drivers of a company's financial results and position. What else does determining a company's business model *most likely* assist in:

A. focusing on areas that require further investigation and setting the analyst's expectations for the issuer.

B. determining the company's stock price.

C. determining the company's market share.

The correct answer is **A.**

Determining a company's business model is indeed the initial step in industry and company analysis. It helps in summarizing the key drivers of a company's financial results and position. Additionally, it assists in focusing on areas that require further investigation and sets the analyst's expectations for the issuer. Understanding a company's business model allows an analyst to identify the key revenue and cost drivers, which in turn helps in forecasting future financial performance.

It also helps in identifying the key risks and opportunities that the company faces, which can guide the analyst in identifying areas that require further investigation. Furthermore, understanding the business model can help set the analyst's expectations for the issuer, as it provides a framework for understanding how the company generates its revenues and profits and how it is likely to perform in the future.

B is incorrect. While the business model can influence a company's stock price, it does not directly determine it. The stock price is determined by the market and is influenced by a variety of factors, including the company's financial performance, the economic environment, and investor sentiment. Therefore, while understanding the business model can help an analyst make informed predictions about a company's future financial performance, it does not directly determine the stock price.

C is incorrect. The business model does not directly determine a company's market share. Market share is determined by the company's sales relative to the total sales in its industry. While the business model can influence a company's ability to generate sales, it is not the only factor that determines market share. Other factors, such as the company's marketing strategy, product quality, and customer service, can also play a significant role.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company’s business model.

Q.4248 A business model describes a company's operations and includes several elements. Analysts investigate these elements by answering key questions. What is most likely the nature of these key questions? They are:

A. company-specific.

B. industry-specific.

C. common across industries and companies.

The correct answer is **C.**

The nature of the key questions that analysts investigate when examining a company's business model is that they are common across industries and companies. These questions typically revolve around understanding the company's value proposition, its target customer segment, its key resources and activities, its cost structure, and its revenue streams, among other things. These are fundamental aspects of any business, regardless of the industry or the specific company.

By asking these questions, analysts can gain a comprehensive understanding of how a company operates, how it creates value, and how it generates profits. This information is crucial for making informed investment decisions. While the specific details of a company's business model may vary depending on the industry and the company, the underlying questions that need to be answered remain the same.

A is incorrect. While it is true that some aspects of a company's business model may be unique to that company, the key questions that analysts need to answer when investigating a business model are not company-specific. They are applicable to any company, regardless of its size, industry, or geographical location.

B is incorrect. Although certain elements of a business model may be influenced by industry-specific factors, the key questions that analysts need to answer are not industry-specific. They are relevant to any company in any industry. Understanding the industry context can certainly help in answering these questions, but it does not change the nature of the questions themselves.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company's business model.

Q.4249 "Analysts often focus their analysis on the differences in a company's business model from a conventional model or those of its competitors". What does this *most likely* imply?

A. Analysts are interested in the uniqueness of a company's business model.

B. Analysts are interested in the similarities between business models.

C. Analysts are interested in the complexity of a company's business model.

The correct answer is **A.**

When analysts focus their analysis on the differences in a company's business model from a conventional model or those of its competitors, it implies that they are interested in the uniqueness of a company's business model. A unique business model can provide a company with a competitive advantage, which can lead to superior financial performance. Analysts are interested in understanding how a company creates, delivers, and captures value and how these processes differ from those of other companies.

By focusing on the differences, analysts can identify unique strategies, resources, or capabilities that may contribute to a company's competitive advantage. This can help them make more accurate predictions about the company's future performance and make better investment decisions. Therefore, the uniqueness of a business model is a key area of focus for analysts.

B is incorrect. While analysts may also be interested in the similarities between business models, this is not what is implied by the focus on differences. Similarities can provide useful benchmarks for comparison, but they do not provide insights into a company's unique strategies or competitive advantages. Therefore, while similarities are important, they are not the primary focus of analysis.

C is incorrect. The complexity of a company's business model is not necessarily a focus of analysis. While a complex business model may require more detailed analysis, it does not necessarily provide a competitive advantage. In fact, a complex business model can sometimes be a disadvantage, as it may be more difficult to implement and manage. Therefore, complexity is not the primary focus of analysis.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company’s business model.

Q.4250 Analysts use various information sources to answer key questions about a company's business model. Which of the following is *most likely* an example of an issuer source of information?

A. Free industry white papers or analyst reports from a consultancy.

B. Reports and data from platforms such as Bloomberg and FactSet.

C. Quarterly or semi-annual earnings conference calls.

The correct answer is **C.**

Issuer sources are those that originate directly from the company or entity being analyzed. These sources include financial statements, press releases, annual reports, and conference calls. Quarterly or semi-annual earnings conference calls are an example of an issuer source. During these calls, company executives discuss the company's financial performance, business strategy, and future outlook.

Analysts can gain valuable insights from these calls, which can help them understand the company's business model and make informed investment decisions. The information provided during these calls is considered to be reliable as it comes directly from the company's management. However, analysts should also consider other sources of information to get a comprehensive view of the company's performance and prospects.

A is incorrect. Free industry white papers or analyst reports from a consultancy are examples of public third-party sources. These sources provide information about the industry or market in which the company operates, but they do not originate from the company itself.

B is incorrect. Reports and data from platforms such as Bloomberg and FactSet are examples of proprietary third-party sources. These platforms provide a wide range of financial data and analysis, but again, this information does not originate from the company being analyzed.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company’s business model.

Q.4251 Which of the following is *most likely* an example of an issuer source of information about a company's business model?

A. Company website.

B. General news outlets.

C. Surveys, conversations, and product comparisons.

The correct answer is **A.**

A company's website or properties that an analyst may be able to visit as either a customer or an investor is a public third-party source that analysts use to determine a company's business model. Company websites often provide a wealth of information about a company's business model, including its products and services, target market, competitive advantages, and strategies for growth.

In addition, visiting a company's properties can provide valuable insights into its operations, customer base, and market positioning. For example, an analyst might visit a retailer's stores to observe customer traffic, product selection, pricing strategies, and service quality. These observations can help the analyst understand the company's business model and assess its potential for success.

B is incorrect. General news outlets are not considered a direct source of information. While they can provide useful information about a company's activities and performance, they do not typically provide detailed insights into a company's business model. They often focus on recent events and developments rather than the underlying business model that drives a company's long-term performance. They are considered public third-party sources.

C is incorrect. Surveys, conversations, product comparisons, and other studies commissioned by the analyst or conducted directly are classified as proprietary primary research. These are primary research methods that analysts use to gather information directly from the company, its customers, competitors, or other stakeholders.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company’s business model.

Q.4252 Analysts in an institutional investment setting are often able to conduct initial research quickly. What is *most likely* the reason for this?

A. They have access to proprietary third-party sources, industry knowledge and experience, and prior analyses of the company

B. They have a large team of analysts working toget

C. They have access to advanced technology and software.

The correct answer is **A.**

Analysts in an institutional investment setting are often able to conduct initial research quickly because they have broad access to a variety of proprietary third-party sources, industry knowledge and experience, prior analyses of the company or industry, and access to the issuer investor relations personnel and management. These resources provide a wealth of information that can be used to quickly assess a company or industry.

Proprietary third-party sources can provide detailed data and analysis that may not be readily available to the public. Industry knowledge and experience can help analysts quickly understand the context and implications of new information. Prior analyses can provide a baseline for comparison and a framework for understanding new data. Access to issuer investor relations personnel and management can provide insights into the company’s strategy and outlook that may not be apparent from public information.

B is incorrect. While having a large team of analysts can certainly help in conducting research quickly, it is not the primary reason. A large team without access to the right resources or without the necessary industry knowledge and experience may not be able to conduct research effectively or efficiently.

C is incorrect. Access to advanced technology and software can certainly aid in the research process, but it is not the primary reason why analysts in an institutional investment setting are able to conduct initial research quickly. Technology and software are tools that can help analysts process and analyze data more efficiently, but they are not a substitute for the knowledge, experience, and resources mentioned in Choice A.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company’s business model.

Q.4253 Which of the following is *most likely* the primary purpose of determining a company's business model in the context of industry and company analysis?

A. Predict the company's future stock price.

B. Summarize the key drivers of a company's financial results and position.

C. Determine the company's market share.

The correct answer is **B.**

The primary purpose of determining a company's business model in the context of industry and company analysis is to summarize the key drivers of a company's financial results and position. Understanding a company's business model is crucial for analysts as it provides a clear picture of how the company generates its revenue, what its cost structures are, and how it creates value for its shareholders.

The business model outlines the company's strategic approach to achieving its financial objectives and provides insights into its competitive positioning within the industry. It helps analysts to understand the company's operational efficiency, profitability, and growth potential. By identifying the key drivers of a company's financial results, analysts can make more accurate forecasts and provide more reliable investment recommendations.

A is incorrect. While predicting the company's future stock price is an important aspect of financial analysis, it is not the primary purpose of determining a company's business model. The business model provides insights into the company's operations and financial performance, which can be used to estimate its future earnings and cash flows. However, the stock price is influenced by a variety of factors, including market sentiment, economic conditions, and investor expectations, which are not directly related to the business model.

C is incorrect. Determining a company's market share is an important part of industry analysis, but it is not the primary purpose of understanding the company's business model. The business model provides insights into how the company competes in the market and generates revenue, but it does not directly determine the company's market share. Market share is determined by comparing the company's sales to the total sales of the industry.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company's business model.

Q.4254 Which of the following is *most likely* the role of proprietary primary research in determining a company’s business model? It provides:

A. information about the company’s competitors.

B. information about the company’s stock price.

C. information through surveys, conversations, product comparisons, and other commissioned studies

The correct answer is **C.**

Proprietary primary research plays a crucial role in determining a company’s business model as it provides information through surveys, conversations, product comparisons, and other studies commissioned by the analyst or conducted directly. This type of research is unique and exclusive to the analyst or the firm conducting it, providing them with a competitive edge.

It allows analysts to gain a deep understanding of the company’s operations, its products or services, its competitive positioning, and its market environment. This information is vital in assessing the company’s business model and its sustainability. Proprietary primary research can reveal insights that are not available through secondary sources or public information, thereby enabling more accurate and informed investment decisions.

A is incorrect. While proprietary primary research can provide information about a company’s competitors, this is not its primary role in determining a company’s business model. Understanding the competitive landscape is just one aspect of the overall analysis of a company’s business model.

B is incorrect. Proprietary primary research does not directly provide information about a company’s stock price. While the insights gained from this research can influence an analyst’s view on the company’s valuation and hence its stock price, the research itself does not provide information about the stock price. The stock price is determined by the market and reflects the collective views of all market participants, not just the views of a single analyst or firm.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company’s business model.

Q.4255 Which of the following is *most likely* the significance of proprietary third-party sources of informaton in determining a company's business model? They provide information:

A. about the company's internal operations.

B. through analyst reports and communications, including from "sell-side" or "Wall Street" analysts and credit rating agencies.

C. about the company's market share.

The correct answer is **B.**

Proprietary third-party sources are significant in determining a company's business model because they provide information through analyst reports and communications, including from "sell-side" or "Wall Street" analysts and credit rating agencies. These sources offer valuable insights into a company's financial health, competitive position, and future prospects. Analyst reports often include a detailed analysis of a company's business model, including its revenue streams, cost structure, and key value drivers.

They also provide forecasts of future financial performance and recommendations on whether to buy, hold, or sell the company's stock. Credit rating agencies assess a company's creditworthiness, which can provide insights into its financial stability and risk of default. These sources can therefore play a crucial role in helping investors, lenders, and other stakeholders understand a company's business model and make informed decisions.

A is incorrect. Proprietary third-party sources do not typically provide information about a company's internal operations. This type of information is usually confidential and not publicly available. It is typically obtained through internal company reports, management discussions, and other internal sources.

C is incorrect. While proprietary third-party sources may provide some information about a company's market share, this is not their primary function or significance in determining a company's business model. Market share information is typically obtained through market research reports, industry publications, and other sources that specialize in market data.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company's business model.

Q.4256 When analyzing a company's financial position and historical results, the first step is to understand the business model. This understanding forms the foundation for forecasting a financial statement model that aids in security valuation. Which of the following is *most likely* the primary focus of this analysis?

A. Revenues.

B. Expenses.

C. Balance sheet analysis.

The correct answer is **A.**

The primary focus of the analysis when forecasting a financial statement model for security valuation is usually the company's revenues. Understanding the company's revenue streams is crucial as it provides insight into the company's business model, its market position, and its potential for growth. Revenue is the top line of the income statement and is often considered the most important financial metric for a company.

It reflects the total amount of money a company generates from its operations before any expenses are deducted. A thorough analysis of a company's revenues can provide valuable information about its business operations, competitive position, and potential for future growth. It can also help identify trends and patterns that may not be immediately apparent from a cursory review of the financial statements.

B is incorrect. While the company's expenses are an important aspect of financial analysis, they are not usually the primary focus when forecasting a financial statement model for security valuation. Expenses are deducted from revenues to calculate net income, which is a measure of profitability. However, without a thorough understanding of the company's revenues, it would be difficult to accurately forecast expenses and, consequently, net income.

C is incorrect. The company's balance sheet provides a snapshot of the company's financial position at a specific point in time, including its assets, liabilities, and shareholders' equity. While it is an important part of financial analysis, it is not usually the primary focus when forecasting a financial statement model for security valuation. The balance sheet does not provide information about the company's revenues or expenses, which are crucial for forecasting future financial performance.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (c): Evaluate a company's revenue and revenue drivers, including pricing power.

Q.4257 Which of the following approaches of determining revenue drivers *most likely* breaks down revenues into drivers such as sales volume and price or revenues by product line, segment, or geography?

A. Bottom-up approach.

B. Top-down approach.

C. Both bottom-up and top-down approach

The correct answer is **A.**

The Bottom-Up approach involves breaking down revenues into drivers such as sales volume and price or revenues by product line, segment, or geography. This approach starts with the smallest base elements and then builds up to the larger aggregate data. It is a detailed and granular approach that allows for a more precise and accurate analysis of revenue drivers.

It is often used in financial analysis, budgeting, and forecasting because it provides a more detailed understanding of the underlying factors that drive revenue. It allows analysts to identify specific areas of strength or weakness in a company's revenue generation and provides a basis for making strategic decisions to improve performance.

B is incorrect. The Top-Down approach starts with the aggregate data and then breaks it down into smaller components. While it can provide a broad overview of revenue trends, it does not provide the same level of detail as the Bottom-Up approach. The Top-Down approach is more suitable for macroeconomic analysis or for understanding the overall market or industry trends rather than the specific drivers of a company's revenue.

C is incorrect. This level of detail is specific to the Bottom-Up approach. The Top-Down approach starts with the total market or industry and then breaks it down into segments or individual companies. Therefore, it does not provide the same level of detail on the specific drivers of a company's revenue.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (c): Evaluate a company's revenue and revenue drivers, including pricing power.

Q.4258 Which of the following statements *most likely* correctly defines pricing power?

A. A company’s ability to set prices and other economic terms without affecting its sales volumes

B. A company’s ability to increase its market share

C. A company’s ability to increase its sales volume

The correct answer is **A.**

Pricing power refers to a company’s ability to set prices and other economic terms with customers without affecting its sales volumes. This is a crucial aspect of a company’s competitive advantage and profitability. Companies with strong pricing power can increase prices without losing customers, which can lead to higher profit margins.

Pricing power is often a result of strong brand recognition, product differentiation, or a lack of competition. It is a key factor to consider in a top-down approach to revenue forecasting, as it can significantly impact a company’s revenue growth. A company with strong pricing power can maintain or increase its revenues even in a challenging economic environment, making it a potentially attractive investment.

B is incorrect. While a company’s ability to increase its market share can contribute to its revenue growth, it is not what is referred to as pricing power. Market share refers to the percentage of an industry’s total sales that is earned by a particular company over a specified time period. A company can increase its market share by outperforming its competitors or by expanding into new markets, but this does not necessarily mean it has strong pricing power.

C is incorrect. A company’s ability to increase its sales volume can also contribute to its revenue growth, but it is not what is referred to as pricing power. Sales volume refers to the number of units of a product or service that a company sells. A company can increase its sales volume by attracting new customers or by selling more to existing customers, but this does not necessarily mean it has strong pricing power.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (c): Evaluate a company’s revenue and revenue drivers, including pricing power.

Q.4259 Analysts evaluate pricing power not just by examining a firm’s prices over time or relative to competitors but also by comparing a firm’s prices with its costs. Which of the following is most likely an important sign of pricing power?

A. Rising profitability over time.

B. Decreasing profitability over time.

C. Stable profitability over time.

The correct answer is **A.**

Rising profitability over time is an important sign of pricing power. Pricing power refers to a company’s ability to raise prices without losing customers to competitors. Firms with strong pricing power can increase prices over time, leading to higher profit margins and thus, rising profitability. This is because these firms have unique products, strong brand recognition, or high customer switching costs that make their customers less sensitive to price increases.

B is incorrect. Decreasing profitability over time is not a sign of pricing power. On the contrary, it suggests that a firm is unable to pass on cost increases to its customers, which indicates a lack of pricing power. This could be due to intense competition, commoditization of the firm’s products, or price sensitivity of the firm’s customers.

C is incorrect. Stable profitability over time does not necessarily indicate pricing power. While it suggests that a firm is able to maintain its profit margins, it does not show whether the firm has the ability to increase prices and improve its profitability. A firm with pricing power should be able to increase its profitability over time, not just maintain it.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (c): Evaluate a company’s revenue and revenue drivers, including pricing power.

Q.4260 Which of the following options *most likely* includes revenue drivers of a company?

A. Market size, product line, and pricing power.

B. Market size, expenses, and pricing power.

C. Market size, profit margins, and a company's share of that market.

The correct answer is **A.**

Revenue drivers are indeed factors that have a significant impact on a company's revenue. Using the bottom-up approach, these include sales volume and price or revenues by product line, segment, or geography.

Using the top-down approach, these include market share, the addressable market or market size, and GDP growth. Understanding these drivers is crucial for investors, as it can help them predict future revenue trends and make informed investment decisions.

B is incorrect. While market size and pricing power are indeed important revenue drivers, expenses are not a revenue driver. Expenses are costs incurred by a company in the process of generating revenue.

C is incorrect. Though the market size and a company's share of the market are considered revenue drivers, profit margin is not a revenue driver. Profit margin is a financial metric that measures a company's profitability and is calculated as a percentage of a company's net profit relative to its total revenue. It is an indicator of how efficiently a company is able to convert its sales into profits.

CFA Level I, Equity, Learning Module 5: Company Analysis: Past and Present. LOS (c): Evaluate a company's revenue and revenue drivers, including pricing power.

Q.4261 Which of the following *most likely* defines what top-down approach to revenue analysis?

A. Looking at the overall market size, sales volume, and price.

B. Looking at the overall market size and the company's share of that market.

C. Looking at the company's share of that market and product line revenue.

The correct answer is **B.**

The top-down approach to analyzing revenue involves looking at the overall market size and the company's share of that market. This approach starts with a broad view of the entire market or industry and then narrows down to the specific company. It involves understanding the total market size, the company's position within that market, and the company's market share.

A is incorrect. Though looking at the overall market size is an aspect of top top-down approach, the use of sales volume and price is not part of the top-down approach. Decomposing revenue into sales volume and price is an aspect of the bottom-up approach.

C is incorrect. Looking at the company's share of the market is an aspect of top-down approach. However, examining the product line revenue is a bottom-up approach activity.

CFA Level I, Equity, Learning Module 5: Company Analysis: Past and Present. LOS (c): Evaluate a company's revenue and revenue drivers, including pricing power.

Q.4262 Which of the following *most likely* describes company's operating costs?

A. Expenses related to the acquisition and production of long-term assets.

B. Payments to debt and equity investors as a return on their investment

C. Expenses related to the generation of current period revenue.

The correct answer is **C.**

Operating costs, also known as operating expenses, are the costs that a company incurs as a result of day-to-day business operations. They are the expenses related to the generation of current period revenue. These costs include rent, utilities, salaries, raw materials, and other expenses that are directly tied to the production and delivery of goods and services.

Operating costs are typically recurring and are necessary for the company to conduct its business. They are deducted from a company's gross income to determine its operating income, which is a measure of profitability before interest and taxes. Understanding operating costs is crucial for managers, investors, and creditors as it helps them assess the company's efficiency and profitability.

A is incorrect. Expenses related to the acquisition and production of long-term assets are not operating costs. These are capital expenditures, which are used to acquire, upgrade, and maintain physical assets such as property, buildings, and equipment. Capital expenditures are not considered operating costs because they are not tied to the company's day-to-day operations and are not recurring in nature.

B is incorrect. Payments to debt and equity investors as a return on their investment are not operating costs. These are financial costs, specifically interest expenses and dividends, which are related to the company's financing activities. While these costs are important for a company's financial health, they are not directly tied to the production and delivery of goods and services and are, therefore, not considered operating costs.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (d): Evaluate a company's operating profitability and working capital using key measures.

Q.4263 Which of the following is *most likely* an example of a variable cost?

A. Insurance costs.

B. Depreciation and amortization.

C. Materials and direct labor costs for a manufacturer.

The correct answer is **C.**

Materials and direct labor costs for a manufacturer are examples of variable costs. Variable costs are those costs that change in direct proportion to the volume of output. In other words, when production increases, variable costs increase, and when production decreases, variable costs decrease. For a manufacturer, the cost of materials and direct labor are directly tied to the number of units produced. If more units are produced, more materials and labor are needed, and thus the cost increases.

A is incorrect. Insurance costs are also an example of fixed costs. These costs are typically set for a certain period (e.g., annually) and do not change with the level of production or sales. Therefore, they are not variable costs.

B is incorrect. Depreciation and amortization are examples of fixed costs, not variable costs. These costs are incurred regardless of the level of production or sales. Depreciation is the systematic allocation of the cost of a tangible asset over its useful life, while amortization is the systematic allocation of the cost of an intangible asset over its useful life. They do not change with the level of output or sales and thus are considered fixed costs.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (d): Evaluate a company's operating profitability and working capital using key measures.

Q.4264 Which of the following will *most likely* increase the degree of operating leverage (DOL) of a company?

A. increasing both the fixed and variable costs in its cost base.

B. increasing the fixed costs and decreasing the variable costs in its cost base.

C. decreasing the fixed costs and increasing the variable costs in its cost base.

The correct answer is **B.**

A firm can increase its Degree of Operating Leverage (DOL) by increasing the fixed costs and decreasing the variable costs in its cost base. The DOL is a measure of how a percentage change in sales volume will affect operating profit. It is calculated as the percentage change in operating profit divided by the percentage change in sales. Firms with a high DOL have a high proportion of fixed costs in their cost structure.

A is incorrect. Increasing both the fixed and variable costs in its cost base would not necessarily increase a firm’s DOL. The impact on DOL would depend on the relative changes in fixed and variable costs. If the increase in fixed costs is greater than the increase in variable costs, the DOL could increase. However, if the increase in variable costs is greater than the increase in fixed costs, the DOL could decrease.

C is incorrect. Decreasing the fixed costs and increasing the variable costs in its cost base would actually decrease a firm’s DOL. This is because a lower proportion of fixed costs would mean that a smaller portion of each additional dollar of sales contributes to operating profit.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (d): Evaluate a company’s operating profitability and working capital using key measures.

Q.4265 Which of the following statements is *most likely* true regarding operating costs?

A. A significant amount of the cost of sales is fixed.

B. Depreciation and amortization expenses are variable.

C. Most operating expenses, such as sales and marketing, general and administrative are variable.

The correct answer is **A.**

A significant amount of the cost of sales is indeed fixed. Cost of sales or cost of goods sold (COGS), is the direct costs attributable to the production of the goods sold by a company. This amount includes the cost of the materials and labor directly used to create the goods. It excludes indirect expenses such as distribution costs and sales force costs.

B is incorrect. Depreciation and amortization expenses are not variable; they are fixed costs. Depreciation is the systematic allocation of the cost of a tangible asset over its useful life, and amortization is a similar process for intangible assets. These costs are determined at the time of acquisition of the asset and do not change with the level of production or sales.

C is incorrect. It is not accurate to say that most operating expenses, such as sales and marketing, general and administrative, and research and development costs, are variable. While some of these costs may vary with the level of sales (for example, sales commissions), many are fixed or semi-fixed in nature. For example, salaries for administrative staff, rent for office space, and research and development costs are typically incurred regardless of the level of sales.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (d): Evaluate a company’s operating profitability and working capital using key measures.

Q.4266 Which of the following *most likely* describe the economies of scale?

A. A decline in costs per unit as output grows.

B. An increase in costs per unit as output grows.

C. A decline in costs per unit as the number of business lines increases.

The correct answer is **A.**

Economies of scale refer to the decline in costs per unit as output grows. This concept is based on the principle that as a company increases its production volume, the cost of producing each unit decreases. This is due to the fact that fixed costs, such as rent, salaries, and equipment, are spread over a larger number of units.

As a company grows, it can often negotiate better terms with suppliers, further reducing the cost per unit. Economies of scale can provide a significant competitive advantage, as they allow a company to produce goods or services at a lower cost than its competitors. This can lead to higher profit margins or the ability to offer lower prices to consumers, both of which can contribute to increased market share.

B is incorrect. An increase in costs per unit as output grows is the opposite of economies of scale. This situation, known as diseconomies of scale, can occur when a company grows too large and becomes inefficient, leading to increased per-unit costs. This can be due to factors such as increased complexity, communication difficulties, or bureaucratic inefficiencies.

C is incorrect. The decline in costs per unit as the number of products or business lines increases is referred to as economies of scope, not economies of scale. Economies of scope occur when a company can produce a variety of products more cheaply than if each product were produced individually. This is often due to shared resources or capabilities, such as a common distribution network or brand recognition.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (d): Evaluate a company's operating profitability and working capital using key measures.

Q.4267 Which of the following is *least likely* a method used by independent investment analysts to determine whether there have been improvements or declines in the value creation of a company?

A. Aggregated measures.

B. Company’s internal reports.

C. Investors’ required rates of return.

The correct answer is **C.**

Investors’ required rates of return is not a method used by independent investment analysts to determine whether there have been improvements or declines in value creation. The required rate of return is a concept that represents the minimum return that an investor expects to achieve by investing in a particular asset. It is not a method of evaluating a company’s capital investments or assessing the effectiveness of management in utilizing investors’ capital.

A is incorrect. Aggregated measures are indeed used by independent investment analysts to determine whether there have been improvements or declines in value creation. These measures, which include ratios such as return on invested capital (ROIC) and economic value added (EVA), provide a comprehensive view of a company’s performance by taking into account various factors such as profitability, efficiency, and risk.

B is incorrect. Company’s internal reports are also used by analysts to assess a company’s performance and value creation. These reports provide detailed information about a company’s operations, financial condition, and strategic initiatives, which can be used to evaluate the effectiveness of management in utilizing investors’ capital.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (b): Determine a company’s business model.

Q.4268 Which of the following *most likely* indicates a high net working capital to sales ratio?

A. The company's current liabilities exceed its current assets.

B. The company is efficiently using its working capital to generate sales.

C. The company is not efficiently using its working capital to generate sales.

The correct answer is **C.**

A high net working capital to sales ratio indicates that the company is not efficiently using its working capital to generate sales. Net working capital is calculated as:

$$\begin{aligned}\text{Net Working Capital} = &(\text{Current assets, excluding cash and marketable securities}) - \\ &(\text{Current liabilities, excluding short-term and current debt})\end{aligned}$$

A high ratio suggests that a large proportion of a company's assets are tied up in working capital, which may not be generating sales or profits. This could be due to excessive inventory, slow collection of receivables, or insufficient payables.

A is incorrect. The net working capital to sales ratio does not directly indicate whether a company's current liabilities exceed its current assets. A company could have a high ratio because it has a large amount of current assets relative to its sales, not because its current liabilities exceed its current assets. If a company's current liabilities did exceed its current assets, it would have negative net working capital, but this would not necessarily result in a high net working capital to sales ratio.

B is incorrect. A low net working capital to sales ratio, not a high one, would indicate that the company is efficiently using its working capital to generate sales. A low ratio suggests that the company is able to generate a high volume of sales with a relatively small amount of working capital, which is generally seen as a sign of efficiency.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (d): Evaluate a company's operating profitability and working capital using key measures.

Q.4269 The risks associated with a company's capital structure can be measured using various methods. Which of the following is *least likely* a method used to assess these risks?

A. Company's market share.

B. Leverage and coverage ratios.

C. Credit ratings by third-party rating agencies

The correct answer is **A.**

The company's market share is not a method used to assess the risks associated with a company's capital structure. Capital structure risk refers to the risk associated with a company's mix of debt and equity financing. It is typically assessed using leverage and coverage ratios, which measure the company's ability to meet its debt obligations, and credit ratings, which provide an independent assessment of the company's creditworthiness.

B is incorrect. Leverage and coverage ratios are indeed used to assess the risks associated with a company's capital structure. Leverage ratios measure the proportion of debt in a company's capital structure, while coverage ratios measure the company's ability to meet its debt service obligations. High leverage and low coverage ratios indicate a higher level of capital structure risk.

C is incorrect. Credit ratings by third-party rating agencies are also used to assess capital structure risk. These ratings provide an independent assessment of a company's creditworthiness, taking into account factors such as its capital structure, financial performance, and industry conditions. Lower credit ratings indicate a higher level of capital structure risk.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (e): Evaluate a company's capital investments and capital structure.

Q.4270 Which of the following will *most likely* be consistent with an increase in the degree of financial leverage?

A. Higher interest expenses that are fixed with respect to operating income.

B. Lower interest expenses that are fixed with respect to operating income.

C. Higher interest expenses that are variable with respect to operating income.

The correct answer is **A.**

The degree of financial leverage increases with higher interest expenses that are fixed with respect to operating income. Financial leverage is a measure of how a company's operations are financed with debt versus equity. It is a measure of risk, as companies with higher leverage are more vulnerable to economic downturns due to the higher fixed costs of interest payments.

When a company has high fixed interest expenses, a change in operating income will have a larger impact on net income because the interest expenses do not change with operating income. This means that a small change in operating income can lead to a large change in net income, increasing the degree of financial leverage.

B is incorrect. Lower interest expenses that are fixed with respect to operating income would decrease the degree of financial leverage, not increase it. This is because lower fixed-interest expenses would mean that a change in operating income would have a smaller impact on net income, reducing the degree of financial leverage.

C is incorrect. Higher interest expenses that are variable with respect to operating income would not necessarily increase the degree of financial leverage. This is because variable interest expenses change with operating income, so a change in operating income would not necessarily lead to a large change in net income. Therefore, the degree of financial leverage would not necessarily be higher when the interest expenses that are variable with respect to operating income are higher.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (e): Evaluate a company's capital investments and capital structure.

Q.4271 Which of the following is *most likely* a measure of levered returns?

A. Return on equity (ROE).

B. Return on assets (ROA).

C. Return on Invested Capital (ROIC).

The correct answer is **A.**

Return on Equity (ROE) is a measure of levered returns. ROE is a financial ratio that measures the profitability of a firm in relation to the equity. It is calculated by dividing net income by shareholder's equity. The reason why ROE is a measure of levered returns is because it takes into account the financial leverage of a company.

Levered returns, often referred to as leveraged returns, are a measure of an investor's total return on an investment that involves the use of leverage or borrowed funds. Leveraged returns take into account not only the return on the investor's own capital but also the impact of borrowed funds on the overall return.

B is incorrect. Return on assets (ROA) is also not a measure of levered returns. ROA measures the profitability of a company in relation to its total assets. It is calculated by dividing net income by total assets. Like ROIC, ROA does not take into account the financial leverage of a company, and therefore, it is not a measure of levered returns.

C is incorrect. Return on Invested Capital (ROIC) is not a measure of levered returns. ROIC measures how effectively a company uses its capital to generate profits. It is calculated by dividing the net operating profit after taxes by the total invested capital. ROIC does not take into account the financial leverage of a company, and therefore, it is not a measure of levered returns.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (e): Evaluate a company's capital investments and capital structure.

Q.4272 Which of the following is *most likely* the main difference/similarity between the degree of financial leverage and the degree of operating leverage?

A. DFL and DOL are primarily determined by the company's financing costs.

B. DFL is more concerned with the variability of cash flows, while DOL with the variability of sales.

C. DFL is determined by financing costs, while DOL is determined by fixed operating cost

The correct answer is **C.**

The degree of financial leverage is determined by financing costs, while the degree of operating leverage is determined by fixed operating costs. Financial leverage refers to the use of debt to acquire additional assets. On the other hand, operating leverage refers to the proportion of fixed costs in a company's cost structure. The degree of operating leverage is a measure of how much operating income will change with a change in sales, due to changes in fixed costs.

A is incorrect. The operating profit margin is a measure of a company's profitability from its core business operations, before taking into account interest and taxes. Like the gross margin, it is not directly comparable to levered returns, which take into account the effect of financial leverage. Therefore, it is not correct to say that a company's levered returns can be significantly higher than its operating margin.

B is incorrect. The degree of financial leverage reflects the risk associated with the company's financing decisions, while the degree of operating leverage reflects the risk associated with the company's operating decisions.

CFA Level I, Topic 6 - Equity, Learning Module 5: Company Analysis: Past and Present. LOS (e): Evaluate a company's capital investments and capital structure.

Learning Module 6: Industry and Competitive Analysis

Q.117 A high-tech industry only has 3 large firms operating in it. This is *most likely* a:

A. concentrated industry.

B. fragmented industry.

C. low-cost industry.

The correct answer is **A.**

A high-tech industry with only 3 large firms operating within it is most accurately described as a concentrated industry. This classification is based on the market structure and competitive landscape of the industry. In a concentrated industry, a small number of firms hold a significant market share, which allows them to exert considerable influence over the industry's direction, pricing, and innovation.

The presence of only 3 large firms suggests that these entities likely dominate the market, making it difficult for new entrants to compete or for smaller firms to gain significant traction. This concentration can lead to higher barriers to entry, reduced competition, and potentially higher prices for consumers. However, it can also foster innovation and efficiency as the dominant firms have the resources to invest in research and development.

B is incorrect. A fragmented industry is characterized by a large number of small or medium-sized firms, none of which has a significant market share or the ability to individually influence the industry's direction. This scenario typically results in intense competition, lower prices, and a focus on niche markets or customer service as a way to differentiate. The description of an industry with only 3 large firms directly contradicts the definition of a fragmented industry, as the concentration of market power is high, not dispersed among many competitors.

C is incorrect. Labeling the industry as low-cost is misleading without additional context regarding the firms' strategies or operational efficiencies. The term "low-cost industry" generally refers to industries where firms compete primarily on price, often due to minimal differentiation in products or services. While it's possible for firms in a concentrated industry to adopt low-cost strategies, the mere presence of a small number of large firms does not inherently make an industry low-cost.

Factors such as the level of technological advancement, the scale of operations, and the competitive strategies of the firms are crucial in determining whether an industry can be classified as low-cost. Therefore, without specific information about the cost structures or pricing strategies of the firms in question, it is inappropriate to categorize the industry based solely on the number of dominant players.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1024 While trying to develop a competitive strategy, a company opts for the leadership cost strategy. Which of the following is *most likely* one of the features of this company?

A. The company has less proportion of market share.

B. The company has a low cost of capital.

C. The company has the power to set higher commodity prices than its competitors.

The correct answer is **B.**

A company that opts for a cost leadership strategy aims to become the lowest-cost producer in its industry. The primary feature of such a company is its ability to maintain a low cost of capital. This is crucial because a low cost of capital allows the company to fund its operations and expansions at a lower cost, enabling it to offer its products or services at a lower price than its competitors while still maintaining profitability.

By achieving cost leadership, the company can attract a larger market share by appealing to cost-conscious customers. This strategy requires efficient production processes, economies of scale, and tight cost control. A low cost of capital is indicative of the company's efficiency in managing its financial resources, which is a cornerstone of the cost leadership strategy.

A is incorrect. Their lower cost structure allows them to offer competitive prices, attracting a larger customer base. Therefore, a smaller market share would not be a characteristic feature of a company pursuing cost leadership but rather an indication of challenges in executing the strategy effectively.

C is incorrect. The assertion that the company has the power to set higher commodity prices than its competitors is contrary to the essence of a cost leadership strategy. The primary goal of this strategy is not to charge higher prices, but to offer products or services at lower prices than competitors, thereby gaining a competitive advantage.

Companies employing a cost leadership strategy focus on minimizing costs to maintain profitability even at lower price points, rather than leveraging the ability to charge higher prices. This approach helps in attracting price-sensitive customers and expanding the company's market share. Therefore, the ability to set higher prices is not characteristic of a cost leadership strategy.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (e) Evaluate the competitive strategy and position of a company.

Q.1028 What happens in a situation of under capacity?

A. Demand is smaller than supply at the current prices.

B. Demand is always equal to supply in the market.

C. Demand is superior to supply at the current prices.

The correct answer is **C.**

Undercapacity refers to a scenario where the production capabilities of a company or industry are insufficient to meet the current demand for its products or services at prevailing prices. This situation often leads to several economic implications, including increased prices and higher returns on investment, as the demand for the limited supply of goods or services exceeds the available supply.

Under-capacity can be caused by various factors such as government policies that restrict expansion or importation, breakdowns of production machinery, labor issues like prolonged strikes, shortages of production inputs, and underutilization of existing plants and equipment. These factors contribute to a scenario where the supply cannot keep up with the demand, leading to a market condition where demand is superior to supply at current prices.

A is incorrect. This option suggests that demand is smaller than supply at the current prices, which describes a situation of overcapacity rather than under-capacity. Overcapacity occurs when the production capabilities exceed the demand for products or services, leading to an excess supply in the market. This condition is opposite to under-capacity, where the demand outstrips the available supply, causing prices to potentially rise as consumers compete for the limited goods or services.

B is incorrect. This option implies that demand is always equal to supply in the market, which describes a state of market equilibrium. In reality, markets frequently experience fluctuations and imbalances between supply and demand due to various external and internal factors. Under-capacity specifically refers to a situation where demand exceeds supply, not a balanced market condition. Market equilibrium is an ideal state where the quantity of goods supplied equals the quantity demanded at a specific price level, but it does not accurately describe the dynamics of under-capacity.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1030 Drug stores can be classified as a:

A. cyclical industry.

B. growth industry.

C. defensive industry.

The correct answer is **C.**

Drug stores are classified as defensive industries because they exhibit stable demand regardless of economic fluctuations. Defensive industries are characterized by their production of goods and services that remain in constant demand, irrespective of the state of the economy. This stability is primarily because these industries provide essential commodities and services that cater to basic human needs, which do not diminish even during economic downturns.

The healthcare sector, including drug stores, is a prime example of a defensive industry. People require medications and healthcare products throughout all economic conditions, making drug stores resilient to economic changes. This inherent stability makes drug stores and similar sectors less susceptible to the economic cycles that affect other industries more significantly.

A is incorrect. The demand for healthcare products and medications remains relatively constant, regardless of economic conditions.

B is incorrect. Growth industries are characterized by their potential for above-average growth compared to the broader market. These industries are often at the forefront of innovation and may represent sectors that are developing due to new technologies or societal changes. Growth industries are expected to expand rapidly as they tap into new markets or create entirely new market segments.

Examples include the technology sector, renewable energy, and biotechnology. While drug stores may experience growth, particularly in regions with aging populations or expanding healthcare coverage, they do not exhibit the high growth rates or the innovative, market-creating characteristics typical of growth industries. Instead, their demand is driven by the consistent and essential need for healthcare products and services, aligning them more closely with the definition of a defensive industry.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1031 Which of these characteristics best describe commodity goods?

A. High competition and high profitability.

B. High competition and low profitability.

C. Low competition and high profitability.

The correct answer is **B.**

Commodity goods are typically characterized by high competition and low profitability. This is primarily due to the nature of commodity markets, where products are largely undifferentiated and interchangeable. In such markets, the presence of numerous suppliers offering similar products leads to intense competition.

Since commodities are standardized, consumers can easily switch from one supplier to another with minimal cost or inconvenience, which further intensifies the competitive environment.

Additionally, the high competition in commodity markets often leads to price wars, as suppliers attempt to undercut each other to gain market share. This competitive pricing strategy, while potentially increasing sales volume, tends to significantly reduce profit margins.

Furthermore, the demand for commodities is often highly elastic, meaning that small changes in price can lead to significant changes in the quantity demanded. This elasticity further contributes to the low profitability of commodity goods, as suppliers have limited ability to increase prices without negatively impacting demand.

A is incorrect. While it is true that commodity markets are highly competitive, this competition typically results in low profitability rather than high. The undifferentiated nature of commodities means that suppliers have little control over pricing and are often forced to compete on price alone, which squeezes profit margins. Additionally, the ease with which consumers can switch between suppliers in a commodity market further limits the potential for high profitability.

C is incorrect. The standardized nature of commodities leads to a crowded marketplace with many suppliers offering similar products, which results in high competition. This high level of competition, combined with the price sensitivity of consumers in commodity markets, typically results in low profitability for suppliers. The notion of low competition in commodity markets contradicts the fundamental characteristics of these markets, where the ease of entry and the presence of numerous suppliers contribute to a highly competitive environment.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (c) Determine an industry's size, growth characteristics, profitability, and market share trends.

Q.1032 How does the oil industry *most likely* maintain a premium pricing strategy?

A. The threat of substitutes

B. The bargaining power of the buyers

C. Significant barriers of entry

The correct answer is **C.**

The oil industry is able to maintain a premium pricing strategy primarily due to significant barriers to entry. These barriers include the high capital investment required for exploration, drilling, and refining, as well as regulatory hurdles and the need for specialized technology and expertise. The presence of these barriers means that new competitors cannot easily enter the market, which limits competition and allows existing companies to set higher prices.

Furthermore, the global demand for oil and its products ensures a steady market for these premium-priced offerings. The strategic control over oil reserves by a few major companies and countries also contributes to the maintenance of these barriers, reinforcing the industry's ability to command premium pricing.

A is incorrect. The threat of substitutes does not directly enable the oil industry to maintain premium pricing. While alternative energy sources are emerging, the current infrastructure and technology heavily depend on oil and its derivatives. This dependency limits the immediate impact of substitutes on the industry's pricing strategy. However, in the long term, the development of viable and cost-effective alternatives could challenge the industry's ability to maintain premium prices.

B is incorrect. The bargaining power of buyers, in theory, could exert downward pressure on prices. However, due to the essential nature of oil and its products in various sectors such as transportation, manufacturing, and energy production, buyers have limited alternatives. This necessity reduces their bargaining power. Additionally, the oligopolistic structure of the oil market means that a few large entities control a significant portion of the supply, further diminishing the bargaining power of individual buyers or small groups of buyers in influencing pricing strategies.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry’s structure and external influences using Porter’s Five Forces and PESTLE frameworks.

Q.1033 Electricity is part of which industrial classification sector?

A. Energy

B. Utilities

C. Technology

The correct answer is **B.**

This sector encompasses companies that provide basic amenities and services to consumers and businesses. These services include the generation, distribution, and sale of electricity, as well as water and gas services.

The Utilities sector is crucial for the functioning of everyday life and the economy, as it ensures the provision of essential services that are necessary for heating, cooling, lighting, and operating machinery in various industries.

A is incorrect. While the Energy sector is closely related to the Utilities sector, it primarily focuses on the exploration, production, and marketing of energy products, including oil, natural gas, and renewable energy sources.

The Energy sector is more concerned with the supply side of energy products rather than the distribution and delivery of services to end-users, which is the main focus of the Utilities sector. Therefore, classifying electricity under the Energy sector would overlook the aspect of service provision that is central to the Utilities sector.

C is incorrect. The Technology sector encompasses companies involved in the research, development, and distribution of technologically based goods and services. This includes software companies, hardware manufacturers, and internet companies, among others.

While technology plays a significant role in the generation and distribution of electricity, especially with the advent of smart grids and renewable energy technologies, the primary function of providing electricity as a service to consumers and businesses falls under the Utilities sector. Therefore, classifying electricity within the Technology sector would not accurately reflect its role as a basic utility service.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1359 Which of the following is the analysis of a specific branch of manufacturing, service or trade?

A. Industry Analysis

B. Company Analysis

C. Benchmarking Analysis

The correct answer is **A.**

Industry analysis is the evaluation and examination of a specific branch of manufacturing, service, or trade. This type of analysis involves a comprehensive study of the economic, political, and market factors that influence the performance and operations of companies within a particular sector.

It aims to identify the strengths, weaknesses, opportunities, and threats (SWOT) that exist within an industry, as well as to understand the competitive landscape, market trends, and potential for growth or decline. Industry analysis is crucial for investors, companies, and stakeholders to make informed decisions regarding investments, strategic planning, and competitive positioning.

B is incorrect. Company analysis focuses on evaluating the financial health, performance, strategies, and competitive position of a specific company rather than an entire industry. It involves a detailed examination of a company's financial statements, business model, products or services, market share, and competitive advantages.

The goal of company analysis is to assess the company's potential for growth, profitability, and risk. While company analysis may consider industry factors as part of its evaluation, its primary focus is on the individual company and not the broader industry in which it operates.

C is incorrect. Benchmarking analysis is a process of comparing a company's processes, performance metrics, and products against those of leading companies within the same industry or across different industries. The purpose of benchmarking analysis is to identify areas where a company can improve its operations, increase efficiency, and enhance competitive advantage by learning from the best practices of others.

Benchmarking can be internal, comparing different departments or operations within the same company, or external, comparing with other companies. Unlike industry analysis, which provides an overview of the entire industry, benchmarking analysis is focused on specific aspects of performance and operational efficiency.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (a) Describe the purposes of, and steps involved in, industry and competitive analysis.

Q.1360 Which of the following is *not* one of the uses of Industry Analysis?

A. Understand a company's business and business environment

B. Identify active investment opportunities

C. Determine the performance of a company based on industry standards

The correct answer is **C.**

Industry analysis is a crucial tool for investors and analysts to understand the broader context in which a company operates. It involves examining the economic, political, and market factors that influence an industry's performance.

This analysis helps in identifying the strengths, weaknesses, opportunities, and threats within a specific sector, enabling investors to make informed decisions. Determining the performance of a company based on industry standards is least likely a use of industry analysis.

A is incorrect. Understanding a company's business and business environment is a primary use of industry analysis. This process involves evaluating the industry's competitive landscape, regulatory environment, market trends, and economic indicators.

By gaining a deep understanding of these factors, investors and analysts can assess a company's position within its industry, its potential for growth, and the challenges it may face. This comprehensive understanding is essential for making strategic investment decisions and for advising companies on their business strategies.

B is incorrect. Identifying active investment opportunities is another significant use of industry analysis. By analyzing different sectors and understanding their growth prospects, investors can pinpoint industries that are poised for growth or sectors that are undervalued by the market.

This analysis allows investors to allocate their resources more effectively, targeting investments in industries with higher potential returns. Furthermore, industry analysis can reveal emerging trends and technologies that may disrupt traditional business models, offering early investment opportunities in innovative companies.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (a) Describe the purposes of, and steps involved in, industry and competitive analysis.

Q.1361 Which of the following is *least likely* one of the three major approaches to industry classification?

A. Market capitalization

B. Products and/or services supplied

C. Statistical similarities

The correct answer is **A.**

Market capitalization is not one of the three major approaches to industry classification. Industry classification systems are designed to categorize companies based on certain characteristics that they share, which helps investors, analysts, and other stakeholders understand the competitive landscapes, performance metrics, and risks associated with different sectors.

The three widely recognized approaches to industry classification include products and/or services supplied, business-cycle sensitivities, and statistical similarities.

B is incorrect. Products and/or services supplied is indeed one of the major approaches to industry classification. This method categorizes companies based on their primary business activities or the main sources of their revenue.

It is a fundamental approach used in various industry classification standards, such as the Global Industry Classification Standard (GICS) and the Industry Classification Benchmark (ICB), which group companies into sectors and industries based on what they produce or the services they provide. This approach helps investors and analysts compare companies with similar products or services and understand the dynamics of specific markets.

C is incorrect. Statistical similarities is also a recognized approach to industry classification. This method involves grouping companies based on the correlations of their securities' returns over time. By analyzing historical performance data, companies that exhibit similar return patterns are classified together.

This approach can reveal underlying economic or market factors that cause certain companies to move in tandem, offering insights into risk factors and investment opportunities. Statistical similarities can complement the more traditional classification methods, providing a quantitative perspective on how companies within the same or different sectors relate to each other in terms of their stock performance.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1362 Which of the following is a company whose profits are strongly correlated with the strength of the overall economy?

A. Cyclical company

B. Positively correlated company

C. Defensive growth company

The correct answer is **A.**

A cyclical company is one whose financial performance is closely linked to the overall state of the economy. These companies tend to perform well when the economy is growing and face challenges during economic downturns. The correlation between the performance of cyclical companies and the economy's health is due to the nature of the products or services they offer, which are often considered non-essential or luxury items.

During times of economic prosperity, consumers and businesses are more likely to increase spending on these non-essential goods and services, leading to higher profits for cyclical companies. Conversely, in periods of economic decline, spending on these items is often reduced, resulting in decreased profits for these companies. This direct relationship with the economic cycle makes cyclical companies a good indicator of the economy's strength.

B is incorrect. The term "positively correlated company" is not a standard classification within the context of economic cycles. While it's true that all companies have some degree of correlation with the economy, the term does not specifically refer to companies whose profits are strongly correlated with the strength of the overall economy.

C is incorrect. Defensive growth companies, also known as non-cyclical or defensive companies, are characterized by their ability to maintain stable earnings and performance regardless of the state of the overall economy. These companies typically operate in industries that provide essential goods and services, such as utilities, healthcare, and consumer staples, which remain in demand even during economic downturns.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (c) Determine an industry’s size, growth characteristics, profitability, and market share trends.

Q.1363 Which of the following is a disadvantage of a business-cycle classification?

A. It uses historical data

B. Different countries and regions of the world frequently progress through the various stages of the business cycle at different times

C. This method often results in non-intuitive groups of companies

The correct answer is **B.**

The business cycle refers to the fluctuations in economic activity that an economy experiences over a period, typically characterized by four stages: expansion, peak, contraction, and trough. One of the main challenges with applying a business-cycle classification is that different countries and regions often do not synchronize in their economic cycles.

This lack of synchronization means that while one country might be experiencing an economic expansion, another could be in a contraction phase. This discrepancy can lead to difficulties in classifying companies that operate globally, as their performance may not align neatly with a single phase of the business cycle.

Moreover, multinational companies might experience varied impacts on their operations and financial performance depending on the economic conditions in different regions, making a straightforward classification based on the business cycle problematic.

A is incorrect. The use of historical data is not inherently a disadvantage of a business-cycle classification. In fact, historical data is crucial for identifying patterns in economic activity and understanding how different phases of the business cycle can impact various sectors and companies.

Analysts rely on historical data to make informed predictions about future economic conditions and to classify companies based on their sensitivity to different economic phases. While historical data may not always perfectly predict future trends, it provides valuable insights that can inform business-cycle classifications.

C is incorrect. The claim that a business-cycle classification often results in non-intuitive groups of companies is more closely associated with the limitations of other classification methods, such as the statistical similarities approach. The business-cycle classification focuses on how companies are affected by economic cycles, which can lead to intuitive groupings based on companies' cyclical nature.

For example, consumer staples are often classified as less sensitive to economic downturns, while luxury goods and discretionary spending are more affected by economic contractions. This approach allows for a logical grouping of companies based on their performance across different stages of the business cycle, contrary to the assertion that it results in non-intuitive groups.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1364 Which of the following is a commercial industry classification system that was jointly developed by Standard and Poor's and MSCI Barra?

A. Russel Global Sectors

B. Global Industry Classification Standard

C. Industry Classification Benchmark

The correct answer is **B.**

The Global Industry Classification Standard (GICS) is a comprehensive industry classification system that was jointly developed by Standard & Poor's (S&P) and MSCI Barra to provide a reliable, detailed framework for investment research, portfolio management, and asset allocation. Its primary purpose is to ensure that global industry comparisons are consistent and standardized across the financial community.

GICS categorizes companies based on their primary business activities, making it easier for investors and analysts to compare companies, sectors, and industries worldwide. This system is widely recognized and used by the global financial community, including investors, analysts, and regulators, to facilitate a clear and common understanding of industries and sectors in the complex global market.

A is incorrect. The Russell Global Sectors classification system is used for segmenting the global equity markets into sectors and industries. While it serves a similar purpose to GICS, it is a distinct system with its own set of classifications and is not the product of a collaboration between Standard & Poor's and MSCI Barra.

C is incorrect. The Industry Classification Benchmark (ICB) is another industry classification system used globally, but it was not developed by Standard & Poor's and MSCI Barra. Instead, the ICB is a product of FTSE Russell and is used to categorize and compare companies across four levels of classification: industries, supersectors, sectors, and subsectors.

While the ICB is a widely used system for classifying stocks and other securities, it is distinct from the GICS and serves as its competitor in the market for industry classification standards.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1366 Which of the following is a commercial industry classification system in which each company is assigned in a sub-industry based on its principal business activity?

A. Global Industry Classification Standard

B. Industry Classification Benchmark

C. Russell Global Sectors

The correct answer is **A.**

The Global Industry Classification Standard (GICS) is a comprehensive commercial industry classification system that plays a crucial role in the organization and analysis of financial markets. GICS is designed to provide a consistent, detailed framework for classifying companies based on their principal business activities.

GICS categorizes each company into one of 11 sectors, which are further divided into 24 industry groups, 69 industries, and 158 sub-industries. This hierarchical structure ensures a high level of specificity in classifying companies, allowing for a nuanced understanding of the market landscape.

The assignment of a company to a sub-industry under GICS is based on its primary revenue source, ensuring that the classification accurately reflects the company's core business operations. This precise classification system is widely adopted by investment professionals worldwide, serving as the foundation for many financial products, including indices, mutual funds, and exchange-traded funds (ETFs).

B is incorrect. The Industry Classification Benchmark (ICB) is another widely recognized industry classification system, developed through a partnership between Dow Jones and FTSE. The ICB employs a different structure, consisting of 10 industries, 19 supersectors, 41 sectors, and 114 subsectors.

While both GICS and ICB serve similar purposes in classifying companies for investment analysis, they differ in their specific categorization criteria and hierarchical organization. The ICB focuses on grouping companies primarily by their source of revenue, which, while similar to GICS, results in different classifications due to its unique structure and definitions.

C is incorrect. Russell Global Sectors is a less commonly used classification system compared to GICS and ICB. Developed by Russell Investments, it categorizes companies based on the products or services they produce.

While it shares the goal of facilitating investment analysis by grouping companies with similar business activities, Russell Global Sectors is not as widely adopted or recognized as GICS or ICB. Its classification methodology and structure differ from those of GICS, making it an alternative rather than a direct competitor to the more established industry classification standards.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by

which companies can be grouped.

Q.1367 Which of the following is *not* one of the Michael Porter's Five Forces?

A. Threat of substitute products.

B. Bargaining power of customers.

C. Government regulations.

The correct answer is **C.**

Government regulations are not one of Michael Porter's Five Forces. While government policies and regulations can significantly impact industries, they are considered an external factor that affects all the components of the Five Forces model rather than being a force within it.

Regulations can influence the intensity of competition, the entry of new players, the power of suppliers and buyers, and the threat of substitutes. However, they do so indirectly by shaping the competitive landscape and operational environment rather than directly as a force of competition.

A is incorrect. The threat of substitute products is indeed one of Porter's Five Forces. It refers to the risk that an industry's products or services can be replaced by other products or services. Substitutes limit an industry’s potential returns by placing a ceiling on the prices firms in the industry can profitably charge. The more attractive the price-performance ratio of the substitutes, the more intense is the threat.

B is incorrect. The bargaining power of customers, also known as buyers, is another force within Porter's framework. This force assesses how much pressure customers can place on businesses, affecting the prices and quality of goods and services. When customers have strong bargaining power, they can demand lower prices or higher product quality, thus squeezing the industry's profitability. This power is influenced by factors such as the number of buyers, the importance of each customer to the business, and the availability of substitutes.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry’s structure and external influences using Porter’s Five Forces and PESTLE frameworks.

Q.1456 Earth, Sun, Moon, Star and Mars firms have market shares of 28%, 22%, 15%, 10% and 4% respectively. The 4-firm Herfindahl-Hirschman Index after the merger of the firms Moon and Star is *closest to*:

A. 1909

B. 1625

C. 1790

The correct answer is **A.**

The Herfindahl-Hirschman Index (HHI) is a commonly used measure of market concentration and is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. It can range from close to zero to 10,000. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases.

In this scenario, after the merger of Moon and Star, the market shares are as follows:

- Earth: 28%
- Sun: 22%
- Moon-Star: 25% (15% + 10%)
- Mars: 4%

Calculating the HHI after the merger involves squaring the market shares of each firm and then summing these squares:

$$\text{HHI} = (28^2) + (22^2) + (25^2) + (4^2) = 784 + 484 + 625 + 16 = 1909$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (c) Determine an industry's size, growth characteristics, profitability, and market share trends.

Q.1742 The global industry classification system is the method of grouping firms into an industry-based on the firm's:

A. size.

B. principal business activity.

C. industry life cycle.

The correct answer is **B.**

The Global Industry Classification System (GICS) is a method used to categorize companies into industries based on their principal business activities. This system is crucial for investors, analysts, and other stakeholders in the financial markets as it provides a standardized framework to classify stocks, thereby facilitating sector analysis and comparison.

The principal business activity of a firm refers to the main source of its revenue or the primary products or services it offers. This criterion is used because it reflects the company's core operations and market positioning, which are essential factors for investment decision-making. By grouping companies based on what they primarily do, GICS enables a more accurate and meaningful analysis of industry trends, performance, and potential investment opportunities.

A is incorrect. Grouping firms based on size does not accurately reflect the nature of their business operations or the industry they belong to. Company size, measured by metrics such as market capitalization, revenue, or number of employees, can vary significantly within the same industry.

For example, both a multinational corporation and a small enterprise may operate in the technology sector but differ vastly in size. Therefore, using size as a criterion for industry classification would not provide meaningful insights into the business activities or the competitive landscape of the firms.

C is incorrect. The industry life cycle refers to the stages of growth and development that an industry goes through, from its inception (emergence) to its decline. While understanding the life cycle stage of an industry can be valuable for assessing its growth potential and risk profile, it is not a suitable criterion for classifying companies into industries.

Companies operating in the same sector can be at different stages of their individual life cycles. Moreover, the industry life cycle stage does not inherently describe the principal business activities of firms. Thus, using the industry life cycle as a basis for classification would not accurately group companies according to the nature of their business operations.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1743 In a typical industry classification system, which of the following will *most likely* be categorized under 'Basic Materials and Processing'?

A. Constructax Building Materials Corp.

B. Allegro Automotive Company.

C. James Morisson Tobacco Company.

The correct answer is **A.**

Constructax Building Materials Corp. is most accurately categorized under 'Basic Materials and Processing' due to the nature of its business. This sector typically includes companies involved in the discovery, development, and processing of raw materials. These materials range from metals and minerals to forest products and building materials.

The classification is based on the fundamental role these materials play in the initial stages of the industrial supply chain. Companies like Constructax, which provide essential materials for construction and infrastructure projects, are foundational to various economic activities, making them a perfect fit for this category.

B is incorrect. Allegro Automotive Company would not fall under 'Basic Materials and Processing' but rather under the 'Consumer Discretionary' sector. This sector includes businesses that tend to be more sensitive to economic cycles, such as those in the automotive industry.

Companies in this category manufacture goods and provide services that consumers are more likely to purchase when they have discretionary income. The automotive sector is characterized by its reliance on consumer demand and economic health, distinguishing it from the more foundational nature of basic materials and processing.

C is incorrect. James Morisson Tobacco Company is best classified under 'Consumer Staples', not 'Basic Materials and Processing'. Consumer staples encompass companies that provide goods and services considered essential for everyday living, including food, beverages, and tobacco.

These products are characterized by their consistent demand, regardless of economic conditions, distinguishing them from the cyclical nature of basic materials. Tobacco products, being non-cyclical and essential for the consumer base that uses them, align with the consumer staples sector's characteristics.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1745 Sui Gas is a firm that provides gas to the households. Which of the following is the appropriate industry for Sui Gas?

A. Energy

B. Utilities

C. Basic Material processing

The correct answer is **B.**

The appropriate industry for Sui Gas, a firm that provides gas to households, is the Utilities sector. This classification is based on the nature of services that the company provides. The Utilities sector encompasses companies that offer essential services such as electricity, water, and gas supply. These services are fundamental to the daily operations of homes and businesses, making them indispensable.

The classification of Sui Gas under the Utilities sector reflects its role in delivering a critical service that ensures the comfort and functionality of residential and commercial spaces. By providing gas, Sui Gas plays a vital part in heating, cooking, and powering various appliances, which are essential activities in households.

A is incorrect. The Energy sector primarily includes companies involved in the exploration, extraction, refining, and distribution of energy sources like oil, coal, and natural gas. While it might seem intuitive to classify a gas supply company under the Energy sector, the key distinction lies in the nature of the operations.

Companies in the Energy sector are typically engaged in the upstream activities of energy production and raw material extraction. In contrast, Sui Gas, which focuses on the distribution of gas to end consumers, aligns more closely with the characteristics of the Utilities sector, which is concerned with the delivery of essential services.

C is incorrect. The Basic Material Processing sector encompasses companies involved in the extraction and processing of raw materials. This sector includes industries such as mining, chemicals, forestry, and metal production. Companies in this sector are primarily engaged in the transformation of natural resources into primary or intermediate materials that are then used by other industries in the production of goods.

Sui Gas, which provides gas directly to households, does not fit into this category as it does not engage in the processing or transformation of raw materials. Instead, its operations are centered around the distribution and supply of gas, making it a better fit for the Utilities sector, which focuses on the provision of essential services to consumers.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1746 Which of the following is *most likely* a cyclical industry?

A. Financial services

B. Telecommunication

C. Consumer staples

The correct answer is **A.**

Financial services are considered the most cyclical industry among the options provided. This is because the performance and earnings of companies within the financial services sector are highly dependent on the phase of the business cycle. During periods of economic expansion, financial services such as banking, investment services, and insurance tend to experience higher demand, leading to increased earnings.

Conversely, in times of economic downturn, these services often see a decline in demand, which can significantly impact their profitability. The cyclical nature of the financial services industry is closely tied to interest rates, consumer confidence, and investment activity, all of which fluctuate with the business cycle.

B is incorrect. The demand for these services remains relatively stable regardless of economic conditions. People continue to use their phones and internet services even during economic downturns, making the revenue streams of telecommunication companies less sensitive to the business cycle.

C is incorrect. Consumer staples, which include essential products such as food, beverages, and household goods, are also considered a non-cyclical industry. The demand for these products remains constant regardless of the state of the economy.

People need to eat, drink, and maintain their households irrespective of economic conditions, making consumer staples a stable industry with predictable demand. This stability contrasts with the cyclical nature of financial services, where demand and profitability can vary significantly with economic cycles.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1748 Which of the following steps is *least likely* included in a thorough industry analysis guidance?

A. Analyze industry prospects based on strategic groups.

B. Classify the life-cycle stage of the industry.

C. Analyze the independence of board members.

The correct answer is **C.**

Analyzing the independence of board members is not typically included in a thorough industry analysis. Industry analysis focuses on understanding the external environment in which firms operate, including market trends, competitive dynamics, and the overall health and trajectory of the industry.

This analysis is crucial for businesses and investors to identify opportunities and threats within a specific industry and to make informed strategic decisions.

A is incorrect. Analyzing industry prospects based on strategic groups is an essential component of industry analysis. Strategic groups refer to clusters of firms within an industry that follow similar business models or strategies.

By examining these groups, analysts can gain insights into the competitive landscape, understand differentiators among competitors, and identify potential opportunities or threats. This step helps in understanding the positioning of various firms within the industry and predicting future industry trends.

B is incorrect. Classifying the life-cycle stage of the industry is another critical step in industry analysis. Industries typically progress through a life cycle that includes stages such as introduction, growth, maturity, and decline. Understanding which stage an industry is in helps analysts and investors predict future growth prospects, competitive intensity, and profitability.

For instance, industries in the growth stage may offer significant investment opportunities but also come with higher risks, while those in the maturity stage might be more stable but offer lower growth prospects. This classification aids in tailoring strategies that are appropriate for the current and anticipated conditions of the industry.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (a) Describe the purposes of, and steps involved in, industry and competitive analysis.

Q.1750 An industry where a small number of firms control a large portion of the market share is known as:

A. an industry with greater market fragmentation.

B. an industry with greater market concentration.

C. a disruptive industry.

The correct answer is **B.**

An industry where a small number of firms control a large portion of the market share is characterized by greater market concentration. This scenario typically results in a situation where these dominant firms have significant control over prices, product offerings, and overall market dynamics.

Market concentration is a key concept in understanding the structure of various industries and their competitive landscapes. It is measured using indices such as the Herfindahl-Hirschman Index (HHI), which calculates the sum of the squares of the market shares of all firms within the industry.

A high HHI score indicates a high level of market concentration, suggesting that a few firms hold a substantial portion of the market share. This can lead to reduced competition, higher prices for consumers, and potentially less innovation. However, it can also result in economies of scale and efficiencies that smaller, fragmented markets may not achieve.

A is incorrect. An industry with greater market fragmentation is characterized by a large number of firms, each holding a small portion of the total market share. This scenario is the opposite of market concentration. In a fragmented market, no single firm has significant market power to influence prices or market conditions substantially.

This often leads to intense competition, lower prices, and potentially more innovation as firms strive to differentiate themselves. Market fragmentation can benefit consumers through greater choice and competitive pricing but may also result in inefficiencies and higher costs for firms due to the lack of economies of scale.

C is incorrect. A disruptive industry refers to one that experiences significant changes due to the introduction of innovative technologies, business models, or products that fundamentally alter the competitive landscape. Disruption often leads to the displacement of established firms, products, and alliances within the industry.

While a disruptive industry can exhibit characteristics of market concentration or fragmentation depending on the stage and nature of the disruption, the term itself does not specifically describe the market share distribution among firms. Instead, it focuses on the transformative impact of innovation on the industry's structure and competitive dynamics.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.1751 Identify the factor that will increase the profitability of a firm.

A. Low barriers to entry

B. An industry with a greater market concentration.

C. Low bargaining power of suppliers

The correct answer is **C.**

Low bargaining power of suppliers can significantly increase the profitability of a firm. This is because when suppliers have low bargaining power, the firm can negotiate better terms, including lower prices for raw materials and other inputs. This reduction in input costs directly contributes to higher margins and, consequently, greater profitability.

Moreover, low supplier power allows a firm more flexibility in its operations, enabling it to respond more effectively to market changes and demands without being constrained by supplier terms. This strategic advantage can lead to cost leadership, allowing the firm to either price more competitively or enjoy higher profit margins, both of which are beneficial for its profitability.

A is incorrect. Low barriers to entry in an industry mean that it is easy for new competitors to enter the market. This increased competition can lead to price wars, reduced market share, and lower profit margins for existing firms. While it might seem that low barriers to entry could stimulate innovation and efficiency, the primary effect in terms of profitability is often negative.

B is incorrect. An industry with greater market concentration means that a few firms hold a significant share of the market. This scenario can lead to oligopolistic behavior, where the dominant firms can exert considerable control over prices, often leading to higher prices and potentially higher profitability for those firms.

However, for a firm that is not one of these dominant players, a high market concentration can be a barrier to increasing its profitability. The firm may find it challenging to gain market share or influence prices. Therefore, while greater market concentration might benefit the few dominant firms, it does not universally increase profitability for all firms in the industry.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (c) Determine an industry's size, growth characteristics, profitability, and market share trends.

Q.1752 Which of the following is the most appropriate statement regarding the under capacity of an industry?

A. Under capacity results in lower pricing power

B. Under capacity results in higher return on capital

C. Under capacity results in excess supply

The correct answer is **B.**

Under capacity in an industry occurs when the demand for a product or service exceeds the available supply. This situation often leads to several economic implications, including a higher return on capital. When companies operate under conditions of under capacity, they are essentially producing at their maximum output levels to meet the excess demand.

This scenario typically allows firms to command higher prices for their products or services due to the scarcity effect, which in turn can lead to higher profit margins and, consequently, a higher return on capital. The return on capital is a measure of a company's efficiency at allocating the capital under its control to profitable investments, and under capacity conditions can significantly enhance this metric.

A is incorrect. The scarcity of the product or service allows firms to raise prices without significantly reducing demand. Consumers, facing limited options, are more willing to pay a premium, thereby increasing the company's pricing power.

C is incorrect. The assertion that under capacity results in excess supply is fundamentally incorrect. Under capacity is characterized by a situation where the supply cannot meet the demand, not by an excess of supply.

Excess supply, or overcapacity is where the production capacity of an industry exceeds the demand for its products or services, often leading to lower prices and reduced profitability. In contrast, under capacity signifies a shortage in supply relative to demand, potentially leading to higher prices and increased profitability for companies within the industry.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (c) Determine an industry’s size, growth characteristics, profitability, and market share trends.

Q.1753 In which of the following cost strategies does a firm decrease its prices to drive out competitors and later increase its prices?

A. Price differentiation strategy

B. Switching cost strategy

C. Predatory pricing strategy

The correct answer is **C.**

Predatory pricing strategy involves a firm deliberately setting its prices low enough to incur a loss or significantly lower profit margins in the short term to eliminate or severely weaken competitors. Once the competition is reduced or eliminated, the firm then has the opportunity to increase prices, leveraging its dominant market position to achieve higher profitability.

This strategy is often scrutinized and regulated under competition laws because it can lead to monopolistic practices and harm consumer interests in the long run. The effectiveness of predatory pricing as a strategy depends on the firm's ability to sustain lower profit margins during the predatory phase and its capacity to capitalize on reduced competition thereafter.

A is incorrect. Price differentiation strategy involves setting different prices for the same product or service based on various factors such as customer segment, purchase quantity, or distribution channel. This strategy aims to maximize revenue by capturing consumer surplus and is not focused on eliminating competitors through pricing tactics. Price differentiation is used to cater to different sensitivities to price in different market segments rather than to drive competitors out of the market.

B is incorrect. The term "switching cost strategy" is a misinterpretation. Firms might increase switching costs to make it less attractive for customers to switch to competitors, thereby enhancing customer loyalty and reducing competitive pressure. This strategy does not involve lowering prices to eliminate competitors but rather focuses on creating barriers to customer migration.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (e) Evaluate the competitive strategy and position of a company.

Q.3645 Due to increased air pollution, a government recently announced subsidies for electric cars. What is the *most likely* impact of the announcement on the electric car manufacturing industry?

A. Increase in the threat of substitute products

B. Increase in the threat of new entrants

C. Decrease in the bargaining power of customers

The correct answer is **B.**

The announcement of subsidies for electric cars by the government is most likely to increase the threat of new entrants in the electric car manufacturing industry. Government subsidies can significantly lower the initial financial barriers to entry for new firms, making it more attractive for them to enter the market. These subsidies might cover various costs associated with the production of electric cars, such as research and development, manufacturing, and marketing.

As a result, the industry could see an influx of new companies looking to capitalize on the favorable conditions created by the subsidies. This increased competition could lead to innovation, more choices for consumers, and potentially lower prices, but it also poses a challenge for existing manufacturers who will have to compete with a larger number of rivals.

A is incorrect. The announcement of subsidies for electric cars is unlikely to increase the threat of substitute products. In fact, the subsidies are intended to make electric cars more competitive against their substitutes, such as gasoline-powered vehicles, by lowering their relative cost and encouraging adoption.

Therefore, rather than increasing the threat of substitutes, the subsidies are likely to decrease it by making electric cars a more attractive option for consumers.

C is incorrect. The announcement of subsidies for electric cars does not directly decrease the bargaining power of customers. Instead, by potentially increasing the number of manufacturers in the market due to lower barriers to entry, the subsidies could actually increase the bargaining power of customers.

With more companies competing in the electric car market, customers might have more options to choose from, which could lead to better prices and services as companies strive to attract and retain customers. Therefore, the effect of government subsidies is more aligned with increasing competition and potentially empowering customers rather than diminishing their bargaining power.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry's structure and external influences using Porter's Five Forces and PESTLE frameworks.

Q.3648 In a given industry, if barriers to entry are low and barriers to exit are high, then the firms will:

A. have a higher pricing power.

B. have a lower pricing power.

C. be able to make abnormal profits.

The correct answer is **B.**

When barriers to entry are low, it means that new competitors can easily enter the industry. This increases the level of competition among firms. On the other hand, high barriers to exit mean that firms cannot easily leave the industry, even if they are not profitable. This situation often leads to overcapacity and further intensifies competition.

In such a competitive environment, individual firms have less control over the prices they can charge for their products or services, leading to lower pricing power. The increased competition forces firms to lower their prices to attract or retain customers, which reduces their ability to set prices above competitive levels.

A is incorrect. Higher pricing power is typically associated with less competition, which is not the case when barriers to entry are low and barriers to exit are high. In such scenarios, the market becomes more saturated with competitors, making it difficult for any single firm to exert significant influence over market prices.

The assumption that firms would have higher pricing power under these conditions misunderstands the dynamics of competition and market saturation.

C is incorrect. The ability to make abnormal profits is usually associated with high barriers to entry and low barriers to exit. High barriers to entry prevent new competitors from entering the market, while low barriers to exit allow unprofitable firms to leave easily, reducing competition.

In contrast, low barriers to entry and high barriers to exit create a highly competitive environment with overcapacity, making it difficult for firms to achieve abnormal profits. Instead, the intense competition and inability to exit the market easily lead to reduced profitability and potentially even losses for the firms involved.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry's structure and external influences using Porter's Five Forces and PESTLE frameworks.

Q.4275 If a specific industry is characterized by high competitive rivalry and strong bargaining power of buyers, which of the following implications is *most likely* true regarding the profitability trajectory of companies within that industry?

A. It results in identical profitability for all industry participants.

B. It ensures that all industry participants have the same competitive strategy.

C. It leads to the same demand and supply opportunities and risk factors for all industry participants.

The correct answer is **C.**

High competitive rivalry and strong bargaining power of buyers are two of the forces identified in Porter's Five Forces model that can significantly impact the profitability trajectory of companies within an industry. These forces can exert a downward pressure on the profitability of companies by increasing competition and empowering buyers to demand lower prices or higher quality, thereby squeezing the profit margins of the companies.

When an industry is characterized by these dynamics, it generally leads to a more challenging environment for companies to maintain high profitability levels. Companies may find themselves in a position where they need to continuously innovate, improve efficiency, or reduce costs to stay competitive and protect their profit margins.

This competitive environment does not guarantee identical profitability for all industry participants, nor does it ensure that all participants will adopt the same competitive strategy. Instead, it creates a scenario where companies are pushed to differentiate themselves through various means to survive and thrive.

A is incorrect. Suggesting that high competitive rivalry and strong bargaining power of buyers result in identical profitability for all industry participants oversimplifies the complex dynamics of competitive industries. While these forces can indeed pressure profitability, companies can still differentiate themselves through innovation, cost leadership, or niche strategies.

Management quality, operational efficiencies, brand strength, and other factors can lead to significant variations in profitability among companies within the same industry. Therefore, it is not accurate to assume that all industry participants will experience identical profitability.

B is incorrect. The statement that high competitive rivalry and strong bargaining power of buyers ensure that all industry participants have the same competitive strategy is also misleading. In reality, companies respond to competitive pressures and buyer power in various ways, depending on their strengths, weaknesses, and strategic priorities.

Some may focus on cost leadership to offer lower prices, while others may pursue differentiation strategies to offer unique products or services that justify higher prices. The diversity in competitive strategies is a reflection of the different paths companies can take to navigate the challenges posed by competitive rivalry and buyer power.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.4276 Based on Porter's Five Forces analysis, which of the following is *least likely* to influence the profit potential of an industry?

A. Collective economic power of customers.

B. Intensity of advertising campaigns.

C. Threat posed by potential new entrants.

The correct answer is **B.**

Based on Porter's Five Forces analysis, the intensity of advertising campaigns is least likely to directly influence the profit potential of an industry. The five forces identified by Porter that determine industry attractiveness and long-term profitability are:

1. the bargaining power of buyers,
2. the bargaining power of suppliers,
3. the threat of new entrants,
4. the threat of substitute products or services, and
5. the intensity of competitive rivalry.

While advertising can play a role in shaping consumer perceptions and can influence competitive dynamics, it is not one of the primary forces that Porter identifies as directly affecting industry structure and profit potential.

A is incorrect. The collective economic power of customers, or the bargaining power of buyers, is a critical component of Porter's Five Forces analysis. This force assesses how much pressure customers can place on businesses, affecting prices, quality, and the overall competitive environment.

High bargaining power of buyers can limit the profit potential of an industry by driving down prices or demanding higher quality or more services, which can increase costs for companies within the industry.

C is incorrect. The threat posed by potential new entrants is another fundamental aspect of Porter's Five Forces analysis. This force examines how easy or difficult it is for new companies to start competing in an industry. Barriers to entry, such as high startup costs, access to distribution channels, or regulatory hurdles, can protect existing companies from new competitors.

However, when barriers to entry are low, new entrants can increase the competitive pressure, reduce market share, and constrain profitability for all players in the industry. Therefore, the threat of new entrants is a crucial factor in determining the profit potential of an industry.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry's structure and external influences using Porter's Five Forces and PESTLE frameworks.

Q.4277 An analyst looking to understand the broader growth prospects of an industry rather than the potential of a specific company would *most likely* adopt which approach?

A. Focus on the competitive strategies of top-tier companies.

B. Emphasize on the PESTLE analysis of the leading company.

C. Opt for a 'basket approach' considering a range of companies within the industry.

The correct answer is **C.**

An analyst aiming to gauge the broader growth prospects of an industry rather than focusing on the potential of a specific company would most likely adopt a 'basket approach'. This method involves considering a range of companies within the industry, thereby offering a diversified and comprehensive perspective on the industry's potential growth.

By analyzing multiple companies, the analyst can identify common trends, challenges, and opportunities that may not be apparent when examining a single company. This approach allows for a more robust analysis of the industry's growth prospects, taking into account the performance and strategies of various players within the market.

A is incorrect. Focusing solely on the competitive strategies of top-tier companies limits the analysis to the practices and outcomes of a few leading players. While understanding the strategies of industry leaders can provide valuable insights, it does not offer a complete picture of the industry's overall growth prospects.

Smaller and emerging companies can also significantly influence the industry's direction and growth potential. Therefore, an analysis that exclusively focuses on top-tier companies may overlook critical factors and trends that are shaping the industry at a broader level.

B is incorrect. Emphasizing the PESTLE analysis of the leading company narrows the scope of the analysis to the external factors affecting a single company. While PESTLE analysis (which examines Political, Economic, Social, Technological, Legal, and Environmental factors) is a valuable tool for understanding the macro-environmental context in which a company operates, it does not provide a comprehensive view of the industry's growth prospects.

Different companies within the same industry may face unique challenges and opportunities based on their market position, resources, and strategies. Therefore, relying on a PESTLE analysis of just one company may result in a skewed understanding of the industry's broader growth potential.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.4278 Which of the following is least likely a challenge associated with industry classification schemes?

A. Deciding whether to include substitute products or services.

B. Classifying companies that operate in more than one industry.

C. Deciding whether to include companies that do not sell products or services.

The correct answer is **C.**

An industry is a group of companies that are related in terms of their primary business activities. In the context of industry definition and classification, companies are typically grouped together based on the similarity of their product or service offerings. Therefore, companies that do not sell products or services would not typically be considered part of an industry.

A is incorrect. Deciding whether to include substitute products or services is indeed a challenge in defining an industry. Substitute products or services are those that can be used in place of one another. For example, butter and margarine are substitute products. Deciding whether to include such substitutes in the same industry can be challenging, as they may have different production processes, target markets, and other factors.

B is incorrect. Classifying companies that operate in more than one industry is also a challenge in defining an industry. Many companies operate in multiple industries, making it difficult to classify them into a single industry. For example, a company might manufacture both automobiles and aircraft, which are typically considered separate industries. Deciding how to classify such a company can be challenging.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.4279 In the context of industry classification, companies are often grouped by geography. Which of the following is *most likely* a typical basis for classifying companies by country?

A. The country where the issuer is incorporated.

B. The country where the company's largest office is located.

C. The country where the company's products or services are most popular.

The correct answer is **A.**

Companies are typically classified by the country where the issuer is incorporated. This classification method is crucial because the country of incorporation establishes the legal framework within which a company operates. This framework encompasses corporate governance standards, tax laws, and regulatory oversight, all of which significantly influence a company's operations, financial performance, and risk profile.

The country of incorporation provides a consistent and objective basis for comparing companies across different industries. It also aids in identifying potential risks and opportunities associated with specific countries or regions, making it a vital criterion for investors and analysts when classifying companies by geography.

B is incorrect. The size or prominence of an office does not necessarily reflect the legal jurisdiction under which a company is incorporated. Companies often have significant operations in multiple countries, and the location of the largest office may change over time or not accurately represent the company's overall business structure and regulatory framework.

C is incorrect. While market presence and brand popularity are important business considerations, they are highly variable and subject to change due to consumer preferences, market competition, and other factors. These aspects do not provide a stable or legally relevant basis for classification compared to the country of incorporation, which determines the core legal and regulatory environment for the company.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.4280 Which of the following is *most likely* true regarding defensive companies? Their sales growth, profitability, and valuations are:

A. less affected by changes in broad macroeconomic activity.

B. more affected by changes in broad macroeconomic activity.

C. not affected by changes in broad macroeconomic activity.

The correct answer is **A.**

Defensive companies are those whose sales growth, profitability, and valuations are less affected by changes in broad macroeconomic activity. These companies are often involved in industries that provide essential goods or services, such as utilities, healthcare, and consumer staples.

Because the demand for these goods and services is relatively stable, regardless of the state of the economy, these companies tend to have more stable revenues and earnings. This makes them less sensitive to changes in the business cycle, hence the term "defensive."

Investors often turn to defensive stocks in times of economic uncertainty or downturns as they offer a degree of protection against market volatility. The stability of their revenues and earnings also often leads to more predictable and reliable dividend payments, which can be attractive to income-focused investors.

B is incorrect. Companies whose sales growth, profitability, and valuations are more affected by changes in broad macroeconomic activity are typically referred to as cyclical companies, not defensive companies.

Cyclical companies are those that are sensitive to the business cycle and whose performance tends to mirror the overall economy. These companies are often involved in discretionary industries, such as consumer discretionary, technology, and industrials.

C is incorrect. It is unrealistic to say that a company's sales growth, profitability, and valuations are not affected by changes in broad macroeconomic activity. All companies operate within the broader economy and are therefore subject to macroeconomic forces to some degree.

Even defensive companies, while less sensitive to changes in the business cycle, are not completely immune to macroeconomic changes. For example, while the demand for their goods or services may be relatively stable, they can still be affected by factors such as inflation, interest rates, and changes in consumer behavior.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.4281 Which of the following is *most likely* the most effective way to measure industry profitability?

A. By estimating the size of the industry

B. By calculating the historical growth rate of the industry

C. Through a time series of the distribution of returns on invested capital

The correct answer is **C.**

The most effective way to measure industry profitability is through a time series of the distribution of returns on invested capital (ROIC). ROIC is a profitability ratio that measures how effectively a company uses its capital to generate profits. It is calculated by dividing net income by the total capital invested in the business. By analyzing a time series of the distribution of ROIC, one can gain insights into the profitability trends of an industry over time.

This method allows for a more comprehensive understanding of industry profitability as it takes into account both the returns generated by companies in the industry and the capital invested to generate those returns. It also allows for comparisons across different industries, as it normalizes for differences in the size and capital structure of companies in different industries.

A is incorrect. Estimating the size of the industry is not an effective way to measure industry profitability. The size of an industry, in terms of its total revenue or total assets, does not provide information about the profitability of the companies within the industry. A large industry can be less profitable than a smaller one if the companies in the larger industry have lower profit margins or higher capital requirements. Therefore, the size of the industry is not a good indicator of industry profitability.

B is incorrect. Calculating the historical growth rate of the industry is not the most effective way to measure industry profitability. While growth is an important aspect of a company's performance, it does not necessarily translate into profitability. A company or an industry can grow rapidly without being profitable, especially if the growth is driven by high levels of investment that do not generate sufficient returns. Therefore, the historical growth rate of the industry does not provide a comprehensive measure of industry profitability.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (c) Determine an industry’s size, growth characteristics, profitability, and market share trends.

Q.4282 Which of the following is *most likely* the use of Herfindahl-Hirschman Index (HHI) used in industry analysis?

A. Measuring the profitability of the industry.

B. Calculating the historical growth rate of the industry.

C. Measuring the degree of industry concentration.

The correct answer is **C.**

The Herfindahl-Hirschman Index (HHI) is used to measure the degree of industry concentration. The HHI is a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers.

A is incorrect. The HHI is not used to measure the profitability of the industry. While industry concentration can have an impact on profitability, the HHI itself does not provide information on profitability. Profitability is typically measured using ratios such as return on assets (ROA), return on equity (ROE), or net profit margin.

B is incorrect. The HHI is not used to calculate the historical growth rate of the industry. The historical growth rate of an industry is typically calculated by looking at changes in total industry sales or output over time, not by looking at market concentration. The HHI is a static measure that does not take into account changes over time.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (c) Determine an industry's size, growth characteristics, profitability, and market share trends.

Q.4283 If the intensity of Porter's Five Forces is high, which of the following is the *most likely* impact on the industry's profitability?

A. The industry is likely to be highly profitable.

B. The industry's profitability will remain unaffected.

C. Almost no company within the industry will earn attractive returns on capital.

The correct answer is **C.**

When the intensity of these forces is high, it signifies a highly competitive market environment. Such competitiveness often leads to aggressive pricing strategies, increased operational costs, and significant barriers to sustaining high-profit margins. Companies operating in industries characterized by high intensity of the Five Forces face relentless pressure that can erode profitability.

This competitive pressure can lead to a scenario where almost no company within the industry can earn attractive returns on capital, as they are constantly investing in competitive strategies, innovation, and customer acquisition and retention efforts.

A is incorrect. High intensity of these forces indicates a competitive market environment where firms are likely to experience increased costs and reduced pricing power. This competitive dynamic pressures profit margins, making it unlikely for the industry to be highly profitable.

The assumption that high competition could lead to high profitability disregards the direct and indirect costs associated with sustaining competitive advantages in such environments.

B is incorrect. The Five Forces are specifically designed to assess how competitive forces influence profitability. A high intensity of these forces typically results in a highly competitive environment, which directly impacts firms' ability to maintain profitable operations.

Increased competition often leads to price wars, higher operational costs, and the need for continuous investment in innovation and customer service, all of which can significantly affect profitability. Therefore, it is inaccurate to suggest that the industry's profitability will remain unaffected in the face of high competitive intensity.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry’s structure and external influences using Porter’s Five Forces and PESTLE frameworks.

Q.4284 Which of the following is *most likely* the primary focus of a PESTLE analysis in comparison to Porter's Five Forces?

A. Assessing the structure of an industry.

B. Assessing the determinants of industry profitability.

C. Evaluating the industry's evolution and market share dynamics.

The correct answer is **C.**

PESTLE analysis is a strategic tool used to understand the macro-environmental factors that impact an organization. It stands for Political, Economic, Social, Technological, Legal, and Environmental factors. This analysis helps businesses in identifying the broader external factors that may influence their operations, strategies, and potential for growth.

Unlike Porter's Five Forces, which focuses on the competitive environment and industry-specific challenges, PESTLE analysis provides a broader view of the external environment that a business operates in. It helps in understanding how external factors like changes in government policies, economic trends, social shifts, technological advancements, legal changes, and environmental concerns can affect an industry's evolution, market share dynamics, and overall growth rate.

A is incorrect. While assessing the structure of an industry is crucial for understanding competitive dynamics, it is not the primary focus of a PESTLE analysis. The structure of an industry, including aspects like the number of competitors, market entry barriers, and product differentiation, is more directly addressed by Porter's Five Forces analysis.

PESTLE analysis, on the other hand, looks at the broader external environment that might indirectly influence these structural factors through changes in policy, economy, society, technology, legal frameworks, and environmental conditions.

B is incorrect. Assessing the determinants of industry profitability is a key objective of Porter's Five Forces analysis, not PESTLE analysis. Porter's Five Forces framework is designed to evaluate how various forces within an industry—such as the bargaining power of suppliers and buyers, the threat of new entrants, the threat of substitute products, and the intensity of competitive rivalry—affect the potential for profitability.

PESTLE analysis, in contrast, focuses on external macro-environmental factors that could impact the industry and its players in a more indirect manner, influencing long-term strategies and growth opportunities rather than immediate profitability determinants.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry’s structure and external influences using Porter’s Five Forces and PESTLE frameworks.

Q.4285 Which of the following is *most likely* the definition of "innovator's dilemma" in the context of disruptive innovation? It refers to the challenge faced by:

A. new entrants in creating disruptive innovations.

B. incumbents in creating sustaining innovations.

C. incumbents in deciding whether to invest in disruptive innovation.

The correct answer is **C.**

The "innovator's dilemma" refers to the significant challenge that incumbent firms face when deciding whether to invest in disruptive innovations. These innovations have the potential to accelerate the decline of their current business models or, if ignored, risk losing market share to competitors who adopt these new technologies.

This concept was introduced by Clayton M. Christensen in his seminal work, "The Innovator's Dilemma". Christensen's research highlights a critical paradox in the business strategy of established companies. On one hand, investing in disruptive technologies can seem counterintuitive because these technologies often target smaller, less profitable market segments and may not meet the immediate financial objectives of large organizations.

On the other hand, these disruptive innovations have the potential to redefine industry standards and consumer expectations, eventually growing to dominate the market. This puts incumbent firms in a precarious position: choosing to invest in disruptive technologies might cannibalize their existing products and erode current profit margins, yet ignoring these innovations could lead to obsolescence and loss of market dominance as new entrants or more agile competitors leverage these technologies to gain a competitive edge.

A is incorrect. The innovator's dilemma does not primarily concern the challenges faced by new entrants in creating disruptive innovations. Contrary to the struggles of incumbent firms, new entrants often have the flexibility and strategic advantage to pursue disruptive innovations aggressively. Without the burden of existing products or services to protect, new entrants can focus on exploiting emerging technologies and market opportunities, potentially disrupting established industries and capturing market share from incumbents.

B is incorrect. While incumbent firms indeed face challenges in creating sustaining innovations, this is not what the innovator's dilemma refers to. Sustaining innovations are improvements to existing products or services that meet the current demands of the market. Incumbent firms are typically adept at executing sustaining innovations as they align with the company's existing business model and market understanding.

The dilemma arises not from the difficulty in creating sustaining innovations but from the strategic decision-making process regarding whether to pursue disruptive innovations, which may initially seem unattractive or incompatible with the company's current success but have the potential to redefine the market landscape.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry's structure and external influences using Porter's Five Forces and PESTLE frameworks.

Q.4286 Which of the following best describes an unintentional competitive strategy? It is a strategy that:

A. is a result of company-wide planning.

B. arises from different teams within a company pursuing their own incentives.

C. is demonstrated by a company's history of value addition for its stakeholders.

The correct answer is **B.**

An unintentional competitive strategy typically emerges from the actions and decisions of different teams within a company as they pursue their own goals and incentives. This type of strategy is not the result of deliberate, company-wide planning but rather develops organically from the varied objectives and actions of individual teams or departments.

These teams may be focused on achieving specific short-term targets or responding to immediate challenges, without necessarily considering the broader strategic implications of their actions. Over time, the cumulative effect of these individual actions can coalesce into a coherent strategy that the company follows, albeit unintentionally. This phenomenon underscores the complexity of organizational dynamics and the importance of aligning departmental objectives with the company's overall strategic goals.

A is incorrect. A strategy that results from company-wide planning is indicative of an intentional strategy. Intentional strategies are characterized by a deliberate process of formulation and implementation, guided by the company's leadership and strategic planning departments.

These strategies are developed through a systematic approach that includes setting long-term objectives, analyzing the competitive environment, and devising specific plans to achieve desired outcomes. The key distinction here is the element of conscious design and purposeful direction, which is absent in unintentional strategies.

C is incorrect. The description of a strategy demonstrated by a company's history of value addition for its stakeholders does not inherently distinguish between intentional and unintentional strategies. Value addition can occur as a result of both deliberate strategic initiatives and the aggregate outcome of various independent actions within the company.

While intentional strategies may explicitly aim to create value for stakeholders through carefully planned efforts, unintentional strategies can also lead to value creation, albeit without a preconceived plan or coordinated effort.

Therefore, this option does not specifically characterize an unintentional strategy, as value addition can be a feature of both intentional and unintentional strategic approaches.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (e) Evaluate the competitive strategy and position of a company.

Q.4287 Which of the following is *least likely* one of the dimensions considered in evaluating a competitive strategy on a forward-looking basis?

A. Maximization of short-term profits.

B. Defense against the five industry forces.

C. External industry influences as identified in the PESTLE analysis.

The correct answer is **A.**

Maximization of short-term profits is the least likely dimension to be considered in evaluating a competitive strategy on a forward-looking basis. A robust competitive strategy should be sustainable, focusing on long-term growth and profitability rather than merely achieving short-term financial gains. Prioritizing short-term profits can lead to detrimental outcomes, such as compromising product quality, neglecting customer satisfaction, and overlooking necessary long-term investments.

B is incorrect. Defense against the five industry forces is a critical aspect of a competitive strategy. Michael Porter's Five Forces framework provides a valuable tool for analyzing a company's competitive environment, including the threat of new entrants, the bargaining power of suppliers and buyers, the threat of substitute products or services, and the intensity of competitive rivalry.

A strategy that effectively addresses these forces can help a company sustain its competitive advantage, making it an essential dimension for forward-looking strategy evaluation.

C is incorrect. Considering external industry influences, as identified in the PESTLE analysis, is crucial for a forward-looking competitive strategy. PESTLE analysis examines the Political, Economic, Social, Technological, Legal, and Environmental factors that can impact a company's operations and strategic direction.

A competitive strategy that aligns with these external factors can enable a company to capitalize on opportunities and mitigate potential risks, thereby enhancing its competitiveness and long-term success. Therefore, external industry influences are a significant dimension in evaluating a competitive strategy on a forward-looking basis.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (e) Evaluate the competitive strategy and position of a company.

Q.4288 In the context of three well-known competitive strategies: cost leadership, differentiation, and focus, which of the following *best* describes a company that is "stuck in the middle"? The company is:

A. a cost leader, differentiated and focused.

B. not a cost leader, not differentiated, and not focused.

C. a cost leader, but not differentiated and not focused.

The correct answer is **B.**

According to Michael Porter's generic strategies, a company that is "stuck in the middle" is one that is not a cost leader, not differentiated, and not focused. This means that the company has not successfully implemented any of the three competitive strategies. It is not a cost leader because it does not have the lowest costs in the industry. It is not differentiated because its products or services are not unique or superior in some way that is valuable to customers. It is not focused because it does not concentrate its efforts on a particular market segment, product line, or group of customers.

Being "stuck in the middle" is a dangerous position for a company because it means that the company is not competitive in any particular way. It is likely to be outperformed by competitors who are either cost leaders, differentiated, or focused. Therefore, Porter advises companies to avoid being "stuck in the middle" and to choose and implement one of the three competitive strategies effectively.

A is incorrect. A company cannot be a cost leader, differentiated, and focused at the same time. These are distinct strategies that require different resources, capabilities, and strategic choices. For example, being a cost leader often requires large-scale operations and cost efficiencies, while being differentiated often requires innovation and high-quality products or services. Being focused requires a deep understanding of a specific market segment or group of customers. Therefore, it is unlikely that a company can successfully implement all three strategies at the same time.

C is incorrect. A company that is a cost leader but not differentiated and not focused is not "stuck in the middle". Instead, it has chosen the cost leadership strategy. This means that it competes on the basis of having the lowest costs in the industry. While it may not be differentiated or focused, it can still be competitive by offering lower prices than its competitors.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (e) Evaluate the competitive strategy and position of a company.

Q.4289 Which of the following *most likely* is the best way to judge the effectiveness of a competitive strategy?

A. Based on the company's current market share.

B. Prospectively, based on the company's future plans.

C. Retrospectively, based on the company's past performance.

The correct answer is **C.**

The effectiveness of a strategy can be judged retrospectively based on the company's past performance. This is because a strategy's effectiveness is demonstrated by its ability to create value over time. This value creation can be measured in various ways, such as economic profits, return on investment, or shareholder value added.

By examining a company's historical performance, we can assess whether its strategy has been effective in creating value. This retrospective analysis allows us to understand the impact of the strategy on the company's performance and to identify the factors that have contributed to its success or failure. It provides a solid basis for evaluating the strategy and for making decisions about its future direction. However, it is important to note that past performance is not always a reliable indicator of future performance and that a strategy that has been effective in the past may not necessarily be effective in the future.

A is incorrect. Judging the effectiveness of a strategy based on the company's current market share is too narrow a perspective. While market share is an important indicator of a company's competitive position, it does not necessarily reflect the effectiveness of its strategy.

A company may have a large market share due to factors other than its strategy, such as favorable market conditions or lack of competition. Moreover, a strategy may be effective in creating value even if it does not result in a large market share.

B is incorrect. Judging the effectiveness of a strategy prospectively, based on the company's future plans, is speculative and uncertain. While it is important to consider the company's future plans in evaluating its strategy, these plans are not yet realized, and their outcomes are uncertain. Therefore, they cannot provide a reliable basis for judging the effectiveness of the strategy.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (e) Evaluate the competitive strategy and position of a company.

Q.4290 In the context of competitive strategies, what does a "defense against the five industry forces" imply? The strategy should protect the company from:

A. competition, new entrants, supplier power, buyer power, and the threat of substitute products or services.

B. economic downturns, political instability, social changes, technological advancements, legal changes, and environmental factors.

C. internal conflicts, communication issues, coordination problems, lack of resources, and lack of capabilities.

The correct answer is **A.**

In the context of competitive strategies, a "defense against the five industry forces" implies that the strategy should protect the company from competition, new entrants, supplier power, buyer power, and the threat of substitute products or services. These five forces are part of a model developed by Michael Porter to analyze the competitive environment of a company. The model suggests that the profitability of an industry depends on these five forces.

A good competitive strategy should help a company to defend against these forces, thereby improving its competitive position and profitability.

B is incorrect. While economic downturns, political instability, social changes, technological advancements, legal changes, and environmental factors can affect a company's competitive position, they are not part of the five industry forces as defined by Porter's model. These factors are part of the broader business environment and are typically considered in a PESTEL analysis (Political, Economic, Social, Technological, Environmental, and Legal).

C is incorrect. Internal conflicts, communication issues, coordination problems, lack of resources, and lack of capabilities are internal factors that can affect a company's performance, but they are not part of the five industry forces. These factors are typically considered in a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats), which looks at both internal and external factors affecting a company.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry's structure and external influences using Porter's Five Forces and PESTLE frameworks.

Q.4607 Which of the following attributes is *most likely* characteristic of the industry, rather than being specific to a particular company?

A. Size

B. Business model variation

C. Sensitivity to the business cycle

The correct answer is **C.**

Sensitivity to the business cycle exemplifies a factor that has an influence on the entire industry. It is a characteristic that demonstrates the degree to which the performance of companies within a specific industry is influenced by changes in the broader economic environment.

A is incorrect. The size of companies within an industry can vary significantly. Industries often comprise both large and small companies, and size is typically a company-specific attribute rather than a defining characteristic of the industry.

B is incorrect. Different companies within the same industry often adopt diverse business models to achieve competitive advantages or respond to specific market demands. Business model variations are more likely to be company-specific attributes, reflecting the unique strategies and approaches taken by individual firms.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (a) Describe the purposes of, and steps involved in, industry and competitive analysis.

Q.4608 Which of the following actions are *most likely* performed in the forecasting company analysis stage?

A. Determining business model

B. Evaluating key risks and uncertainties

C. Analyzing industry structure and external influence

The correct answer is **B.**

Evaluating the key risks and uncertainties is one of the activities that are performed in the forecasting company analysis stage. The others include determining forecast objects and approaches, forecasting revenue, forecasting operating profitability and working capital, and forecasting capital investments and capital structure.

A is incorrect. Determining the business model is a task of the past and present company analysis stage. The other tasks in this stage include analyzing revenue and revenue drivers, analyzing operating profitability and working capital, and analyzing capital investments and capital structure.

C is incorrect. Analyzing industry structure and external influence is a task under the industry and competitive analysis stage. The other tasks include defining Industry, analyzing size, growth and character, profitability, market share trends, and evaluating company's competitive strategy and positioning and determining if company has a competitive advantage.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (a) Describe the purposes of, and steps involved in, industry and competitive analysis.

Q.4609 Which of the following is *least likely* a limitation of third-party industry classification schemes?

A. Industry classifications always account for geographical variations

B. Some industries may contain companies with diverse business models

C. Companies engage in the production and sale of multiple products or services

The correct answer is **A.**

Industry classifications may not always account for geographical variations. Some industries are influenced by regional factors, and companies operating in different parts of the world may face distinct market conditions. Failure to consider these geographical nuances in industry classification systems may lead to oversimplification of the industry landscape.

B is incorrect. Industry classification systems often categorize companies based on their primary business activities. However, some industries may contain companies with diverse business models or those that offer substitute products and services. This diversity within the same industry category can make it challenging for analysts to draw accurate conclusions about the overall health or performance of the industry.

C is incorrect. Many companies engage in the production and sale of multiple products or services. Industry classification systems often assign a company to a specific sector based on its predominant business activity. However, this can be problematic when dealing with conglomerates or diversified companies that operate across various segments. The primary focus of a multi-product company might not be accurately represented by its industry classification.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.4610 The method of grouping companies based on industry or product is just one approach among several, and its utility may diminish when applied in contexts beyond industry analysis. Which of the following is *least likely* an approach used in contexts such as index construction and investment performance evaluation?

A. Geography

B. Statistical differences

C. Sensitivity to the business cycle

The correct answer is **B.**

Statistical similarities and not differences is an approach used contexts such as index construction and investment performance evaluation. It is the application of clustering analysis to categorize companies based on shared financial ratios and market data, or the correlated movements of their securities' investment returns. This method encompasses grouping by size, considering factors such as market capitalization or other distinctive characteristics.

A is incorrect. Geographical classification involves organizing companies based on their respective countries, which are then grouped into broader categories like developed, emerging, and frontier markets. Companies are typically classified according to the country of incorporation, the primary listing of equity securities, the location of their headquarters, or market perception.

C is incorrect. Companies can be classified based on their sensitivity to the business cycle, categorized as either "defensive" or "cyclical." Defensive companies experience relatively minimal impact on sales growth, profitability, and valuations in response to changes in broad macroeconomic activity (e.g., GDP growth). Conversely, cyclical companies are more susceptible to such fluctuations.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (b) Describe industry classification methods and compare methods by which companies can be grouped.

Q.4611 Which of the following industries *most likely* be classified under cyclical and mature under the industry growth style box?

A. Software

B. Natural gas

C. Pharmaceuticals

The correct answer is **B.**

Natural gas is classified as a cyclical and mature industry under the industry growth style box. Cyclical industries are those that experience significant fluctuations in demand based on the economic cycle. Mature industries are characterized by slower growth rates and well-established market presence. Other examples of industries in this category include crude oil and freight transportation.

A is incorrect. Software is classified under growth and defensive industries. Growth industries are characterized by rapid growth and innovation, while defensive industries are those that provide consistent performance regardless of economic cycles. Other industries in this category include biotechnology and gaming.

C is incorrect. Pharmaceuticals are also classified under growth and defensive industries. These industries tend to perform well during various phases of the economic cycle due to the consistent demand for their products. Other industries in this category include utilities and beverages.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (c) Determine an industry's size, growth characteristics, profitability, and market share trends.

Q.4612 The semi-conductor market in the country consists of four firms with the following market shares, 33%, 24%, 22% and 21%. The Herfindahl-Hirschman Index (HHI) is *most likely*?

A. 0.2590

B. 2590

C. 50.89

The correct answer is **B.**

The Herfindahl-Hirschman Index (HHI) is used to gauge industry concentration. It is computed by summing the squares of individual competitor market shares:

$$HHI = \sum_{i=1}^{\infty} S_i^2$$

$$HHI = 33^2 + 24^2 + 22^2 + 21^2 = 2590$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (c) Determine an industry's size, growth characteristics, profitability, and market share trends.

Q.4615 Porter’s Five Forces is a framework for assessing industry structure. Which of the following is *least likely* one of Porter’s five forces?

A. Threat of substitutes

B. Threat of new entrants

C. Threats of new regulations

The correct answer is **C.**

“Threats of new regulations" is less likely to be considered one of Porter's Five Forces. The traditional five forces focus on aspects such as competition, bargaining power, and market dynamics rather than regulatory threats.

Porter's Five Forces framework assesses the competitive forces within an industry that can impact its attractiveness and competitiveness. The five forces are:

i. Threat of substitutes
ii. Threat of new entrants
iii. Bargaining power of buyers
iv. Bargaining power of suppliers
v. Intensity of competitive rivalry

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry’s structure and external influences using Porter’s Five Forces and PESTLE frameworks.

Q.4616 Which of the following factors in the PESTLE analysis *most likely* include the analysis in changes in GDP or personal income, inflation, interest rates and exchange rates?

A. Political influences

B. Economic influences

C. Technological influences

The correct answer is **B.**

Economic factors affecting an industry encompass fluctuations in GDP and personal income, variations in inflation, interest rates, and exchange rates. These influences may be linked to the business cycle, exhibiting cyclical patterns, or they can be structural, reflecting differences in longer-term population and productivity growth rates among countries, thereby impacting the sales and costs of companies operating in different regions.

A is incorrect. Political factors affecting an industry involve shifts in fiscal and monetary policies, direct selling and purchasing activities by governments, alterations in regulations, and geopolitical conditions and actions.

C is incorrect. Technological advancements have the potential to introduce novel or enhanced products while making existing ones obsolete, leading to significant transformations in industries and companies. These technological changes can be categorized into two types: sustaining innovations and disruptive innovations.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (d) Analyze an industry's structure and external influences using Porter's Five Forces and PESTLE frameworks.

Q.4617 Which of the following is *most likely* a characteristic of cost leadership under the generic competitive strategies?

A. Premium pricing

B. Firms invest in advertising

C. Firms have economies of scale

The correct answer is **C.**

Cost leadership is a characteristic of cost leadership, and it typically involves achieving the lowest cost of production and operation in the industry. This allows the firm to offer products or services at lower prices than competitors while maintaining acceptable quality.

A is incorrect. Premium pricing is not characteristic of cost leadership. Cost leadership usually focuses on offering products or services at competitive or lower prices. Premium pricing is a characteristic of differentiation.

B is incorrect. Firms invest in advertising under the differentiation strategy of the generic competitive strategies. Advertising expenses can contribute to higher costs, which is contrary to the cost-cutting approach of cost leadership.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (e) Evaluate the competitive strategy and position of a company.

Q.4618 Which of the following industry characteristics is the cost leadership strategy most appropriate?

A. Capital intensive

B. Customers value distinctiveness

C. Price is not foremost concern for customers

The correct answer is **A.**

Cost leadership is most appropriate in capital intensive industries as cost leadership strategies often involve achieving economies of scale and cost efficiencies. Larger production volumes may lead to cost advantages.

B is incorrect. Differentiation strategy is most appropriate in industries where customers value distinctiveness and unique features in products or services. This strategy focuses on offering something unique or perceived as unique by customers, which allows a company to command premium prices and build brand loyalty.

C is incorrect. Price is not the foremost concern for customers under the differentiation strategy. Customers are willing to pay a premium for the unique features, qualities, or brand image associated with the differentiated product or service.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 6: Industry and Competitive Analysis, LOS (e) Evaluate the competitive strategy and position of a company.

Learning Module 7: Company Analysis: Forecasting

Q.4291 An analyst is preparing a financial forecast for a company. The analyst has access to a wealth of information and is planning to build a highly detailed model with a long-term perspective. This scenario is *most likely* to occur in which of the following situations?

A. The analyst is an investor with a controlling position in a private company.

B. The analyst is preparing a forecast for a public issuer with a straightforward business model.

C. The analyst is publishing company research for external distribution and is focusing on quarterly forecasts of revenue and earnings per share.

The correct answer is **A.**

An analyst preparing a financial forecast for a company with a wealth of information and planning to build a highly detailed model with a long-term perspective is most likely to occur when the analyst is an investor with a controlling position in a private company. In this situation, the analyst has access to detailed internal information and has a vested interest in the long-term performance of the company.

The analyst can use this information to build a comprehensive financial model that takes into account the company's specific business operations, financial condition, and strategic plans. This level of detail and long-term perspective is particularly important for an investor with a controlling position, as their investment decisions can have a significant impact on the company's future.

A is incorrect. While an analyst publishing company research for external distribution may have access to a wealth of information, they are typically focused on short-term forecasts of revenue and earnings per share. These forecasts are often based on publicly available information and are intended to provide guidance to investors and other external stakeholders. They do not typically involve the level of detail and long-term perspective described in the question.

C is incorrect. An analyst preparing a forecast for a public issuer with a straightforward business model may not need to build a highly detailed model with a long-term perspective. While they may have access to a wealth of information, the straightforward nature of the business model may not require the level of detail described in the question. Furthermore, public issuers are subject to regulatory requirements that limit the amount of non-public information that can be used in financial forecasts, which may further limit the level of detail and long-term perspective that can be incorporated into the model.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (a): Explain principles and approaches to forecasting a company’s financial results and position.

Q.4292 An analyst is preparing a financial forecast for a company. The analyst needs to consider the company's business model as it can significantly influence the structure of the forecast. This is particularly important when comparing companies from different industries. Which of the following industries is *most likely* to require a different approach to forecasting due to its unique financial structure and revenue streams?

A. A company operating in the retail industry.

B. A company operating in the online marketplace industry.

C. A company operating in the oil and gas production industry.

The correct answer is **C.**

A company operating in the oil and gas production industry is likely to require a different approach to forecasting due to its unique financial structure and revenue streams. The oil and gas industry is characterized by high capital expenditure, long project timelines, and revenues that are highly dependent on commodity prices. This makes the financial structure of oil and gas companies significantly different from companies in other industries.

A is incorrect. While the retail industry has its own unique characteristics, such as inventory management and seasonality, these do not significantly alter the basic structure of a financial forecast. The main revenue streams for a retail company, such as sales of goods, are similar to those of many other industries. Therefore, the approach to forecasting for a retail company would not be significantly different from that for companies in many other industries.

B is incorrect. While the online marketplace industry has unique characteristics, such as network effects and scalability, these do not significantly alter the basic structure of a financial forecast. The main revenue streams for an online marketplace company, such as transaction fees, are similar to those of many other industries. Therefore, the approach to forecasting for an online marketplace company would not be significantly different from that for companies in many other industries.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (d): Explain approaches to forecasting a company’s capital investments and capital structure.

Q.4293 An analyst is preparing a forecast for a company's financial health and future prospects. He decides to focus on the average number of stores open and the average net sales per store to predict the company's net sales. He also plans to forecast gross margin and SG&A expenses as percentages of net sales. Which forecast object is the analyst *most likely* using in this scenario?

A. Summary Measures.

B. Drivers of Financial Statement Lines.

C. Individual Financial Statement Lines.

The correct answer is **B.**

The analyst is primarily using Drivers of Financial Statement Lines as the forecast object in this scenario. In financial forecasting, drivers are the operational and financial variables that influence the financial performance of a company. In this case, the analyst is using the average number of stores open and the average net sales per store as drivers to predict the company's net sales.

These are operational drivers that directly influence the company's revenue. Similarly, the analyst is forecasting gross margin and SG&A expenses as percentages of net sales, which are financial drivers that influence the company's profitability. By focusing on these drivers, the analyst is able to create a more accurate and detailed forecast of the company's financial health and future prospects.

A is incorrect. Summary Measures refer to aggregate measures of a company's financial performance, such as total revenue or net income. While these measures are important, they are not the primary focus of the analyst's forecast in this scenario. The analyst is focusing on the underlying drivers that influence these summary measures, not the measures themselves.

C is incorrect. Individual Financial Statement Lines refer to the individual line items in a company's financial statements, such as revenue, cost of goods sold, or net income. While the analyst is indeed forecasting some of these line items, he is doing so by focusing on the underlying drivers, not the line items themselves.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company’s revenues.

Q.4294 A company has recently announced a material legal proceeding that could potentially impact its financial health. An analyst decides to forecast the potential loss or gain and its timing to make an investment decision. This forecast is not based on historical financial statements. Which type of forecast object is the analyst *most likely* using in this case?

A. Ad Hoc Objects.

B. Summary Measures.

C. Individual Financial Statement Lines.

The correct answer is **A.**

The analyst is using Ad Hoc Objects for the forecast. Ad Hoc Objects are used when the analyst needs to forecast an event that is not based on historical financial statements and is not a regular occurrence. In this case, the analyst is trying to forecast the potential impact of a legal proceeding on the company's financial health. This is not a regular occurrence and is not something that can be predicted based on historical financial statements.

The analyst is using an Ad Hoc Object for the forecast. Ad Hoc Objects are often used in situations where there is a significant event or change in the company's operations that could potentially have a significant impact on the company's financial performance. These forecasts are often more subjective and require a higher level of judgment and expertise from the analyst.

B is incorrect. Summary Measures are used when the analyst is forecasting a summary measure of the company's financial performance, such as earnings per share or return on equity. This is not the case here, as the analyst is not forecasting a summary measure but rather the potential impact of a legal proceeding.

C is incorrect. Individual Financial Statement Lines are used when the analyst is forecasting specific line items on the financial statements based on historical trends and other relevant factors. This is not the case here, as the analyst is not forecasting a specific line item on the financial statements but rather the potential impact of a legal proceeding.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (e): Describe the use of scenario analysis in forecasting.

Q.4295 An analyst is preparing a forecast for a company's sales and gross margin. The company discloses its gross margin only on a consolidated basis. The analyst is considering forecasting sales and gross margin by individual product line. However, the analyst is aware that if the company's reported gross margin results differ from the gross margin estimates, it will be challenging to verify the product-line gross margin estimates. In this scenario, what is the *most likely* issue the analyst will face?

A. The analyst will be able to easily verify the product-line gross margin estimates.

B. The analyst will not be able to determine if the forecast is off on individual product lines.

C. The analyst will not face any issues as the company discloses its gross margin on a consolidated basis.

The correct answer is **B.**

When a company only discloses its gross margin on a consolidated basis, it becomes challenging to verify the gross margin estimates for individual product lines. This is because the consolidated gross margin is a weighted average of the gross margins of all the product lines, and it does not provide information about the gross margin of each individual product line. If the company's reported gross margin results differ from the gross margin estimates, the analyst will not be able to identify which product line's gross margin estimate is off.

This could lead to inaccuracies in the forecast and could potentially mislead the analyst's understanding of the company's profitability by product line. Therefore, it is crucial for analysts to consider the limitations of using consolidated gross margin data when forecasting sales and gross margin by individual product lines.

A is incorrect. The analyst will not be able to easily verify the product-line gross margin estimates if the company only discloses its gross margin on a consolidated basis. The consolidated gross margin does not provide information about the gross margin of each individual product line, making it difficult to verify the gross margin estimates for individual product lines.

C is incorrect. The analyst will indeed face issues even though the company discloses its gross margin on a consolidated basis. The issue is that the consolidated gross margin does not provide information about the gross margin of each individual product line, making it difficult to verify the gross margin estimates for individual product lines.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company's revenues.

Q.4296 An analyst is considering creating a complex model to forecast the revenues of Novartis AG, a Swiss pharmaceutical company, by forecasting sales for each of its individual drugs by illness and geography. The analyst is aware that such a model would take months to create and weeks to update every quarter. Moreover, the forecasts by illness are not verifiable over time based on the company's disclosures. In this scenario, what would *most likely* be the most advisable course of action for the analyst?

A. The analyst should create the complex model but only update it annually to save time.

B. The analyst should proceed with creating the complex model as it will provide the most accurate forecast.

C. The analyst should not create a complex model and instead focus on the most important drivers and use aggregations and shortcuts where the value-added of discrete forecasting is low.

The correct answer is **C.**

The analyst should not create a complex model and instead focus on the most important drivers and use aggregations and shortcuts where the value-added of discrete forecasting is low. In financial analysis, it is important to balance the complexity of a model with its practicality and usefulness. While a highly detailed model may theoretically provide more accurate forecasts, it may also be time-consuming to create and update and may not necessarily provide significantly better results than a simpler model.

A is incorrect. Updating the model only annually would not provide timely and relevant information for decision-making. In a fast-paced industry like pharmaceuticals, conditions can change rapidly, and outdated information could lead to inaccurate forecasts and poor decisions.

B is incorrect. While creating a complex model might seem like it would provide the most accurate forecast, it is not always the best course of action. The time and resources required to create and maintain such a model may not be justified by the potential increase in forecast accuracy. Moreover, if the forecasts by illness are not verifiable, the model could be based on inaccurate assumptions, leading to inaccurate forecasts.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company's revenues.

Q.4297 Assume you are an analyst working for a financial firm. You are tasked with forecasting the future performance of a company that operates in a cyclical industry and is currently undergoing a major restructuring process, including a large acquisition. Given the circumstances, you are considering the Historical Results Forecast Approach. Is this approach suitable for your task?

A. Yes, because the Historical Results Forecast Approach is the easiest and often the default method due to its simplicity.

B. No, because the Historical Results Forecast Approach is less suitable for companies in cyclical industries and those undergoing major restructuring.

C. Yes, because the Historical Results Forecast Approach is commonly used for forecast objects that are not material or that the analyst does not hold an opinion on.

The correct answer is **B.**

The Historical Results Forecast Approach is less suitable for companies in cyclical industries and those undergoing major restructuring. This approach relies on the assumption that past performance is a reliable indicator of future performance. However, in cyclical industries, performance can vary significantly from one period to another due to changes in the business cycle. Therefore, using historical results to forecast future performance can lead to inaccurate predictions.

A is incorrect. While the Historical Results Forecast Approach is indeed often the default method due to its simplicity, this does not mean it is suitable for all situations. As explained above, it is less suitable for companies in cyclical industries and those undergoing major restructuring.

C is incorrect. The Historical Results Forecast Approach is not only used for forecast objects that are not material or that the analyst does not hold an opinion on. It can also be used for material forecast objects and when the analyst does hold an opinion. However, its suitability depends on the specific circumstances, as explained above.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (e): Describe the use of scenario analysis in forecasting.

Q.4298 You are a financial analyst, and you are asked to predict the future outcomes for a company operating in an industry where you do not anticipate any changes in the industry structure. The company also has a low sensitivity to changes in the business cycle. Why would the historical forecast approach forecasting approach *most likely* be most suitable in this scenario?

A. It is less appropriate for companies in cyclical industries and those undergoing major restructuring.

B. It is commonly used to forecast objects that are not material or that the analyst does not hold an opinion on.

C. It is suitable for companies operating in industries where the analyst does not anticipate any changes in the industry structure and for companies that have a low sensitivity to changes in the business cycle.

The correct answer is **C.**

The Historical Results Forecast Approach is most suitable in this scenario because it is ideal for companies operating in industries where the analyst does not anticipate any changes in the industry structure and for companies that have a low sensitivity to changes in the business cycle. This approach uses historical data as a basis for estimating future outcomes. It assumes that the past performance of a company is a good indicator of its future performance.

A is incorrect. While it is true that the Historical Results Forecast Approach is less appropriate for companies in cyclical industries and those undergoing major restructuring, this statement does not accurately describe why it would be the most suitable approach in this particular scenario. The key factor in this scenario is not that the company is not in a cyclical industry or undergoing restructuring, but that the industry is stable and the company has a low sensitivity to changes in the business cycle.

B is incorrect. The Historical Results Forecast Approach is not just used for forecast objects that are not material or that the analyst does not hold an opinion on. It can be used for any company or industry, provided that the conditions are suitable, as they are in this scenario. This choice misrepresents the scope and applicability of the Historical Results Forecast Approach.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (a): Explain principles and approaches to forecasting a company's financial results and position.

Q.4299 In which of the following scenarios would the historical base rates and convergence forecast approach be *most likely* suitable?

A. A company in a new and rapidly changing industry where calculating a base rate is difficult.

B. A leading tech company that accounts for a substantial proportion of the industry base rate.

C. A biotechnology company that recently launched its first drug and is expected to scale its operations.

The correct answer is **C.**

The Historical Base Rates and Convergence forecast Approach would be most suitable for a biotechnology company that recently launched its first drug and is expected to scale its operations. This is because the company is in a phase where it is expected to grow and stabilize its operations, and hence, it is reasonable to expect that its performance will converge to the industry average over time. The base rate, in this case, would be the average or median performance of similar biotechnology companies that have launched their first drug and scaled their operations.

A is incorrect. A company in a new and rapidly changing industry where calculating a base rate is difficult would not be a suitable candidate for the Historical Base Rates and Convergence forecast Approach. This is because the lack of historical data and the rapid changes in the industry make it difficult to calculate a reliable base rate, and hence, the forecast based on this approach would be highly uncertain and potentially misleading.

B is incorrect. A leading tech company that accounts for a substantial proportion of the industry base rate would not be a suitable candidate for the Historical Base Rates and Convergence forecast Approach. This is because the company's performance is likely to have a significant impact on the industry average, and hence, using the industry average as a base rate for forecasting the company's performance would be circular and potentially misleading.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (a): Explain principles and approaches to forecasting a company’s financial results and position.

Q.4300 Which of the following is *most likely* explains why the Historical Base Rates and Convergence forecast Approach is not suitable for companies in highly cyclical industries?

A. It requires a longer-term base rate and smooth convergence to it, which would obscure year-to-year volatility.

B. It requires a short-term base rate and rapid convergence it, which would highlight year-to-year volatility.

C. It requires a medium-term base rate and moderate convergence to it, which would neither obscure nor highlight year-to-year volatility.

The correct answer is **A.**

The Historical Base Rates and Convergence Forecast Approach is not suitable for companies in highly cyclical industries because it requires a longer-term base rate and smooth convergence to it, which would obscure year-to-year volatility. Highly cyclical industries are characterized by significant fluctuations in performance and profitability due to economic cycles. These industries can experience periods of rapid growth followed by periods of contraction.

B is incorrect. The Historical Base Rates and Convergence forecast Approach does not require a short-term base rate and rapid convergence to it. This would highlight year-to-year volatility, which is not the objective of this approach. This approach is designed to provide a long-term perspective and smooth out short-term fluctuations, not to highlight them.

C is incorrect. The Historical Base Rates and Convergence forecast Approach does not require a medium-term base rate and moderate convergence to it. This would neither obscure nor highlight year-to-year volatility, which is not the objective of this approach. This approach is designed to provide a long-term perspective and smooth out short-term fluctuations, not to maintain a balance between obscuring and highlighting volatility.

CFA Level I, Equity, Learning Module 7: Company Analysis: Forecasting. LOS (a): Explain principles and approaches to forecasting a company’s financial results and position.

Q.4301 A public company's management has provided a guidance range for their sales growth as 2%–4%. As an investor, you are trying to understand the management's true expectations. Based on the characteristics of guidance and management expectations, how should you most likely interpret this range?

A. The midpoint of the range, 3%, represents the management's true expectations.

B. The lower bound of the range, 2%, represents the management's true expectations.

C. The upper bound of the range, 4%, represents the management's true expectations.

The correct answer is **C.**

When a company's management provides a guidance range for their sales growth, interpreting the upper bound of the range as the management's true expectations is often a prudent approach for investors. This interpretation is grounded in the understanding that management teams typically offer guidance ranges to encapsulate potential uncertainties and risks that could affect the company's performance. The upper end of this range is not just an optimistic target but rather a calculated estimate that management believes is achievable, even in the face of some anticipated challenges.

A is incorrect. Suggesting that the midpoint of the range, 3%, represents management's true expectations oversimplifies the strategic purpose behind providing a range. While the midpoint might seem like a reasonable estimate, it does not fully account for the optimism that management might have about its strategies and market conditions. The midpoint could be seen as a conservative estimate, potentially underestimating the company's capabilities and market opportunities.

B is incorrect. Interpreting the lower bound of the range, 2%, as the management's true expectations is overly pessimistic. This figure likely represents a threshold that management is confident it can exceed, barring any unforeseen major disruptions. It is a conservative figure that ensures the company can meet its guidance even under less favorable conditions. Relying solely on the lower end of the guidance range might lead investors to undervalue the company's potential for growth and overlook the strategic initiatives in place to achieve higher sales growth.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company's revenues.

Q.4302 You are an analyst considering the use of a company's guidance for your forecasts. The company in question is highly sensitive to the business cycle. Based on the principles of using guidance for forecasts, should you rely on the company's guidance for your forecasts?

A. Yes, because guidance accounts for a majority of the quarterly financial reporting information used by investors.

B. Yes, because guidance is forward-looking, and management has an abundance of industry and company information that investors do not.

C. No, because management does not have an informational advantage over investors in forecasting macroeconomic variables like GDP or the prices of commodities.

The correct answer is **C.**

When considering the use of a company's guidance for forecasts, especially for a company that is highly sensitive to the business cycle, it is important to understand the limitations of management's ability to predict future outcomes. While management does have access to a wealth of industry and company-specific information, they do not have an informational advantage over investors when it comes to forecasting macroeconomic variables like GDP or the prices of commodities.

A is incorrect. While the guidance does account for a significant portion of the quarterly financial reporting information used by investors, this does not mean that it should be the sole source of information for forecasts. Guidance is just one of many tools that investors can use to predict future performance. Other sources of information, such as economic indicators, industry trends, and independent research, should also be considered when making forecasts.

B is incorrect. While it is true that management has access to a wealth of industry and company-specific information, this does not necessarily translate into an ability to accurately predict future macroeconomic conditions. As mentioned above, management does not have an informational advantage over investors when it comes to forecasting macroeconomic variables. Relying solely on the company's guidance for forecasts could lead to inaccurate predictions.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (a): Explain principles and approaches to forecasting a company’s financial results and position.

Q.4304 A financial analyst is preparing a revenue forecast for a company that discloses the volumes and prices of its products. The analyst plans to prepare individual forecasts for these quantities and then multiply them to arrive at a revenue forecast. This approach is *most likely* an example of which type of forecast object?

A. Top-Down Forecast Object.

B. Bottom-Up Forecast Object.

C. Market Growth and Market Share Forecast Object

The correct answer is **B.**

This approach is an example of a Bottom-Up Forecast Object. In a bottom-up forecasting approach, the analyst starts with the smallest, most basic elements of the business and then combines them to create a larger, overall forecast. In this case, the analyst starts with the individual volumes and prices of the company's products, which are the basic elements of the company's revenue.

A is incorrect. A top-down forecast object would involve starting with a larger, overall forecast (such as total market size or total company revenue) and then breaking it down into smaller components. This is the opposite of the approach described in the question.

C is incorrect. A market growth and market share forecast object would involve forecasting the growth of the overall market and the company's share of that market. This is a different approach than the one described in the question, which involves forecasting individual volumes and prices of the company's products.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company's revenues.

Q.4305 A retail company is forecasting its revenues based on the number of stores and sales per store, or same-store sales growth and sales related to new-store openings. This approach is *most likely* an example of which type of forecast object?

A. Capacity-based Measures Forecast Object.

B. Return- or Yield-based Measures Forecast Object.

C. Market Growth and Market Share Forecast Object.

The correct answer is **A.**

This approach is an example of a Capacity-based Measures Forecast Object. The capacity is the number of stores that the retail company operates. The company is forecasting its revenues based on two factors: the sales per store (same-store sales growth) and the sales related to new-store openings. This approach is a capacity-based measure because it is based on the company's capacity to generate sales, which is determined by the number of stores it operates.

The company is forecasting its revenues based on its ability to utilize its capacity (i.e., its stores) to generate sales. This approach is commonly used in industries where capacity is a key determinant of revenues, such as retail, manufacturing, and hospitality.

B is incorrect. Return- or Yield-based Measures Forecast Object refers to a forecasting approach that is based on the returns or yields that a company expects to generate. This approach is typically used in financial industries, such as banking and investment. In this case, the company is not forecasting its revenues based on returns or yields but rather on its own capacity to generate sales.

C is incorrect. Market Growth and Market Share Forecast Object refers to a forecasting approach that is based on the growth of the overall market and the company's share of that market. In this case, the company is not forecasting its revenues based on market growth or market share but rather on its own capacity to generate sales.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company’s revenues.

Q.4306 A retail company is forecasting its revenues based on the number of stores and sales per store, or same-store sales growth and sales related to new-store openings. This approach is *most likely* an example of which type of forecast object?

A. Capacity-based Measures Forecast Object.

B. Return- or Yield-based Measures Forecast Object.

C. Market Growth and Market Share Forecast Object.

The correct answer is **A.**

This approach is an example of a Capacity-based Measures Forecast Object. In this case, the capacity is the number of stores that the retail company operates. The company is forecasting its revenues based on two factors: the sales per store (same-store sales growth) and the sales related to new-store openings. This approach is a capacity-based measure because it is based on the company's capacity to generate sales, which is determined by the number of stores it operates.

B is incorrect. Return- or Yield-based Measures Forecast Object refers to a forecasting approach that is based on the returns or yields that a company expects to generate. This approach is typically used in financial industries, such as banking and investment. The company is not forecasting its revenues based on returns or yields but rather on its own capacity to generate sales.

C is incorrect. Market Growth and Market Share Forecast Object refers to a forecasting approach that is based on the growth of the overall market and the company's share of that market. In this case, the company is not forecasting its revenues based on market growth or market share but rather on its own capacity to generate sales.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company’s revenues.

Q.4307 A bank is forecasting its net interest income based on account balances and revenue yields on them. The net interest income is calculated as loans multiplied by the average interest rate minus the product of deposits and liabilities and their average interest rate. This approach is *most likely* an example of which type of forecast object?

A. Return- or Yield-based Measures Forecast Object.

B. Product-line or Segment Revenues Forecast Object.

C. Market Growth and Market Share Forecast Object.

The correct answer is **A.**

Return- or yield-based measures are forecasts based on account balances and revenue yields on them. For example, net interest income for a bank can be calculated as loans multiplied by the average interest rate minus the product of deposits and liabilities and their average interest rate.

B is incorrect. Product-line or segment revenues are forecasts for individual products, product or business lines, geographic areas, or reporting segments are made and then aggregated into a total revenue forecast. This approach is commonly used if a company makes such disclosures and if the objects have different economic exposures.

C is incorrect. In a market growth and market share technique the analyst first forecasts a growth rate for a company's product market, and then considers the company's current market share and how that share is likely to change over time.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company's revenues.

Q.4308 If a company experiences a sudden increase in revenue due to changes in exchange rates, additional selling days in the period, or acquisitions, how should these items *most likely* be treated in the revenue forecast? They should be:

A. included in the forecast but highlighted as potential risks.

B. included in the forecast as they contribute to the overall revenue.

C. excluded from the forecast and considered separately as they do not have the same drivers as the recurring revenue.

The correct answer is **C.**

These items should be excluded from the forecast and considered separately as they do not have the same drivers as the recurring revenue. In financial forecasting, it is crucial to distinguish between recurring and non-recurring items. Recurring items are those that are expected to continue in the future, while non-recurring items are one-time events that are not expected to repeat. A sudden increase in revenue due to changes in exchange rates, additional selling days in the period, or acquisitions are examples of non-recurring items.

A is incorrect. While it is important to highlight potential risks in a forecast, including these items in the forecast could lead to overestimation or underestimation of future revenues. These items are non-recurring and do not reflect the company's underlying business performance. Therefore, they should not be included in the forecast, even if they are highlighted as potential risks.

B is incorrect. Including these items in the forecast as they contribute to the overall revenue can lead to inaccurate forecasts. These items are non-recurring and do not reflect the company's underlying business performance. Therefore, they should not be included in the forecast.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company’s revenues.

Q.4309 The COVID-19 pandemic led to a rapid increase in e-commerce sales, which later decelerated or declined in 2022. How should an analyst *most likely* interpret this trend in e-commerce sales?

A. As an indication that the e-commerce industry is in decline.

B. As a sign of the e-commerce industry's instability and unpredictability.

C. As evidence that some of the growth in e-commerce sales during the pandemic was non-recurring.

The correct answer is **C.**

The rapid increase in e-commerce sales during the COVID-19 pandemic and the subsequent deceleration or decline in 2022 should be interpreted as evidence that some of the growth in e-commerce sales during the pandemic was non-recurring. The pandemic led to a unique set of circumstances that significantly boosted e-commerce sales, including lockdowns, social distancing measures, and a general shift towards online shopping due to health concerns.

A is incorrect. The deceleration or decline in e-commerce sales in 2022 does not necessarily indicate that the e-commerce industry is in decline. It is more likely a return to more normal growth rates after the extraordinary surge in sales during the pandemic. The long-term trend for the e-commerce industry is still one of growth, driven by factors such as increasing internet penetration, technological advancements, and changing consumer behaviors.

B is incorrect. The fluctuation in e-commerce sales during and after the pandemic does not necessarily indicate the e-commerce industry's instability and unpredictability. It is more a reflection of the extraordinary circumstances created by the pandemic, which led to a temporary surge in e-commerce sales.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (e): Describe the use of scenario analysis in forecasting.

Q.4310 Which of the following is *most likely* the primary reason the analyst to analysts may separate certain "one-time" revenues or gains from the main revenue forecast when forecasting revenue?

A. To make the revenue forecast appear more impressive.

B. To forecast the "underlying" revenue or growth apart from the non-recurring items.

C. To simplify the revenue forecast by removing complex elements.

The correct answer is **B.**

The primary reason for separating certain "one-time" revenues or gains from the main revenue forecast is to forecast the "underlying" revenue or growth apart from the non-recurring items. This is because one-time revenues or gains are not expected to recur in the future, and therefore, they can distort the true picture of a company's ongoing operations. By separating these items, analysts can provide a more accurate and reliable forecast of the company's future revenue growth.

A is incorrect. The purpose of separating one-time revenues or gains from the main revenue forecast is not to make the revenue forecast appear more impressive. While removing these items may result in a lower total revenue figure, it provides a more accurate and reliable measure of the company's ongoing operations. The goal of financial analysis is to provide accurate and reliable information, not to inflate or distort the financial results.

C is incorrect. The purpose of separating one-time revenues or gains from the main revenue forecast is not to simplify the revenue forecast by removing complex elements. While this approach may simplify the analysis to some extent, its primary purpose is to provide a more accurate and reliable measure of the company's ongoing operations. Even with the removal of one-time items, the revenue forecast may still involve complex elements, such as the impact of changes in market conditions, competition, and company strategy.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company's revenues.

Q.4311 In the late 2010s, GPU manufacturers saw a large increase in sales, partly attributed to the use of GPUs in cryptocurrency mining. However, the companies could not or would not quantify the precise amount. How should an analyst *most likely* treat such sales in their forecast? They should:

A. ignore these sales as they are not quantified by the company.

B. include these sales in the forecast as they contribute to the overall revenue.

C. exclude these sales from the forecast and consider them separately, judging them as non-recurring.

The correct answer is **C.**

An analyst should exclude these sales from the forecast and consider them separately, judging them as non-recurring. This is because the sales attributed to the use of GPUs in cryptocurrency mining are not a regular or predictable source of revenue for the company. The demand for GPUs for cryptocurrency mining can fluctuate significantly depending on various factors such as the price of cryptocurrencies, the difficulty of mining, and regulatory changes.

A is incorrect. Ignoring these sales completely would not be a prudent approach either. Even though the company has not quantified the precise amount of these sales, they still represent a significant part of the company's business. Ignoring them could lead to an underestimation of the company's total revenue and could also overlook the potential risks associated with the company's exposure to the cryptocurrency market.

B is incorrect. While it is true that these sales contribute to the overall revenue of the company, including them in the forecast without considering their non-recurring nature could lead to inaccurate predictions. The demand for GPUs for cryptocurrency mining is highly volatile and unpredictable, and therefore, it is not a reliable source of revenue for the company.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company’s revenues.

Q.4312 Which of the following is *least likely* one of the main approaches used for revenue forecasting?

A. Historical results.

B. Market speculation.

C. Management guidance.

The correct answer is **B.**

Market speculation is not one of the main approaches used for revenue forecasting. Revenue forecasting is a crucial part of financial analysis and planning, and it involves predicting the future revenues of a company based on various factors. The main approaches used for revenue forecasting include historical results, management guidance, and market research. Market speculation, is not a reliable or systematic method for forecasting revenues.

A is incorrect. Historical results are indeed one of the main approaches used for revenue forecasting. This method involves analyzing a company's past revenue trends to predict future revenues. It is based on the assumption that past performance is a good indicator of future performance.

C is incorrect. Management guidance is also a main approach used for revenue forecasting. This method involves using the revenue projections provided by a company's management team. These projections are often based on the company's strategic plans and goals, as well as its current market position and competitive environment.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (b): Explain approaches to forecasting a company’s revenues.

Q.4313 An analyst is reviewing the financial statements of a company. The company's disclosures about operating costs are less detailed compared to revenue disclosures. The analyst has to rely on more aggregated forecast objects. Which of the following would *most likely* be an example of such an aggregated forecast object that the analyst might rely on?

A. Costs separated by different geographic regions.

B. Detailed breakdown of costs for each product line

C. Consolidated financial statement lines such as cost of sales

The correct answer is **C.**

When a company's disclosures about operating costs are less detailed compared to revenue disclosures, an analyst might have to rely on more aggregated forecast objects. An example of such an aggregated forecast object is consolidated financial statement lines such as cost of sales. Cost of sales is a line item on a company's income statement that aggregates all the direct costs associated with producing goods sold by a company.

A is incorrect. Costs separated by different geographic regions would not be an aggregated forecast object. This would be a more detailed breakdown of costs, which the analyst does not have access to in this scenario.

B is incorrect. A detailed breakdown of costs for each product line would also not be an aggregated forecast object. This would be a more detailed level of cost information, which the analyst does not have access to in this scenario. Therefore, the analyst would not be able to rely on this information for forecasting.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (c): Explain approaches to forecasting a company’s operating expenses and working capital.

Q.4314 An analyst is forecasting for a grocery chain that also sells higher-margin items such as alcoholic products or pharmaceutical products. The analyst expects a change in the product mix sold. What is the *most likely* reason for the analyst to forecast this change?

A. The grocery chain is planning to reduce its product range.

B. The grocery chain is planning to expand its product range.

C. Food and grocery items typically have low gross profit margins

The correct answer is **C.**

The likely reason for the analyst to forecast a change in the product mix sold by the grocery chain is that food and grocery items typically have low gross profit margins. In the retail industry, gross profit margin is a key indicator of a company's financial health. It represents the percentage of sales revenue a company retains after incurring the direct costs associated with producing the goods it sells, and the services it provides.

The higher the gross profit margin, the more capital a company retains on each dollar of sales, which it can then use to pay other costs or satisfy debt obligations. Therefore, by shifting its product mix towards higher-margin items such as alcoholic or pharmaceutical products, the grocery chain can increase its gross profit margin and improve its financial performance. This is a common strategy used by grocery chains to boost their profitability.

A is incorrect. Reducing the product range could also lead to a change in the product mix, but again, it is not necessarily linked to the gross profit margin. The impact on profitability would depend on which products are removed from the range and what their margins were. If the grocery chain removes low-margin products, it could potentially increase its overall gross profit margin, but if it removes high-margin products, the opposite could happen.

B is incorrect. While expanding the product range could potentially lead to a change in the product mix, it is not necessarily linked to the gross profit margin. The new products could have higher or lower margins than the existing ones, and their impact on the overall profitability would depend on their sales volume and the costs associated with their production and distribution.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (a): Explain principles and approaches to forecasting a company's financial results and position.

Q.4316 A company heavily relies on commodities for its production process. Recently, the input prices have increased significantly. The company has a hedging strategy in place. As an analyst, how would you *most likely* expect this situation to impact the company's gross margin?

A. The gross margin will significantly decrease due to the rise in input prices.

B. The gross margin may decline, but the company's hedging strategy will mitigate the impact.

C. The gross margin will remain the same as the hedging strategy will completely mitigate the impact of rising input prices.

The correct answer is **B.**

The gross margin may decline, but the impact will be mitigated by the company's hedging strategy. Gross margin is calculated as sales revenue minus cost of goods sold (COGS) divided by sales revenue. When input prices rise, the COGS will increase, which could potentially decrease the gross margin.

However, if the company has a hedging strategy in place, it can mitigate the impact of rising input prices. Hedging strategies are designed to protect against price fluctuations by locking in prices for inputs in advance.

A is incorrect. While it's true that rising input prices can lead to a decrease in gross margin, this statement ignores the fact that the company has a hedging strategy in place, which can mitigate the impact of rising input prices.

C is incorrect. This statement assumes that the hedging strategy will completely mitigate the impact of rising input prices, which is not always the case. The effectiveness of a hedging strategy can vary depending on various factors, and it may not always be able to completely eliminate the impact of rising input prices.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (e): Describe the use of scenario analysis in forecasting.

Q.4317 You are analyzing a company that operates as a wholesaler with franchised retail operations. When comparing this company's gross margin with a retailer that owns and operates its own stores, what would you most likely expect to find? The wholesaler will have a

A. higher gross margin and lower operating costs.

B. lower gross margin and higher operating costs.

C. lower gross margin but also much lower operating costs.

*The correct answer is **C.***

The wholesaler will have a much lower gross margin but also much lower operating costs. Gross margin is the difference between revenue and cost of goods sold (COGS), divided by revenue. A wholesaler typically has a lower gross margin than a retailer because it sells goods in bulk at lower prices. However, a wholesaler also has lower operating costs than a retailer. This is because a wholesaler does not have to bear the costs associated with running retail operations, such as rent, utilities, and staff salaries.

A is incorrect. *The wholesaler will not have a much higher gross margin and lower operating costs. As explained above, a wholesaler typically has a lower gross margin than a retailer because it sells goods in bulk at lower prices. While it is true that a wholesaler has lower operating costs than a retailer, this does not result in a higher gross margin.*

B is incorrect. *The wholesaler will not have a much lower gross margin and higher operating costs. While it is true that a wholesaler has a lower gross margin than a retailer, its operating costs are also lower, not higher. This is because a wholesaler does not have to bear the costs associated with running retail operations, such as rent, utilities, and staff salaries.*

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (c): Explain approaches to forecasting a company’s operating expenses and working capital.

Q.4318 Total, a German cement and building materials company, experienced a sales growth of 6.1% from 2017 to 2018. However, the company's gross profit fell by 6.5% and its gross margin declined due to the growth of other operating costs, including SG&A expenses. Despite the increase in SG&A expenses, as a percentage of revenue, these expenses declined slightly. Based on this information, what can *most likely* be inferred about the relationship between SG&A expenses and the company's sales?

A. SG&A expenses increase in direct proportion to the company's sales.

B. SG&A expenses decrease in direct proportion to the company's sales.

C. SG&A expenses do not have a direct relationship with the company's sales.

The correct answer is **C.**

Based on the information provided, it can be inferred that SG&A (Selling, General & Administrative) expenses do not have a direct relationship with the company's sales. This is because despite the company experiencing a sales growth of 6.1% from 2017 to 2018, the SG&A expenses increased, but as a percentage of revenue, these expenses declined slightly. This indicates that the increase in SG&A expenses was not directly proportional to the increase in sales.

A is incorrect. SG&A expenses do not increase in direct proportion to the company's sales. If this were the case, the increase in sales would have resulted in a proportional increase in SG&A expenses as a percentage of revenue, which did not happen.

B is incorrect. SG&A expenses do not decrease in direct proportion to the company's sales. If this were the case, the increase in sales would have resulted in a proportional decrease in SG&A expenses as a percentage of revenue, which also did not happen.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (c): Explain approaches to forecasting a company’s operating expenses and working capital.

Q.4319 Which of the following is *most likely* can be inferred about the type of information typically included in segment disclosures? Segment disclosures typically include:

A. cost items such as cost of sales, SG&A, etc., by segment.

B. operating and EBITDA margin profitability by segment.

C. both cost items and profitability measures by segment.

The correct answer is **B.**

Segment disclosures typically include operating and EBITDA margin profitability by segment. This is because these measures provide a summary view of the profitability of each segment, which is useful for investors and analysts. Operating margin is a measure of profitability that shows how much of each dollar of revenues is left over after both costs of goods sold and operating expenses are considered.

A is incorrect. Segment disclosures generally do not include cost items such as cost of sales, SG&A, etc., by segment. This is because these details can be sensitive and revealing them could potentially harm the company's competitive position. Furthermore, these cost items can be complex and difficult to allocate accurately to individual segments, especially in diversified companies with multiple lines of business.

C is incorrect. While it would be ideal if segment disclosures included both cost items and profitability measures by segment, this is generally not the case. As mentioned earlier, cost items are typically not included due to their sensitive nature and the complexity involved in accurately allocating them to individual segments. Therefore, analysts usually have to rely on summary measures such as operating and EBITDA margin profitability to assess the performance of individual segments.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (c): Explain approaches to forecasting a company’s operating expenses and working capital.

Q.4320 A financial analyst is preparing a working capital forecast for a business. He is considering various elements to project the future financial health of the business. In this context, which of the following elements is *least likely* typically included in a working capital forecast?

A. Inventories

B. Long-term liabilities

C. Accounts receivable

The correct answer is **B.**

Long-term liabilities are not typically included in a working capital forecast. Working capital is a measure of a company's operational liquidity and short-term financial health. It is calculated as current assets minus current liabilities. Current assets typically include cash, accounts receivable, and inventories, while current liabilities include accounts payable and short-term debt. These are all items that are expected to be used, collected, or paid within one year.

A is incorrect. Inventories are also typically included in a working capital forecast. Inventories represent goods that a company has on hand for sale in the ordinary course of business. They are considered a current asset because they are expected to be sold within one year. Therefore, they are relevant to a company's short-term financial health and liquidity and are typically included in a working capital forecast.

C is incorrect. Accounts receivable are typically included in a working capital forecast. Accounts receivable represents money owed to a company by its customers for goods or services that have been delivered or used but not yet paid for. It is considered a current asset because it is expected to be collected within one year. Therefore, it is relevant to a company's short-term financial health and liquidity and is typically included in a working capital forecast.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (c): Explain approaches to forecasting a company’s operating expenses and working capital.

Q.4322 In the context of capital expenditures, which type is *most likely* needed to expand the business and is more discretionary, tied to management’s expansion plans and revenue growth?

A. Growth capital expenditures.

B. Operational capital expenditures.

C. Maintenance capital expenditures.

The correct answer is **A.**

Growth capital expenditures are the type of capital expenditures that are needed to expand the business and are more discretionary, tied to management’s expansion plans and revenue growth. These expenditures are made with the expectation that they will increase the company's capacity to generate revenue in the future. They are often associated with the purchase of long-term assets such as property, plant, and equipment or investments in new technology or research and development.

B is incorrect. Operational capital expenditures are the costs associated with the day-to-day operations of a business. While these expenditures are necessary for the company to continue its operations, they do not contribute to the expansion of the business. Operational capital expenditures are typically recurring and predictable and are not tied to management’s expansion plans and revenue growth.

C is incorrect. Maintenance capital expenditures are the costs incurred to keep the company's existing assets in good working condition. These are necessary expenditures that a company must make to maintain its current level of operations and are not discretionary. They do not contribute to the growth of the company but rather to the maintenance of its existing operations.

CFA Level I, Equity, Learning Module 7: Company Analysis: Forecasting. LOS (d): Explain approaches to forecasting a company’s capital investments and capital structure.

Q.4323 When projecting a company’s future capital structure, which of the following ratios are *most likely* used as the forecast object to project future debt and equity levels?

A. Current ratio, Quick ratio, and Cash ratio.

B. Debt to capital, Debt to equity, and Debt to EBITDA.

C. Return on assets, Return on equity, and Return on investment.

The correct answer is **B.**

When projecting a company’s future capital structure, the ratios often used as the forecast object to project future debt and equity levels are Debt to Capital, Debt to Equity, and Debt to EBITDA. These ratios are directly related to a company's capital structure and provide insights into the company's financial leverage and ability to meet its financial obligations. The Debt to Capital ratio measures the proportion of a company's funding that comes from debt.

A is incorrect. The Current ratio, Quick ratio, and Cash ratio are liquidity ratios, not capital structure ratios. They are used to measure a company's ability to pay off its short-term liabilities with its short-term assets. While these ratios are important in assessing a company's short-term financial health, they are not typically used to project future debt and equity levels.

C is incorrect. The Return on Assets (ROA), Return on Equity (ROE), and Return on Investment (ROI) are profitability ratios, not capital structure ratios. They measure the efficiency of a company in generating profits from its assets, equity, and investments, respectively. While these ratios provide valuable insights into a company's profitability, they are not typically used to project future debt and equity levels.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (d): Explain approaches to forecasting a company’s capital investments and capital structure.

Q.4325 Which of the following might management *most likely* provide guidance on when projecting the future capital structure?

A. Company's marketing strategy and customer base.

B. Company's market share and competitive landscape.

C. Target capital structure, debt covenant ratios, and capital expenditures.

The correct answer is **C.**

When projecting the future capital structure, management might provide guidance on the target capital structure, debt covenant ratios, and capital expenditures. The target capital structure is the mix of debt, preferred stock, and common equity, which the firm plans to finance its investments. It is the proportion of debt and equity that the company aims to maintain over the long term. Debt covenant ratios are conditions that lenders put on loans to limit the actions of the borrower and reduce the lender's risk.

A is incorrect. While the company's marketing strategy and customer base are important aspects of the overall business strategy, they are not directly related to the projection of the future capital structure. The capital structure is more concerned with the financial aspects of the company, such as debt and equity levels, rather than marketing strategies or customer base.

B is incorrect. The company's market share and competitive landscape are important factors in strategic planning and can indirectly influence the capital structure. However, they are not the primary factors that management would provide guidance on when projecting the future capital structure. The capital structure is more directly influenced by financial factors such as the target capital structure, debt covenant ratios, and capital expenditures.

CFA Level I, Topic 6 - Equity, Learning Module 7: Company Analysis: Forecasting. LOS (d): Explain approaches to forecasting a company's capital investments and capital structure.

Learning Module 8: Equity Valuation: Concepts & Basic Tools

Q.121 An equity valuation model that estimates the intrinsic value as the present value of expected future benefits is *most likely*:

A. a multiplier model.

B. an asset-based model.

C. a present value model.

The correct answer is **C.**

The intrinsic value of an equity is most accurately estimated using a present value model. This approach is grounded in the principle of time value of money, which posits that the value of money is affected by the time it is received or paid. A present value model calculates the intrinsic value of an equity as the present value of its expected future benefits, which could be in the form of dividends, free cash flows, or other financial benefits accruing to the investors.

This model takes into account the future cash flows that the investment is expected to generate and discounts them back to their present value using an appropriate discount rate. This method is widely regarded as one of the most fundamental and theoretically sound approaches to equity valuation.

A is incorrect. A multiplier model, also known as a relative valuation model, estimates an asset's value based on the valuation multiples of similar assets. Common examples include the price-to-earnings (P/E) ratio, price-to-book (P/B) ratio, and enterprise value multiples. These models are based on market perceptions and comparisons rather than the intrinsic future benefits of the equity.

While multiplier models can provide useful benchmarks and are easy to apply, they do not directly account for the present value of expected future benefits, making them less suitable for estimating intrinsic value based on future cash flows.

B is incorrect. An asset-based model values a company based on the net asset value of its underlying assets. This approach is often used for companies with significant tangible assets, such as real estate or manufacturing firms. The asset-based model focuses on the current value of a company's assets minus its liabilities, rather than the present value of future benefits.

While this model can be useful in certain contexts, especially for liquidation scenarios or for companies with significant tangible assets, it does not directly estimate the intrinsic value based on the expected future benefits to equity holders, such as dividends or free cash flows.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (e) Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.1098 The economic principle guiding the price multiple comparable methods is:

A. the law of one price.

B. the constant growth rate.

C. the constant required rate of return.

The correct answer is **A.**

The economic principle guiding the price multiple comparable methods is the law of one price. This principle asserts that two identical assets should sell at the same price. The rationale behind this principle is straightforward: if two assets offer the same cash flows or benefits, their prices should be equal in an efficient market, as any price discrepancy would lead to arbitrage opportunities.

Arbitrage refers to buying the asset in the market where it is undervalued and selling it in the market where it is overvalued, thus profiting from the price difference until it no longer exists. The law of one price is fundamental in financial markets and underpins the concept of price multiples.

Price multiples, such as the price-to-earnings (P/E) ratio, are used to compare the value of companies by standardizing the price of an asset by some measure of its cash flow or earnings. By applying the law of one price, investors can identify potentially overvalued or undervalued securities by comparing their multiples against those of similar companies or the industry average.

B is incorrect. The constant growth rate is an assumption primarily associated with the Gordon Growth Model, which is used to value a stock by assuming constant dividends that grow at a certain rate indefinitely. While the constant growth rate is a critical factor in some valuation models, it does not directly guide the price multiple comparable methods.

Price multiples are relative valuation metrics that compare a company's market value to a financial performance metric, such as earnings or sales, and do not inherently rely on the assumption of a constant growth rate.

C is incorrect. A constant required rate of return is another assumption used in various valuation models, including the Gordon Growth Model and the Capital Asset Pricing Model (CAPM). It represents the return investors expect to receive from an investment, considering its risk.

While the required rate of return is crucial for discounting future cash flows to their present value in absolute valuation models, it does not directly influence the application of price multiple comparables. Price multiples are used in relative valuation to compare companies based on current market prices and financial metrics, without explicitly calculating the present value of future cash flows.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (j) Explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables.

Q.1099 What will happen to the value of a stock if the difference between the return on the stock and the constant growth rate widens?

A. There will be no change.

B. The value of the stock will increase.

C. The value of the stock will decrease.

The correct answer is **C.**

The value of the stock decreases because the estimated stock value is very sensitive to the denominator. Candidates can use figures to arrive at the answer. The formula used to estimate the intrinsic value of a dividend-paying stock is: $V_o = \frac{D_1}{r-g}$, where V_o is the intrinsic value of a stock, D_1 is the expected dividends in year 1, obtained by using the formula: $D_1 = D_o(1+g)$, r is the required rate of return, and g is the growth rate. Assume an arbitrary numerator (D_1) say, 5. Then assume that the initial difference between the return on the stock and the constant growth rate was 2, and now it has widened to 3.
Initial value of stock = $\frac{5}{2} = 2.5$, value of stock as at now = $\frac{5}{3} = 1.67$

As seen above, the value of the stock has declined.

A and B are incorrect. The value of the stock decreases.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.1102 In which of the following methods do analysts adjust book values of the firm's assets and liabilities to their fair values?

A. Asset-based models.

B. Market multiple models.

C. Discounted cash flow models.

The correct answer is **A.**

Analysts adjust the book values of a firm's assets and liabilities to their fair values using asset-based models. This approach is grounded in the principle that a company's intrinsic value can be determined by assessing the net value of its assets and liabilities.

Asset-based models focus on the balance sheet items, adjusting them from their historical cost to current market values to provide a more accurate picture of a company's worth. This method is particularly useful for companies with significant tangible assets, where the market value of these assets can differ substantially from their book values due to factors like depreciation or market conditions.

B is incorrect. Market multiple models do not adjust the book values of a firm's assets and liabilities to their fair values. Instead, these models estimate a company's value based on multiples of financial performance metrics, such as earnings, sales, or book value, compared to similar companies in the industry.

Market multiple models are primarily used for relative valuation, relying on the assumption that similar companies should trade at similar multiples. This method focuses on comparing a company's current market valuation to that of its peers, rather than adjusting the company's balance sheet items to their fair values.

C is incorrect. Discounted cash flow (DCF) models do not directly adjust the book values of assets and liabilities to their fair values. DCF models estimate a company's value based on the present value of its expected future cash flows. This method involves forecasting the company's free cash flows over a certain period and discounting them back to their present value using a discount rate that reflects the risk of those cash flows.

While DCF models may consider the value of a company's assets and liabilities in determining future cash flows and terminal value, the primary focus is on the income statement and cash flow statement rather than adjusting balance sheet items to fair market values.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (m) Describe asset-based valuation models and their use in estimating equity value.

Q.1104 Which of the following is a disadvantage of price multiple valuations?

A. Lagging price multiples reflect the past.

B. Price multiples are relatively easy to use and interpret.

C. Price multiples cannot be used in time series and cross-sectional comparisons.

The correct answer is **A.**

One of the primary disadvantages of using price multiple valuations is that they often reflect past performance and may not accurately predict future performance. This is because price multiples, such as the price-to-earnings (P/E) ratio, price-to-book (P/B) ratio, and others, are based on historical financial data. For instance, the P/E ratio uses earnings that have already been reported.

While historical performance can provide valuable insights, it does not necessarily indicate how a company will perform in the future. Market conditions, competitive dynamics, and company-specific factors can change, potentially rendering past multiples less relevant for future valuation. This limitation is particularly pronounced in rapidly changing industries where past performance may be a poor predictor of future success.

B is incorrect. This option suggests that price multiples are relatively easy to use and interpret, which is actually an advantage, not a disadvantage. Price multiples provide a straightforward way to compare companies within the same industry or sector, making them accessible tools for investors and analysts.

They simplify complex financial data into ratios that can be easily compared across different companies, helping investors make informed decisions. However, the simplicity of price multiples can also lead to oversimplification, as they do not account for the nuances of a company's financial health, growth prospects, or industry conditions.

C is incorrect. In fact, one of the advantages of price multiples is their versatility in allowing for both time series and cross-sectional analyses. Time series analysis involves comparing a company's price multiples over different time periods to assess trends and performance over time.

Cross-sectional analysis, on the other hand, involves comparing the price multiples of different companies within the same industry at a specific point in time to gauge relative valuation. This flexibility makes price multiples valuable tools for evaluating and comparing the financial performance and valuation of companies.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (f) Explain advantages and disadvantages of each category of valuation model.

Q.1106 Some firms do not currently pay dividends but are expected to pay dividends in the future. Which of the following methods should an analyst *most likely* use for analysis?

A. Asset-based models.

B. Valuation using multiples.

C. Dividend discount models.

The correct answer is **B.**

Valuation using multiples is a suitable method for analyzing firms that do not currently pay dividends but are expected to do so in the future. This approach, also known as comparable company analysis, estimates the intrinsic value of a company's stock by comparing it to similar companies based on various financial metrics.

These metrics can include share price multiples such as the price-to-earnings (P/E) ratio, which is calculated by dividing the company's share price by its earnings per share. Additionally, enterprise value multiples such as EV/EBITDA and EV/Total Revenue are used, where EV represents the company's enterprise value, and EBITDA stands for earnings before interest, taxes, depreciation, and amortization.

This method is particularly useful for firms that are not currently paying dividends, as it allows analysts to derive value from other financial indicators that reflect the company's performance and potential for growth.

A is incorrect. Asset-based models focus on a company's net assets to estimate its intrinsic value. This method involves subtracting the company's current liabilities from its current assets to determine its net asset value.

While this approach can provide insights into the company's financial health, it may not accurately reflect the future earnings potential or growth prospects of firms that do not currently pay dividends but are expected to in the future. Asset-based models are more suited to companies with significant tangible assets and less emphasis on future growth potential.

C is incorrect. Dividend discount models (DDMs) are used to value a company based on the present value of its expected future dividends. This method requires the firm to be currently paying dividends, as it relies on forecasting these payments and discounting them back to their present value to estimate the stock's intrinsic value.

For firms that do not currently pay dividends but may do so in the future, the DDM approach is not applicable, as there are no current dividends to base the valuation on. Therefore, while DDMs are a powerful tool for valuing dividend-paying firms, they are not suitable for companies in the early stages of growth or those that reinvest their earnings instead of distributing them as dividends.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (f) Explain advantages and disadvantages of each category of valuation model.

Q.1108 Which of the following is *least likely* one of the common price multiples used for valuation?

A. Price to earnings.

B. Price to dividend.

C. Price to book value ratios

The correct answer is **B.**

Price to dividend, is the least likely common price multiple used for valuation. Valuation using multiples is a fundamental approach in finance to estimate the value of a company's stock. This method relies on comparing the company's current market value to certain financial metrics to derive a relative valuation.

Among the most commonly used price multiples are the Price to Earnings (P/E) ratio and the Price to Book Value (P/BV) ratio. The P/E ratio compares the company's market price per share with its earnings per share (EPS), providing insights into how much investors are willing to pay per dollar of earnings.

The P/BV ratio, on the other hand, compares the market price per share with the book value per share, offering a perspective on how much investors are paying for the net assets of the company.

A is incorrect. The Price to Earnings (P/E) ratio is one of the most widely used price multiples in valuation. It measures the market's valuation of a company relative to its earnings. The P/E ratio is calculated by dividing the market price per share by the earnings per share (EPS).

This ratio is used by investors and analysts to determine the relative value of a company's shares in comparison to its earnings, providing a basis for comparing the company's valuation with that of its peers or the market as a whole. A higher P/E ratio might indicate that the company is overvalued or that investors are expecting high growth rates in the future.

C is incorrect. The Price to Book Value (P/BV) ratio is another fundamental price multiple used in the valuation of companies. It compares a company's market price per share to its book value per share. The book value is derived from the company's balance sheet and represents the net asset value of the company according to its financial statements.

The P/BV ratio provides insights into how much investors are willing to pay for each dollar of book value. A lower P/BV ratio might indicate that the company is undervalued, suggesting that its market price does not reflect the true value of its net assets. This ratio is particularly useful for valuing companies with significant tangible assets on their balance sheets.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (k) Calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to book value.

Q.1109 The expected P/E ratio of a stock is 10, and the actual P/E ratio is 10.8. What can we say about the stock?

A. The stock is overvalued.

B. The stock is undervalued.

C. The stock is correctly valued.

The correct answer is **A.**

When the actual Price-to-Earnings (P/E) ratio of a stock is higher than its expected P/E ratio, it indicates that the stock is trading at a price higher than what its earnings can justify, suggesting that the stock is overvalued. The P/E ratio is a widely used metric to evaluate the valuation of a stock relative to its earnings. A higher P/E ratio might indicate that investors are expecting higher earnings growth in the future compared to stocks with a lower P/E ratio.

However, when the actual P/E ratio exceeds the expected P/E ratio, it implies that the stock's price has increased to a level that is not fully supported by its earnings potential, leading to an overvaluation. This situation can occur due to various factors, including speculative trading, market optimism about the company's future prospects, or general market overvaluation.

Investors might pay a premium for the stock based on expectations of future growth, which may or may not materialize. Therefore, a careful analysis of the reasons behind the high P/E ratio is essential before making investment decisions.

B is incorrect. This option suggests that the stock is undervalued, which would be the case if the expected P/E ratio was higher than the actual P/E ratio. This scenario is opposite to what is described in the question, where the actual P/E ratio is higher than the expected, indicating overvaluation rather than undervaluation.

C is incorrect. Correct valuation implies that the stock's market price is in line with its earnings potential, and there is no significant discrepancy between the price investors are willing to pay and the earnings the company is expected to generate.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (k) Calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to book value.

Q.1348 What is the market risk premium if the expected return on a stock is 12% while its beta is 1.5? Assume the risk-free rate to be 6%.

A. 6%

B. 4%

C. 10%

The correct answer is **B.**

Recall that,

$$\text{Expected return on stock} = \text{Risk-free rate} + \text{Beta} \times \text{Market Risk premium}$$

Note:

$$\text{Market Risk premium} = \text{Expected Return on the Market - Risk-free rate}$$

$$\begin{aligned}
\text{Expected return on stock} &= \text{Risk-free rate} + \text{Beta} \times (\text{Expected Return on the Market - Risk-free ra} \\
12\% &= 6\% + 1.5(\text{Market Risk Premium}) \\
\Rightarrow \text{Market Risk Premium} &= \frac{(12\% - 6\%)}{1.5} = 4\%
\end{aligned}$$

Therefore, the market risk premium is 4%.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (e) Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.1755 Which of the following valuation models *most likely* estimates a stock's value as the present value of cash flows distributed to shareholders?

A. Multiplier models.

B. Asset-based models.

C. Dividend discount model.

The correct answer is **C.**

The Dividend Discount Model (DDM) is a valuation model that estimates a stock's value as the present value of all future dividends distributed to shareholders. This model is grounded in the principle that the value of a stock is essentially the sum of all its future dividend payments when discounted back to their present value. This approach allows investors to estimate the intrinsic value of a stock based on the expected dividends and the discount rate, which reflects the risk and the time value of money.

A is incorrect. Multiplier models, such as the price-to-earnings (P/E) ratio or the enterprise value-to-EBITDA (EV/EBITDA) ratio, do not directly estimate a stock's value based on the present value of cash flows distributed to shareholders.

Instead, these models estimate the intrinsic value of a stock based on multiples of some financial performance measures, like earnings or EBITDA. These models are more focused on comparing the stock's current market price to its earnings or other financial metrics, rather than estimating the present value of future cash flows to shareholders.

B is incorrect. Asset-based models estimate a company's intrinsic value by calculating the net asset value, which is the difference between the total value of the company's assets and its liabilities. This approach is more relevant for companies with significant tangible assets and does not directly involve the estimation of the present value of future cash flows distributed to shareholders.

Asset-based valuation is particularly used for companies in industries like real estate or investment companies, where the value of the company is closely tied to the value of its assets rather than its earnings or dividend payments.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (e) Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.1756 Calculate the present value of a stock if the stock is expected to pay dividends of $1.50 and $2 at the end of the 1st and 2nd year, respectively. At the end of the second year, the stock is expected to sell for $25. Assuming that the required rate of return of 12%, the stock's intrinsic value is :

A. $22.86

B. $24.50

C. $26.36

The correct answer is **A.**

We use the dividend discount model to estimate the intrinsic value of a dividend-paying company.

The formula used to estimate intrinsic value using the dividend discount model is:

$V_o = \sum_{(t=1)}^{n} \frac{D_t}{(1+r)} + \frac{P_n}{(1+r)^n}$

Where:

V_o = the present value of a stock today,

D_t = expected dividend in year t,

r = required rate of return, and

P_n = selling price of the stock at the end of the investment horizon.

The stock pays a dividend of $1.50 at the end of the first year. We have to account for it in our calculation, as shown in the first part of the below equation. The second part of the equation represents the accumulation of year 2's dividend and stock price discounted at the required rate of return.

$$\left(\frac{1.5}{1.12^1}\right) + \left(\frac{(2+25)}{1.12^2}\right) = \$22.86$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (g) Calculate the intrinsic value of a non-callable, non-convertible preferred stock.

Q.1757 Texas Corp. is a calculator manufacturing firm which is expected to pay a dividend of $2 next year that will grow at the rate of 5% for two more years. If the stock is expected to sell for $30 at the end of the third year, and the required rate of return is 11%, then the present value of the stock is *closest to*:

A. $25.00

B. $27.05

C. $31.50

The correct answer is **B.**

We use the dividend discount model to estimate the intrinsic value of a dividend-paying company.

The formula used to estimate intrinsic value using the dividend discount model is:

$$V_o = \sum_{t=1}^{n} \frac{D_t}{(1+r)^t} + \frac{P_n}{(1+r)^n}$$

Where:

V_o = the present value of a stock today,

D_t = expected dividend in year t,

r = required rate of return, and

P_n = selling price of the stock at the end of the investment horizon.

Texas Corp pays dividends every year for three years, and we have to account for these dividends by discounting them at the required rate of return, as shown in the first and second part of the equation below.

At the end of the third year, apart from the dividends paid, we have to include the stock's selling price then discount the sum at the required rate of return, as shown in the last part of the equation below.

$$\text{Expected price} = \left(\frac{2}{1.11^1}\right) + \left(\frac{2.1}{1.11^2}\right) + \left(\frac{(2.205 + 30)}{1.11^3}\right) = \$27.05$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.1758 Which of the following is the *most appropriate* formula for calculating free cash flow to equity?

A. FCFE = CFO + Net borrowing.

B. FCFE = CFO - Increase in fixed income - Net borrowing.

C. FCFE = Net income + Depreciation - Increase in net working capital - Increase in net fixed investment + Net borrowing.

The correct answer is **C.**

Free cash flow to equity is one way to estimate a stock's intrinsic value under the present value (discounted cash flow models). The other approach under the present value model is the dividend discount model.

Free cash flow to equity measures the amount of cash available to a firm's shareholders after all debts, expenses, and reinvestments have been paid.

$$\text{Free cash flow to equity} = \text{Net income} + \text{Depreciation} - \text{Increase in net working capital} - \text{Increase in net fixed investment} + \text{Net borrowing}$$

or

$$\text{FCFE} = \text{CFO} - \text{Fixed capital investment} + \text{Net borrowing}$$

A is incorrect. It oversimplifies the calculation of FCFE. The formula:

FCFE = CFO + Net borrowing

only considers cash flow from operations and net borrowing, neglecting the impact of capital expenditures and changes in working capital. This omission can lead to an inaccurate representation of the actual cash available to equity shareholders, as it does not account for the cash used in or provided by these important activities.

B is incorrect. It inaccurately represents the formula for calculating FCFE. Net borrowing represents additional funds available to shareholders, and an increase in fixed income is not a standard component of the FCFE calculation. This formula fails to accurately capture the components necessary for determining the free cash flow available to equity shareholders.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (e) Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.1759 Core Inc. has preferred stocks outstanding priced at $70 that pay a fixed yearly dividend of $3.50. Assuming a required rate of return of 8%, the value of the preferred stock of Core is *closest to*:

A. $20.

B. $43.75.

C. $63.80.

The correct answer is **B.**

The value of preferred stock is calculated by dividing the dividend by the required rate of return:, i.e.,

Market value = $\frac{\text{Dividend}}{\text{Required rate of return}}$.

Value of Core's preferred stock = $\frac{\$3.5}{\$0.08}$ = $43.75,

implying that each share of Core Inc. is currently worth $43.75.

This calculation shows that the value of each share of Core Inc.'s preferred stock, based on the given dividend and required rate of return, is $43.75.

This value represents the price at which the stock should theoretically trade, assuming the market conditions reflect the required rate of return and the dividend remains constant.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (g) Calculate the intrinsic value of a non-callable, non-convertible preferred stock.

Q.1761 Which of the following is *least likely* an assumption of the constant growth model?

A. The rate of return and the growth rate is constant.

B. Dividends are appropriate measures of shareholders' wealth.

C. The growth rate will always be greater than the required rate of return.

The correct answer is **C.**

The constant growth or Gordon Growth Model is used to estimate the intrinsic value of a dividend-paying company that is insensitive to the business cycle and in a mature growth phase. It assumes that dividends are appropriate measures of shareholders' wealth. It also assumes that the rate of return and the growth rate is constant and that the required rate of return is greater than the growth rate.

Thus, choice C is incorrect. The model assumes that the required rate of return is greater than the growth rate, not the other way round.

To determine the intrinsic value of a company using the Gordon growth model, we use the formula.

$$V_o = \frac{D_1}{r - g}$$

Where:

V_o = the intrinsic value of the stock,

D_1 = the dividend in year 1,

r = the required rate of return, and

g = the growth rate.

A is incorrect. It accurately reflects one of the assumptions of the constant growth model. The model assumes that both the rate of return and the growth rate of dividends are constant over time. This assumption simplifies the calculation of the intrinsic value of a stock by allowing for a perpetual growth rate that can be easily factored into the model. It is based on the premise that the company in question is in a stable phase with predictable financial performance.

B is incorrect. It also correctly identifies an assumption of the constant growth model. Dividends are considered a direct measure of the wealth returned to shareholders and are used in the model to estimate the intrinsic value of a company. The model assumes that dividends will continue to be paid out to shareholders at a constant growth rate, reflecting the company's commitment to returning value to its shareholders and its financial stability.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a

two-stage dividend discount model, as appropriate.

Q.1762 Stocks of MZJ Inc. recently paid a dividend of $2. If the dividend is expected to grow at the constant the rate of 4%, the value of the stock assuming an 11% required rate of return is *closest to*:

A. $19.65

B. $28.57

C. $29.71

The correct answer is **C.**

Using the constant growth model, the value of MZJ's stock will be:

$$P = \frac{D}{(r-g)}$$

Where;

P = the current price/value of the stock,

D_1 = dividend in year 1,

Obtained using the equation; $D_1 = D_o(1+g)$

r = required rate of return, and

g = growth rate

$$\text{Price of MZJ} = \frac{(2 \times 1.04)}{0.11 - 0.04} = \$29.71$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.1763 When using Gordon's growth model, which of the following conditions will *most likely* increase the value of a stock?

A. Increasing the required rate of return and the growth rate.

B. Increasing the required rate of return and decreasing the growth rate.

C. Decreasing the required rate of return and increasing the growth rate.

The correct answer is **C.**

The value of a stock using Gordon's constant growth formula is:

$$\frac{D_o(1+g)}{r-g},$$

Where;

$D_o(1 + g) = D_1$ (Dividend in year 1),

D_o = Dividend in year 0,

r = required rate of return, and

g = The growth rate

We can increase the value of the stock by dividing the numerator by a smaller number. We can obtain this smaller number by increasing g and decreasing r.

Note: The difference between r and g should not be negative.

Generally, a stock value is positively correlated with the growth rate and inversely correlated with the required rate of return.

A is incorrect. Increasing both the required rate of return and the growth rate simultaneously does not necessarily increase the value of a stock according to Gordon's model. While increasing the growth rate g tends to increase the stock value by increasing future dividends, increasing the required rate of return r has the opposite effect.

It makes future dividends less valuable in present terms, as investors demand a higher return for their investment. The net effect on the stock value depends on the relative changes in g and r, but generally, increasing r has a stronger negative impact on stock value than the positive impact of increasing g.

B is incorrect. Increasing the required rate of return while decreasing the growth rate will most likely decrease the value of a stock according to Gordon's growth model. This scenario increases the denominator $r-g$ of the valuation formula, making the present value of future dividends less valuable.

A higher required rate of return indicates that investors are demanding more for their investment, which decreases the attractiveness of the stock. Simultaneously, a lower growth rate in dividends suggests that the company's future cash flows will not increase as much, further diminishing the stock's value. This combination of factors leads to a decrease in the stock's valuation.

Q.1764 Galaxy Ceramics is a ceramic and tiles manufacturing company based in Palo Alto. Some information regarding the stock of the company is given in the following table:

Required rate of return	12%
Return on equity	10%
Earnings per share	$5
Dividend	$1.50 per share

Assuming the dividend was paid last year, the growth rate of Galaxy's is *closest to*:

A. 3%.

B. 6%.

C. 7%.

The correct answer is **C.**

To determine the growth rate of Galaxy Ceramics, we can use the formula that links the growth rate to the company's retention rate and its return on equity (ROE). The growth rate can be calculated as follows:

$$\text{Growth rate} = \text{Retention rate} \times \text{Return on equity}$$

The dividend payout ratio is a crucial component in calculating the retention rate. It represents the proportion of earnings paid out as dividends to shareholders.

The retention rate, on the other hand, indicates the proportion of earnings retained in the business for reinvestment. Mathematically, the retention rate can be calculated as 1−dividend payout ratio.

Given the earnings per share (EPS) of $5 and a dividend of $1.50 per share, the dividend payout ratio can be calculated as follows:

$$\begin{aligned} \text{Dividend payout ratio} &= \frac{\text{Dividends per share}}{\text{Earnings per share}} \\ &= \frac{1.5}{5} \\ &= 30\% \end{aligned}$$

Therefore, the retention rate is:

$$\text{Retention rate} = 1 - 0.3 = 0.7$$

Given the return on equity (ROE) of 10%, the growth rate of Galaxy Ceramics can be calculated as:

$$\text{Growth rate} = 0.7 \times 10\% = 7\%$$

CFA Level I, Topic 6 - Equity, Learning Module 8: Equity Valuation: Concepts & Basic Tools. LOS (g): Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.1765 Galaxy Ceramics is a ceramic and tiles manufacturing company based in Palo Alto. Assuming the dividend was paid last year and using the data given in the following table, calculate the value of Galaxy's stocks using the constant growth model.

Required rate of return	12%
Return on equity	10%
Earnings per share	$5
Dividend	$1.50 per share

A. $25.75

B. $30

C. $32.10

The correct answer is **C.**

The sustainable growth rate of a firm, SGR, is given by:

$$\text{SGR} = \text{ROE} \times \text{retention ratio}$$

Where;

$$\text{Retention ratio} = 1 - \text{Dividend payout ratio}$$
$$\text{Dividend payout ratio} = \frac{\text{Dividend per share}}{\text{Earnings per share}}$$
$$1 - \frac{1.5}{5} = 1 - 0.3$$

The growth rate for Galaxy is thus;

$$0.7 \times 10\% = 7\%$$

Stock value according to the constant growth model = $\frac{D_1}{r-g}$

Where;

- D_1 = is the expected annual dividend per share for the following year obtained by multiplying the dividend for the current year by 1 + g,
- k = is the required rate of return, and
- g = is the sustainable growth rate.

$$\text{Stock value} = \frac{1.5(1.07)}{(0.12 - 0.07)} = \$32.10$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.1766 Ibiza Vibe is the chain of nightclubs in southern Spain. In the last five years, the firm's stock price has doubled. The relevant information regarding the company is given below:

Required rate of return	9%
Growth rate	4%
Expected earnings per share	$4
Dividend payout	40%

Using the data provided in the table, Ibiza Vibe's price-to-earnings ratio is *closest to*:

A. 8.

B. 12.

C. 32.

The correct answer is **A.**

Price to earnings is calculated using the formula:

$$\frac{\text{Price per share}}{\text{Earnings per share}}$$

Ibiza's earning per share is $4. However, we do not know its price per share and thus have to estimate it using Gordon's growth model (since it's a dividend-paying company), using the formula:

$$V_o = \frac{D_1}{r - g}$$

Where;

- V_o = value (current price) of the share,
- D_1 = Dividend in year 1,
- r = required rate of return, and
- g = the growth rate

We do not know the dividend, but we know that:

$$\begin{aligned}
\text{Dividend payout ratio} &= \frac{\text{Annual dividend}}{\text{Earnings per share}} \\
0.4 &= \frac{\text{Annual dividends}}{4} \\
\text{Annual dividends} &= 0.4 \times 4 \\
&= 1.6
\end{aligned}$$

Therefore,

$$\text{Price per share} = \frac{1.6}{0.09 - 0.04} = 32$$

And,

$$\text{P/E} = \frac{32}{4} = 8$$

Ibiza's price-to-earnings ratio is 8.

Note: The dividend obtained is D_1 and not D_0 because the $4 used is **expected** earnings per share and not the current earnings per share.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (k) Calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to

book value.

Q.1767 The price-to-earnings ratio based on fundamentals is *best* known as:

A. market P/E.

B. justified P/E.

C. historical P/E.

The correct answer is **B.**

The price-to-earnings ratio based on fundamentals is known as Justified P/E.

The price to earnings ratio is a price multiple. Price multiples can be used independently of present value (discounted cash flow valuation) models. However, price multiples are related to fundamentals through discounted cash flow models, developing expressions known as the justified value of multiples, i.e., the value justified by (based on) fundamentals.

As an example, we can use the Gordon growth model to arrive at a forward justified price per earnings ratio.

$$P_0 = \frac{D_1}{r - g}$$

Where;

- P_0 = intrinsic value of the stock,
- r = required rate of return,
- g = growth rate, and
- D_1 = dividends in year 1, obtained by multiplying dividends in year 0 by (1 + g)

To arrive at the justified forward price per earnings ratio by relating a fundamental through Gordon's growth model, we divide both sides of the above equation by the fundamental "next year's earnings estimate, "E_1," as shown below:

$$\frac{P_0}{E_1} = \frac{D_1/E_1}{r - g}$$

Where;

- E_1 = Estimate of next year's earnings, and
- D_1/E_1 = the dividend payout ratio.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (j) Explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables.

Q.1768 An analyst has recently gathered the following information regarding the shares of Eternity Automotive Company that trade on the open market:

Share price	$25
Shares outstanding	250,000
Market value of total debt	$5 million
Cash and Investments	$1.1 million
Inventory	$500,000

Using the given data, the enterprise value of Eternity Automotive Company is *closest to*:

A. $6.25 million.

B. $9.65 million.

C. $10.15 million.

The correct answer is **C.**

The enterprise value (EV) of a company is a comprehensive measure that reflects the total value of the company, often considered as the theoretical takeover price if the company were to be bought. It is calculated by adding the market value of equity (share price multiplied by the number of shares outstanding) to the market value of total debt and then subtracting cash and investments.

This calculation provides a more accurate representation of a company's value than simply looking at its market capitalization because it includes debt (which the acquirer would assume) and excludes cash and investments (which the acquirer would gain).

Using the given data, the enterprise value of Eternity Automotive Company can be calculated as follows:

$$\begin{aligned} \text{EV} &= \text{Market value of equity} + \text{Market value of debt} - \text{Cash and investment} \\ &= (\$25 \times 250{,}000 \text{ shares}) + \$5,000,000 - \$1,100,000 \\ &= \$10,150,000 \end{aligned}$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (l) Describe enterprise value multiples and their use in estimating equity value.

Q.1769 Which of the following is *most likely* a disadvantage of the discounted cash flow valuation model?

A. They are widely accepted.

B. They allow for sensitivity analysis

C. Value estimates are very sensitive to input values.

The correct answer is **C.**

The discounted cash flow (DCF) valuation model is a powerful tool used in finance to estimate the value of an investment based on its expected future cash flows. However, one of the primary disadvantages of the DCF model is that the value estimates it produces are highly sensitive to the input values used in the calculation, such as the discount rate and the projected growth rates of cash flows.

This sensitivity means that small changes in these inputs can lead to significant variations in the estimated value of an investment, making the DCF model somewhat unreliable in situations where the future cash flows or the appropriate discount rate are uncertain. This characteristic of the DCF model requires analysts to exercise caution and perform rigorous sensitivity analyses to understand how changes in assumptions impact the valuation.

A is incorrect. The widespread acceptance of the DCF valuation model is indeed an advantage, not a disadvantage. Its acceptance and use across the finance industry provide a common language and framework for valuing investments, facilitating comparisons and discussions among investors, analysts, and other stakeholders.

The model's ability to theoretically value any investment based on expected future cash flows makes it a versatile and valuable tool in financial analysis.

B is incorrect. The ability of the DCF model to allow for sensitivity analysis is another advantage, not a disadvantage. Sensitivity analysis enables analysts to explore how changes in key assumptions, such as growth rates or discount rates, affect the valuation outcome.

This analysis is crucial for understanding the range of possible values for an investment and assessing the risk associated with specific assumptions. By identifying which variables have the most significant impact on the valuation, analysts can focus their research and due diligence efforts more effectively, leading to more accurate and reliable investment decisions.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (f) Explain advantages and disadvantages of each category of valuation model.

Q.3649 An equity analyst is tracking the stock price of an Information Technology (IT) company. The company's share currently trades at $50. Based on the company's financial statements, the analyst predicts that the company will pay a dividend of $3 and $4 in the next two years. He also forecasts that the company's shares would trade at $60 at the end of these two years. For an investor with a required rate of return of 10%, the best course of action would *most likely* be to:

A. sell shares of the stock.

B. buy shares of the stock.

C. short-sell shares of the stock.

The correct answer is **B.**

Based on information regarding the payment of the dividend, the current share price can be calculated as:

$$\text{Share price} = \frac{D_1}{(1+r)^1} + \frac{D_2}{(1+r)^2} + \frac{P_2}{(1+r)^2}$$
$$= \frac{3}{(1+10\%)^1} + \frac{4}{(1+10\%)^2} + \frac{60}{(1+10\%)^2} = \$55.62$$

The fair value of the shares based on expected dividends is $55.62, yet the shares are currently trading at $50, which indicates that the shares are undervalued. If an investor believes that the predictions made by the equity analyst are accurate, he must buy shares of the stock.

A is incorrect. The stock is undervalued, not overvalued. Selling undervalued shares would mean missing out on potential gains as the stock price adjusts to its fair value.

C is incorrect. Short selling involves borrowing shares to sell them at the current price with the expectation of buying them back at a lower price in the future. This strategy is typically employed when an investor believes that the stock is overvalued and expects its price to decline.

In this case, since the stock is undervalued, short selling would not be an appropriate strategy. Short selling in a scenario where the stock is expected to increase in value could result in significant losses when the investor is required to buy back the shares at a higher price.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (a) Evaluate whether a security, given its current market price and a value estimate, is overvalued, fairly valued, or undervalued by the market.

Q.3650 An equity analyst is tracking the share price of a steel company. The company's dividends are expected to grow at a rate of 4% per year. Additional financial details of the company are given in the following exhibit.

Exhibit: Jury Steel Limited – Financial details for the year 2014

Net Income	\$55, 000
Dividends	\$20, 000
Number of Common Shares	8, 000

If the earnings retention ratio of the company remains constant, the return on equity of the company next year will be *closest to*:

A. 6.35%.

B. 7.67%.

C. 8.97%.

The correct answer is **A.**

To calculate the return on equity (ROE) for the next year, given the constant earnings retention ratio and a dividend growth rate of 4%, we use the formula that links the growth rate (g), the earnings retention ratio (b), and the ROE. The formula is:

$$g = b \times \text{ROE}$$

Thus,

$$\text{ROE} = \frac{g}{b}$$

Where;

- g = dividend growth rate
- b = earnings retention rate = (1 – Dividend payout ratio)
- ROE = return on equity. We know that g = 4% = 0.04
- And; b = 1 − dividend payout ratio

Where;

$$\text{Dividend payout ratio} = \frac{\text{Annual dividends}}{\text{Net Income}}$$

$$b = 1 - \frac{20,000}{55,000}$$

$$= 0.63$$

Therefore,

$$\text{ROE} = \frac{0.04}{0.63} = 6.35\%$$

Note:

$$\text{ROE} = \frac{\text{Net income}}{\text{book value of shares}}$$

But we just have the number of shares here, so we cannot use this formula to directly work out ROE's value.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3651 A company's dividends are expected to grow at a rate of 4% per year. Additional financial details of the company are given in the following exhibit.

Exhibit 1: Marek Ltd – Financial details for the year 2015

Net Income	\$27,500
Dividends	\$10,000
Surplus Transferred to Reserves	\$12,500
Outstanding Shares	4,000

Assuming that the required rate of return is equal to the return on equity, the intrinsic value of the company's shares is *closest to*:

A. \$111.26.

B. \$113.54.

C. \$118.23

The correct answer is **B.**

Dividends paid by the company per share

$$\frac{\$10,000}{4,000} = \$2.50$$

According to the Gordon Growth Model, the intrinsic value can be calculated as:

$$\frac{D_1}{(k-g)}$$

Where;

$$(D_1 = D_0(1+g))$$

We know that g = 0.04, but we do not know the value of k, except that it is equal to the ROE. However, recall that

$$g = b \times ROE$$

Thus,

$$ROE = \frac{g}{b}$$

Where;

- g = dividend growth rate
- b = earnings retention rate = (1 – Dividend payout ratio)
- ROE = return on equity

We also know that:

$$\text{Dividend payout ratio} = \frac{\text{Dividends}}{\text{Net Income}}$$

Therefore,

$$b = 1 - \frac{10,000}{27,500} = 0.6364$$

And,

$$ROE = \frac{0.04}{0.6364} = 6.29\%$$

We now have all the inputs and can finally work out the intrinsic value:

$$= \frac{\$2.50(1+4\%)}{(6.29\% - 4\%)} = \$113.54$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3652 An equity analyst is tracking the share price of a PharmaCom's stock. The company's dividends are expected to grow at a rate of 12% per year. Additional financial details of the company are given in the following exhibit.

Exhibit 1: PharmaCom – Financial details for the year 2011

Net Income	$1,300,000
Dividends	$65,000
Surplus Transferred to Reserves	$1,235,000
Outstanding Shares	80,000

If the company does not issue fresh equity, the earnings per share of the company next year will be *closest to*:

A. $18.2.

B. $5.73.

C. $6.73.

The correct answer is **A.**

To calculate the earnings per share (EPS) for the next year without issuing fresh equity, we need to understand the relationship between dividends, net income, and the dividend payout ratio. The dividend payout ratio is defined as the proportion of net income that is paid out as dividends to shareholders.

It is calculated as dividends paid divided by net income. Given the financial details for PharmaCom, we can calculate the dividend per share and use the dividend payout ratio to find the EPS for the next year.

The net income for the year 2011 is $1,300,000, and the dividends paid are $65,000. The number of outstanding shares is 80,000. Therefore, the dividend per share for the year 2011 is calculated as follows:

$$\text{Dividend per share} = \frac{\text{Dividends}}{\text{Outstanding Shares}} = \frac{\$65,000}{80,000} = \$0.8125$$

Given that the dividends are expected to grow at a rate of 12% per year, the dividend per share for the next year (2012) can be calculated by applying the growth rate:

$$\text{Dividend per share}_{2012} = \text{Dividend per share} \times (1 + \text{Growth Rate}) = \$0.8125 \times (1 + 0.12) = \$0.91$$

The dividend payout ratio is the ratio of dividends paid to net income, which can be calculated as follows:

$$\text{Dividend payout ratio} = \frac{\text{Dividends}}{\text{Net Income}} = \frac{\$65,000}{\$1,300,000} = 0.05 \text{ or } 5\%$$

Knowing the dividend payout ratio and the dividend per share for the next year, we can calculate the EPS for 2012. The EPS is inversely related to the dividend payout ratio when the dividend per share is known:

$$\text{EPS}_{2012} = \frac{\text{Dividend per share}_{2012}}{\text{Dividend payout ratio}} = \frac{\$0.91}{0.05} = \$18.20$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (k) Calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to book value.

Q.3653 A company recently developed a piece of software that is new to the market and currently has no competitors. However, equity research analysts believe that due to the huge market opportunities presented by the new software, the segment would attract fierce competition within the next 3 to 4 years. The *most* appropriate model to determine the intrinsic value of the company would be the:

A. multiplier model.

B. Gordon Growth Model.

C. multistage dividend discount model.

The correct answer is **C.**

The most appropriate model to determine the intrinsic value of the company, given the expected change in market dynamics due to new competition, is the multistage dividend discount model. This model is particularly suited for companies that are expected to experience varying growth rates over different periods.

In the scenario described, the company is anticipated to enjoy a period of high growth due to its unique software offering and lack of competition. However, as the market opportunity attracts more competitors, the growth rate is expected to normalize or decrease.

The multistage dividend discount model allows for the valuation of the company by discounting dividends that are expected to grow at different rates in different stages, thus providing a more accurate reflection of the company's intrinsic value under changing market conditions.

A is incorrect. The multiplier model, which includes both share price multiples and enterprise value multiples, is not the most suitable for this scenario. While multiplier models can provide a quick valuation based on current earnings, sales, or EBITDA, they do not adequately account for the expected changes in growth rates over time.

These models are more appropriate for valuing companies with stable and predictable financial performance, rather than those in dynamic sectors with fluctuating growth rates like the company in question.

B is incorrect. The Gordon Growth Model, also known as the Dividend Discount Model (DDM) with constant growth, assumes that dividends will grow at a constant rate indefinitely. This assumption does not align with the expected business trajectory of the company, which is likely to see a high growth rate initially due to its unique market position, followed by a slowdown as competition increases.

The model's inability to accommodate varying growth rates over different periods makes it less suitable for accurately valuing a company in a rapidly evolving industry or market segment.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (i) Identify characteristics of companies for which the constant growth or a multistage dividend discount model is appropriate.

Q.3654 A company currently pays a dividend of $2 which is expected to grow at a rate of 8% for the next two years and then at a rate of 1% until perpetuity. If the required rate of return is 12%, then the intrinsic value of the company's shares is *closest to*:

A. $20.89.

B. $15.89.

C. $22.89.

The correct answer is **A.**

The intrinsic value of a company's shares can be calculated using the Dividend Discount Model (DDM), which considers the present value of expected future dividends. In this case, the company pays an initial dividend of $2, which is expected to grow at a rate of 8% for the next two years and then at a rate of 1% into perpetuity.

Given a required rate of return of 12%, we can calculate the intrinsic value of the company's shares as follows:

The dividends for the first two years and the perpetual growth thereafter are calculated as:

$$\begin{aligned} &D(0) = \$2.00 \\ &D(1) = \$2 \times (1 + 8\%) = \$2.16 \\ &D(2) = \$2.16 \times (1 + 8\%) = \$2.33 \\ &D(3) = \$2.33 \times (1 + 1\%) = \$2.36 \end{aligned}$$

$$\text{Intrinsic value after two years} = \frac{(\$2.36)}{(12\% - 1\%)} = \$21.45$$

Step 2:

$$\text{Intrinsic value today} = \frac{\$2.16}{(1.12)} + \frac{\$2.33}{(1.12)^2} + \frac{\$21.45}{(1.12)^2} = \$20.89$$

We can use the financial calculator to arrive at the above answer.

First, we calculate the future selling price using Gordon's Growth Model formula.

$$\begin{aligned} V_o &= \frac{D_1}{r - g} = \frac{D_o\,(1 + g)}{r - g} \\ &= \frac{2 \times (1 + 0.08)^2 \times (1 + 0.01)}{0.12 - 0.01} = 21.419 \end{aligned}$$

Then we use the CF function of the financial calculator to solve. We will add the above-calculated future selling price (21.419) to the last cash flow (CF3).

$$[CF0 = 0,\ CF1 = 2 \times 1.08,\ CF2 = 2 \times (1.08)^2,\ CF3 = 2 \times (1.08)^3 + 21.419]$$

Press “CPT” “NPV,” input “I” as 12, then finally press “CPT” to get the NPV as 20.8.

Note: Candidates do not have to work out the CF values separately. They can directly calculate the cashflows. For example, once the calculator’s screen shows CF2, candidates should type $2 \times (1.08^2)$, press ENTER, and scroll down twice to CF3.

After every cash flow, candidates should press “ENTER” then scroll down twice to get to the next Cash flow (Once for CF1).

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3655 An equity analyst is tracking the shares of a pharmaceutical company – Jilliax Inc. The company has an expected earnings retention ratio of 80%, a dividend growth of 4%, and a required rate of return of 8%. The leading P/E ratio of the company is *closest to*:

A. 3.

B. 4.

C. 5.

The correct answer is **C.**

The leading Price-to-Earnings (P/E) ratio of a company can be calculated using the formula that relates the expected dividend payout ratio to the difference between the required rate of return and the dividend growth rate. This relationship is expressed as:

$$\frac{P_0}{E_1} = \left(\frac{\frac{D_1}{E_1}}{k - g}\right)$$

$$\frac{D_1}{E_1} = \text{expected dividend payout ratio}$$

$$\text{Dividend payout} = 1 - \text{Earnings Retention Ratio} = 1 - 80$$

$$\text{Leading P/E ratio} = \frac{20}{8\% - 4\%} = 20\%/4\% = 5$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (j) Explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables.

Q.3656 GGH Corp. has an expected earnings retention ratio of 75%, a dividend growth rate of 3%, and a required rate of return of 7%. Based on this information, what can a trader at HY Investment Bank expect to occur if they are currently short 500,000 shares of GGH Corp., given that the shares are trading at a P/E ratio of 8?

A. Hold on to his short position.

B. Buy back the company's shares.

C. Buy back the company's shares and go long additional shares of GGH.

The correct answer is **A.**

The leading P/E can be calculated using the formula:

$$\text{Leading P/E ratio} = \frac{1 - b}{r - g} = \frac{1 - 75\%}{7\% - 3\%} = 6.25$$

The current P/E ratio (8) is higher than the leading P/E ratio (6.25) which indicates that the stock is overvalued. Hence, the company's shares must be sold or, in the case above, the short position should be maintained.

CFA Level I, Topic 6 - Equity, Learning Module 8: Equity Valuation: Concepts & Basic Tools. LOS (a): Evaluate whether security, given its current market price and a value estimate, is overvalued, fairly valued, or undervalued by the market.

Q.3657 A perpetual preferred share promises to pay a dividend of $5. If the required rate of return is 10%, then the intrinsic value of the preferred share is *closest to*:

A. $52.50.

B. $50.

C. $55.

The correct answer is **B.**

The intrinsic value of a perpetual preferred share can be calculated using the formula for the present value of a perpetuity. The formula is given by:

$$V_{\text{perpetual}} = \frac{D}{r}$$

where V(perpetual) is the intrinsic value of the perpetual preferred share, D is the annual dividend payment, and r is the required rate of return (expressed as a decimal). Given that the annual dividend (D) is $5 and the required rate of return (r) is 10% or 0.10, we can substitute these values into the formula to find the intrinsic value of the preferred share:

$$V_{\text{perpetual}} = \frac{50}{10} = \$50$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (g) Calculate the intrinsic value of a non-callable, non-convertible preferred stock.

Q.3658 An equity analyst manages a global equity portfolio. He tracks two telecom companies, the financial details of which are given in exhibit 1.

Exhibit 1: Telecom Companies

Company	IntraTelecom	SupraCom
Country of Operation	X	Y
Dividend Payout Ratio	30%	30%

All other operating and financial parameters of the companies are similar. Furthermore, both countries have identical risk profiles.
Exhibit 2 provides the central bank stance of country X and Y, respectively.

Exhibit 2: Central Bank Stance

Country	Central Bank Stance
X	The central bank is pursuing a policy of monetary easing and intends to keep the interest rates at record low levels to boost economic activity.
Y	The central bank is pursuing a policy of monetary tightening and is concerned about the increase in asset prices. It intends to keep the interest rates high.

The analyst forecasts the forward P/E of both companies assuming different growth rates. If actual growth rates of the companies exceed the analyst's projection, the impact on the P/E ratio will *most likely* be higher for:

A. IntraTelecom.

B. SupraCom.

C. neither of the two companies.

The correct answer is **A.**

The impact on the Price-to-Earnings (P/E) ratio of a company when actual growth rates exceed the analyst's projections is influenced by various factors, including the interest rate environment in which the company operates.

In this scenario, IntraTelecom operates in Country X, where the central bank is pursuing a policy of monetary easing with the intention to keep interest rates at record low levels to boost economic activity.

On the other hand, SupraCom operates in Country Y, where the central bank is pursuing a policy of monetary tightening, intending to keep interest rates high to curb the increase in asset prices.

Low-interest rates generally lead to higher asset prices, including equities, as investors search for better returns than what is offered by fixed-income securities. This environment makes equities more attractive, leading to higher P/E ratios as investors are willing to pay more for each dollar of earnings.

Therefore, if the actual growth rates of IntraTelecom exceed the analyst's projections, the impact on its P/E ratio will likely be higher compared to SupraCom, which operates in a high-interest rate environment. The low-interest rate in Country X supports economic expansion and potentially higher earnings growth for IntraTelecom, making its stocks more appealing to investors and thus, increasing its P/E ratio more significantly.

B is incorrect. This option incorrectly suggests that the P/E ratio impact would be higher for SupraCom. However, SupraCom operates in a high-interest rate environment (Country Y), which generally dampens the attractiveness of equities due to higher returns available from fixed-income securities.

This environment could limit the upward pressure on SupraCom's P/E ratio, even if its actual growth rates exceed projections.

C is incorrect. Suggesting that neither of the two companies would experience a higher impact on their P/E ratio disregards the differing monetary policies and interest rate environments of the countries in which IntraTelecom and SupraCom operate.

The monetary policy stance directly influences the cost of capital and investor sentiment towards equities, which in turn affects the P/E ratios of companies. Given the low-interest rate environment in Country X, IntraTelecom is more likely to see a significant impact on its P/E ratio if growth exceeds expectations.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (j) Explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables.

Q.3659 A telecom company acquired its competitor in a highly competitive bid. Subsequent to the acquisition, the company books a ‘Goodwill’ which forms 30% of its balance sheet. An equity analyst intends to value the company, the valuation methods *least likely* to be used by the analyst are:

A. multiplier models.

B. asset-based valuation models.

C. relative valuation models.

The correct answer is **B.**

Asset-based valuation models are least likely to be effective for valuing a company where a significant portion of the balance sheet consists of intangible assets such as goodwill. In the scenario where a telecom company has acquired its competitor, resulting in goodwill that forms 30% of its balance sheet, the asset-based valuation method becomes less suitable.

This is because asset-based valuation primarily focuses on the company's tangible assets and liabilities to determine its value. Goodwill, an intangible asset, represents the excess of the purchase price over the fair value of the identifiable net assets of the acquired company. It reflects non-physical assets such as brand reputation, customer relationships, and intellectual property, which are not easily quantifiable in monetary terms. Therefore, relying on an asset-based approach might undervalue the company since it does not adequately capture the value of these intangible assets.

A is incorrect. Multiplier models could be effectively used in valuing the company. These models, including price-to-earnings (P/E) ratio, price-to-sales (P/S) ratio, and enterprise value-to-EBITDA (EV/EBITDA), leverage financial metrics that can incorporate the effects of intangible assets like goodwill.

For instance, a high P/E ratio might reflect the market's expectation of future growth, partly due to the acquired goodwill. Thus, multiplier models remain relevant for companies with significant intangible assets.

C is incorrect. Relative valuation models are also suitable for valuing the company. These models involve comparing the company to its peers or competitors based on various financial metrics and ratios. Since goodwill can influence a company's financial performance and market valuation, relative valuation models can account for the presence of significant intangible assets by comparing similar companies within the same industry.

This approach allows analysts to assess whether the company is undervalued or overvalued relative to its peers, taking into consideration the impact of goodwill on its financial statements and market perception.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (m) Describe asset-based valuation models and their use in estimating equity value.

Q.3660 Consider the following statements:

I. Price multiple models allow for the comparison of companies operating in different industries.
II. Price multiple models allow for both cross-sectional and time-series relative comparisons of companies.

Which of these statements are accurate?

A. I

B. II

C. I & II

The correct answer is **B.**

The second statement accurately captures one of the key strengths of price multiple models: their ability to facilitate both cross-sectional and time-series relative comparisons of companies. Cross-sectional analysis involves comparing a company's financial metrics and valuation multiples against those of other companies at a specific point in time.

This type of analysis is useful for identifying undervalued or overvalued stocks within a peer group or industry. On the other hand, time-series analysis involves comparing a company's financial metrics and valuation multiples over different time periods. This can help investors understand how the company's valuation has changed over time in response to its financial performance, market conditions, or other factors.

Price multiple models are particularly suited for these types of analyses because they provide a standardized way to compare valuation levels, regardless of the absolute size of the companies being compared.

A is incorrect. While price multiple models can technically be applied to any company, comparing multiples across different industries can be misleading due to the vast differences in industry characteristics, growth prospects, risk profiles, and capital structures.

For meaningful comparisons, it is generally recommended that companies be compared within the same industry or sector where they operate under similar economic conditions and business models. Therefore, while price multiple models are versatile, their utility across different industries is limited without adjusting for these differences.

C is incorrect. As explained, the first statement is not entirely accurate without considering the need for industry-specific comparisons.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (j) Explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables.

Q.3661 The shares of AAA Telematics Limited are currently trading at $50 and pay a yearly $4 dividend. In the after-hours, the company announces that it has closed-in on a $100 million project from a big investment bank. The information causes a revision of AAA's next year forecasted share price which rises to $80. If analysts expect the shares of the company to generate a yearly holding period return of 18%, then the price of AAA's stock is most likely to open at a price of:

A. $63.72.

B. $67.80.

C. $71.19.

The correct answer is **C.**

To determine the opening price of AAA Telematics Limited's stock following the announcement of a significant project win, we can use the formula for calculating the expected holding period return (HPR). The HPR is given by the formula:

$$HPR = \frac{P_1 - P_0 + D}{P_0}$$

Where:

- P1 is the forecasted share price at the end of the period (\$80 in this case).
- P0 is the current share price, which we are trying to find.
- D is the dividend paid during the period (\$4 in this case).

Given that the analysts expect a yearly holding period return of 18%, we can rearrange the formula to solve for P0, the opening price of the stock:

$$0.18 = \frac{80 - P_0 + 4}{P_0}$$

Solving this equation for P0 gives us:

$$1.18P_0 = 84$$

$$P_0 = \frac{84}{1.18} = \$71.19$$

Therefore, the stock is most likely to open at a price of $71.19.

Q.3662 Exhibit 1 shows the dividends paid by three companies for the past five years.

Exhibit 1: Dividends paid to investors

Company	2012	2013	2014	2015	2016
WWW	\$2.00	\$2.20	\$2.42	\$2.66	\$2.93
ZZZ	\$2.50	\$3.00	\$3.30	\$4.13	\$5.36
YYY	\$1.50	\$1.80	\$2.34	\$3.28	\$3.60

The company *most* likely to be valued using the Gordon growth dividend discount model is:

A. WWW.

B. ZZZ.

C. YYY.

The correct answer is **A.**

	Growth rate (2012-2013)	Growth rate (2013-2014)	Growth rate (2014-2015)	Growth rate (2015-2016)
WWW	$\frac{2.2-2.0}{2.0}=0.1$	$\frac{2.42-2.0}{2.2}=0.1$	$\frac{2.66-2.42}{2.42}=0.1$	$\frac{2.93-2.66}{2.66}=0.1$
ZZZ	$\frac{3.0-2.5}{2.5}=0.2$	$\frac{3.3-3.0}{3.0}=0.1$	$\frac{4.13-3.3}{3.3}=0.25$	$\frac{5.36-4.13}{4.13}=0.3$
YYY	$\frac{1.8-1.5}{1.5}=0.2$	$\frac{2.34-1.8}{1.8}=0.3$	$\frac{3.28-2.3}{2.34}=0.4$	$\frac{3.6-3.28}{3.28}=0.97$

WWW's dividend grew at a constant rate of 10% while the dividend growth rate of the other two companies varied from year to year.

The Gordon growth dividend discount model is ideal for valuing firms that have a stable dividend policy. Therefore, the company most likely to be valued using the Gordon growth dividend discount model is WWW.

B is incorrect. Company ZZZ, while showing significant growth in dividends, does not exhibit a consistent growth rate year over year. The growth rate fluctuates, with increases of 20%, 10%, 25%, and 30% over the four years. This inconsistency in growth rates makes ZZZ less suitable for valuation using the Gordon Growth Model.

C is incorrect. Company YYY, similar to ZZZ, shows a variable dividend growth rate over the years. The growth rates for YYY are 20%, 30%, 40%, and approximately 9.7%, indicating significant variability. This inconsistency makes YYY an unsuitable candidate for the Gordon Growth Model. The model's reliance on a constant growth rate means it is best applied to companies with stable and predictable dividend policies, which is not the case for YYY.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a

Q.3663 Company X does not pay dividends now, but it is supposed to do so in three years. The dividend is estimated to be $3.00 and is expected to be received three years from now. The dividend is estimated to grow at the rate of 4.5% per year to infinity. The required rate of return 7%. The current intrinsic value of the company's X share is *closest to*

A. $125.4

B. $97.96

C. $102.36

The correct answer is **C.**

To solve this problem, we need to use the Gordon growth model to estimate the value at year three, noting that the year-end dividend is $3(1.045) and then find the present value at time $t = 0$. Using the following formula:

$$V_0 = \sum_{t=1}^{\infty} \frac{D_1}{r - g}$$

Where
V_0 = value of a share of stock today, at $t = 0$.
D_t = expected dividend in year t, assumed to be paid at the end of the year.
r = required rate of return on the stock
In this case we need,

$$V_0 = V_3(1.07)^{-3}$$

Where

$$V_3 = \frac{3(1.045)}{0.07 - 0.045} = 125.4$$

So that,

$$V_0 = 125.4(1.07)^{-3} = 102.36$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3664 An equity analyst intends to use the Gordon growth dividend discount model to value a company. He assumes that the dividend of the company will grow at the constant rate ‘g’ and the company's dividend payout ratio will remain constant over the following decades.
The most consistent assumption concerning the company's earnings is that:

A. the earnings growth rate will exceed the dividend growth rate.

B. the earnings growth rate will be lower than the dividend growth rate.

C. the earnings growth rate will be equal to the dividend growth rate.

The correct answer is **C.**

The Gordon Growth Model (GGM) is a method used to value a company's stock by assuming a constant growth rate in dividends paid to shareholders. The model is particularly useful for companies that are expected to have stable growth rates in the foreseeable future.

The assumption that the dividend payout ratio will remain constant is crucial for the application of this model. Given this assumption, the most consistent assumption regarding the company's earnings is that the earnings growth rate will be equal to the dividend growth rate.

This consistency arises because the dividend payout ratio is defined as the fraction of earnings paid out as dividends to shareholders. If the dividend payout ratio remains constant and dividends grow at a constant rate g , then it logically follows that earnings must also grow at this same rate g for the payout ratio to remain unchanged.

A is incorrect. Suggesting that the earnings growth rate will exceed the dividend growth rate contradicts the assumption of a constant dividend payout ratio. If earnings were to grow at a faster rate than dividends, the dividend payout ratio would decrease over time, which is inconsistent with the premise of the Gordon Growth Model in this scenario.

B is incorrect. Proposing that the earnings growth rate will be lower than the dividend growth rate also contradicts the assumption of a constant dividend payout ratio. If dividends were to grow at a faster rate than earnings, the dividend payout ratio would increase over time, which again is inconsistent with the premise of the Gordon Growth Model in this scenario.

The only way for the dividend payout ratio to remain constant while dividends grow is for earnings to grow at the same rate as dividends.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3665 Exhibit 1 summarizes broad assumptions regarding JulaVista Inc.

Exhibit 1: Julavista Inc.

Dividend paid this year	\$4.00
Dividends growth rate	3%
Rate of return required by equity investors	8%

The percentage of the stock's intrinsic value that's attributable to the dividend growth assumption is:

A. 39.3%.

B. 50%.

C. 60%.

The correct answer is **A.**

To determine the percentage of a stock's intrinsic value attributable to the dividend growth assumption, we first calculate the stock's intrinsic value with and without the dividend growth.

The intrinsic value with dividend growth considers the future dividends that are expected to grow at a certain rate, discounted back to their present value at the required rate of return. The intrinsic value without dividend growth assumes dividends remain constant indefinitely.

The intrinsic value of JulaVista Inc.'s stock, considering the dividend growth, is calculated using the Gordon Growth Model (also known as the Dividend Discount Model for a perpetually growing dividend), which is given by:

$$\text{Intrinsic Value} = \frac{D0 \times (1 + g)}{r - g}$$

Where:

- D0 is the dividend paid this year, which is \$4.00.
- g is the dividend growth rate, which is 3% or 0.03 in decimal form.
- r is the required rate of return by equity investors, which is 8% or 0.08 in decimal form.

Substituting the given values, we get:

$$\text{Intrinsic Value} = \frac{4.00 \times (1 + 0.03)}{0.08 - 0.03} = \frac{(4.00 \times 1.03)}{0.05} = \frac{4.12}{0.05} = \$82.40$$

The value of the company's stock without dividend growth (assuming dividends remain constant) is calculated by dividing the constant dividend by the required rate of return:

$$\text{Value without growth} = \frac{D_0}{r} = \frac{4.00}{0.08} = \$50.00$$

Therefore, the percentage of the stock's intrinsic value attributable to the dividend growth assumption is calculated as:

$$\frac{\text{Intrinsic Value with growth - Value without growth}}{\text{Intrinsic Value with growth}} = \frac{\$82.40 - \$50.00}{\$82.40} = 0.393 = 39.3\%$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3666 An e-commerce firm began its operations one year ago. The company's management has indicated that it will start paying dividends from its fifth operating year and onward and expect to maintain a dividend payout ratio of 40% with a dividend growth rate of 5%. If the company pays a dividend of $5.00 five years from now, then the company's stock price today given a required rate of return for investors of 8% is *closest* to:

A. $210.10.

B. $122.50.

C. $120.10.

The correct answer is **B.**

Stock price in five years

$$V_5 = \frac{D_5(1+g)}{r-g} = \frac{D_6}{r-g} = \frac{\$5 \times (1+5\%)}{(8\% - 5\%)} = \$175$$

Dividend paid in year 5 = 5

Stock Price Today

$$V_0 = \frac{175}{(1.08)^5} + \frac{5}{(1.08)^5} = \frac{180}{(1.08)^5} = \$122.5$$

CFA Level I, Equity, Learning Module 8: Topic 6 - Equity Valuation: Concepts & Basic Tools. LOS (g): Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3667 Exhibit 1 shows the financial information of Ulyss, a firm operating in the oil industry.

Exhibit 1: Financial information - Ulyss

	Dividends	EPS
After 1 year	$4.50	$12.00
After 2 years	$5.40	$14.40
Share price at the end of Year 2		$120.00
Stock beta		1.2
Market average return		10%
Yield on government bonds		3.50%

If the company's dividend is assumed to grow at the same constant rate, then the return on equity (ROE) ratio of the company is closest to:

A. 20%

B. 32%

C. 38%

The correct answer is **B.**

To determine the return on equity (ROE) for Ulyss, we first need to calculate the dividend growth rate and the earnings retention ratio. The dividend growth rate can be found by comparing the dividends from one year to the next. The earnings retention ratio is calculated by determining what portion of the earnings per share (EPS) is not paid out as dividends, which essentially represents the portion of earnings retained by the company for reinvestment.<.p>

The dividend growth rate is calculated as follows:

$$\text{Dividend Growth Rate} = \frac{\text{Dividend in Year 2 - Dividend in Year 1}}{\text{Dividend in Year 1}} = \frac{\$5.40 - \$4.50}{\$4.50} = 20\%$$

This indicates that the dividends are growing at a rate of 20% from Year 1 to Year 2.The earnings retention ratio is calculated by subtracting the dividend from the EPS and dividing by the EPS:

$$\text{Earnings Retention Ratio} = \frac{\text{EPS - Dividend}}{\text{EPS}} = \frac{\$12.00 - \$4.50}{\$12.00} = 62.5\%$$

$$\text{ROE} = \frac{20\%}{62.50\%} = 32\%$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3668 Exhibit 1 shows the financial information of Ulyss, a firm operating in the oil industry.

Exhibit 1: Financial information - Ulyss

	Dividends	EPS
After 1 year	\$4.50	\$12.00
After 2 years	\$5.40	\$14.40
Share price at the end of Year 2		\$120.00
Stock beta		1.2
Market average return		10%
Yield on government bonds		3.50%

The stock price of Ulyss today is *closest* to:

A. \$106.27

B. \$102.27

C. \$105.27

The correct answer is **C.**

To get the stock price, we first have to calculate the required rate of return using CAPM.

$$R_r = R_f + \beta \text{ (Market Risk Premium)},$$

where
R_r= Required Rate of Return,
R_f= risk-free rate, and
β = Beta (Measure of how risky the stock is)

$$\text{Market Risk Premium} = (R_m - R_f)$$

Where:

R_m = Average Market Return
Risk free rate = 3.50%

Market risk premium = Avg. market return – Risk-free rate = 10% - 3.50% = 6.50%

Beta = 1.20
Required rate of return for equity investors = 3.50% + 1.20 × 6.50% = 11.30%

$$\begin{aligned}\text{Stock price today } &= \frac{\$4.50}{(1+11.3\%)} + \frac{\$5.40}{(1+11.3\%)^2} + \frac{\$120}{(1+11.3\%)^2} \\ &= \$4.04 + \$101.23 = \$105.27\end{aligned}$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation:

Q.3669 The Free Cash Flow to Equity (FCFE) valuation model assumes that:

A. The cashflows left after debt payment will be distributed to the equity holders.

B. The cashflows left after debt payment and taxes will be distributed to the equity holders.

C. The cash flows left after debt payments, reinvestments and taxes will be distributed to the equity holders.

The correct answer is **C.**

The Free Cash Flow to Equity (FCFE) valuation model is predicated on the assumption that the cash flows remaining after accounting for debt payments, reinvestments, and taxes will be available for distribution to equity holders.

This approach provides a comprehensive view of the funds that are truly available to shareholders, after the company has made all necessary expenditures to sustain and grow its business. The FCFE formula is given by:

$$\text{FCFE} = \text{Cash Flow from Operations (CFO)} - \text{Cash Flow needed for Fixed Capital Investment (Bor}$$

This formula takes into account the cash generated from the company's operations and adjusts it for the cash spent on fixed capital investments, such as property, plant, and equipment, which are necessary for the company's growth and sustainability.

Additionally, it factors in the net borrowing, which represents the difference between any new borrowings and the repayment of existing debt. This comprehensive approach ensures that the FCFE reflects the net cash flow that could potentially be distributed to equity holders, after fulfilling all other financial obligations and investment needs.

A is incorrect. This option suggests that only the cash flows left after debt payment will be distributed to the equity holders. However, this view is too narrow as it overlooks the critical aspects of reinvestments and taxes, which are essential outflows that a company must account for before determining the cash available for distribution to equity holders.

Ignoring these factors would overestimate the available cash flow to equity holders, as it does not consider the cash used for sustaining and growing the business, nor does it account for the tax obligations.

B is incorrect. While this option expands on option A by including taxes in the calculation, it still falls short of capturing the full picture by omitting the cash flow needed for fixed capital investments. Reinvestments in the business are crucial for its long-term growth and sustainability.

Without accounting for these reinvestments, the calculation would again overestimate the cash available to equity holders, as it would not reflect the company's expenditures on maintaining and expanding its operational capabilities.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (e) Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.3670 PPP Construction Project's Limited, a construction company, has been receiving a lot of media attention lately. The company started its operation in 1990 and was rated as one of the top 50 best-managed company for five years consecutively. However, recently, concerns have been raised by the shareholders about the company's management. The company has been incurring a substantial loss by undertaking projects with negative net present values (NPVs).
If an equity research analyst wants to value the company, the *most* appropriate valuation model(s) to be used would be:

A. the Free Cash Flow to Equity Valuation (FCFE) Model.

B. the Dividend Discount Model (DDM).

C. either the Free Cash Flow to Equity Valuation (FCFE) Model or the Dividend Discount Model (DDM).

The correct answer is **A.**

The Free Cash Flow to Equity (FCFE) Valuation Model is the most appropriate for valuing PPP Construction Project's Limited in this scenario. The FCFE model calculates the cash flow available to the company's equity shareholders after accounting for all expenses, reinvestments, and debt payments.

This model is particularly useful in situations where a company's dividend payments are not clear or do not accurately reflect the company's financial health, as might be the case with PPP Construction Project's Limited, which has been incurring substantial losses. The FCFE formula is given by:

$$\text{FCFE} = \text{CFO} - \text{FCInv} + \text{Net Borrowing}$$

Where:

- CFO = is cash flow from operations,
- FCInv = is capital expenditures, and
- Net Borrowing = is the difference between new debt issued and debt repayments.

This model is advantageous in this context because it provides a direct measure of the cash flows that could potentially be paid to shareholders, making it a more accurate reflection of the company's value to equity holders, especially in light of its recent financial troubles.

CFA Level I, Topic 6 - Equity, Learning Module 8: Equity Valuation: Concepts & Basic Tools. LOS (e): Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.3671 A company is valued using the Free Cash Flow to Equity Valuation (FCFE) Model and the Dividend Discount Model (DDM). Both valuation models will provide the same value for the firm if the company invests excess cash in:

A. negative net present value (NPV) projects.

B. positive net present value (NPV) projects.

C. zero net present value (NPV) projects.

The correct answer is **C.**

The Free Cash Flow to Equity (FCFE) Valuation Model and the Dividend Discount Model (DDM) are two prominent methods used for valuing a company. The FCFE model focuses on the cash flows available to equity shareholders after accounting for all expenses, reinvestments, and debt payments.

On the other hand, the DDM values a company based on the present value of its expected future dividends. For both models to yield the same valuation for a company, it is crucial that the company's investment decisions regarding excess cash align with the expectations embedded within these models.

Investing excess cash in projects with zero Net Present Value (NPV) ensures that the company's value remains unchanged by these investments. NPV is the difference between the present value of cash inflows and the present value of cash outflows over a period.

A zero NPV means that the project is expected to generate a return exactly equal to the cost of capital, indicating that it neither adds nor subtracts value from the company. This condition is necessary for both the FCFE and DDM models to align because it implies that all excess cash is either distributed to shareholders or invested in a manner that does not affect the company's overall valuation.

A is incorrect. The DDM would not account for the value lost in poor investments, while the FCFE model would reflect this decrease in available cash flows to equity shareholders.

B is incorrect. While investing in positive NPV projects is generally beneficial for a company's value, it creates a divergence between the FCFE and DDM valuations. Positive NPV projects increase the company's value beyond what is accounted for by expected dividends in the DDM.

The FCFE model would capture the increased cash flows resulting from these profitable investments, leading to a higher valuation compared to the DDM, which primarily focuses on dividends. Thus, for both models to equate the company's value, the investment must be in projects with zero NPV.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (e) Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.3672 An analyst uses an equity valuation model that emphasizes on the anticipated dividends rather than the ability to pay the dividends. The model is *mostly likely* to be:

A. Free Cash Flow to Equity Valuation (FCFE) Model.

B. Dividend Discount Model (DDM).

C. either the Free Cash Flow to Equity Valuation (FCFE) Model or the Dividend Discount Model (DDM).

The correct answer is **B.**

The Dividend Discount Model (DDM) is primarily focused on the anticipated dividends for equity valuation. This model operates on the principle that the value of a stock is worth the sum of all its future dividend payments when discounted back to their present value.

This approach is particularly useful for companies that pay dividends consistently. The DDM is a fundamental analysis method that helps investors determine the fair value of a stock based on the dividends it is expected to pay in the future. The model takes into account the expected growth rate of these dividends as well as the required rate of return by the investors. The formula for the DDM is expressed as:

$$\text{Value} = \sum_{t=1}^{\infty} \frac{D_t}{(1+k)^t}$$

where $\mathbf{D_t}$ is the expected dividend in year **t**, and **k** is the required rate of return or discount rate. This model is particularly suited for stable, dividend-paying companies and may not be as relevant for companies that do not pay dividends or have unpredictable dividend policies.

A is incorrect. The Free Cash Flow to Equity (FCFE) Model values a stock by discounting the expected future free cash flows to equity holders back to their present value. This model is more focused on the company's ability to generate cash that can be potentially distributed to shareholders, rather than the dividends that are actually paid out.

It takes into account the capital expenditures, changes in working capital, and debt payments to calculate the free cash flow available to equity holders.

C is incorrect. While both the Free Cash Flow to Equity (FCFE) Model and the Dividend Discount Model (DDM) are used for equity valuation, they emphasize different aspects of a company's financial health and return to shareholders.

The FCFE model is concerned with the cash flows available to equity holders after accounting for expenses, investments, and debt payments, whereas the DDM focuses solely on the dividends expected to be paid to shareholders.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (e) Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.3673 Chiasson & Alabama, a private equity fund, has investments in multiple companies. Exhibit 1 shows the private equity fund's ownership percentage across different companies.

Exhibit 1: Chiasson & Alabama Investments

Company	Ownership %	Initial Investment
CCC	80%	$200 million
DDD	20%	$50 million

The *most* appropriate valuation model to value Company CCC is the:

A. Free Cash Flow to Equity Valuation (FCFE) Model.

B. Dividend Discount Model (DDM).

C. either the Free Cash Flow to Equity Valuation (FCFE) Model or the Dividend Discount Model (DDM).

The correct answer is **A.**

The most appropriate valuation model for Chiasson & Alabama to value Company CCC is the Free Cash Flow to Equity (FCFE) Model. This model is particularly suitable due to the significant ownership stake (80%) that Chiasson & Alabama holds in CCC. With such a substantial ownership percentage, the private equity fund has considerable influence over the company's operations, including its dividend policies and investment decisions.

The FCFE Model calculates the value of equity as the present value of all future expected free cash flows to equity holders, after accounting for the company's debt payments. This model is especially relevant in scenarios where the investor has control or significant influence over the company, as it allows for a more direct assessment of the cash flows that can be extracted from the business.

B is incorrect. The DDM is based on the premise that a company's value is the present value of all future dividends. However, in the case of CCC, where Chiasson & Alabama can significantly influence or determine the dividend payouts due to their 80% ownership, relying solely on dividends as a measure of value might not capture the full economic benefit Chiasson & Alabama can derive from its investment.

The FCFE Model, which considers the cash flows available to equity holders after fulfilling all financial obligations, offers a more comprehensive valuation in this context.

C is incorrect. While both models aim to estimate the value of an investment, the choice between them should be informed by the investor's ability to influence the company's financial policies. In situations where the investor, like Chiasson & Alabama, has a controlling interest, the FCFE Model is more suitable as it directly evaluates the cash flows that can be allocated to equity holders, beyond just dividends.

This approach is more aligned with the investment strategy of a private equity fund that seeks to maximize the value extracted from its holdings through operational control and strategic financial management.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (e) Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.3674 An analyst forecasted the dividend policy of Philly's SteakHouse, as shown in exhibit 1.

Exhibit 1: Philly's SteakHouse – Expected Dividend Policy

Year	Dividend
2018	\$3.00
2019	\$4.00
2020	\$6.00
After 2020	Dividends will grow at a rate of 4%

Assuming the required rate of return for equity investors to be 10%, the share price of Philly's SteakHouse in 2017 is *closest* to:

A. \$84.68.

B. \$84.17.

C. \$88.68.

The correct answer is **C.**

To determine the share price of Philly's SteakHouse in 2017, we need to calculate the present value of expected dividends, including the terminal value of the stock at the end of 2020, discounted back to 2017.

The terminal value represents the present value of all future dividends beyond 2020, growing at a constant rate of 4%. The required rate of return for equity investors is given as 10%, which we will use as the discount rate.

The formula for calculating the present value of a dividend in a given year is:

$$\text{PV})\_(\text{Dividend}) = \text{Dividend} \times (1 + r)^{n}$$

where r is the required rate of return, and n is the number of years from the valuation date to the dividend payment date. The terminal value at the end of 2020, which represents the present value of all future dividends growing at 4% indefinitely from 2021 onwards, can be calculated using the Gordon Growth Model as follows:

$$TV_{2020} = \frac{D_{2021}}{r - g}$$

where D2021 is the dividend in 2021, r is the required rate of return, and g is the growth rate of dividends. Given that the dividend in 2020 is \$6.00 and it will grow at 4% thereafter, the dividend in 2021 (D2021) will be $6.00 x (1 + 4%) = $6.24. Substituting the values into the Gordon Growth Model gives us:

$$TV_{2020} = \frac{\$6.24}{0.10 - 0.04} = \$104$$

The present value of the dividends for 2018, 2019, and the terminal value at the end of 2020, discounted back to 2017, is calculated as follows:

$$PV_{2017} = \$3.00 \times (1.1)^1 + \$4.00 \times (1.1)^2 + \frac{(\$104 + \$6.00)}{(1.1)^3} = \$88.68$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3675 An analyst forecasted the dividend policy of Bicom Group, as shown in exhibit 1.

Exhibit 1: Bicom Group – Expected Dividend Policy

Year	Dividend
2018	$4.00
2019	Nil
2020	Nil
2021	$5.00
2022	Nil
2023	$8.00
After 2023	Dividends will grow at a rate of 2%

Assuming the required rate of return for equity investors to be 8%, the share price of Bicom Group in 2017 is *closest* to:

A. $99.08.

B. $98.12.

C. $93.08.

The correct answer is **B.**

To determine the share price of Bicom Group in 2017, we need to calculate the present value of all future dividends, including the terminal value of the stock in 2023 when dividends start growing at a constant rate.

The Gordon Growth Model (also known as the Dividend Discount Model for a perpetuity) is used to calculate the terminal value in 2023, and the present value formula is applied to discount all future dividends and the terminal value back to 2017.

The formula for the terminal value in 2023, when the dividends start growing at a constant rate, is given by:

$$\text{Terminal Value}_{2023} = \frac{D_{2024}}{r - g}$$

Where D2024 is the dividend in 2024, r is the required rate of return, and g is the growth rate of dividends. Substituting the given values:

$$\text{Terminal Value}_{2023} = \frac{\$8 \times (1 + 2\%)}{8\% - 2\%} = \frac{\$8.16}{0.06} = \$136$$

The present value of future dividends and the terminal value in 2017 is calculated using the formula:

$$\text{Present Value} = \frac{D_{2018}}{(1 + r)^1} + \frac{D_{2021}}{(1 + r)^4} + \frac{D_{2023} + \text{Terminal Value}_{2023}}{(1 + r)^6}$$

Substituting the given values and the calculated terminal value:

$$\text{Present Value} = \frac{\$4}{(1.08)^1} + \frac{\$5}{(1.08)^4} + \frac{\$8 + \$136}{(1.08)^6} = \$98.12$$

Therefore, the share price of Bicom Group in 2017 is closest to $98.12.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3676 An analyst forecasted the dividend policy of AlterOrg LifeScience, as shown in exhibit 1.

Exhibit 1: AlterOrg – Expected Dividend Polic

Year	Dividend
2018	$2.50
2018-2021	Dividends will grow at a rate of 8%
After 2021	Dividends will grow at a rate of 5%
Required rate of return for equity holders	9%

AlterOrg LifeScience's stock price in 2017 is *closest* to:

A. $57.63.

B. $67.63.

C. $77.63.

The correct answer is **B.**

To determine the stock price of AlterOrg LifeScience in 2017, we need to calculate the present value of expected dividends and the present value of the stock price in 2021, discounted back to 2017. The dividends for the years 2018 to 2021 grow at an 8% rate, and after 2021, they grow at a 5% rate. The required rate of return for equity holders is 9%.

The expected dividend for 2021 can be calculated using the formula for the future value of a single sum:

$$\text{ExpectedDividend}_{2021} = \$2.50 \times (1 + 0.08)^3 = \$3.15$$

After 2021, the dividends are expected to grow at a rate of 5%. The stock price in 2021 can be calculated using the Gordon Growth Model, which is given by:

$$\text{StockPrice}_{2021} = \frac{\text{ExpectedDividend}_{2022}}{(\text{RequiredRateofReturn} - \text{GrowthRate})} = \frac{\$3.15 \times (1 + 0.05)}{0.09 - 0.05} = \$82.69$$

To find the stock price in 2017, we discount the dividends from 2018 to 2021 and the stock price in 2021 back to 2017 using the required rate of return of 9%:

$$\text{StockPrice}_{2017} = \frac{\$2.50}{(1.09)} + \frac{\$2.50 \times (1.08)}{(1.09)^2} + \frac{\$2.50 \times (1.08)^2}{(1.09)^3} + \frac{\$2.50 \times (1.08)^3}{(1.09)^4} + \frac{\$82.69}{(1.09)^4} = \$67.63$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3677 An extract from an equity research report on Alcalyn Info-Services Limited is presented below:

"The company operates in the highly competitive landscape of IT Services. However, the sector is expected to witness a wave of consolidation in the next 3-4 years. The dividends of Alcalyn Info-Services Limited are expected to grow at a rate of 4% for the next four years. Currently, the average return demanded by equity investors of IT services hovers around 12%, which is expected to come down to 9% as the sector matures and sees a wave of consolidation. The company expects the earnings to grow at a rate of 8% when the industry consolidates and the competition decreases."

If the company paid a dividend of $4.50 this year, the current stock price of the company according to the analyst's expectations is *closest* to:

A. $390.03

B. $376.03

C. $355.03

The correct answer is **B.**

To determine the current stock price of Alcalyn Info-Services Limited based on the analyst's expectations, we need to calculate the present value of the expected dividends for the next four years, as well as the present value of the expected stock price at the end of the fourth year.

This approach is grounded in the Dividend Discount Model (DDM), which is a method used to estimate the value of a company's stock based on the theory that its stock is worth the sum of all its future dividend payments, discounted back to their present value. Here, we also account for the expected growth in dividends and the eventual growth in earnings, which impacts the stock price.

The dividends for the next four years are expected to grow at a rate of 4% annually. Starting with a dividend of $4.50 this year, the dividends for the next four years can be calculated as follows:

- Dividend paid next year = $4.50*(1.04) = $4.68
- Dividend (2nd year) = $4.68*1.04 = $4.87
- Dividend (3rd year) = $4.87*1.04 = $5.06
- Dividend (4th year) = $5.06*1.04 = $5.26

$$\text{Expected Stock Price}_{4\text{thyear}} = \frac{5.26 \times (1 + 0.08)}{0.09 - 0.08} = \$568.08$$

To find the current stock price, we discount these future cash flows back to their present value using the current required rate of return of 12%:

$$\text{Current Stock Price} = \frac{4.68}{(1+0.12)} + \frac{4.87}{(1+0.12)^2} + \frac{5.06}{(1+0.12)^3} + \frac{5.26}{(1+0.12)^4} + \frac{568.08}{(1+0.12)^4} = \$376.03$$

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3678 The expected dividend policy of a consumer product manufacturer is given in exhibit 1.

Exhibit 1: Consumer Product Manufacturer – Expected Dividend Policy

Year	Expected dividend growth rate
2018-2020	8%
Post 2020	4%

Given that the company plans to pay a dividend of \$3.00 in 2018, and the return required by the equity investors is 10%, the company's stock price in 2017 is *closest* to:

A. \$53.50.

B. \$43.62.

C. \$63.42.

The correct answer is **A.**

Note that for the 2018-2020 period, we will be using the following formula:

$$V_0 = \sum_{t=1}^{\infty} \frac{D_0(1+g)^t}{(1+r)^t}$$

Where:

V_0 = value of a share of stock today, at $t = 0$

D_t = expected dividend in year t, assumed to be paid at the end of the year.

r = required rate of return on the stock.

g = dividend growth rate.

For the "post-2020" period, we will use the following formula:

$$V_0 = \frac{D_1}{r - g}$$

Thus, the stock price in 2017 is given by:

$$V_{2017} = \frac{3.00}{1.1^1} + \frac{3.00(1.08)}{1.1^2} + \frac{3.00(1.08)^2}{1.1^3} + (1.1)^{-3}\left[\frac{3.00(1.08)(1.08)(1.04)}{0.10 - 0.04}\right] = \$53.50$$

Note that we have to discount the "post-2020" by three years since we are calculating its present value at the year 2020, whereas we need the present value in the year 2017.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (h) Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3679 An equity analyst tracks two similar companies, both of which manufacture consumer products. Company A has grown inorganically by acquiring small firms at market prices (that are significantly higher than average historical prices). Company B has grown gradually by making its factories operationally efficient. Both companies are considered to be market leaders in their industry. The company *most* likely to have a higher price-to-book multiple is:

A. Company A.

B. Company B.

C. either Company A or Company B.

The correct answer is **A.**

Company A, which has grown inorganically by acquiring small firms at market prices significantly higher than average historical prices, is more likely to have a higher price-to-book multiple. This is primarily due to the nature of inorganic growth strategies, which often involve paying a premium for acquisitions. This premium is then reflected in the acquiring company's book value, leading to an increase in the price-to-book ratio.

The price-to-book multiple is a financial valuation metric used to compare a company's current market price to its book value. A higher multiple suggests that the market values the company more than its book value, often due to expectations of future growth or the acquisition of valuable assets through mergers and acquisitions.

In the case of Company A, the strategy of acquiring small firms at prices above their historical averages can lead to a significant increase in the company's assets and perceived market value, thus elevating its price-to-book multiple.

B is incorrect. Suggesting that Company B, which has grown gradually by making its factories operationally efficient, would have a higher price-to-book multiple overlooks the impact of acquisition premiums on the price-to-book ratio.

While operational efficiency can improve profitability and potentially enhance shareholder value over time, it does not have the immediate and direct impact on the book value that acquisitions do.

Therefore, Company B's approach to growth, although potentially beneficial for long-term value creation, is less likely to result in a higher price-to-book multiple compared to Company A's strategy of inorganic growth through acquisitions.

C is incorrect. The acquisition premiums paid are immediately reflected in the book value, whereas operational efficiencies, though beneficial, have a more gradual and less direct impact on the company's financial metrics.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (j) Explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables.

Q.3680 A recent survey in a popular financial magazine indicates that investors are willing to take higher risk because of the recent price surge in cryptocurrencies. The study *most* likely point towards a/an:

A. increase in the price-to-earnings ratio of all stocks.

B. decrease in the price-to-earnings ratio of all stocks.

C. increase in the equity risk premium demanded by investors.

The correct answer is **A.**

The recent survey indicating that investors are willing to take higher risks due to the surge in cryptocurrency prices most likely points towards an increase in the price-to-earnings (P/E) ratio of all stocks. The P/E ratio is a key financial metric used to evaluate the valuation of a company's shares, calculated as the market value per share divided by the earnings per share.

An increase in investor risk appetite generally leads to higher stock prices as investors are more willing to invest in equities, driving up the P/E ratios. This phenomenon can be attributed to the decreased equity risk premium demanded by investors. The equity risk premium is the extra return over the risk-free rate that investors require to compensate them for the risk of investing in stocks.

When investors are more willing to take risks, they demand a lower premium for holding risky assets, which in turn lowers the required return on equity. This lower required return makes stocks more attractive, pushing their prices up and, consequently, increasing the P/E ratios.

B is incorrect. A higher risk appetite among investors typically results in higher stock prices as investors are more inclined to buy equities, thus increasing the P/E ratios. The decrease in the equity risk premium demanded by investors leads to a lower required return on equity, making stocks more appealing and driving up their prices and P/E ratios.

C is incorrect. When investors are willing to take on more risk, as indicated by the survey, they generally demand a lower equity risk premium, not higher. This is because their increased risk tolerance means they require less additional return to compensate for the risk of investing in equities. As a result, the required return on equity decreases, making stocks more attractive and likely leading to an increase in stock prices and P/E ratios, not an increase in the equity risk premium.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (j) Explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables.

Q.3681 An equity trader intends to follow a momentum-based trading strategy. The trader is *most likely* to select stocks based on:

A. discounted cash flow valuation approaches.

B. asset-based valuation approaches.

C. price multiples valuation approaches.

The correct answer is **C.**

A momentum trading strategy involves trading stocks that are experiencing significant price movements, either upward or downward, with the aim of capitalizing on the continuation of these trends. Traders employing this strategy are less concerned with the intrinsic value of the stocks and more focused on their price movements and patterns.

Therefore, they rely on valuation approaches that can quickly and effectively gauge a stock's market performance relative to its peers or the market as a whole. Price multiples valuation approaches, such as Price-to-Earnings (P/E) ratio, Price-to-Sales (P/S) ratio, and Price-to-Book (P/B) ratio, are particularly useful for this purpose.

These methods allow traders to assess whether a stock is overvalued or undervalued based on its current price relative to key financial metrics, making it easier to identify stocks with strong momentum.

A is incorrect. Discounted cash flow (DCF) valuation approaches are primarily used to estimate the intrinsic value of a stock by forecasting its future cash flows and discounting them back to their present value.

This method requires in-depth financial analysis and is more suited to long-term investment strategies focused on fundamental value rather than short-term price movements. Therefore, it is not typically used in momentum-based trading strategies, which prioritize immediate price trends over fundamental value.

B is incorrect. Asset-based valuation approaches determine a company's value by assessing the net asset value of its tangible and intangible assets. This method is often used for companies in the process of liquidation or for those with significant physical assets.

Like the DCF approach, asset-based valuation is more concerned with the underlying value of a company rather than its current market price movements. As such, it does not align with the objectives of a momentum trading strategy, which seeks to exploit short-term price trends rather than evaluate a company's asset base.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (b) Describe major categories of equity valuation models.

Q.3682 An equity analyst is comparing the price multiples of two companies – Quartic Ltd. and Recon Inc. While examining the balance sheet of the two companies, the analyst finds out that Quartic capitalizes its advertisement costs while Recon expenses out its advertisement costs. Assuming that both companies are similar in all other aspects, Quartic Ltd. is *most* likely to have:

A. a higher price-to-earnings ratio than Recon Inc.

B. a lower price-to-earnings ratio than Recon Inc.

C. the same price-to-earnings ratio as Recon Inc.

The correct answer is **B.**

Quartic Ltd., by capitalizing its advertisement costs, essentially spreads these costs over several periods rather than expensing them in the period they are incurred. This accounting treatment can lead to higher reported earnings in the short term since the expense recognition is delayed.

Consequently, if we assume that the market price of Quartic's shares remains relatively stable, a higher earnings figure would result in a lower price-to-earnings (P/E) ratio. The P/E ratio is calculated by dividing the market price per share by the earnings per share (EPS).

If the EPS increases due to higher reported earnings (as a result of capitalizing advertisement costs), and the market price per share remains constant, the P/E ratio will decrease.

A is incorrect. This option overlooks the impact of capitalizing advertisement costs on reported earnings. By capitalizing these costs, Quartic is likely to report higher earnings in the short term compared to Recon Inc., which expenses its advertisement costs immediately. Higher earnings, with a stable market price, lead to a lower P/E ratio, not a higher one.

C is incorrect. The difference in accounting treatment for advertisement costs (capitalization vs. expensing) will likely result in different reported earnings between the two companies. Since the P/E ratio is sensitive to earnings figures, it is improbable that Quartic Ltd. and Recon Inc. would have identical P/E ratios if their earnings are affected differently by their respective accounting treatments of advertisement costs.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (j) Explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables.

Q.3683 An equity analyst is comparing the price multiples of two companies – Welsh Inc. and Far-East Corp. While examining the balance sheet of both companies, the analyst observes that Welsh follows the straight-line method of depreciation while Far-East depreciates its assets using the double-declining balance method.
Assuming that both companies are similar in all other aspects, which company is *most* likely to report a higher price-to-earnings ratio in the early years of both companies' lives?

A. Welsh Inc.

B. Far-East Corp

C. The depreciation method will not affect the price-to-earnings ratio

The correct answer is **B.**

The double-declining balance method of depreciation results in a faster rate of depreciation compared to the straight-line method. This results in higher tax savings in the early years of a company's life, which in turn increases earnings. The higher earnings will lead to a higher price-to-earnings (P/E) ratio.

Since Far East depreciates its assets using the double-declining balance method, it is most likely to report a higher P/E ratio in the early years compared to Welsh, which follows the straight-line method of depreciation.

A is incorrect. Welsh uses the straight-line method of depreciation, which results in a slower rate of depreciation compared to the double-declining balance method. This results in lower tax savings in the early years of a company's life, which in turn decreases earnings. The lower earnings will lead to a lower P/E ratio compared to Far-East, which uses the double-declining balance method.

C is incorrect. Depreciation is a non-cash expense that reduces taxable income, and it directly affects earnings. A faster rate of depreciation, as seen in the double-declining balance method, results in higher tax savings in the early years, which increases earnings. An increase in earnings will result in a higher P/E ratio. Hence, the depreciation method will impact the P/E ratio.

CFA Level I, Topic 6 - Equity, Learning Module 8: Equity Valuation: Concepts & Basic Tools. LOS (g): Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Q.3684 According to the Management Discussion & Analysis of a publicly-traded company, the firm's dividends are expected to grow at a rate of 4% for the next ten years. If the return-on-equity ratio of the company is likely to improve in the next ten years, then the price-to-earnings ratio of the company will most likely:

A. remain unchanged.

B. increase.

C. decrease.

The correct answer is **B.**

The price-to-earnings (P/E) ratio of a company is a key financial metric used by investors to evaluate the value of a company's shares. It is calculated by dividing the market value per share by the earnings per share (EPS).

The P/E ratio can be influenced by several factors, including the company's growth prospects, dividend policy, and return on equity (ROE). In the scenario where a company's dividends are expected to grow at a rate of 4% for the next ten years and its ROE is likely to improve, the P/E ratio of the company is most likely to increase.

Improvements in ROE indicate that the company is generating more profit from its equity financing, which is a sign of financial health and efficiency. An increasing ROE suggests that the company is using its investments effectively to generate earnings growth.

This improvement in profitability often leads to higher investor expectations for future earnings growth, which can increase demand for the company's shares. As demand for the shares increases, so does the market value per share, which can lead to a higher P/E ratio if the increase in the market value per share outpaces the growth in earnings per share.

A is incorrect. Suggesting that the P/E ratio will remain unchanged overlooks the impact that an improving ROE and dividend growth can have on investor expectations and demand for the company's shares.

An improving ROE, coupled with a steady growth in dividends, generally fosters a positive outlook on the company's future earnings potential, which can influence the P/E ratio upwards as investors are willing to pay more for the company's earnings.

C is incorrect. An improving ROE signals better use of equity to generate profits, and a steady dividend growth rate can attract investors looking for reliable income, both of which can drive up the price investors are willing to pay for the company's earnings.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (k) Calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to book value.

Q.3686 Portions of the balance sheet of Proctor Corp. and Gator Inc. is given in exhibit 1.

Exhibit 1: Balance sheet comparatives - Proctor Corp. vs Gator Inc.

	Proctor Corp.	Gator Inc.
Fixed Assets	$10,000	$7,000
Inventories	$25,800	$27,000
Current investments	$20,000	$30,000
Prepaid Expenses	$5,000	$1,000
Total assets	$60,800	$65,000
Long term borrowings	$10,000	$8,875
Short term borrowings	$17,500	$20,000
Paid-up capital	$1,000	$1,500
Reserves and surplus	$10,000	$15,000
Accounts payables	$22,300	$19,625
Total liabilities & Equity	$60,800	$65,000

Both companies have similar growth rates and equal dividend payout ratios, but Gator Inc. currently trades at a higher P/E ratio. Which of the following is the most likely reason for the shares of the Proctor Corp. to trade at a lower price-to-earnings ratio?

A. Proctor Corp.’s current investments are lower than Gator Inc.’s.

B. The debt to equity ratio of Proctor Corp. is higher than Gator Inc.'s

C. Proctor Corp. accounts payable turnover ratio is lower than Gator Inc.

The correct answer is **B.**

The debt-to-equity ratio of both the companies:

	Debt	Equity	D/E
Proctor Corp.	$27,500	$11,000	2.50
Gator Inc.	$28,875	$16,500	1.75

Proctor Corp. is more leveraged as compared to Gator Inc. Hence, it most likely that Proctor’s equity investors will demand a higher return. Therefore, a higher cost of equity will make the price-to-earnings ratio of Proctor Corp. lower than Gator Inc.’s.

Additional explanation on the debt-to-equity ratio

$$\text{D/E} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Further information:

What is total debt comprised of? Interest-bearing liabilities.

In this case, we have long-term borrowings and short-term borrowings as our debts.

Thus, total debt for Proctor Corp. = $10,000 + $17,500 = $27,500

and total debt for Gator Inc. = $8,875 + $20,000 = $28,875

What about shareholders' equity?

Recall that:

Assets = Liabilities + Shareholders' equity

A little algebraic manipulation gives us precisely the definition of shareholders equity:

Shareholders equity = Assets - Liabilities

For Proctor Corp., S. equity = Assets - long-term borrowings - short-term borrowings - payables

=60,800 - 10,000 - 17,500 - 22,300 = 11,000

Similarly,

Gator Inc. S. equity = 65,000 - 8,875 - 20,000 - 19,625 = 16,500

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (j) Explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables.

Q.3687 Exhibit 1 shows a limited amount of financial information that a private equity analyst has been able to gather from four private companies.

Exhibit 1: Financial Information

	Total Assets	Debt-to-Equity Ratio	Earnings
AAA	$250 million	3.5	$234,000
BBB	$195 million	1.2	$120,000
CCC	$300 million	2.0	$250,000
DDD	$280 million	0.35	$225,000

If the analyst wants to carry out a relative valuation of the four companies in exhibit 1, then the most appropriate ratio would be the:

A. price-to-earnings ratio.

B. EV/EBITDA ratio.

C. price-to-book ratio.

The correct answer is **B.**

The most appropriate ratio for carrying out a relative valuation of the four companies, given their diverse capital structures as indicated by their varying debt-to-equity ratios, is the EV/EBITDA ratio. The EV/EBITDA ratio, or Enterprise Value to Earnings Before Interest, Taxes, Depreciation, and Amortization, is a widely used valuation metric that compares the value of a company, including debt and equity, to its cash earnings excluding non-cash expenses.

It is particularly useful in situations where companies have different financing structures or tax situations, as it allows for a more apples-to-apples comparison by neutralizing the effects of financing and accounting decisions. This makes the EV/EBITDA ratio a more accurate measure of a company's underlying operational performance and its value relative to peers.

A is incorrect. It is significantly affected by the capital structure of a company. The P/E ratio measures the market price per share divided by the earnings per share (EPS), which can be heavily influenced by the company's debt levels and interest expenses. Since the companies in Exhibit 1 have varying debt-to-equity ratios, using the P/E ratio for relative valuation could lead to misleading comparisons due to the different impacts of leverage on each company's earnings.

C is incorrect. The price-to-book (P/B) ratio, which compares a company's market value to its book value, is also not the most suitable metric for this analysis. The P/B ratio can be influenced by the accounting methods used for asset valuation, depreciation, and other factors that may not accurately reflect the current market value of a company's assets or its operational performance.

The P/B ratio does not account for the companies' earnings capabilities or their debt levels, making it less relevant for comparing companies with diverse capital structures.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (l) Describe enterprise value multiples and their use in estimating equity value.

Q.3688 A trader is trying to find short-selling opportunities using price multiples. The P/E multiple of a few stocks is given in exhibit 1:

Exhibit 1: P/E Multiples vs. Industry Average

Company	P/E Multiple
AAA	2.3
BBB	3.4
CCC	6.3
DDD	2.2
Industry Average	2.2

The equity trader concludes that the shares of CCC are the most overvalued. However, to confirm his hypothesis, he tries to study the fundamental factors which may have driven up the company's P/E ratio. None of the underlying factors based on trailing earnings, such as the payout ratio, justify such a massive valuation. To further confirm whether the company is currently overvalued, the trader must *most* likely:

A. perform a discounted cash flow (DCF) valuation.

B. compare the forward price-to-earnings ratio of all firms.

C. perform an asset-based valuation.

The correct answer is **B.**

To accurately assess whether CCC is overvalued, the equity trader should compare the forward price-to-earnings (P/E) ratios of all firms within the same industry. The forward P/E ratio is a valuation metric that uses projected earnings over the next 12 months, rather than historical earnings.

This approach provides a more current perspective on the company's valuation, taking into account expected growth rates, future earnings potential, and market sentiment. By comparing forward P/E ratios, the trader can better understand if CCC's high current P/E ratio is justified by its future earnings prospects or if it indeed indicates overvaluation relative to its peers.

A is incorrect. DCF analysis requires detailed financial information and assumptions about future growth rates, discount rates, and terminal values, which can be time-consuming and complex. While DCF is a valuable tool for valuation, it might not be the most straightforward approach for quickly assessing overvaluation based on price multiples.

C is incorrect. An asset-based valuation focuses on a company's net asset value, calculating the total value of its assets minus the total value of its liabilities. This method is more relevant for companies with significant tangible assets and in certain industries like real estate or investment companies.

For an equity trader looking to assess overvaluation through price multiples, an asset-based valuation might not provide the most relevant insights. It does not directly address the issue of the company's earnings potential and growth prospects, which are critical factors influencing P/E ratios and overall market valuation.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (f) Explain advantages and disadvantages of each category of valuation model.

Q.3689 The owner of a software company intends to sell his medium-sized business. However, if the owner is not willing to sell its proprietary software codes to the acquirer, then the *most* appropriate metric to value the company would be a/an:

A. price-to-sales multiple valuation.

B. asset-based valuation.

C. discounted cash flow (DCF) valuation.

The correct answer is **B.**

When the owner of a software company is unwilling to sell its proprietary software codes to the acquirer, the most appropriate metric to value the company would be an asset-based valuation. This approach focuses on the company's assets, both tangible and intangible, excluding the proprietary software codes in this scenario.

Asset-based valuation is particularly suitable in situations where the company's primary value drivers, such as proprietary technology or software codes, are not part of the sale. This method assesses the value of the company based on the net asset value, which is the difference between the total assets and total liabilities.

It provides a clear picture of the company's worth from a purely asset-centric perspective, making it the most appropriate choice under these circumstances.

A is incorrect. Price-to-sales multiple valuation relies on comparing the company's sales or revenue to its market value, which can be significantly influenced by proprietary software codes in a software company. This method might not accurately reflect the company's value without including the proprietary codes, as these codes are often a critical driver of sales and profitability in the software industry.

Therefore, using a price-to-sales multiple without considering the value contributed by the proprietary software codes could lead to an inaccurate valuation.

C is incorrect.

The exclusion of proprietary software codes from the sale could significantly impact the company's future cash flows, making it challenging to accurately forecast these cash flows without considering the value and contribution of the software codes. Additionally, the DCF method requires assumptions about future growth rates and discount rates, which could introduce a high level of uncertainty in the valuation without the proprietary codes.

Therefore, an asset-based valuation is more appropriate in this context.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (e) Explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.

Q.3690 The sole owner of a digital marketing company that started its operations a few years ago intends to sell his business. If he is willing to sell all of the proprietary software codes to the acquirer, then the most appropriate metric to value the company would be the:

A. price-to-earnings ratio.

B. price-to-sales ratio.

C. price-to-book value ratio.

The correct answer is **B.**

The most appropriate metric to value a digital marketing company that is willing to sell all of its proprietary software codes to the acquirer is the price-to-sales ratio. This decision is based on several factors that are unique to the nature of the business and its assets.

The price-to-sales ratio is a valuation ratio that compares a company's stock price to its revenues, providing an indication of the value placed on each dollar of a company's sales or revenues. This metric is particularly useful for valuing companies that may not yet be profitable or have significant intangible assets, such as proprietary software codes, which can be difficult to value accurately using other metrics.

A is incorrect. The price-to-earnings ratio, which compares a company's stock price to its earnings per share, is not the most appropriate metric in this scenario. For a digital marketing company that started its operations a few years ago, it is possible that the company has not yet achieved stable or significant earnings.

Startups and young companies often reinvest their earnings into the business to fuel growth, which can result in low or negative earnings in the initial years. Therefore, using the price-to-earnings ratio could undervalue the company or fail to provide a meaningful valuation metric due to the lack of substantial earnings.

C is incorrect. The price-to-book value ratio, which compares a company's stock price to its book value per share, is also not suitable for valuing a company that intends to sell all of its proprietary software codes.

The book value primarily reflects the net asset value of a company as recorded on its balance sheet, which includes tangible assets and certain intangible assets. However, proprietary software codes, while potentially highly valuable, may not be fully captured or accurately valued on the balance sheet.

Intangible assets like software codes can have significant value based on their potential to generate future revenue, but this value may not be reflected in the book value. As a result, the price-to-book value ratio may not provide a comprehensive valuation of the company, especially when the proprietary software codes are a key asset.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (k) Calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to book value.

Q.3691 The trailing and forward price multiples of the shares of few companies are furnished in the table below:

Company	Sector	Trailing P/E Multiple	Forward P/E Multiple
A	Telecom	4.34	1.30
B	Oil and Gas	3.20	4.25
C	Consumer Staples	3.25	3.30
D	Banking	2.30	3.28
E	Social Media	3.23	3.90

If only the price multiples are considered, then the company which appears to be the most undervalued is Company:

A. A.

B. D.

C. E.

The correct answer is **A.**

When evaluating the valuation of companies based on price multiples, both trailing and forward Price-to-Earnings (P/E) ratios are significant indicators. The trailing P/E ratio is based on past earnings, while the forward P/E ratio is based on projected future earnings.

Generally, a lower P/E ratio may indicate that the company is undervalued relative to its earnings. In this context, Company A, with a forward P/E ratio of 1.30, appears to be the most undervalued among the options provided. This is because investors are paying the least amount for each dollar of Company A's future earnings compared to the other companies listed, suggesting that Company A's stock might be undervalued.

B is incorrect. Company D, with a forward P/E ratio of 3.28, is not the most undervalued company based on the information provided. While Company D's forward P/E ratio is relatively low, indicating some level of undervaluation, it is not the lowest among the options.

The forward P/E ratio is a forward-looking metric that helps investors gauge the market's expectations for a company's future earnings growth. Since Company A has a lower forward P/E ratio (1.30) compared to Company D, Company A is considered more undervalued than Company D when only price multiples are considered.

C is incorrect. Company E, with a forward P/E ratio of 3.90, is not the most undervalued based on the forward P/E ratios provided. The forward P/E ratio is an essential tool for investors to evaluate a company's stock price relative to its expected future earnings. A higher forward P/E ratio may indicate that the market has higher expectations for a company's future earnings growth.

However, when assessing undervaluation solely based on price multiples, a lower forward P/E ratio is preferable. Since Company A has a significantly lower forward P/E ratio (1.30) compared to Company E, it is considered more undervalued than Company E in this context.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (k) Calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to book value.

Q.3766 The following data is available on a company:

- Comprehensive income – $ 150 million
- Other Comprehensive Income – $ 40 million
- Common Shares Outstanding – 30 million
- Stock Price Per Share - $ 40

On a net income basis, the Company's P/E is closest to:

A. 10.91

B. 8

C. 3.667

The correct answer is **A.**

To determine the Price to Earnings (P/E) ratio on a net income basis for the company, we first need to calculate the Net Income and Earnings Per Share (EPS). Net Income is derived by subtracting Other Comprehensive Income from Comprehensive Income. In this case, the Net Income is calculated as follows:

$$\text{Net Income} = \text{Comprehensive Income} - \text{Other Comprehensive Income}$$

$$= 150 \text{ Million} - 40 \text{ Million} = \$110 \text{ Million}$$

$$\text{Earnings Per Share (EPS)} = \frac{\text{Net Income}}{\text{Common Shares Outstanding}}$$

$$= \$110 \text{ Million}/30 \text{ Million} = \$3.667$$

$$P/E = \frac{\text{Stock Price}}{\text{EPS}}$$

$$= \frac{\$40}{3.667} = 10.91$$

B is incorrect. This is because it represents comprehensive P/E and not net P/E

$$\text{Comprehensive Income Per Share} = \frac{\text{Comprehensive Income}}{\text{Common Shares Outstanding}}$$

$$= \frac{\$150\ \text{Million}}{30\ \text{Million}} = \$5$$

$$\frac{P}{E} = \frac{\text{Stock Price}}{\text{Comprehensive Income Per Share}} = \frac{\$40}{\$5} = 8$$

C is incorrect. This is because it represents the basic EPS and not the P/E.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (k) Calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to book value.

Q.3873 The most recent annual dividend declared by Creed Inc. to all shareholders is $0.78 per share. The stock is currently trading at $28 per share. Analysts expect the dividend to grow at 4 percent per year and the required rate of return on the market is 8%. The intrinsic value of the stock is *closest to:*

A. 27.59

B. 19.5

C. 20.28

The correct answer is **C.**

According to the Gordon growth model:

$$V_0 = \frac{D_1}{r-g} = \frac{D_0(1+g)}{r-g} = \frac{0.78(1.04)}{0.08-0.04} = \$20.28 \text{ per share}$$

Note that we do not use the current price of the stock in calculating the stock's intrinsic value. Our goal here is to find the intrinsic value and to then decide if the stock is under or overvalued.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (g) Calculate the intrinsic value of a non-callable, non-convertible preferred stock.

Q.3875 A company has recently announced an annual dividend on its stock of $0.78. Analysts believe the dividends are expected to grow at an annual rate of 4% for 5 years and then 2% thereafter. If the required rate of return on equity is 8 percent, then the intrinsic value of the share of stock is closest to:

A. 3.49

B. 16.13

C. 14.49

The correct answer is **C.**

Step 1: Find PV of income in the high-growth period

$$PV = \frac{0.78(1.04)}{1.08} + \frac{0.78(1.04)^2}{1.08^2} + \frac{0.78(1.04)^3}{1.08^3} + \frac{0.78(1.04)^4}{1.08^4} + \frac{0.78(1.04)^5}{1.08^5} = \$3.49$$

Step 2: Find PV of income in the stable-growth period

$$\text{PV at time } 5 = V_n = \frac{D_{n+1}}{r - g_l} = \frac{0.78 \times 1.04^5 \times 1.02}{0.08 - 0.02} = \$16.13$$

$$\text{PV at time } 0 = \frac{16.13}{1.08^5} = \$11$$

Step 3: Sum up the PVs of the high growth and stable-growth periods

$$= \$3.49 + \$11 = \$14.49$$

We can use the financial calculator to arrive at the above answer. First, we calculate the future selling price using Gordon's Growth Model formula.

$$V_o = \frac{D_1}{r - g} = \frac{D_o\,(1 + g)}{r - g}$$

$$= \frac{0.78 \times (1 + 0.04)^5 \times (1 + 0.02)}{0.08 - 0.02} = 16.1328$$

Then we use the CF function of the financial calculator to solve. We will add the above-calculated future selling price (16.1328) to the last cash flow (CF5)

$$[CF0 = 0,\ CF1 = 0.78 \times 1.04,\ CF2 = 0.78 \times (1.04^2),\ CF3 = 0.78 \times (1.04^3),\ CF4 = 0.78 \times (1.04^4)$$

Press "CPT" "NPV," input "I" as 8, then finally press "CPT" to get the NPV as 14.49.

CFA Level 1, Topic 6 - Equity Investments, Learning Module 8: Equity Valuation: Concepts and Basic Tools, LOS (g) Calculate the intrinsic value of a non-callable, non-convertible preferred stock.