

Q.127 A portfolio consisting of perfectly positive correlated assets:

- A. Does not affect diversification.
- B. Minimizes unsystematic risk.
- C. Minimizes systematic risk.

The correct answer is **A**.

A portfolio consisting of perfectly positive correlated assets has no effect of diversification.

B is incorrect. Unsystematic risk, also known as specific risk, is the risk that is unique to a particular company or industry. By investing in assets that are perfectly positively correlated, an investor is essentially exposed to the same types of unsystematic risk across all investments, as they would all respond identically to market changes. Therefore, this approach does not minimize unsystematic risk but rather, it fails to mitigate it through diversification.

C is incorrect. Systematic risk, also known as market risk, is the risk inherent to the entire market or market segment. Systematic risk affects the overall market, not just a particular stock or industry. Since it impacts the entire market, it cannot be eliminated through diversification. A portfolio of perfectly positively correlated assets does not minimize systematic risk; instead, it means that the portfolio is fully exposed to market movements without the cushioning effect that diversification among non-correlated or negatively correlated assets might provide.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (d): Explain how risk tolerance affects risk management.

Q.1183 Risk communication across the organization is *most likely* part of the:

- A. Risk management process.
- B. Risk management framework.
- C. Risk governance.

The correct answer is **B**.

Risk communication concerns across the organization is one of the several activities defined in the risk management framework.

A is incorrect. While risk communication is an integral part of the overall risk management process, which includes the identification, assessment, response, and monitoring of risk, the question specifically refers to the structural and organizational aspect of risk communication. The risk management process focuses more on the operational steps taken to manage risk, rather than the overarching structure and policies that govern how risk communication is implemented across the organization. Therefore, the risk management process is not the most accurate answer in this context.

C is incorrect. Risk governance refers to the higher-level framework that defines the roles, responsibilities, and accountabilities of various stakeholders in managing risk, as well as the policies and principles guiding the organization's risk management practices. While risk governance sets the tone and direction for how risk is managed within an organization, including aspects of risk communication, the question specifically targets the operational aspect of how risk communication is carried out across the organization. Risk governance provides the overarching principles and structure, but the risk management framework is what operationalizes these principles, including the mechanisms for risk communication.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (b): Describe features of a risk management framework.

Q.1188 The purpose of risk governance is to seek to manage risk in order to achieve:

- A. Organizational goals.
- B. Senior management's goals.
- C. Shareholders' goals.

The correct answer is **A**.

Risk governance plays a crucial role in ensuring that an organization can effectively manage and mitigate risks to achieve its overarching goals. This comprehensive approach to risk management involves setting the right policies, procedures, and controls to manage risk across the organization. It is designed to align risk appetite and strategy, enhance risk response decisions, and reduce operational surprises and losses. By integrating risk management practices into the organization's governance, strategy, and planning processes, risk governance ensures that all levels of the organization are involved in identifying, assessing, and responding to risks in a manner that supports the achievement of organizational objectives.

B is incorrect. Suggesting that the purpose of risk governance is solely to achieve senior management's goals is a narrow view that overlooks the broader objectives of risk governance. While senior management plays a significant role in setting the direction and risk appetite of the organization, risk governance aims to serve the interests of the entire organization, including its employees, customers, and other stakeholders. By focusing only on senior management's goals, this option fails to recognize the importance of aligning risk management efforts with the organization's overall strategy and objectives, which are essential for sustainable growth and success.

C is incorrect. While shareholders' goals, particularly in terms of maximizing shareholder value, are important for any organization, risk governance seeks to balance these goals with the broader objectives of the organization. This includes ensuring the safety and well-being of employees, maintaining customer satisfaction, and contributing to the community and environment. Risk governance involves a holistic approach to managing risk that considers the interests of all stakeholders, not just shareholders. By focusing solely on shareholders' goals, this option misses the essence of risk governance, which is to manage risk in a way that supports the achievement of the organization's comprehensive set of goals.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (c): Define risk governance and describe elements of effective risk governance.

Q.1189 The risk associated with the uncertainty regarding the fulfillment of a contractual obligation by a counterparty is called:

- A. market risk.
- B. credit risk.
- C. liquidity risk.

The correct answer is **B**.

Credit risk is the uncertainty about whether counterparties will fulfill their obligations.

B is incorrect. Suggesting that the purpose of risk governance is solely to achieve senior management's goals is a narrow view that overlooks the broader objectives of risk governance. While senior management plays a significant role in setting the direction and risk appetite of the organization, risk governance aims to serve the interests of the entire organization, including its employees, customers, and other stakeholders. By focusing only on senior management's goals, this option fails to recognize the importance of aligning risk management efforts with the organization's overall strategy and objectives, which are essential for sustainable growth and success.

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CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (c): Define risk governance and describe elements of effective risk governance.

Q.1190 The risk of restrictions on the firm's activities is associated with the:

- A. Regulatory risk.
- B. Credit risk.
- C. Governmental risk.

The correct answer is **A**.

Regulatory risk is associated with changes in the regulatory framework that can hinder the activities of an organization.

B is incorrect. Credit risk pertains to the possibility that a borrower will default on their financial obligations to the lender. It is primarily concerned with the creditworthiness of counterparties in financial transactions and does not directly relate to restrictions on a firm's activities due to regulatory changes. While credit risk can impact a firm's financial health and its ability to secure financing, it does not encompass the broader scope of regulatory risks that can affect a firm's operational, strategic, and compliance frameworks.

C is incorrect. Governmental risk, often referred to as political risk, involves the risk that government actions or instability can adversely affect a firm's operations or profitability. This can include changes in government policies, expropriation of assets, political unrest, or changes in trade policies. While governmental risk can overlap with regulatory risk, especially in cases where government actions result in new regulations, it is broader and encompasses a wider range of non-regulatory actions that can impact a firm. Regulatory risk is specifically focused on the risk associated with changes in the regulatory framework within which a firm operates.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (c): Define risk governance and describe elements of effective risk governance.

Q.1191 The non-financial risk associated with organizations is *most likely* called:

- A. Market risk.
- B. Tax risk.
- C. Interest rate risk.

The correct answer is **B**.

The non-financial risk associated with organizations is most accurately referred to as tax risk. Non-financial risks encompass a broad range of risks that are not directly related to the financial markets or financial instruments. These include operational risks, legal risks, and external risks such as political, environmental, and indeed, tax risks. Tax risk specifically pertains to the uncertainty and potential financial loss that organizations face due to changes in tax laws, tax rates, or disputes over tax filings. This type of risk can significantly impact an organization's financial planning and operations, making it a critical area of concern for businesses.

A is incorrect. Market risk, also known as systematic risk, refers to the potential for investors to experience losses due to factors that affect the overall performance of the financial markets. This includes changes in interest rates, exchange rates, and stock market fluctuations. Market risk affects the value of investments in stocks, bonds, and other securities, making it a financial rather than a non-financial risk. Therefore, it does not accurately describe the non-financial risks associated with organizations, such as tax risk.

C is incorrect. Interest rate risk is a type of financial risk that arises from fluctuations in interest rates. It affects the value of fixed-income securities, such as bonds, as well as loans and mortgages. When interest rates rise, the value of existing bonds typically falls, and vice versa. This risk is directly related to the financial markets and the performance of financial instruments, distinguishing it from non-financial risks like tax risk. Interest rate risk is a concern for investors and financial institutions, not a direct representation of the non-financial risks faced by organizations in their operational or external environments.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (f): Identify financial and non-financial sources of risk and describe how they may interact.

Q.1192 Which of the following is *least likely* a type of financial risk?

- A. Credit risk
- B. Accounting risk
- C. Liquidity risk

The correct answer is **B.**

Accounting risk is least likely to be considered a direct type of financial risk when compared to credit risk and liquidity risk. Financial risk typically encompasses those risks that directly impact the financial standing or financial transactions of an entity. These include, but are not limited to, risks associated with the ability of counterparties to fulfill their financial obligations (credit risk), the risk of loss resulting from inadequate or failed internal processes, people, and systems, or from external events (operational risk), and the risk associated with the inability to convert assets into cash without significant loss in value (liquidity risk).

A is incorrect. Credit risk is a fundamental type of financial risk. It refers to the risk that a borrower will default on any type of debt by failing to make the required payments. In the financial markets, this can relate to the risk inherent in lending money or extending credit. It is a critical risk for banks, financial institutions, and investors, making it a core component of financial risk management practices. Credit risk assessment and management are essential for maintaining the financial health and stability of lending institutions and for ensuring the integrity of the broader financial system.

C is incorrect. It cannot convert assets to cash quickly enough. This risk can affect both financial institutions and companies outside the financial sector. In the context of investments, liquidity risk is the risk that an investor will not be able to sell or liquidate an asset at or near its value due to a lack of buyers or an inefficient market. Managing liquidity risk is crucial for the ongoing solvency and operational capability of any financial entity or investment portfolio.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (d): Explain how risk tolerance affects risk management.

Q.1193 The risk that arises from incorrectly concluding that extreme events are *least likely* to occur than they actually are is called:

- A. Environmental risk.
- B. Risk of natural disasters.
- C. Tail risk.

The correct answer is C.

Tail risk refers to the risk of extreme market movements that are not captured by standard risk models. This type of risk is associated with events that have a small probability of occurring but can lead to significant losses if they do happen. The term "tail" comes from the shape of the probability distribution curves used in finance, where the ends or "tails" of the distribution represent rare and extreme outcomes. Traditional financial models often assume a normal distribution of returns, which underestimates the likelihood and impact of these extreme events.

A is incorrect. Environmental risk refers to the potential for environmental changes or disasters to impact financial markets or specific investments. While environmental risks can lead to significant financial consequences, they are not specifically related to the underestimation of extreme market events represented by tail risk. Environmental risks encompass a broader range of issues, including climate change, natural disasters, and pollution, which can affect the performance of investments in various sectors.

B is incorrect. The risk of natural disasters, similar to environmental risk, involves the potential financial impact of natural events such as earthquakes, hurricanes, and floods. While these events can cause significant damage and lead to financial losses, the term "risk of natural disasters" does not specifically address the concept of tail risk, which is focused on the underestimation of the likelihood and impact of extreme market movements. Natural disaster risk is more concerned with the direct physical and economic effects of natural events on specific regions, industries, or assets.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (f): Identify financial and non-financial sources of risk and describe how they may interact.

Q.1194 The longevity risk or risk of living longer than anticipated can be mitigated by:

- A. buying insurances.
- B. buying lifetime annuities.
- C. buying T-Bills.

The correct answer is **B**.

Buying insurances mitigate the risk of mortality.

T-Bills have a given maturity. Therefore, they cannot be used to mitigate the risk of longevity.

A is incorrect. While buying insurance can protect against various risks, such as health issues or property damage, it does not directly mitigate longevity risk. Insurance policies typically provide coverage for specific events or losses and do not offer a continuous income stream in retirement. Therefore, while insurance is an important part of a comprehensive financial plan, it does not address the core issue of ensuring sustained income in the event of an unexpectedly long life.

C is incorrect. Treasury Bills (T-Bills) are short-term government securities with maturities ranging from a few days to 52 weeks. They are considered a safe investment, but they do not provide a solution to longevity risk. T-Bills need to be rolled over upon maturity to maintain investment, and their interest rates do not guarantee an income stream sufficient to cover living expenses indefinitely. Furthermore, T-Bills are subject to interest rate risk and inflation risk, which can erode the purchasing power of the income they generate. Therefore, while T-Bills can be part of a diversified investment portfolio, they do not offer a direct means of mitigating longevity risk.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (d): Explain how risk tolerance affects risk management.

Q.1195 Which of the following is used to measure the price sensitivity of bonds to the changes in market interest rates?

- A. Duration
- B. Yield-to-maturity
- C. Beta

The correct answer is **A**.

Duration is used to measure the price sensitivity of debt securities to the interest rate.

B is incorrect. Yield-to-maturity (YTM) is a different concept from duration. YTM is the total return anticipated on a bond if the bond is held until it matures. It is a comprehensive measure that considers the annual income payments, the bond's current market price, and the amount that will be received at maturity. While YTM does factor into the calculation of a bond's price and can be affected by changes in interest rates, it does not directly measure the bond's price sensitivity to those changes. Instead, YTM provides an estimate of the bond's overall expected return, assuming it is held to maturity and all payments are made as scheduled.

C is incorrect. Beta is a measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole. It is primarily used in the context of equity securities and portfolios to determine their sensitivity to market movements. A beta greater than 1 indicates that the security's price is expected to be more volatile than the market, while a beta less than 1 suggests that the security is expected to be less volatile. Although beta is a critical measure in assessing the risk and expected return of equities, it does not apply to the price sensitivity of bonds to interest rate changes.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (d): Explain how risk tolerance affects risk management.

Q.1197 BCG Bank has a one-month Value at Risk (VaR) of \$600 million with the probability of 7%, which means:

- A. A one-month maximum loss of \$600 million will occur 7% of the time.
- B. A one-month minimum loss of \$600 million will occur 7% of the time.
- C. A loss of \$600 million will occur one month from now.

The correct answer is **B**.

Value at Risk (VaR) is a measure of the potential loss on a portfolio of assets, given a certain level of confidence and a specific period of time. In this case, BCG Bank has a one-month VaR of \$600 million with a probability of 7%.

Another way to interpret a one-month VaR of \$600 million with a probability of 7% is that, there is a 7% chance that the bank will experience a minimum loss of \$600 million over the course of one month. This means that the bank's portfolio of assets has a 93% chance of not losing more than \$600 million over the same period.

A is incorrect. This option suggests that a one-month maximum loss of \$600 million will occur 7% of the time. However, this interpretation is slightly misleading. VaR does not predict the maximum loss but rather the minimum loss at a certain confidence level. Therefore, stating it as a "maximum" loss does not accurately represent the concept of VaR, which is focused on the threshold that losses are not expected to exceed only 7% of the time, implying that losses could be greater than \$600 million but not less, within the specified period.

C is incorrect. This option implies that a loss of \$600 million is certain to occur one month from now, which misinterprets the probabilistic nature of VaR. VaR provides a measure of potential loss at a specific confidence level (in this case, 7%) but does not predict when a loss will occur. It indicates the risk of experiencing a loss of at least \$600 million within a one-month period, but it does not guarantee that such a loss will happen in the next month. The essence of VaR is in its ability to quantify risk in terms of both the size of the potential loss and the probability of that loss occurring, not in forecasting specific losses for specific future periods.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (d): Explain how risk tolerance affects risk management.

Q.1198 Matt Frank is an equity analyst at the Istanbul Income Fund who wants to measure the benefits of diversification in equity portfolios. Which of the following measures serves the purpose of measuring diversification?

- A. Beta
- B. Standard deviation
- C. Delta

The correct answer is **B**.

The measure that serves the purpose of measuring diversification in equity portfolios is standard deviation.

Standard deviation is a measure of risk and volatility in an equity portfolio. It quantifies how much the returns of individual assets within the portfolio vary from the portfolio's overall average return. A lower standard deviation indicates less variability or risk in the portfolio, which can be a result of diversification. Therefore, standard deviation is a common measure used to assess the benefits of diversification in equity portfolios. A well-diversified portfolio typically has a lower standard deviation compared to a concentrated or undiversified portfolio.

A is incorrect. Beta measures the sensitivity of an asset's returns to the returns of the market or a benchmark index, not the diversification of a portfolio. It is a gauge of systematic risk, which is the risk inherent to the entire market or market segment. While beta can indicate how much risk an individual asset or portfolio may add to a diversified portfolio, it does not measure the benefits of diversification itself. Beta is more relevant in understanding how a specific asset's returns move in relation to market movements and is used in the Capital Asset Pricing Model (CAPM) to calculate the expected return of an asset based on its beta and the expected market returns.

C is incorrect. Delta is a measure used in options trading that indicates how the price of an option is expected to change relative to a \$1 change in the price of the underlying asset. It is part of the Greeks, which are parameters used to measure different types of risk in options portfolios. Delta is specifically related to price sensitivity and does not serve the purpose of measuring diversification in equity portfolios. Diversification involves spreading investments across various assets to reduce risk, whereas delta is concerned with the sensitivity of an option's price to movements in its underlying asset's price.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (f): Identify financial and non-financial sources of risk and describe how they may interact.

Q.1199 Which of the following will pay for losses incurred to the employer by employees' theft or misconduct?

- A. Fidelity Bond
- B. Euro Bond
- C. Surety

The correct answer is **A.**

A fidelity bond is a form of insurance protection that businesses purchase to safeguard against losses caused by fraudulent acts or dishonesty of their employees. This type of bond is particularly important in industries where employees handle cash or sensitive financial information. It serves as a safeguard, ensuring that the employer is compensated for any financial losses resulting from employee theft, embezzlement, or other forms of misconduct. The fidelity bond is essentially a guarantee from the insurer to the employer that they will be protected against losses due to dishonest acts by their employees.

B is incorrect. Euro Bond refers to a type of international bond that is issued in a currency not native to the country where it is issued. For example, a bond issued in US dollars by a European company. Euro Bonds are used by companies, governments, or other entities to raise capital in the international market. They are not designed to protect against losses from employee theft or misconduct. Therefore, suggesting that a Euro Bond would cover such losses misunderstands the purpose and function of Euro Bonds in the financial markets.

A surety bond is a three-party agreement where the surety (insurance company) guarantees to a party (obligee) that a second party (principal) will fulfill an obligation or series of obligations to the obligee. This might include fulfilling a contract or complying with legal requirements. While surety bonds do provide a form of financial guarantee, they are not specifically designed to cover losses incurred due to employee theft or misconduct. Instead, surety bonds are more commonly used in the context of contractual obligations, licensing, and permits. Therefore, suggesting that a surety bond directly pays for losses incurred by employee theft or misconduct does not accurately capture the primary function of surety bonds.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (f): Identify financial and non-financial sources of risk and describe how they may interact.

Q.1200 Which of the following "Greeks" measures the amount that an option contract's price changes in reaction to a change in the implied volatility of the underlying asset?

- A. Rho
- B. Vega
- C. Gamma

The correct answer is **B.**

Derivatives risk measures are also referred to as "Greeks." Vega measures the sensitivity of derivatives value to the volatility of prices of underlying assets.

A is incorrect. Rho measures the sensitivity of an option's price to changes in the risk-free interest rate. Specifically, it represents the change in the price of an option for a one percentage point change in interest rates. Rho is more relevant for options with longer time to expiration, as the impact of interest rate changes is more pronounced over longer periods. However, Rho's impact on option pricing is generally considered to be less significant than the effects of other Greeks, such as Delta, Gamma, and Vega, especially for short-term options.

C is incorrect. Gamma measures the rate of change of an option's Delta with respect to changes in the price of the underlying asset. In other words, Gamma reflects the sensitivity of Delta itself to movements in the underlying asset's price. A high Gamma value indicates that Delta is highly sensitive to price changes, which means the option's price is likely to exhibit significant volatility as the underlying asset price changes. Gamma is highest for at-the-money options and decreases as the option becomes more deeply in-the-money or out-of-the-money. Understanding Gamma is essential for managing the risk of an options portfolio, especially for delta-neutral hedging strategies.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (e): Describe risk budgeting and its role in risk governance.

Q.2850 The process of adjusting the risk being taken towards the risk to be taken to maximize the portfolio's value is called:

- A. Risk measurement.
- B. Risk exposure.
- C. Risk management.

The correct answer is C.

Risk management is the process of adjusting the risk being taken towards the risk to be taken to maximize the company's or portfolio's value or the individual's overall utility.

A is incorrect. Risk measurement is a component of the broader risk management process. It involves quantifying risk in terms of likelihood and impact, which is a crucial step in understanding the overall risk exposure of a portfolio or organization. However, risk measurement on its own does not encompass the actions taken to adjust or control risk, which is the essence of risk management.

B is incorrect. Risk exposure refers to the extent to which a company or individual is vulnerable to various risks. While understanding risk exposure is a critical part of risk management, it is not synonymous with the process itself. Risk exposure is more about identifying and quantifying risks, whereas risk management includes the additional steps of prioritizing and implementing strategies to mitigate or capitalize on those risks to maximize value.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (b): Describe features of a risk management framework.

Q.2851 Which of the following is *least likely* a goal of the risk management process?

- A. Identifying the risk
- B. Taking the risk to maximize the company's value
- C. Minimizing the risk

The correct answer is **C**.

While minimizing risk might seem like a logical goal of risk management, it is not the primary objective. The main goal is not to minimize all risks but to manage them in a way that balances risk with opportunity. Excessive risk aversion can hinder a company's ability to innovate and grow. Therefore, the risk management process focuses on making informed decisions that allow the company to pursue strategic opportunities while managing the associated risks in a way that is aligned with the company's overall objectives and risk appetite. This involves accepting certain risks when the potential rewards justify doing so, rather than seeking to minimize risk at all costs.

A is incorrect. Identifying the risk is actually a crucial initial step in the risk management process. Without the identification of potential risks, it would be impossible to assess or manage them effectively. This step involves recognizing the various risks that could impact the company's operations, financial performance, or strategic objectives. It is the foundation upon which the rest of the risk management process is built, as it allows for a systematic approach to analyzing and addressing risks.

B is incorrect. Taking risks to maximize the company's value is an essential aspect of strategic risk management. This option is often misunderstood; however, it is important to recognize that risk-taking is not inherently negative. Strategic risk-taking involves making calculated decisions to pursue opportunities that have the potential to enhance the company's value, even if they involve certain risks. The key is in assessing the potential benefits against the risks to ensure that the decisions made are in the best interest of the company and its stakeholders. This approach recognizes that avoiding all risks can limit a company's growth and competitive advantage.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (d): Explain how risk tolerance affects risk management.

Q.2853 Which of the following key factors of the risk management framework involves the quantitative assessment of potential sources of risk and the organization's risk exposure?

- A. Risk analysis and integration
- B. Risk identification and measurement
- C. Risk infrastructure

The correct answer is **B**.

Risk identification and measurement is the key element of the risk management framework that involves the quantitative assessment of potential sources of risk and the organization's risk exposure.

A is incorrect. Risk analysis and integration refer to the process of analyzing identified risks and integrating risk management practices into the organization's overall strategy and operations. While this is an important aspect of risk management, it does not specifically focus on the quantitative assessment of potential sources of risk and the organization's risk exposure. Instead, it deals with how identified and measured risks are analyzed in the context of the organization's objectives and how risk management is embedded within the organizational processes and decision-making.

C is incorrect. Risk infrastructure pertains to the systems, processes, and frameworks established within an organization to support effective risk management. This includes the policies, procedures, technology, and governance structures that enable the identification, measurement, monitoring, and control of risks. Although risk infrastructure is critical for implementing risk management practices, it does not directly involve the quantitative assessment of potential sources of risk and the organization's risk exposure. Instead, it provides the foundation and tools necessary for carrying out these and other risk management activities.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (b): Describe features of a risk management framework.

Q.2854 Which of the following is *least likely* an element of the risk management framework for an individual?

- A. Risk communication
- B. Risk identification and measurement
- C. Risk monitoring

The correct answer is **A**.

As the individual is its own governance body, there is no need for risk communication. Therefore, option A) is least likely an element of the risk management framework for an individual.

B is incorrect. Risk identification and measurement are fundamental components of any risk management framework, including for individuals. This process involves recognizing potential risks that could impact one's financial goals and assessing the magnitude and likelihood of those risks. Without accurately identifying and measuring risks, individuals cannot effectively manage or mitigate those risks to protect their financial well-being.

C is incorrect. Risk monitoring is another essential element of the risk management framework for individuals. It involves regularly reviewing and assessing the risk landscape to identify any changes or new risks that may have emerged. Continuous monitoring ensures that individuals can adjust their risk management strategies as needed to respond to evolving risks and maintain alignment with their financial objectives. Without ongoing risk monitoring, individuals may fail to recognize shifts in the risk environment, potentially exposing themselves to unforeseen threats.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (b): Describe features of a risk management framework.

Q.2855 Which of the following are two important areas in which governing bodies drive the risk framework?

- A. Defining the risk tolerance of the organization and self-insuring the governing body
- B. Determining the organization's goals and defining the risk appetite/tolerance of the organization
- C. Determining the organization's goals and driving the organization away from taking risks

The correct answer is **B**.

The two important areas in the governing body that drive the risk framework are determining the organization's goals and defining the risk appetite/tolerance of the organization.

A is incorrect. While defining the risk tolerance of the organization is crucial, self-insuring the governing body is not typically considered a primary area driving the risk framework. Self-insurance might be a risk management strategy for specific risks, but it does not constitute a foundational element in the development of an organization's overall risk framework. The focus should instead be on broader strategies that encompass the entire spectrum of risks the organization faces.

C is incorrect. Although determining the organization's goals is essential, driving the organization away from taking risks is not a balanced approach to risk management. Risk-taking is an inherent part of business operations and strategic growth. A well-defined risk framework does not aim to eliminate risk-taking altogether but to manage it in a way that aligns with the organization's risk appetite and tolerance. This approach ensures that risks are taken judiciously, with a clear understanding of potential benefits and drawbacks, rather than avoiding risk-taking entirely, which could stifle innovation and growth opportunities.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (d): Explain how risk tolerance affects risk management.

Q.2856 The *most likely* risk tolerance activity that is conducted by the risk governance body of an organization is:

- A. Selecting portfolios of acceptable risk activities.
- B. Producing the highest returns at any given risk level.
- C. Establishing the organization's risk appetite.

The correct answer is C.

Establishing the organization's risk appetite is the important risk tolerance activity conducted by the risk governance body of an organization.

A and B are incorrect: Selecting portfolios of acceptable risk activities and producing the highest returns at any given risk level are activities that are usually conducted by the management of the organization.

A is incorrect. Selecting portfolios of acceptable risk activities is typically a management function rather than a governance function. While the risk governance body establishes the overall risk appetite and framework, it is the responsibility of management to implement this framework by selecting and managing specific risk activities within the established parameters. This involves analyzing various risk factors and making decisions about which risks to accept, mitigate, or avoid in order to achieve the organization's strategic objectives.

B is incorrect. Producing the highest returns at any given risk level is a goal often associated with investment management and portfolio optimization, rather than with the risk governance body's activities. This objective involves identifying the optimal mix of investments that can deliver the best possible returns for a given level of risk, based on the principles of modern portfolio theory. While the risk governance body sets the overall risk appetite, it is up to the investment managers and the management team to apply this guidance in their investment decisions and operational activities to achieve the desired balance between risk and return.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (c): Define risk governance and describe elements of effective risk governance.

Q.2857 Which of the following is the most appropriate risk tolerance definition from the enterprise risk management perspective?

- A. Risk tolerance identifies the extent to which the enterprise is willing to lose money and incur opportunity costs.
- B. Risk tolerance provides the organization-wide risk metrics for identifying the risk tolerance level of the investors.
- C. Risk tolerance is defined as quantifying and allocating the tolerable risk using specific metrics.

The correct answer is **A**.

From the enterprise risk management perspective, risk tolerance identifies the extent to which the enterprise is willing to experience losses, incur opportunity costs, and fail to meet its financial objectives.

B is incorrect. This option implies that risk tolerance is primarily about providing organization-wide risk metrics for identifying the risk tolerance level of investors. While risk metrics are indeed a crucial part of understanding and quantifying risk tolerance, this definition is too narrow and investor-focused for the broader concept of enterprise risk management. Risk tolerance in an enterprise context is about the organization as a whole, including but not limited to investors. It involves a comprehensive assessment of the enterprise's willingness and capacity to take on risks across all areas of operation, not just those directly related to investment decisions.

C is incorrect. This option defines risk tolerance as quantifying and allocating tolerable risk using specific metrics. While quantification and allocation of risk are important aspects of managing risk tolerance, this definition misses the essence of risk tolerance as a concept that encompasses the enterprise's overall willingness to accept and manage risk in pursuit of its strategic objectives. Risk tolerance is not just about the technical aspects of quantification and allocation but also involves a broader understanding of the enterprise's risk appetite, strategic goals, and financial capacity to absorb risk.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (d): Explain how risk tolerance affects risk management.

Q.2859 Which of the following is *most appropriate* for controlling the risk management function of the organization?

- A. Head of the risk committee
- B. Head of the audit committee
- C. Chief Financial Officer (CFO)

The correct answer is A.

The Chief Risk Officer (CRO) and the Risk Management Committee are the most appropriate for handling the risk management functions of large organizations.

B is incorrect. The Chief Financial Officer (CFO) is responsible for the organization's financial health, including planning, implementing, managing, and running all the finance activities, such as business planning, budgeting, forecasting, and negotiations. While the CFO plays a significant role in managing financial risks and has a vested interest in the organization's overall risk management framework, the CFO's responsibilities are broader and more strategic in nature. Risk management is just one aspect of the CFO's role, and they may not be involved in the detailed, day-to-day activities of risk management. Furthermore, the CFO's focus on financial performance and strategy might limit their capacity to dedicate the necessary attention to the comprehensive management of all types of risks the organization faces.

C is incorrect. The Chief Financial Officer (CFO) is indeed a key figure in managing financial risks and has a significant role in the organization's strategic planning, which includes risk management considerations. However, the CFO's broad scope of responsibilities, which encompasses the entire financial health of the organization, means that the specific task of controlling the risk management function is more effectively handled by the Head of the Risk Committee. The Risk Committee is dedicated solely to risk management, allowing for a more focused and specialized approach to identifying, assessing, and mitigating risks across the organization.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (c): Define risk governance and describe elements of effective risk governance.

Q.2861 Which of the following is *least likely* a type of financial risk?

- A. Credit risk
- B. Solvency risk
- C. Liquidity risk

The correct answer is **B.**

The types of financial risks include: market risk, credit risk, and liquidity risk. Solvency risk is categorized as a non-financial risk.

A is incorrect. Credit risk is a fundamental type of financial risk. It refers to the risk that a borrower will default on any type of debt by failing to make the required payments. In the financial markets, this can relate to the risk inherent in lending money or extending credit. It is a critical risk for banks, financial institutions, and investors, making it a core component of financial risk management practices. Credit risk assessment and management are essential for maintaining the financial health and stability of lending institutions and for ensuring the integrity of the broader financial system.

C is incorrect. It cannot convert assets to cash quickly enough. This risk can affect both financial institutions and companies outside the financial sector. In the context of investments, liquidity risk is the risk that an investor will not be able to sell or liquidate an asset at or near its value due to a lack of buyers or an inefficient market. Managing liquidity risk is crucial for the ongoing solvency and operational capability of any financial entity or investment portfolio.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (b): Describe features of a risk management framework.

Q.2862 Which of the following risks arises from a change in interest rates?

- A. Credit risk
- B. Solvency risk
- C. Market risk

The correct answer is **C**.

Market risk arises from the movement in interest rates, stock prices, commodity prices, and exchange rates.

A is incorrect. Credit risk, also known as default risk, refers to the possibility that a borrower will be unable to make the required payments on their debt obligations. This type of risk is primarily associated with fixed-income securities, such as bonds. Credit risk is more concerned with the issuer's financial health and ability to meet its obligations rather than changes in the market conditions like interest rates. Therefore, while credit risk is a significant concern for investors in debt securities, it does not directly arise from changes in interest rates.

B is incorrect. Solvency risk pertains to the risk that a company will not be able to meet its long-term financial obligations. This risk is more related to the overall financial stability and viability of a company rather than the immediate market conditions. Solvency risk is influenced by a company's capital structure, liquidity, and operational efficiency. While changes in interest rates can affect a company's cost of borrowing and potentially its solvency, solvency risk itself does not directly arise from interest rate movements. Instead, it is more concerned with the broader financial health and sustainability of an entity.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (f): Identify financial and non-financial sources of risk and describe how they may interact.

Q.2863 Which of the following is the risk associated with an organization unable to meet its long-term financial commitments?

- A. Solvency risk
- B. Credit risk
- C. Liquidity risk

The correct answer is **A.**

Solvency risk is the risk associated with an organization's inability to meet its long-term financial commitments. This type of risk is crucial for investors, creditors, and other stakeholders as it directly impacts an organization's long-term viability and its ability to sustain operations over time. Solvency risk is concerned with an entity's overall financial health, specifically its ability to generate enough cash flow to meet both its short-term and long-term obligations, including paying off long-term debts, interest, and other fixed charges. An organization that is unable to manage its solvency risk effectively may face bankruptcy or liquidation in the long term. Therefore, assessing solvency risk involves evaluating the entity's capital structure, leverage ratios, and the sustainability of its business model.

B is incorrect. Credit risk refers to the possibility that a borrower will default on a financial obligation, such as a loan, by failing to make the required payments. This type of risk is primarily associated with lending activities and is a concern for financial institutions, investors, and any party that extends credit to another. Credit risk focuses on the borrower's ability to repay the principal and interest on debts in the short term, rather than the organization's overall long-term financial health. While related, credit risk is distinct from solvency risk, as the latter encompasses a broader assessment of an organization's capacity to meet all its financial commitments over the long term.

C is incorrect. Liquidity risk pertains to an organization's ability to meet its short-term financial obligations as they come due without incurring unacceptable losses. This type of risk arises when an entity cannot easily convert assets into cash or obtain additional funding without a significant cost. Liquidity risk is concerned with the immediacy of cash flows and the organization's ability to manage its cash and short-term liabilities efficiently. It is a critical aspect of financial management, especially for entities facing volatile cash flows or operating in markets with limited access to quick funding. Unlike solvency risk, which deals with long-term financial health, liquidity risk is focused on the short-term operational aspects of managing cash flows and obligations.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (b): Describe features of a risk management framework.

Q.2864 Which of the following is *most likely* an example of model risk?

- A. Assuming that the tails of the return distribution are fat when, in fact, they are flat
- B. Using standard deviation for measuring the risk of asymmetrically distributed returns
- C. Using VaR to measure the risk on government bonds

The correct answer is **B**.

Model risk uses standard deviation to measure risk when returns are asymmetrically distributed. In finance, model risk is the risk of loss resulting from using models to make decisions, initially and frequently in the context of valuing financial securities.

A is incorrect. Assuming that the tails of the return distribution are fat when, in fact, they are flat, describes a scenario of incorrect assumption about the distribution characteristics rather than an inherent flaw in the model itself. While this assumption can lead to incorrect risk assessments, it is more about the misjudgment of the distribution's properties than the application of a model that is unsuitable for the data's nature.

C is incorrect. Using Value at Risk (VaR) to measure the risk on government bonds is not inherently an example of model risk. VaR is a widely used risk measure that estimates the maximum loss a portfolio could face over a given period with a certain confidence level. While there are limitations and assumptions in the VaR model that could introduce model risk, especially in its ability to predict extreme events or its applicability to assets with non-linear risks, the use of VaR itself is not a direct example of model risk. The effectiveness of VaR depends on the accuracy of the model's assumptions and the data's characteristics. Therefore, the critical factor is whether the model's assumptions align with the reality of government bonds' return distributions, not the use of VaR per se.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (g): Describe methods for measuring and modifying risk exposures and factors to consider in choosing among the methods.

Q.2865 Which of the following statements appropriately describes the risk drivers?

- I. Risk drivers are factors that influence industries and economies.
- II. Risk drivers are customized frameworks for mitigating organizational risks.
- III. Risk drivers are statistical metrics that measure risk.

- A. Statement I only
- B. Statements I & II only
- C. Statements I, II & III

The correct answer is **A**.

Risk drivers are defined as fundamental factors that influence macro economies and industries.

B is incorrect. This option incorrectly suggests that risk drivers are merely statistical metrics used to measure risk. While statistical metrics are indeed used in the assessment of risk, they are not synonymous with risk drivers. Risk drivers are the underlying factors that cause changes in risk levels, whereas statistical metrics are tools used to quantify and analyze these changes. Metrics such as volatility, beta, and Value at Risk (VaR) are used to measure the impact of risk drivers on investments or portfolios, but they do not constitute the drivers themselves.

C is incorrect. This option inaccurately combines the concept of risk drivers with frameworks for mitigating organizational risks. While understanding risk drivers is essential for risk mitigation, the drivers themselves are not frameworks or strategies. Risk mitigation frameworks are developed based on an understanding of risk drivers and are aimed at managing the impact of these drivers on an organization. These frameworks may include risk management policies, contingency planning, and risk transfer strategies. However, the drivers are the underlying factors that these frameworks aim to address, not the frameworks themselves.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (f): Identify financial and non-financial sources of risk and describe how they may interact.

Q.2867 Which of the following metrics measures the sensitivity of a security's returns to the returns of the market portfolio?

- A. Delta
- B. Beta
- C. Gamma

The correct answer is **B**.

Beta is the metric that measures the sensitivity of a security's returns to the returns of the market portfolio.

A is incorrect. Delta measures the sensitivity of an option's theoretical value to a change in the price of the underlying asset. It is a ratio that compares the change in the price of an asset, usually a derivative, to the corresponding change in the price of its underlying asset. Delta is primarily used in the trading of options and is part of the Greeks, which are various measures used to assess different types of risk in option portfolios. While delta does measure sensitivity, it is specific to options and their underlying assets, not the sensitivity of a security's returns to the market portfolio.

C is incorrect. Gamma is another metric from the Greeks, which measures the rate of change in the delta of an option for a one-unit change in the price of the underlying asset. Essentially, gamma reflects the stability of an option's delta, providing insight into how the delta could change as the market price of the underlying asset changes. Like delta, gamma is specific to options trading and does not measure the sensitivity of a security's returns to the returns of the market portfolio. It is more concerned with the curvature of the value of an option relative to the underlying asset's price, rather than the broader market's influence on a security's returns.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (f): Identify financial and non-financial sources of risk and describe how they may interact.

Q.2868 Which of the following metrics measures the sensitivity of derivative prices to small changes in the value of the underlying asset?

- A. Beta
- B. Delta
- C. Vega

The correct answer is **B.**

Delta measures the sensitivity of derivative prices to small changes in the value of the underlying asset.

A is incorrect. Beta measures the sensitivity of a stock's returns relative to the returns of a market benchmark. It is a measure of systematic risk, indicating how much the price of a particular stock is expected to move in relation to market movements. While beta is a critical concept in portfolio management and capital asset pricing, it does not directly measure the sensitivity of derivative prices to changes in the value of the underlying asset, which is the specific focus of delta.

C is incorrect. Vega measures the sensitivity of a derivative's price to changes in the volatility of the underlying asset. It is an essential metric in options trading, as it helps traders understand how the price of an option is likely to change with fluctuations in market volatility. While vega is crucial for assessing the impact of volatility on derivatives, it does not directly address the sensitivity of derivative prices to small changes in the value of the underlying asset, which is the primary function of delta.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (f): Identify financial and non-financial sources of risk and describe how they may interact.

Q.2869 Which of the following risk metrics is considered a second-order risk metric?

- A. Delta
- B. Vega
- C. Gamma

The correct answer is C.

Gamma is considered a second-order risk metric because it measures the rate of change in an option's delta for a one-unit change in the price of the underlying asset. This characteristic makes Gamma a crucial metric in options trading and risk management, as it provides insights into the convexity of an option's value relative to the underlying asset's price. Unlike first-order risk metrics, which only consider linear relationships, second-order risk metrics like Gamma account for the curvature in the relationship between an option's price and the underlying asset's price, offering a more nuanced understanding of risk.

A is incorrect. Delta is a first-order risk metric that measures the sensitivity of an option's price to a one-unit change in the price of the underlying asset. It represents the expected change in the option's price for a small change in the underlying asset's price, assuming all other variables remain constant. Delta is crucial for understanding an option's directional risk but does not account for the curvature or the rate of change of Delta itself, which is why it is considered a first-order, not a second-order, risk metric.

B is incorrect. Vega is another first-order risk metric that measures the sensitivity of an option's price to a 1% change in the implied volatility of the underlying asset. It represents the expected change in the option's price for a small change in the implied volatility, assuming all other variables remain constant. Vega is essential for understanding how changes in market perceptions of volatility can affect an option's price. However, like Delta, Vega does not consider the rate of change of itself or the curvature in the relationship between the option's price and the underlying variable it measures (in this case, volatility), which is why it is classified as a first-order risk metric.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (g): Describe methods for measuring and modifying risk exposures and factors to consider in choosing among the methods.

Q.2870 Which of the following is the first-order risk measure of the change in the option price for a change in the volatility of the underlying asset?

- A. Gamma
- B. Rho
- C. Vega

The correct answer is **C**.

Vega is the risk metric that measures the change in the derivative's price relative to the change in the volatility of the underlying asset.

A is incorrect. Gamma measures the rate of change of an option's delta for a one-unit change in the price of the underlying asset. While Gamma is an important risk measure in options trading, it does not directly quantify the sensitivity of an option's price to changes in the volatility of the underlying asset. Instead, Gamma focuses on the curvature of the option's price as the underlying asset's price changes, making it a second-order risk measure rather than a first-order risk measure like Vega.

B is incorrect. Rho measures the sensitivity of an option's price to changes in the risk-free interest rate. Although Rho is a relevant risk metric for assessing how changes in interest rates may impact the price of an option, it does not address the option's price sensitivity to changes in the volatility of the underlying asset.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (g): Describe methods for measuring and modifying risk exposures and factors to consider in choosing among the methods.

Q.2871 An analyst has recently read a research paper developed at a renowned university which says that the prices of derivatives are also sensitive to the changes in interest rates. If the analyst is interested in measuring such changes, then the best metric he should use is:

- A. Rho.
- B. Gamma.
- C. Delta.

The correct answer is **A**.

Rho measures the expected change in an option's price per 1% change in interest rates. It tells us how much the price of an option should fall or rise in response to an increase or decrease in the risk-free rate of interest.

B is incorrect. Gamma measures the rate of change in an option's delta per \$1 change in the price of the underlying stock.

It tells us how much the option's delta should change as the price of the underlying stock or index increases or decreases.

C is incorrect. Delta is a measure of the degree to which an option is exposed to changes in the price of the underlying asset.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (d): Explain how risk tolerance affects risk management.

Q.2872 Which of the following metrics measures the sensitivity of fixed income instruments to changes in interest rates?

- A. Rho
- B. Vega
- C. Duration

The correct answer is C.

Duration measures the interest rate sensitivity of a fixed income instrument while Rho measures the interest rate sensitivity of derivatives.

A is incorrect. Rho is a measure used in options trading that assesses the sensitivity of an option's price to a change in interest rates. Specifically, it represents the change in the option's price for a one percentage point change in interest rates. While Rho does relate to interest rate sensitivity, it is applicable to derivatives, not fixed income instruments like bonds. Therefore, it does not accurately measure the interest rate sensitivity of fixed income instruments.

B is incorrect. Vega measures the sensitivity of an option's price to changes in the volatility of the underlying asset. It represents the change in the option's price for a 1% change in the implied volatility of the underlying asset. Vega is crucial for options traders as it helps them understand how the price of an option might change as market conditions (specifically, volatility) change. However, since Vega is related to volatility and not interest rates, it does not serve as a measure for the sensitivity of fixed income instruments to changes in interest rates.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (d): Explain how risk tolerance affects risk management.

Q.2873 Which of the following three elements are measured with the VaR risk metric?

- A. The amount at risk of the total portfolio, the time period to maturity and the probability of default
- B. The amount at risk, the time period and the probability
- C. The amount at risk, the time period and the sensitivity of price to the changes in volatility

The correct answer is **B**.

The three elements measured by the VaR are the amount at risk, the time period and the probability.

A is incorrect. It inaccurately includes the probability of default as one of the elements measured by VaR. While VaR does consider the amount at risk and the time period, it does not specifically measure the probability of default. Instead, VaR focuses on the overall probability of experiencing a certain level of loss, without distinguishing whether such loss is due to default or other market factors. The inclusion of the probability of default suggests a misunderstanding of what VaR measures, as VaR is concerned with the potential loss in value of a portfolio due to general market movements and not solely due to default events.

C is incorrect. It mistakenly includes the sensitivity of price to changes in volatility as one of the elements measured by VaR. While sensitivity to volatility is an important concept in finance, particularly in the context of options pricing and the Greeks, it is not a component of VaR. VaR is concerned with quantifying the maximum expected loss over a specified time period at a certain confidence level, without directly measuring how price sensitivity to volatility affects this potential loss. The inclusion of price sensitivity to volatility confuses the purpose and calculation of VaR, which does not directly assess the impact of volatility changes on the portfolio's value. In summary, VaR is a tool used to estimate the potential loss in a portfolio over a given time period with a specified confidence level, focusing on the amount at risk, the time period, and the probability of experiencing such loss.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (b): Describe features of a risk management framework.

Q.2874 Which of the following is the most appropriate explanation for risk transfers and risk shifting?

- A. Risk transfer refers to actions that change the distribution of risk outcomes whereas risk shifting refers to actions taken that pass on risk to other parties.
- B. Examples of risk transfers include derivatives and examples of risk shifting include insurances.
- C. Risk shifting refers to actions that change the distribution of risk outcomes whereas risk transfer refers to actions taken that pass on risk to other parties.

The correct answer is **C**.

Risk shifting refers to actions that change the distribution of risk outcomes and risk transfer refers to actions taken that pass on risk to other parties. Examples of risk shifting include derivatives and examples of risk transfers include insurances.

A is incorrect. This option inaccurately defines risk transfer and risk shifting by reversing their meanings. It suggests that risk transfer changes the distribution of risk outcomes and risk shifting involves passing on risk to other parties, which is the opposite of their actual definitions.

B is incorrect. Insurance is a classic example of risk transfer, not risk shifting. It involves a contractual agreement where one party (the insurer) agrees to compensate another (the insured) in the event of a loss, thereby transferring the financial risk from the insured to the insurer. Misclassifying insurance as a form of risk shifting overlooks the fundamental principle of risk transfer inherent in insurance contracts.

CFA Level I, Portfolio Management, Learning Module 6: Introduction to Risk Management. LOS (b): Describe features of a risk management framework.
