

Learning Module 7: Introduction to Digital Assets

Q.4519 Which of the following statements is *least likely* true about DLT?

- A. Bitcoin, a popular cryptocurrency, uses DLT to record all transactions.
- B. DLT networks are fully secure, and there are no possible breaches in privacy and data protection.
- C. DLT networks offer potential enhancements in delivering financial services and maintaining financial records.

The correct answer is **B**.

While Distributed Ledger Technology (DLT) offers many potential benefits, it is not accurate to say that DLT networks are fully secure and there are no possible breaches in privacy and data protection. Like any technology, DLT is not immune to security risks. The decentralized nature of DLT can make it more difficult to manage and control, and there are concerns about the potential for hacking, fraud, and other types of cybercrime.

Additionally, the transparency of DLT networks, while a potential advantage in some respects, can also raise privacy concerns. For example, if a DLT network is public, all transactions are visible to all participants in the network, which could potentially expose sensitive information.

A is incorrect. Bitcoin, a popular cryptocurrency, does indeed use DLT to record all transactions. This is a fundamental aspect of how Bitcoin and many other cryptocurrencies operate. The use of DLT allows for a decentralized, transparent, and secure record of all transactions, which is a key feature of these digital currencies.

C is incorrect. DLT networks do indeed offer potential enhancements in delivering financial services and maintaining financial records. This is one of the key potential benefits of DLT, and it is a major reason why this technology is being explored in the financial services industry.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (a): Describe financial applications of distributed ledger technology.

Q.4520 Which of the following *best* describes the role of cryptography in DLT? It is used to:

- A. decrypt data, making it usable for unauthorized parties.
- B. verify network participant identity and for data decryption.
- C. encrypt data, making it unusable for unauthorized parties and to verify network participant identity.

The correct answer is **C**.

Cryptography plays a crucial role in Distributed Ledger Technology (DLT) by encrypting data, making it unusable for unauthorized parties, and verifying the identity of network participants. Cryptography is a method of protecting information by transforming it into an unreadable format. Only those who possess a special key can decrypt and read the information. In the context of DLT, cryptography is used to secure transactions and control the creation of new units.

A is incorrect. Cryptography in DLT is not used to decrypt data, making it usable for unauthorized parties. On the contrary, it is used to encrypt data, making it unusable for unauthorized parties. The purpose of cryptography is to secure data, not to make it accessible to unauthorized parties.

B is incorrect. While it is true that cryptography is used to verify network participant identity, it is not used for data decryption in the context of DLT. Instead, it is used to encrypt data, making it unusable for unauthorized parties. The decryption of data is only possible for authorized parties who possess the correct cryptographic key.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4521 In the context of consensus mechanisms in blockchain technology, which of the following statements is *most likely* true regarding these mechanisms?

- A. Proof of Work is more energy-efficient than Proof of Stake.
- B. Proof of Stake requires more computational power than Proof of Work.
- C. Proof of Stake is generally considered more energy-efficient than Proof of Work.

The correct answer is **C**.

Proof of Stake (PoS) is generally considered more energy-efficient than Proof of Work (PoW). This is because PoS does not require miners to solve complex mathematical problems to validate transactions and create new blocks in the blockchain. Instead, the creator of a new block is chosen based on their stake or ownership of tokens in the network. This process does not require significant computational power or energy, making it more energy-efficient than PoW.

A is incorrect. Proof of Work is not more energy-efficient than Proof of Stake. In fact, one of the main criticisms of PoW is its high energy consumption. PoW requires miners to solve complex mathematical problems, which consumes significant computational power and energy. This is in contrast to PoS, which does not require such intensive computational work and is, therefore, more energy-efficient.

B is incorrect. Proof of Stake does not require more computational power than Proof of Work. In PoS, the creator of a new block is chosen based on their stake or ownership of tokens in the network, not on their ability to solve complex mathematical problems. This means that PoS does not require the same level of computational power as PoW, making it less resource-intensive and more energy-efficient.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4522 Which of the following is *most likely* is the primary function of blockchain technology in the context of Bitcoin transactions?

- A. Increase the value of Bitcoin.
- B. Provide a platform for Bitcoin mining.
- C. Verify and record all Bitcoin transactions

The correct answer is **C**.

The primary function of blockchain technology in the context of Bitcoin transactions is to verify and record all Bitcoin transactions. Blockchain technology is a decentralized ledger that records all transactions across a network of computers. In the case of Bitcoin, every transaction made with the cryptocurrency is recorded on the blockchain. This record is permanent and cannot be altered, providing a transparent and secure method of recording transactions.

A is incorrect. Blockchain technology does not directly increase the value of Bitcoin. The value of Bitcoin is determined by supply and demand dynamics in the market, not by the technology underlying it. While the security and transparency provided by the blockchain may contribute to Bitcoin's appeal and, therefore, its value, this is an indirect effect and not the primary function of the blockchain.

B is incorrect. While blockchain technology does provide the platform for Bitcoin mining, this is not its primary function. Mining is the process of verifying transactions and adding them to the blockchain, but the main purpose of the blockchain itself is to record and verify these transactions. The platform for mining is a byproduct of the blockchain's primary function, not the function itself.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (b): Explain investment features of digital assets and contrast them with other asset classes.

Q.4523 Which of the following is *most likely* the primary purpose of a consensus protocol in a blockchain system?

- A. Increase the speed of transactions.
- B. Provide a user-friendly interface for users.
- C. Dictate how blocks can join the chain and become the immutable "truth".

The correct answer is **C**.

The primary purpose of a consensus protocol in a blockchain system is to dictate how blocks can join the chain and become the immutable "truth." In a blockchain system, the consensus protocol is a set of rules that all participating nodes in the network agree to follow. It ensures that all transactions are recorded in a consistent and secure manner across all nodes in the network. The consensus protocol is designed to resist attempts at malicious manipulation and maintain the integrity and security of the system.

A is incorrect. While increasing the speed of transactions can be a desirable feature of a blockchain system, it is not the primary purpose of the consensus protocol. The consensus protocol is primarily concerned with ensuring the integrity and security of the system, not its speed. In fact, the process of reaching a consensus can sometimes slow down the transaction processing speed, as it requires the agreement of multiple nodes in the network.

B is incorrect. Providing a user-friendly interface for users is not the purpose of a consensus protocol in a blockchain system. The consensus protocol operates at the backend of the system, ensuring the integrity and security of the blockchain. It does not directly interact with users or affect the user interface. The user interface is typically handled by separate software or applications that interact with the blockchain.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (d): Analyze sources of risk, return, and diversification among digital asset investments.

Q.4524 Which of the following statements *best* describes how block creators are chosen in a Proof of Stake (PoS) consensus system?

- A. Block creators in PoS are chosen based on the amount of computational power they have.
- B. Block creators in PoS are chosen randomly, without considering their stake in the network.
- C. Block creators in PoS are chosen randomly, but their selection probability increases with their stake in the network.

The correct answer is **C**.

In a Proof of Stake (PoS) consensus algorithm, the creator of a new block is chosen based on a specific criterion that is deterministic and depends on the creator's stake in the network. The more cryptocurrency a miner owns, the more mining power they have. Therefore, block creators in PoS are chosen randomly, but their selection probability increases with their stake in the network.

This is a key feature of PoS systems, as it incentivizes participants to hold and invest in the network's cryptocurrency, thereby promoting network security and stability. The more stake a participant has, the more likely they are to be chosen to create a new block, and the more they stand to lose if they attempt to undermine the network. This mechanism aligns the interests of the participants with the overall health and success of the network.

A is incorrect. The statement that block creators in PoS are chosen based on the amount of computational power they have is incorrect because this describes the Proof of Work (PoW) consensus algorithm, not PoS. In PoW, miners compete to solve complex mathematical problems, and the first to solve the problem gets to add a new block to the blockchain. This process requires significant computational power and energy consumption.

B is incorrect. The statement that block creators in PoS are chosen randomly, without considering their stake in the network, is also incorrect. In PoS, the selection of block creators is not purely random; it is influenced by the amount of stake a participant has in the network. The more stake a participant has, the higher their chances of being selected to create a new block.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4525 Which of the following statements is *most likely* true regarding the susceptibility to '51% attacks' and energy efficiency in Proof of Work (PoW) and Proof of Stake (PoS) consensus algorithms?

- A. PoW is more energy-efficient and less susceptible to '51% attacks' compared to PoS.
- B. PoS is more energy-efficient and less susceptible to '51% attacks' compared to PoW.
- C. PoW and PoS have the same energy efficiency and susceptibility to '51% attacks'.

The correct answer is **B**.

Proof of Stake (PoS) is indeed more energy-efficient and less susceptible to '51% attacks' compared to Proof of Work (PoW). PoS is a consensus algorithm that achieves network security through the staking of assets. In PoS, the creator of the next block is chosen via various combinations of random selection and wealth or age of staked assets. This makes PoS more energy-efficient as it does not require miners to solve complex mathematical problems, which is a characteristic of PoW that requires significant computational power and energy consumption.

In terms of susceptibility to '51% attacks', PoS is considered less vulnerable. A '51% attack' refers to an attack on a blockchain network by a group of miners controlling more than 50% of the network's mining hash rate or computing power. In PoS, executing a '51% attack' would require ownership of 51% of the cryptocurrency, which is financially disincentivizing, making PoS less susceptible to such attacks.

A is incorrect. Proof of Work (PoW) is not more energy-efficient compared to Proof of Stake (PoS). PoW requires miners to solve complex mathematical problems to add a new block to the blockchain, which requires significant computational power and energy consumption. Also, PoW is more susceptible to '51% attacks' as it allows anyone with enough computational power to take control of the network.

C is incorrect. Proof of Work (PoW) and Proof of Stake (PoS) do not have the same level of susceptibility to '51% attacks'. As explained above, PoS is more energy-efficient and less susceptible to '51% attacks' compared to PoW.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4526 Which of the following statements *best* describes the difference between permissioned and permissionless networks?

- A. Both permissioned and permissionless networks restrict who can participate in the network.
- B. Permissionless networks are open to all participants, while permissioned networks restrict who can participate in the network.
- C. Permissioned networks are open to all participants, while permissionless networks restrict who can participate in the network.

The correct answer is **B**.

Permissionless networks are open to all participants, while permissioned networks restrict who can participate in the network. In the context of blockchain technology, a permissionless network, also known as a public blockchain, is open to anyone who wants to participate. Anyone can join the network, validate transactions, and create new blocks. Bitcoin and Ethereum are examples of permissionless networks.

On the other hand, a permissioned network, also known as a private blockchain, restricts who can participate in the network. Only authorized participants can validate transactions and create new blocks. This type of network is often used by businesses for its increased efficiency and security. The key difference between the two types of networks is the level of access control for participation in the network, which has implications for the network's transparency, security, and speed.

A is incorrect. This statement is not accurate because it suggests that both permissioned and permissionless networks restrict participation, which is not the case. Permissionless networks are open to all participants, not restricted.

C is incorrect. This statement is the opposite of the correct answer. In reality, permissioned networks restrict who can participate in the network, while permissionless networks are open to all participants.

Q.4527 Which of the following statements is *most likely* true regarding permissionless networks?

- A. Trust between transacting parties is a requirement in a permissionless network.
- B. Permissionless networks require a centralized authority to confirm or deny the validity of transactions.
- C. Permissionless networks are independent of a centralized authority to confirm or deny the validity of transactions.

The correct answer is **C**.

Permissionless networks are indeed independent from a centralized authority to confirm or deny the validity of transactions. This is one of the key characteristics of permissionless networks, such as Bitcoin's blockchain. In these networks, the validation of transactions is decentralized and is performed by the network's participants or nodes. This is achieved through a consensus mechanism, such as proof-of-work or proof-of-stake, where nodes compete to validate transactions and add them to the blockchain.

A is incorrect. Permissionless networks do not require a centralized authority to confirm or deny the validity of transactions. This is a characteristic of permissioned networks, where a central authority, such as a bank or a consortium of companies, controls who can participate in the network and validate transactions.

B is incorrect. Trust between transacting parties is not a requirement in a permissionless network. This is because the validity of transactions is ensured by the network's consensus mechanism, not by the trustworthiness of the participants. This is often referred to as "trustless" transaction, as it removes the need for trust in individual participants and instead relies on the trust in the network's protocol and consensus mechanism. ***CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (c): Describe investment forms and vehicles used in digital asset investments.***

Q.4528 Which of the following statements is *most likely* true regarding the consensus mechanism and cost-effectiveness of permissionless and permissioned blockchains?

- A. Permissioned blockchains use a consensus protocol that requires significant computational power, making them less cost-effective.
- B. Permissionless blockchains use a Proof of Work consensus mechanism and are more cost-effective due to their high level of decentralization.
- C. Permissionless blockchains use a Proof of Work consensus mechanism and are less cost-effective due to their high level of decentralization.

The correct answer is **C**.

Permissionless blockchains like Bitcoin use a Proof of Work (PoW) consensus mechanism and are less cost-effective due to their high level of decentralization. In a PoW system, miners compete to solve complex mathematical problems, and the first one to solve the problem gets to add a new block to the blockchain. This process requires a significant amount of computational power and energy, making it less cost-effective.

Furthermore, the high level of decentralization in permissionless blockchains means that every participant in the network must validate and record every transaction, which requires a significant amount of bandwidth and storage capacity. This further adds to the cost and inefficiency of permissionless blockchains. Despite these drawbacks, the high level of decentralization in permissionless blockchains provides a high level of security and transparency, which is one of the main reasons why they are used for cryptocurrencies like Bitcoin.

A is incorrect. Permissioned blockchains like Ripple do not require a significant amount of computational power, which makes them more cost-effective. In permissioned blockchains, only a select group of nodes are allowed to validate and record transactions, which reduces the amount of computational power, energy, bandwidth, and storage capacity required. This makes permissioned blockchains more cost-effective compared to permissionless blockchains.

B is incorrect. While it is true that permissionless blockchains like Bitcoin use a Proof of Work consensus mechanism, they are not more cost-effective due to their high level of decentralization. As explained above, the high level of decentralization in permissionless blockchains requires a significant amount of computational power, energy, bandwidth, and storage capacity, which makes them less cost-effective.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (d): Analyze sources of risk, return, and diversification among digital asset investments.

Q.4529 Which of the following statements is *most likely* true regarding digital assets?

- A. They can only take the form of currencies.
- B. They require an intermediary for transactions.
- C. They allow for near-real-time transactions without the need for an intermediary.

The correct answer is **C**.

Digital assets indeed allow for near-real-time transactions without the need for an intermediary. This is one of the key characteristics of digital assets, particularly cryptocurrencies like Bitcoin. The use of blockchain technology, which underpins many digital assets, enables this direct peer-to-peer transaction capability. Blockchain is a decentralized ledger that records transactions across many computers so that the record cannot be altered retroactively without the alteration of all subsequent blocks.

This technology eliminates the need for a central authority or intermediary, such as a bank or financial institution, to validate and process transactions. This not only speeds up transaction times but also reduces costs and increases security. The ability to transact directly and in near-real-time is a significant advantage of digital assets and is transforming the way financial transactions are conducted globally.

A is incorrect. Digital assets can take various forms, not just currencies. They can represent a wide range of tangible and intangible items, including but not limited to financial assets like stocks and bonds, real estate, and other property rights. Digital assets also include non-financial items like digital art, music, and other intellectual property rights. Therefore, the statement that digital assets can only take the form of currencies is incorrect.

B is incorrect. One of the defining characteristics of digital assets, particularly those based on blockchain technology, is that they do not require an intermediary for transactions. This is a significant departure from traditional financial systems, which rely heavily on intermediaries such as banks and financial institutions to validate and process transactions. Therefore, the statement that digital assets require an intermediary for transactions is incorrect.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (a): Describe financial applications of distributed ledger technology.

Q.4530 Which of the following statements *best* describes the primary purpose of a Central Bank Digital Currency (CBDC)?

- A. To create a new form of currency that is not tied to any existing fiat currency.
- B. To replace the physical currency with a digital version that is not controlled by any central authority.
- C. To create a digital version of the currency issued by the central bank, essentially a digital bank note or coin.

The correct answer is **C**.

The primary purpose of a Central Bank Digital Currency (CBDC) is to create a digital version of the currency issued by the central bank, essentially a digital bank note or coin. CBDCs are a new form of central bank money that is different from balances in traditional reserve or settlement accounts. They are designed to have the same underlying value as the physical currency issued by the central bank and are fully regulated and backed by the central bank.

This means that they offer the same level of security and legal tender status as physical currency. The introduction of CBDCs is seen as a response to the decline in cash usage and the rise of digital payments. They are intended to ensure that central bank money remains accessible to all in a digital world and to provide a safe, efficient, and inclusive payment instrument.

A is incorrect. CBDCs are not intended to create a new form of currency that is not tied to any existing fiat currency. They are a digital form of the existing fiat currency issued by the central bank and are fully backed by that currency. They are not a new, separate currency but a new form of the existing currency.

B is incorrect. CBDCs are not intended to replace the physical currency with a digital version that is not controlled by any central authority. On the contrary, CBDCs are issued and regulated by the central bank, which is a central authority. They are designed to complement, not replace, physical currency and existing digital forms of central bank money.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4531 Which of the following statements *best* describes the primary difference between fungible tokens like cryptocurrencies and non-fungible tokens (NFTs)?

- A. Fungible tokens, like cryptocurrencies, are unique and represent authenticated objects, while NFTs are interchangeable and lack uniqueness.
- B. Both fungible tokens and NFTs are unique and represent authenticated objects, but NFTs are more commonly used for trading in digital artwork.
- C. Fungible tokens, like cryptocurrencies, are interchangeable and lack uniqueness, while each NFT is unique and represents a unique authenticated object.

The correct answer is **C**.

The primary difference between fungible tokens like cryptocurrencies and non-fungible tokens (NFTs) is that fungible tokens are interchangeable and lack uniqueness, while each NFT is unique and represents a unique authenticated object. Fungible tokens, such as cryptocurrencies like Bitcoin or Ethereum, are identical to each other and can be exchanged on a one-for-one basis. They do not carry unique information and are not linked to a specific asset.

On the other hand, NFTs are unique digital assets that are linked to a specific object or piece of content. Each NFT carries unique information and is linked to a specific asset, which can be a digital artwork, a collectible, a piece of real estate, or any other asset. This uniqueness and the ability to authenticate the asset is what gives NFTs their value and distinguishes them from fungible tokens.

A is incorrect. Fungible tokens, like cryptocurrencies, are not unique and do not represent authenticated objects. They are interchangeable and identical to each other. On the other hand, NFTs are unique and represent authenticated objects. They are not interchangeable.

B is incorrect. While it is true that NFTs are more commonly used for trading in digital artwork, this does not represent the primary difference between fungible tokens and NFTs. The primary difference is that fungible tokens are interchangeable and lack uniqueness, while each NFT is unique and represents a unique authenticated object.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (b): Explain investment features of digital assets and contrast them with other asset classes.

Q.4532 Consider a scenario where you are an active user on a blockchain-based platform. You frequently use this platform for various transactions and services. The platform uses a specific type of token as a medium of exchange for services and transaction fees. These tokens do not pay out dividends but compensate for activities on the network.

Based on your understanding of different types of tokens in a blockchain environment, which type of token is the platform *most likely* using?

- A. Equity tokens
- B. Utility tokens
- C. Security tokens

The correct answer is **B**.

The platform is likely using Utility Tokens. Utility tokens are a type of digital asset that are designed to be spent within a certain blockchain ecosystem. They are not created to be an investment, instead, they provide users with access to a product or service. In this case, the tokens are used as a medium of exchange for services and transaction fees on the platform, which is a characteristic of utility tokens.

These tokens are often used to raise funds in an Initial Coin Offering (ICO), but their primary function is to provide access to a product or service. They are like digital coupons that give holders the right to use a network, and they can also be used to incentivize certain behaviors or actions within the network. Therefore, the tokens described in the scenario are utility tokens because they are used to compensate for activities on the network and do not pay out dividends.

A is incorrect. Equity tokens represent ownership in an underlying asset or company. They are similar to traditional stocks, and holders may have voting rights or be entitled to dividends. In this scenario, the tokens do not pay out dividends and do not represent ownership in an asset or company, so they are not equity tokens.

C is incorrect. Security tokens are a type of token that pay dividends, share profits, pay interest or invest in other tokens or assets to generate profits for the token holders. They are subject to federal securities and regulations. In this scenario, the tokens do not pay out dividends, which is a characteristic of security tokens, so they are not security tokens.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4533 Which statement *best* describes the role of cryptocurrencies in an investment portfolio?

- A. Hedge against inflation and are not considered a legitimate asset class.
- B. They are considered a traditional asset, similar to stocks and bonds, and are a standard part of any investment portfolio.
- C. They are considered an alternative asset, sought after by certain institutional investors for their potential for higher returns and diversification benefits.

The correct answer is **C**.

Cryptocurrencies are indeed considered an alternative asset, sought after by certain institutional investors for their potential for higher returns and diversification benefits. As an alternative asset class, cryptocurrencies are not correlated with traditional asset classes such as stocks and bonds. This lack of correlation can provide diversification benefits to an investment portfolio, potentially reducing risk and enhancing returns.

Furthermore, the high volatility of cryptocurrencies can lead to higher potential returns, albeit at a higher risk. This makes them attractive to certain institutional investors, such as hedge funds, who are willing to take on higher risk in exchange for the potential for higher returns. The example of Tesla's investment in Bitcoin illustrates this trend. Therefore, cryptocurrencies can play a role in an investment portfolio, particularly for investors seeking diversification and higher potential returns.

A is incorrect. While some investors may use cryptocurrencies as a hedge against inflation, this is not their primary role in an investment portfolio. Moreover, the statement that cryptocurrencies are not considered a legitimate asset class is incorrect. As mentioned above, they are increasingly being recognized as a legitimate, albeit alternative, asset class by institutional investors.

B is incorrect. Cryptocurrencies are not considered a traditional asset, similar to stocks and bonds. They are a relatively new type of asset with unique characteristics, such as decentralization and reliance on blockchain technology. Furthermore, they are not a standard part of any investment portfolio. While some investors may choose to include cryptocurrencies in their portfolios, many others do not, due to their high volatility and regulatory uncertainty.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4534 Which of the following services is *least likely* provided by these financial service providers to support the growth and adoption of digital assets?

- A. Secure storage of digital assets.
- B. Physical delivery of digital assets.
- C. Transaction processing of digital assets.

The correct answer is **B**.

Physical delivery of digital assets is not typically provided by financial service providers like Coinbase and BitGo. Digital assets, by their very nature, are intangible and exist only in the digital realm. They are represented by cryptographic tokens that are stored on a blockchain or other form of distributed ledger technology. These tokens can be transferred electronically from one digital wallet to another, but they cannot be physically delivered in the same way that traditional assets like stocks or commodities can be.

A is incorrect. Secure storage of digital assets is one of the primary services provided by financial service providers like Coinbase and BitGo. They provide digital wallets that securely store the cryptographic keys that control access to digital assets. This is a crucial service for the adoption and growth of digital assets, as it provides a safe and secure way for individuals and institutions to store their digital assets.

C is incorrect. Transaction processing of digital assets is another primary service provided by financial service providers like Coinbase and BitGo. They process transactions on the blockchain or other distributed ledger on behalf of their customers, ensuring that the transactions are valid and correctly recorded. This is another crucial service for the adoption and growth of digital assets, as it provides a reliable and efficient way for individuals and institutions to transact with their digital assets.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4535 In the context of digital assets, which statement would be the *most accurate*?

- A. Blockchain technology eliminates the volatility in the value of digital assets.
- B. Regulatory considerations have no significant impact on the value and usability of digital assets.
- C. The value of digital assets is highly volatile, and regulatory considerations can significantly impact their value and usability.

The correct answer is **C**.

The statement that the value of digital assets is highly volatile and regulatory considerations can significantly impact their value and usability is the most accurate. Digital assets, such as cryptocurrencies, are known for their high volatility. This volatility is due to a variety of factors, including market speculation, technological advancements, and regulatory considerations. Regulatory considerations can have a significant impact on the value and usability of digital assets. Different countries have different regulations regarding digital assets.

A is incorrect. Blockchain technology does not eliminate the volatility in the value of digital assets. While blockchain technology does provide a secure and transparent way to record transactions, it does not control the factors that contribute to the volatility of digital assets, such as market speculation, technological advancements, and regulatory considerations.

B is incorrect. The statement that regulatory considerations have no significant impact on the value and usability of digital assets is incorrect. As explained above, regulatory decisions can significantly impact the demand for, and therefore the value of, digital assets. They can also impact the usability of digital assets. Therefore, regulatory considerations are a significant factor that investors in digital assets need to consider.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (d): Analyze sources of risk, return, and diversification among digital asset investments.

Q.4536 Which of the following *least likely* describes digital assets?

- A. They are tangible and can be physically owned.
- B. They utilize cryptographic techniques for secure transactions.
- C. They are mostly decentralized and do not require a central authority for their operation.

The correct answer is **A**.

Digital assets, as the name suggests, are digital in nature and do not have a physical form. This is one of the key characteristics that set them apart from traditional financial assets. Digital assets, such as cryptocurrencies, exist only in electronic form and are stored in digital wallets or on blockchain networks. They cannot be physically owned or held, unlike traditional assets such as cash, stocks, or real estate.

B is incorrect. The use of cryptographic techniques for secure transactions is indeed a distinguishing characteristic of digital assets. Cryptography is used to secure transactions and control the creation of new units of digital assets. This provides a high level of security and helps to prevent fraud and double-spending.

C is incorrect. One of the key characteristics of many digital assets, particularly cryptocurrencies, is that they are decentralized and do not require a central authority for their operation. This is facilitated by blockchain technology, which allows for a distributed ledger system where transactions are verified and recorded by a network of computers rather than a central authority. This decentralization can offer benefits such as increased transparency and reduced reliance on traditional financial intermediaries.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4537 Which statement *accurately* reflects the distinctions between digital assets and traditional financial assets?

- A. Digital assets, unlike traditional financial assets, cannot be divided into smaller units.
- B. Traditional financial assets, unlike digital assets, do not require regulatory oversight.
- C. Digital assets, unlike traditional financial assets, can be transferred without the need for an intermediary.

The correct answer is **C**.

Digital assets, unlike traditional financial assets, can indeed be transferred without the need for an intermediary. This is one of the key characteristics of digital assets and a major factor that differentiates them from traditional financial assets. The transfer of digital assets is facilitated by blockchain technology, which allows for peer-to-peer transactions to occur in a decentralized manner.

A is incorrect. Digital assets, like traditional financial assets, can indeed be divided into smaller units. In fact, one of the advantages of digital assets is their high degree of divisibility. This high degree of divisibility allows for greater flexibility in transactions and can facilitate microtransactions, which are not always feasible with traditional financial assets.

B is incorrect. Traditional financial assets, like digital assets, do require regulatory oversight. In fact, traditional financial assets are typically subject to a high degree of regulation to protect investors, maintain market integrity, and ensure the stability of the financial system. Digital assets are also subject to regulation, although the regulatory framework for digital assets is still evolving and varies widely by jurisdiction.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (a): Describe financial applications of distributed ledger technology.

Q.4538 Which of the following is *most likely* the primary characteristic of an Investible Digital Asset? They are:

- A. Digital assets that can only be used for online purchases.
- B. Physical assets that have been digitized for ease of trading.
- C. Digital representations of value that can be traded, stored, or invested.

The correct answer is **C**.

This option accurately describes the primary characteristic of an investible digital asset. Investible digital assets are digital representations of value that can be traded on various platforms, securely stored in digital wallets, and serve as investment vehicles. This definition encompasses a wide range of assets, including cryptocurrencies, tokenized securities, and other blockchain-based assets.

A is incorrect: This option is too narrow, focusing on digital assets with a specific use case (online purchases). Investible digital assets are broader in scope, encompassing various digital representations of value beyond just those used for online transactions.

B is incorrect: While this option refers to the digitization of physical assets, it doesn't capture the primary characteristic of an investible digital asset. Investible digital assets are typically native to digital environments, often built on blockchain technology, and not necessarily the digitization of physical assets.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (b): Explain investment features of digital assets and contrast them with other asset classes.

Q.4539 Which of the following statements is *most likely* true about smart contracts?

- A. Can be altered or changed after they have been executed.
- B. Do not provide a trackable and irreversible record of transactions.
- C. Automate the execution of agreements and provide a trackable, irreversible record of transactions.

The correct answer is **C**.

Smart contracts automate the execution of agreements and provide a trackable, irreversible record of transactions. This is one of the key features of smart contracts. They are self-executing contracts with the terms of the agreement directly written into code. The code and the agreements contained therein exist across a distributed, decentralized blockchain network. The code controls the execution, and transactions are trackable and irreversible.

Once a smart contract is executed, it cannot be altered or changed, providing a high level of security and trust in the transaction. The automation of the execution process reduces the need for intermediaries and can significantly increase the efficiency of transactions. The trackable and irreversible record of transactions provided by smart contracts is a key feature that enhances transparency and trust in the blockchain network.

A is incorrect. Smart contracts cannot be altered or changed after they have been executed. This is a key feature of smart contracts that enhances their security and trustworthiness. Once a smart contract is executed, the terms of the agreement are enforced automatically by the code, and the transaction is recorded on the blockchain, creating an irreversible record.

B is incorrect. Contrary to this statement, smart contracts do provide a trackable and irreversible record of transactions. This is one of the key features of smart contracts and blockchain technology in general. Every transaction executed through a smart contract is recorded on the blockchain, creating a permanent, unalterable record that can be tracked and verified by all participants in the network.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4540 A trader in Japan is interested in acquiring a tokenized asset from the United States. What potential advantages could the utilization of stablecoins *most likely* offer to the trader?

- A. Earn interest on the tokenized asset.
- B. Increase the volatility of the tokenized asset.
- C. Bypass traditional banking systems and avoid foreign exchange fees.

The correct answer is **C**.

Stablecoins can indeed help the trader to bypass traditional banking systems and avoid foreign exchange fees. In the context of international transactions, stablecoins offer a significant advantage over traditional banking systems. Traditional banking systems often involve multiple intermediaries, each of which may charge fees, and can take several days to process international transactions. In contrast, transactions with stablecoins can be completed almost instantly, with minimal fees, regardless of the geographical location of the parties involved.

A is incorrect. While it is possible for a trader to earn interest on a tokenized asset, this is not a direct benefit of using stablecoins. The ability to earn interest on a tokenized asset depends on the specific terms of the asset, not on the use of stablecoins.

B is incorrect. Stablecoins are designed to minimize volatility, not increase it. The primary purpose of stablecoins is to provide stability in the highly volatile cryptocurrency market. Therefore, using stablecoins would not help the trader to increase the volatility of the tokenized asset.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4541 In the context of cryptocurrency trading, which of the following is *most likely* accurate?

- A. Centralized cryptocurrency exchanges operate independently without any central authority, similar to peer-to-peer trading platforms.
- B. Decentralized cryptocurrency exchanges function like traditional stock exchanges, with a central authority overseeing transactions.
- C. Centralized cryptocurrency exchanges function like traditional stock exchanges, while decentralized exchanges operate like peer-to-peer trading platforms.

The correct answer is C.

Centralized cryptocurrency exchanges function like traditional stock exchanges, while decentralized exchanges operate like peer-to-peer trading platforms. Centralized exchanges are operated by a central authority or company that oversees and facilitates transactions, much like a traditional stock exchange. They provide a platform for users to trade cryptocurrencies for other assets, such as conventional fiat money or other digital currencies. Centralized exchanges are often easier to use and offer advanced features like margin trading, stop loss, lending, and others.

On the other hand, decentralized exchanges operate without a central authority. Instead, they run on blockchain technology that enables peer-to-peer trading. This means that transactions are made directly between users without the need for an intermediary. Decentralized exchanges offer increased privacy and control over one's funds, but they can be more difficult to use and may lack some of the features of centralized exchanges.

A is incorrect. Centralized cryptocurrency exchanges do not operate independently without any central authority. They are run by a central authority or company that oversees and facilitates transactions. This is in contrast to decentralized exchanges, which operate without a central authority and enable peer-to-peer trading.

B is incorrect. Decentralized cryptocurrency exchanges do not function like traditional stock exchanges. They do not have a central authority overseeing transactions. Instead, they operate on blockchain technology that enables peer-to-peer trading, allowing transactions to be made directly between users without the need for an intermediary.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4542 Which of the following is *most likely* a possible implementation of the pump-and-dump tactic in the context of cryptocurrency exchanges?

- A. Creating a fake cryptocurrency and selling it on the exchange.
- B. Hacking into the exchange's system and altering the price of a cryptocurrency.
- C. Using social media to artificially inflate the price of a cryptocurrency, then selling off when the price is high.

The correct answer is **C**.

In the context of cryptocurrency exchanges, a pump-and-dump scheme can be implemented by using social media to artificially inflate the price of a cryptocurrency, then selling off when the price is high. This is a form of market manipulation where the manipulators buy a cryptocurrency at a low price, then create hype around it through social media or other platforms to attract other investors. As more people buy the cryptocurrency, its price increases.

Once the price is high enough, the manipulators sell their holdings, causing the price to crash and leaving the other investors with losses. This tactic is similar to the pump-and-dump schemes seen in the stock market and is a major challenge for cryptocurrency exchanges due to the lack of rigorous oversight and regulation.

A is incorrect. Creating a fake cryptocurrency and selling it on the exchange is a form of fraud, not a market manipulation tactic. While it is a serious issue that can harm investors and damage the reputation of the exchange, it is not the same as a pump-and-dump scheme. This tactic involves creating a cryptocurrency that has no real value or utility and selling it to unsuspecting investors, often through deceptive marketing practices.

B is incorrect. Hacking into the exchange's system and altering the price of a cryptocurrency is a form of cybercrime, not a market manipulation tactic. While it is a serious issue that cryptocurrency exchanges need to address, it is not the same as a pump-and-dump scheme.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (d): Analyze sources of risk, return, and diversification among digital asset investments.

Q.4543 Which of the following is *least likely* a characteristic of Direct Digital Asset Investment?

- A. Involves the direct purchase of digital assets without the use of intermediaries.
- B. Allows investors to have direct ownership and control over their digital assets.
- C. Requires the use of a broker or other financial intermediary to facilitate the transaction.

The correct answer is **C**.

Direct Digital Asset Investment does not require the use of a broker or other financial intermediary to facilitate the transaction. This is one of the key characteristics of Direct Digital Asset Investment. It involves the direct purchase of digital assets such as cryptocurrencies, tokens, and other digital securities without the use of intermediaries. This allows investors to have direct ownership and control over their digital assets.

A is incorrect. This statement is actually a characteristic of Direct Digital Asset Investment. It involves the direct purchase of digital assets without the use of intermediaries. This is one of the key features of this form of investment.

B is incorrect. This statement is also a characteristic of Direct Digital Asset Investment. It allows investors to have direct ownership and control over their digital assets. This can offer significant advantages in terms of control and flexibility, but it also comes with its own set of risks and challenges.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (b): Explain investment features of digital assets and contrast them with other asset classes.

Q.4544 Which of the following is *most likely* the unique feature that distinguishes digital asset exchanges from traditional stock exchanges?

- A. They are not regulated by any financial authority.
- B. They operate 24/7, allowing for continuous trading.
- C. They only allow transactions in one specific type of digital asset.

The correct answer is **B**.

Digital asset exchanges, such as Coinbase, Binance, or Kraken, operate 24/7, allowing for continuous trading. This is a unique feature that distinguishes them from traditional stock exchanges. Traditional stock exchanges operate during specific hours, typically five days a week. However, digital asset exchanges operate continuously, allowing investors to trade digital assets at any time of the day or night, regardless of their location.

A is incorrect. While it is true that the regulatory environment for digital assets is less developed than for traditional financial assets, it is not accurate to say that digital asset exchanges are not regulated by any financial authority. Many digital asset exchanges are subject to regulations in the jurisdictions in which they operate.

C is incorrect. Digital asset exchanges typically support transactions in a wide range of digital assets, not just one specific type. These can include cryptocurrencies like Bitcoin and Ethereum, as well as other types of digital assets like utility tokens and security tokens. The range of digital assets supported can vary between exchanges, but it is not accurate to say that they only allow transactions in one specific type of digital asset.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (b): Explain investment features of digital assets and contrast them with other asset classes.

Q.4545 Which of the following would be the *most suitable* strategy for an investor contemplating an investment in cryptocurrencies?

- A. Invest only in smaller cryptocurrencies, or altcoins, to avoid the influence of "whales."
- B. Invest all their savings in one popular cryptocurrency to maximize potential returns.
- C. Conduct thorough research and due diligence before investing, diversify their cryptocurrency portfolio, and securely store their passkeys.

The correct answer is **C**.

Conducting thorough research and due diligence before investing, diversifying their cryptocurrency portfolio, and securely storing their passkeys is the most appropriate strategy for an investor considering investing in cryptocurrencies. This approach mitigates the three main risks associated with cryptocurrency investments. Firstly, by conducting thorough research and due diligence, investors can avoid fraudulent activities such as scam ICOs and pump-and-dump schemes, thereby reducing Fraud Risk.

Secondly, diversifying their cryptocurrency portfolio can help investors spread their risk across different cryptocurrencies, reducing the impact of any single cryptocurrency's performance on their overall portfolio. This can help mitigate Concentration Risk. Lastly, securely storing their passkeys can prevent loss of access to their cryptocurrency holdings, thereby reducing Access Risk. Therefore, this strategy provides a comprehensive approach to managing the risks associated with cryptocurrency investments.

A is incorrect. Investing only in smaller cryptocurrencies, or altcoins, to avoid the influence of "whales" is not an appropriate strategy as it increases the Fraud Risk. Smaller cryptocurrencies are often less regulated and more susceptible to fraudulent activities. Furthermore, this strategy does not address the Access Risk and may not effectively mitigate the Concentration Risk, as "whales" can also exist in smaller cryptocurrencies.

B is incorrect. Investing all their savings in one popular cryptocurrency to maximize potential returns is not an appropriate strategy as it increases the Concentration Risk. If the chosen cryptocurrency performs poorly, the investor could lose a significant portion, if not all, of their investment. Furthermore, this strategy does not address the Fraud Risk and Access Risk associated with cryptocurrency investments.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (d): Analyze sources of risk, return, and diversification among digital asset investments.

Q.4546 Which of the following is *most likely* an example of an indirect digital asset investment?

- A. Storing digital assets in a digital wallet.
- B. Purchasing Bitcoin directly from a cryptocurrency exchange.
- C. Investing in a technology company that develops blockchain solutions.

The correct answer is **C**.

Investing in a technology company that develops blockchain solutions is an example of an indirect digital asset investment. This is because the investor is not directly purchasing a digital asset like Bitcoin or Ethereum, but is instead investing in a company that is involved in the digital asset market. The performance of the investment is linked to the success of the company and its blockchain solutions, which may be influenced by the overall performance of the digital asset market.

A is incorrect. Storing digital assets in a digital wallet is not an investment at all. It is simply a method of storing digital assets that have been purchased. While it is an important aspect of managing digital assets, it does not involve putting money into a financial instrument or company with the expectation of generating a return, which is the definition of an investment.

B is incorrect. Purchasing Bitcoin directly from a cryptocurrency exchange is a direct digital asset investment, not an indirect one. In this case, the investor is directly purchasing and owning a digital asset. The performance of the investment is directly linked to the price of Bitcoin, which can be highly volatile.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4547 Which of the following is *most likely* correct statement regarding trading in cryptocurrency futures contracts?

- A. Trading in cryptocurrency futures contracts requires the investor to physically store and secure the cryptocurrency.
- B. Trading in cryptocurrency futures contracts is not leveraged, meaning you cannot control a large amount of cryptocurrency with a relatively small amount of capital.
- C. The market for cryptocurrency futures may be less liquid and more volatile than more established futures markets, leading to potential large price swings and losses.

The correct answer is **C**.

The market for cryptocurrency futures may indeed be less liquid and more volatile than more established futures markets, leading to potential large price swings and losses. Cryptocurrencies are known for their high volatility, and this extends to their futures contracts as well. The liquidity of a market refers to how easily assets within that market can be bought and sold without affecting the asset's price.

A is incorrect. Trading in cryptocurrency futures contracts does not require the investor to physically store and secure the cryptocurrency. This is because these contracts are typically cash-settled, meaning that no actual cryptocurrency changes hands. Instead, the contract is settled in cash based on the difference between the contract price and the market price of the cryptocurrency at the time of settlement.

B is incorrect. Trading in cryptocurrency futures contracts is indeed leveraged, meaning you can control a large amount of cryptocurrency with a relatively small amount of capital. This is a characteristic of futures trading in general, not just cryptocurrency futures. The leverage comes from the fact that the trader only needs to put up a fraction of the contract's value as a margin to enter the trade. This can amplify potential gains but also potential losses.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (d): Analyze sources of risk, return, and diversification among digital asset investments.

Q.4548 Which of the following statements *accurately* reflects the nature of Cryptocurrency ETFs?

- A. They use only cash to gain exposure to the value of cryptocurrencies.
- B. They directly invest in cryptocurrencies and hold them in their portfolio.
- C. They use cash and cryptocurrency derivatives to gain exposure to the value of cryptocurrencies.

The correct answer is **C**.

Cryptocurrency Exchange-Traded Funds (ETFs), such as the Bitwise 10 Crypto Index Fund (BITW), typically do not directly invest in cryptocurrencies. Instead, they use both cash and cryptocurrency derivatives to gain exposure to the value of cryptocurrencies. This strategy allows them to circumvent the risks and complexities associated with holding cryptocurrencies directly. Cryptocurrency derivatives are financial contracts that derive their value from the performance of the underlying cryptocurrency.

A is incorrect. Cryptocurrency ETFs do not use only cash to gain exposure to the value of cryptocurrencies. While they may use cash as part of their investment strategy, they also use cryptocurrency derivatives to gain exposure to the value of cryptocurrencies. This allows them to replicate the performance of a basket of cryptocurrencies without the need to hold the cryptocurrencies directly.

B is incorrect. Cryptocurrency ETFs typically do not directly invest in cryptocurrencies and hold them in their portfolio. This is because holding cryptocurrencies directly involves significant risks and complexities, including the risk of loss due to hacking, the need for secure storage, and the challenges of managing the private keys that control access to the cryptocurrencies.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4549 Which of the following statements *best* describes the role of hedge funds in the digital asset market?

- A. Hedge funds primarily act as intermediaries between cryptocurrency buyers and sellers, facilitating transactions and earning commissions.
- B. Hedge funds primarily invest in cryptocurrencies by purchasing them on exchanges and holding them in anticipation of price appreciation.
- C. Hedge funds actively participate in the cryptocurrency market through various strategies, including mining for Bitcoin, investing in blockchain technology, and trading digital assets.

The correct answer is **C**.

Hedge funds actively participate in the cryptocurrency market through various strategies, including mining for Bitcoin, investing in blockchain technology, and trading digital assets. Hedge funds, known for their diverse and often complex investment strategies, have been increasingly involved in the digital asset space. They employ a variety of strategies to generate returns, including mining for Bitcoin, investing in blockchain technology, and trading digital assets.

Mining for Bitcoin involves the use of powerful computers to solve complex mathematical problems, thereby validating transactions on the Bitcoin network. The miners are then rewarded with new Bitcoin, which can be sold for a profit. This active participation in the cryptocurrency market allows hedge funds to generate returns in a variety of market conditions and to take advantage of the unique opportunities presented by digital assets.

A is incorrect. While some hedge funds may act as intermediaries between cryptocurrency buyers and sellers, this is not their primary role in the cryptocurrency market. Hedge funds are primarily investment vehicles, not intermediaries. They seek to generate returns for their investors through a variety of investment strategies, including those involving cryptocurrencies.

B is incorrect. While some hedge funds may invest in cryptocurrencies by purchasing them on exchanges and holding them in anticipation of price appreciation, this is not their only strategy in the cryptocurrency market. Hedge funds employ a variety of strategies in the cryptocurrency market, including mining for Bitcoin, investing in blockchain technology, and trading digital assets. Simply buying and holding cryptocurrencies is just one of many strategies that hedge funds may use.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.

Q.4550 Which of the following is *most likely* the primary advantage of asset-backed tokens?

- A. It increases the overall value of the asset.
- B. It democratizes access to high-value assets.
- C. It allows investors to own a whole high-priced asset.

The correct answer is **B**.

The primary benefit of asset-backed tokens is that they democratize access to high-value assets. This is achieved through the concept of fractional ownership, which allows multiple investors to own a fractional interest in high-priced assets. This means that investors who would not normally be able to afford to invest in such assets due to their high price can now do so.

A is incorrect. While asset-backed tokens can potentially increase the liquidity of an asset, they do not necessarily increase the overall value of the asset. The value of the asset is derived from the underlying physical or financial asset, and the tokenization process does not change this. The value of the tokens will fluctuate based on the value of the underlying asset, but the overall value of the asset remains the same.

C is incorrect. Asset-backed tokens do not allow investors to own a whole high-priced asset. Instead, they allow investors to own a fraction of such an asset. This is a key feature of asset-backed tokens and is what makes them different from traditional forms of investment.

**CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (c): Describe investment forms and vehicles used in digital asset investments.**

Q.4551 Which of the following is *most likely* true regarding the investment in cryptocurrencies?

- A. Investing in cryptocurrencies is a low-risk strategy due to their recognition as alternative investments.
- B. Despite their recognition as alternative investments, cryptocurrencies should be approached with caution due to their high level of risk.
- C. The value appreciation of cryptocurrencies is solely due to the introduction of traditional indirect forms of investment into the cryptocurrency market.

The correct answer is **B**.

Despite their recognition as alternative investments, cryptocurrencies should indeed be approached with caution due to their high level of risk. Cryptocurrencies, such as Bitcoin and Ethereum, have seen significant increases in value and have been recognized as alternative investments. However, they are known for their volatility, which can lead to substantial financial losses.

While they offer the potential for high returns, the risk associated with these digital assets is equally high. This is due to a variety of factors, including regulatory uncertainty, technological vulnerabilities, and market manipulation. Therefore, while cryptocurrencies can be a part of a diversified investment portfolio, they should be approached with caution, and investors should be prepared for the possibility of losing their entire investment.

A is incorrect. Investing in cryptocurrencies is not a low-risk strategy due to their recognition as alternative investments. While it is true that cryptocurrencies have gained recognition as alternative investments, this does not mitigate the high level of risk associated with them. Their prices are highly volatile and can fluctuate widely in a very short period of time. Therefore, investing in cryptocurrencies can lead to substantial financial losses.

C is incorrect. The value appreciation of cryptocurrencies is not solely due to the introduction of traditional indirect forms of investment into the cryptocurrency market. While the introduction of traditional indirect forms of investment has certainly contributed to the increase in value of cryptocurrencies, it is not the only factor. Other factors, such as increased acceptance of cryptocurrencies as a form of payment, technological advancements, and regulatory developments, have also played a role in their value appreciation.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (d): Analyze sources of risk, return, and diversification among digital asset investments.

Q.4552 Which of the following *most likely* determines the value of cryptocurrencies?

- A. Number of transactions processed through the network.
- B. Amount of dividends or interest payments it generates.
- C. Scarcity principle that is similar to how the value of precious metals is determined.

The correct answer is **C**.

The value of cryptocurrencies like Bitcoin is primarily determined by the scarcity principle, similar to how the value of precious metals is determined. This principle is based on the economic theory of supply and demand. When the supply of an asset is limited and demand for it is high, its value tends to increase. In the case of Bitcoin, its supply is capped at 21 million, making it a scarce digital asset.

A is incorrect. While the number of transactions processed through the network can influence the perceived utility and hence the demand for a cryptocurrency, it is not the primary determinant of its value. The value of a cryptocurrency is not directly tied to the volume of transactions it processes. A cryptocurrency could process a high volume of transactions, but if the demand for the cryptocurrency is low, its value may not necessarily be high.

B is incorrect. Cryptocurrencies do not generate dividends or interest payments, so their value is not determined by these factors. This is a key difference between cryptocurrencies and traditional assets like stocks and bonds, which derive their value from the underlying cash flows they generate.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets.
LOS (b): Explain investment features of digital assets and contrast them with other asset classes.

Q.4553 Which of the following is *most likely* true about cryptocurrencies in terms of regulatory status and potential risks?

- A. Despite the lack of clear legal protection, there is no risk involved in investing in cryptocurrencies due to their digital nature.
- B. Cryptocurrencies are fully regulated and protected by law in both the United States and the EU, minimizing the risk for investors.
- C. The regulatory uncertainty and lack of legal protection for cryptocurrencies create a significant risk for investors, with potential for fraud and criminal activities.

The correct answer is **C**.

The regulatory uncertainty and lack of legal protection for cryptocurrencies indeed create a significant risk for investors, with the potential for fraud and criminal activities. The legal and regulatory frameworks for cryptocurrencies are still evolving, and this lack of clarity can lead to significant risks. In the United States, cryptocurrencies are treated as digital commodities, but this does not mean they are fully regulated or protected by law.

In the EU, comprehensive regulations are yet to be established. This lack of clear legal protection can expose investors to various risks, including fraud and criminal activities. Cryptocurrencies, due to their digital nature and the anonymity they can provide, have been used in illegal activities, including money laundering and financing of terrorism. Furthermore, the lack of regulation can also lead to market manipulation and volatility, which can result in significant financial losses for investors.

A is incorrect. Cryptocurrencies are not fully regulated and protected by law in both the United States and the EU. While the US treats cryptocurrencies as a digital commodity, this does not equate to full regulation or legal protection. In the EU, comprehensive regulations are yet to be established. Therefore, the statement is inaccurate.

B is incorrect. The statement that there is no risk involved in investing in cryptocurrencies due to their digital nature is incorrect. The digital nature of cryptocurrencies does not eliminate risks; in fact, it can introduce new ones, such as cybersecurity risks. Furthermore, the lack of clear legal protection can expose investors to significant risks, including fraud and criminal activities.

CFA Level I, Alternative Investments, Learning Module 7: Introduction to Digital Assets. LOS (d): Analyze sources of risk, return, and diversification among digital asset investments.
