CHAPTER 55
FINTECH IN INVESTMENT MANAGEMENT

1. (C) traditional asset classes.

Explanation

Robo-advisory services typically offer passively managed investments in traditional asset classes. High-frequency trading refers to intraday arbitrage trading with computer algorithms.

Related Material

SchweserNotes - Book 5

2. (A) cryptocurrency.

Explanation

An ICO is a sale of cryptocurrency to investors in exchange for cash or another cryptocurrency.

(Study Session 18, Module 55.1, LOS 55.d)

Related Material

SchweserNotes - Book 5

3. (A) algorithmic trading.

Explanation

One of the potential applications of algorithmic trading is entering the optimal execution instructions for a trade. Text analytics is used for interpreting unstructured text or voice data. Natural language processing is used for applications such as language translation and speech recognition.

(Study Session 18, Module 55.1, LOS 55.c)

Related Material

SchweserNotes - Book 5

4. (B) The model treats true parameters as noise.

Explanation

Underfitting describes a machine learning model that is not complex enough to describe the data it is meant to analyze. An underfit model treats true parameters as noise and fails to identify the actual patterns and relationships. A model that is overfit (too complex) will tend to identify spurious relationships in the data.

Labeling of input data is related to the use of supervised or unsupervised machine learning techniques.

(Study Session 18, Module 55.1, LOS 55.b)

Related Material

SchweserNotes - Book 5

5. (A) **An analyst adjusts daily stock index data from two countries for their different market holidays.**

Explanation

Curation is ensuring the quality of data – for example, by adjusting for bad or missing data. Word clouds are a visualization technique. Moving data from a storage medium to where they are needed is referred to as transfer.

(Study Session 18, Module 55.1, LOS 55.b)

Related Material

SchweserNotes - Book 5

6. (C) **tokenization.**

Explanation

Tokenization refers to maintaining ownership records for physical assets on a distributed ledger. This might, but would not necessarily, use a blockchain, which is a subcategory of distributed ledgers. Smart contracts are computerized agreements designed to automatically carry out certain actions if defined conditions are met.

(Study Session 18, Module 55.1, LOS 55.d)

Related Material

SchweserNotes - Book 5

7. (A) **computer systems that emulate human thinking.**

Explanation

Artificial intelligence refers to computer systems that emulate the functioning of the human mind. Networks of smart devices and buildings are referred to as the Internet of Things. Data science is the field of study concerned with extracting information from data.

(Study Session 18, Module 55.1, LOS 55.b)

Related Material

SchweserNotes - Book 5

8. (C) Fintech companies include those that develop technology for the financial services industry.

Explanation

Fintech refers to technological developments with potential applications in financial services, as well as to the industry that develops these technologies. While firms must process an increasing volume of data, a large portion of that data exists in unstructured forms. Automated investment advice is a potential application of fintech.

(Study Session 18, Module 55.1, LOS 55.a)

Related Material

SchweserNotes - Book 5

9. (C) Volume and velocity.

Explanation

Big Data may be characterized by its volume (the amount of data available), velocity (the speed at which data are communicated), and variety (degrees of structure in which data exist). "Terabyte" is a measure of volume. "Latency" refers to velocity.

(Study Session 18, Module 55.1, LOS 55.b)

Related Material

SchweserNotes - Book 5

10. (B) supervised learning.

Explanation

Supervised learning is a machine learning technique in which a machine is given labeled input and output data and then models the output data based on the input data. In unsupervised learning, a machine is given input data in which to identify patterns and relationships, but no output data to model. Deep learning is a technique to identify patterns of increasing complexity, and may use supervised or unsupervised learning.

(Study Session 18, Module 55.1, LOS 55.b)

Related Material

SchweserNotes - Book 5