Advanced Certificate in Financial Crimes in Banking and Finance Law

Digital Currency and Blockchain Technology

Digital Currency
Digital currency is a type of currency available only in digital or electronic form, not in physical form like paper money or coins. It is also known as electronic money or digital money and is used for transactions conducted online. Digital currencies operate independently of a central bank and are decentralized, utilizing cryptography for security. They are stored in digital wallets and can be transferred electronically.

Related Terms:
- Cryptocurrency: A type of digital currency that uses cryptography for security and operates on a decentralized network.
- Central Bank Digital Currency (CBDC): Digital currencies issued by central banks as a digital form of fiat currency.
- Stablecoin: A type of cryptocurrency designed to have a stable value by pegging it to a reserve asset like a fiat currency or commodity.
- E-Wallet: A digital wallet that allows users to store, send, and receive digital currencies.

Example:
Bitcoin is a popular digital currency that was created in 2009 and is used for online transactions without the need for intermediaries like banks.

Challenges:
One of the challenges of digital currencies is their volatility, as their value can fluctuate significantly in a short period of time.

Blockchain Technology
Blockchain technology is a decentralized and distributed ledger that records transactions across a network of computers. Each block in the chain contains a list of transactions, and once a block is completed, it is added to the chain in chronological order. Blockchain technology is secure, transparent, and immutable, making it ideal for recording transactions in a tamper-proof manner.

Related Terms:
- Cryptocurrency: Digital currencies that operate on blockchain technology.
- Smart Contracts: Self-executing contracts with the terms of the agreement between buyer and seller directly written into code.
- Decentralized Ledger Technology (DLT): A broader term that includes blockchain technology and other distributed ledger technologies.
- Consensus Mechanism: A protocol used to achieve agreement on a single data value among distributed processes or systems.

Example:

Blockchain technology is used in the supply chain industry to track the movement of goods from the manufacturer to the consumer in a transparent and secure manner.

Challenges:
Scalability, energy consumption, and regulatory concerns are some of the challenges facing blockchain technology as it continues to evolve and expand into various industries.