# 27 Lecture - MGT201

## **Important Subjective**

#### 1. What is the difference between systematic and unsystematic risk?

Answer: Systematic risk, also known as market risk, is the risk that affects the entire market or a broad segment of it, such as changes in interest rates, economic conditions, or geopolitical events. Unsystematic risk, on the other hand, is specific to a particular company or industry, such as a management scandal, product recall, or supply chain disruption.

#### 2. What is the Capital Asset Pricing Model (CAPM) and how does it work?

Answer: The CAPM is a financial model that describes the relationship between risk and expected return. It suggests that the expected return on a security is equal to the risk-free rate plus a premium for bearing market risk, which is determined by the security's beta. Beta is a measure of a security's systematic risk relative to the overall market. According to the CAPM, a security's expected return should be proportional to its beta, with higher beta securities having higher expected returns.

#### 3. What are the assumptions of the CAPM?

Answer: The CAPM makes several key assumptions, including that investors are rational and risk-averse, that markets are efficient and all investors have the same information, that there are no transaction costs, taxes or other frictions, and that investors have homogeneous expectations about the future.

#### 4. What is portfolio theory and how does it relate to risk management?

Answer: Portfolio theory is the study of how investors can construct portfolios of assets to optimize their expected return for a given level of risk. The theory emphasizes the importance of diversification, which can reduce unsystematic risk and increase returns through a combination of assets with different correlations. By constructing a portfolio of assets with different levels of risk and return, investors can manage their exposure to risk while potentially earning higher returns.

#### 5. What is the Sharpe Ratio and how is it used in risk management?

Answer: The Sharpe Ratio is a measure of risk-adjusted return that takes into account both the return and the risk of an investment. It is calculated by subtracting the risk-free rate from the portfolio or investment's return, and dividing by the portfolio or investment's standard deviation. The higher the Sharpe Ratio, the better the risk-adjusted return of the investment. The Sharpe Ratio can be used to compare the risk-adjusted returns of different investments or portfolios.

#### 6. What is beta and how is it used in the CAPM?

Answer: Beta is a measure of a security's systematic risk, or the risk that cannot be diversified away. It measures how much a security's returns move relative to the market as a whole. Beta is used in the CAPM to determine the expected return of a security, with higher beta securities expected to have **higher returns**.

#### 7. What is diversification and how does it reduce risk?

Answer: Diversification is the process of investing in a variety of assets that have different risk and return characteristics. By holding a diversified portfolio, an investor can reduce

unsystematic risk, or the risk specific to a particular company or industry, because losses in one area can be offset by gains in another. Diversification can increase the overall return of a portfolio for a given level of risk.

#### 8. What are the limitations of the CAPM?

Answer: The CAPM has several limitations, including that it assumes perfect information and efficient markets, which may not always be the case. It also assumes that investors are rational and risk-averse, which may not always be true. In addition, the CAPM does not take into account other factors that may affect a security's returns, such as liquidity, size, or momentum.

### 9. What is the relationship between risk and return?

Answer: In general, the higher the risk of an investment, the higher the potential return.