# 24 Lecture - MGT201

# **Important Subjective**

#### What is the stock beta, and how is it calculated? Answer: Stock beta measures the sensitivity of a stock's returns to the market returns. It is calculated as the covariance of the stock returns with market returns divided by the variance of the market returns.

 How is the portfolio beta calculated for a given set of stocks in a portfolio? Answer: The portfolio beta is calculated as the weighted average of the individual stock betas in the portfolio. The weight of each stock is its proportion of the total portfolio value.

#### 3. What is the significance of beta in investing?

Answer: Beta is significant in investing because it measures the risk of a stock or portfolio relative to the overall market. Investors can use beta to adjust their portfolio risk exposure based on their risk tolerance.

4. What is the Security Market Line (SML), and how is it used in portfolio analysis? Answer: The Security Market Line (SML) is a graphical representation of the Capital Asset Pricing Model (CAPM), which shows the expected return on an investment as a function of its beta. It is used in portfolio analysis to determine whether an investment is undervalued or

overvalued based on its expected return and beta.

5. What is the difference between systematic risk and unsystematic risk?

Answer: Systematic risk is the risk associated with the overall market and cannot be diversified away, while unsystematic risk is the risk associated with a specific company or industry and can be diversified away by investing in a diversified portfolio.

6. How does diversification affect portfolio risk?

Answer: Diversification reduces portfolio risk by spreading investments across different asset classes, sectors, and companies. This helps to reduce the impact of individual stock or sector risk on the overall portfolio.

## 7. What is the difference between beta and standard deviation?

Answer: Beta measures the risk of a stock or portfolio relative to the market, while standard deviation measures the volatility of returns around the mean. Beta measures systematic risk, while standard deviation measures total risk.

8. What is the Capital Asset Pricing Model (CAPM), and how is it used in portfolio analysis?

Answer: The Capital Asset Pricing Model (CAPM) is a model that describes the relationship between risk and expected return in a portfolio. It is used in portfolio analysis to determine the expected return of an investment based on its beta and the market risk premium.

## 9. What is the market risk premium, and how is it calculated?

Answer: The market risk premium is the additional return that investors expect to receive for taking on the risk of investing in the overall market. It is calculated as the difference between the expected return on the market and the risk-free rate of return.

#### 10. What are some limitations of the CAPM and the SML in portfolio analysis? Answer: Some limitations of the CAPM and the SML in portfolio analysis include the assumption of market efficiency, the use of historical data, and the lack of consideration of non-market risk factors.