MGT201
Financial Management

Important subjective

Lec 1 - Introduction to financial management

1. **What is financial management? Explain its importance in an organization.**
   Answer: Financial management is the process of managing an organization's financial resources, including planning, organizing, directing, and controlling financial activities. It is important in an organization as it helps in making financial decisions that are critical to its success.

2. **What is the difference between financial management and accounting?**
   Answer: Accounting is the process of recording, classifying, and summarizing financial transactions, while financial management is concerned with planning and controlling an organization's financial resources.

3. **Explain the concept of time value of money.**
   Answer: Time value of money refers to the idea that money received today is worth more than the same amount of money received in the future due to its potential earning capacity over time.

4. **What are the three main financial statements, and what information do they provide?**
   Answer: The three main financial statements are the balance sheet, income statement, and cash flow statement. The balance sheet provides information on an organization's assets, liabilities, and equity. The income statement provides information on revenue, expenses, and profit or loss. The cash flow statement provides information on an organization's cash inflows and outflows.

5. **What is working capital, and why is it important?**
   Answer: Working capital is the difference between an organization's current assets and current liabilities. It is important as it represents the funds that an organization can use to meet its short-term financial obligations and to support its daily operations.

6. **Explain the concept of financial leverage.**
   Answer: Financial leverage refers to the use of debt to finance an organization's operations or investments. It can increase an organization's potential returns but also increases its financial risk.

7. **What is the role of a financial manager in an organization?**
   Answer: The role of a financial manager in an organization is to manage the organization's financial resources, including planning, organizing, directing, and controlling financial activities.

8. **What is the difference between financial planning and budgeting?**
   Answer: Financial planning involves developing long-term financial goals and strategies, while budgeting involves allocating financial resources to specific activities or projects within a given time frame.

9. **What is capital budgeting, and what are some methods used to evaluate investment opportunities?**
   Answer: Capital budgeting is the process of evaluating investment opportunities and deciding which projects to pursue. Some methods used to evaluate investment opportunities include the payback period, net present value, and internal rate of return.

10. **What are some financial ratios used to analyze an organization's financial performance?**
    Answer: Some financial ratios used to analyze an organization's financial performance include the current ratio, quick ratio, debt-to-equity ratio, return on equity, and earnings per share.

Lec 2 - Objectives of financial management, financial assets and financial markets

1. **What is the primary objective of financial management?**
   Answer: The primary objective of financial management is to maximize shareholder wealth and ensure long-term financial viability.

2. **What are financial assets?**
   Answer: Financial assets are instruments that represent ownership or debt in an entity, such as stocks, bonds, and real estate.

3. **What are the different types of financial assets?**
   Answer: The different types of financial assets include stocks, bonds, derivatives, and real estate.

4. **What is a financial market?**
   Answer: A financial market is a platform where buyers and sellers trade financial assets, such as stock exchanges and bond markets.

5. **What factors affect financial asset prices in financial markets?**
   Answer: Economic conditions, political instability, interest rates, and company performance are some of the factors that affect financial asset prices in financial markets.

6. **What is the difference between stocks and bonds?**
   Answer: Stocks represent ownership in a company, while bonds represent a debt owed by a company or government entity.

7. **What are the characteristics of financial assets?**
   Answer: Financial assets have a high degree of liquidity, are easily transferable, have the potential for high returns, and are subject to varying degrees of risk.

8. **What are the functions of financial markets?**
   Answer: Financial markets provide a platform for companies to raise capital, facilitate the buying and selling of financial assets, and provide a means for investors to diversify their portfolios.

9. **Why is understanding financial markets important for effective financial management?**
   Answer: Understanding financial markets is important for effective financial management as it enables informed investment decisions that align with business objectives and risk tolerance.

10. **What are the risks associated with investing in financial assets?**
    Answer: The risks associated with investing in financial assets include market risk, credit risk, liquidity risk, and inflation risk.

Lec 3 - Analysis of financial statements

1. **What is financial statement analysis, and why is it important?**
   Answer: Financial statement analysis is the process of examining an organization's financial reports to gain insight into its financial health and performance. It is important because it helps investors, creditors, and managers make informed decisions about investments, loans, and business operations.

2. **What are the three main financial statements used in financial statement analysis?**
   Answer: The three main financial statements used in financial statement analysis are the balance sheet, income statement, and cash flow statement.

3. **What is the difference between horizontal and vertical analysis?**
   Answer: Horizontal analysis compares financial data over multiple periods, while vertical analysis compares financial data within a single period.

4. **What is the current ratio, and what does it measure?**
   Answer: The current ratio is a financial ratio that measures an organization's ability to pay off its short-term debt obligations. It is calculated by dividing current assets by current liabilities.

5. **What is the debt-to-equity ratio, and what does it measure?**
   Answer: The debt-to-equity ratio is a financial ratio that measures an organization's leverage. It is calculated by dividing total debt by total equity.

6. **What is the return on assets ratio, and what does it measure?**
   Answer: The return on assets ratio is a financial ratio that measures an organization's efficiency in using its assets to generate revenue. It is calculated by dividing net income by total assets.

7. **What is the gross profit margin, and what does it measure?**
   Answer: The gross profit margin is a financial ratio that measures an organization's profitability. It is calculated by dividing gross profit by total revenue.

8. **What is liquidity, and why is it important in financial statement analysis?**
   Answer: Liquidity refers to an organization's ability to meet its short-term debt obligations. It is important in financial statement analysis because it helps investors and creditors assess an organization's financial health and ability to pay off its debts.

9. **What is the operating cash flow, and why is it important in financial statement analysis?**
   Answer: The operating cash flow is the cash flow generated from an organization's core business operations. It is important in financial statement analysis because it helps investors and creditors assess an organization's ability to generate cash from its core business activities.

10. **What are some limitations of financial statement analysis?**
    Answer: Some limitations of financial statement analysis include the use of historical data, the possibility of accounting manipulation, and the impact of external factors that are beyond an organization's control.

Lec 4 - Time value of money

1. **What is the time value of money?**
   Answer: The time value of money is the idea that money received or paid out at different times has different values due to the potential earning power of money over time.

2. **What is present value?**
   Answer: Present value is the current value of future cash flows, calculated using a discount rate.

3. **What is future value?**
   Answer: Future value is the value of an investment at a specific point in time in the future, calculated using an expected rate of return.

4. **What is an annuity?**
   Answer: An annuity is a series of equal payments made at regular intervals.

5. **What is compounding?**
   Answer: Compounding is the process of earning interest on interest.

6. **What is discounting?**
   Answer: Discounting is the process of calculating the present value of future cash flows.

7. **What is the formula for calculating future value?**
   Answer: FV = PV x (1 + r)^n, where FV is the future value, PV is the present value, r is the expected rate of return, and n is the number of years.

8. **What is the formula for calculating present value?**
   Answer: PV = FV / (1 + r)^n, where PV is the present value, FV is the future value, r is the discount rate, and n is the number of years.

9. **What is the time period used in time value of money calculations?**
   Answer: The time period used in time value of money calculations is usually in years.

10. **Why is time value of money important in finance?**
    Answer: Time value of money is important in finance because it allows for the comparison of cash flows over time, and helps in making investment decisions based on the value of money at different points in time.

Lec 5 - Financial forecasting & financial planning

1. **What is financial forecasting and how is it useful for organizations?**
   Answer: Financial forecasting involves predicting future financial outcomes based on historical data. It is useful for organizations as it helps in budgeting, decision making, and setting financial goals.

2. **What are the common financial forecasting techniques used by organizations?**
   Answer: The common financial forecasting techniques used by organizations are trend analysis, regression analysis, and ratio analysis.

3. **What is financial planning and why is it important for organizations?**
   Answer: Financial planning is the process of creating a roadmap for achieving financial goals. It is important for organizations as it helps in identifying financial resources, allocating funds, and managing financial risks.

4. **What are the steps involved in financial planning?**
   Answer: The steps involved in financial planning are setting financial goals, identifying financial resources, developing a financial plan, implementing the plan, and monitoring and evaluating the plan.

5. **What is a financial budget and how is it useful for organizations?**
   Answer: A financial budget is a detailed plan that outlines the expected revenues and expenses for a specific period. It is useful for organizations as it helps in allocating resources, tracking financial performance, and making informed decisions.

6. **What is cash flow forecasting and why is it important for organizations?**
   Answer: Cash flow forecasting is the process of predicting the inflow and outflow of cash for a specific period. It is important for organizations as it helps in managing cash flow, identifying potential cash shortages, and making financial decisions.

7. **What is break-even analysis and how is it useful for organizations?**
   Answer: Break-even analysis is the process of determining the point at which total revenues equal total costs. It is useful for organizations as it helps in identifying the minimum level of sales required to cover costs and make a profit.

8. **What is sensitivity analysis and why is it useful for organizations?**
   Answer: Sensitivity analysis is the process of analyzing how changes in key variables affect financial outcomes. It is useful for organizations as it helps in identifying risks, evaluating financial performance, and making informed decisions.

9. **What is financial modeling and how is it useful for organizations?**
   Answer: Financial modeling is the process of using mathematical formulas to simulate financial scenarios. It is useful for organizations as it helps in predicting financial outcomes, evaluating the impact of different financial decisions, and identifying risks.

10. **What is the role of financial forecasting and planning in the overall financial management of an organization?**
    Answer: Financial forecasting and planning are crucial components of financial management. They help in setting financial goals, identifying financial resources, allocating funds, managing risks, and making informed financial decisions.

Lec 6 - Present value and discounting

1. **What is present value?**
   Answer: Present value is the current worth of a future sum of money, discounted at a specific rate of return.

2. **What is discounting?**
   Answer: Discounting is the process of determining the present value of a future sum of money by applying a discount rate.

3. **How is the present value of a future sum of money affected by the discount rate?**
   Answer: The present value of a future sum of money decreases as the discount rate increases.

4. **What is the formula for calculating present value?**
   Answer: Present Value = Future Value / (1 + Discount Rate)^n, where n is the number of periods.

5. **Why is present value important in finance?**
   Answer: Present value is important in finance because it allows us to compare the value of cash flows that occur at different points in time.

6. **How does inflation affect the present value of money?**
   Answer: Inflation decreases the purchasing power of money, which means that the present value of a future sum of money is reduced.

7. **What is the relationship between the discount rate and the risk associated with an investment?**
   Answer: The higher the risk associated with an investment, the higher the discount rate used to calculate its present value.

8. **How do interest rates affect present value?**
   Answer: Higher interest rates increase the discount rate, which reduces the present value of a future sum of money.

9. **How does compounding affect present value?**
   Answer: Compounding increases the future value of an investment, which in turn increases its present value.

10. **What is the difference between simple interest and compound interest when it comes to present value?**
    Answer: Simple interest assumes that interest is only earned on the principal amount, while compound interest assumes that interest is earned on both the principal and any accumulated interest. As a result, compound interest typically results in a higher present value than simple interest.

Lec 7 - Discounted cash flow analysis, annuities and perpetuities

1. **What is the purpose of Discounted Cash Flow (DCF) analysis?**
   Answer: The purpose of DCF analysis is to estimate the present value of an investment's future cash flows.

2. **What is the difference between an annuity and a perpetuity?**
   Answer: An annuity has a finite number of equal payments made at regular intervals, while a perpetuity has an infinite series of equal payments.

3. **What is the formula for calculating the present value of an annuity?**
   Answer: PV = PMT * (1-(1+r)^-n) / r, where PV is the present value, PMT is the payment amount, r is the discount rate, and n is the number of payments.

4. **What is the formula for calculating the present value of a perpetuity?**
   Answer: PV = PMT / r, where PV is the present value, PMT is the payment amount, and r is the discount rate.

5. **How does the discount rate affect the present value of an investment?**
   Answer: The higher the discount rate, the lower the present value of an investment's future cash flows.

6. **What is the difference between simple interest and compound interest?**
   Answer: Simple interest is calculated only on the principal amount, while compound interest is calculated on both the principal and any accrued interest.

7. **What is the time value of money?**
   Answer: The time value of money is the concept that money is worth more today than the same amount of money in the future due to its potential earning capacity.

8. **How does the length of time affect the present value of an investment?**
   Answer: The longer the time until the investment's cash flows are received, the lower the present value of those cash flows.

9. **What is the difference between a fixed annuity and a variable annuity?**
   Answer: A fixed annuity provides a guaranteed fixed rate of return, while a variable annuity's rate of return is based on the performance of underlying investments.

10. **What are the limitations of using DCF analysis to value an investment?**
    Answer: The limitations of DCF analysis include the accuracy of cash flow projections, the choice of discount rate, and the uncertainty of future events that may affect cash flows.

Lec 8 - Capital budgeting and capital budgeting techniques

1. **What is capital budgeting?**
   Answer: Capital budgeting is the process of evaluating and selecting long-term investment projects that will generate the highest returns for a business.

2. **What is the difference between capital budgeting and operational budgeting?**
   Answer: Capital budgeting focuses on long-term investment decisions while operational budgeting focuses on short-term decisions related to day-to-day operations.

3. **What is the payback period method and what are its limitations?**
   Answer: The payback period method is a capital budgeting technique that calculates the length of time it takes to recover the initial investment. Its limitations include ignoring cash flows beyond the payback period and not considering the time value of money.

4. **What is the net present value (NPV) method and how is it calculated?**
   Answer: The NPV method is a capital budgeting technique that calculates the present value of expected cash inflows minus the present value of expected cash outflows. It considers the time value of money and helps determine the profitability of a project.

5. **What is the internal rate of return (IRR) method and how is it calculated?**
   Answer: The IRR method is a capital budgeting technique that calculates the discount rate at which the present value of expected cash inflows equals the present value of expected cash outflows. It considers the time value of money and helps determine the rate of return of a project.

6. **What is the profitability index (PI) method and how is it calculated?**
   Answer: The PI method is a capital budgeting technique that calculates the ratio of the present value of expected cash inflows to the initial investment. It helps determine the profitability of a project relative to its cost.

7. **What is the cost of capital and how is it determined?**
   Answer: The cost of capital is the rate of return required by investors to invest in a project. It is determined by calculating the weighted average of the cost of debt and the cost of equity.

8. **How can risk be incorporated into capital budgeting decisions?**
   Answer: Risk can be incorporated by adjusting the discount rate used in capital budgeting techniques to reflect the riskiness of the project. A higher discount rate is used for riskier projects.

9. **What is the difference between the net present value (NPV) and internal rate of return (IRR) methods?**
   Answer: The NPV method calculates the present value of expected cash inflows minus the present value of expected cash outflows while the IRR method calculates the discount rate at which the present value of expected cash inflows equals the present value of expected cash outflows.

10. **What are the advantages and disadvantages of the payback period method?**
    Answer: The advantages of the payback period method include its simplicity and ease of use. The disadvantages include ignoring cash flows beyond the payback period and not considering the time value of money.

Lec 9 - Net present value & internal rate of return

1. **What is net present value (NPV) and how is it calculated?**

Answer: Net present value is the difference between the present value of expected cash inflows and the present value of expected cash outflows. It is calculated by discounting all future cash flows to their present values and subtracting the initial investment.

2. **What is internal rate of return (IRR) and how is it calculated?**

Answer: Internal rate of return is the discount rate at which the present value of expected cash inflows equals the present value of expected cash outflows. It is calculated by trial and error or by using a financial calculator or spreadsheet function.

3. **How is the required rate of return determined and why is it important in capital budgeting?**

Answer: The required rate of return is the minimum rate of return an investor expects to earn on an investment. It is determined based on the investor's risk tolerance and opportunity cost of capital. It is important in capital budgeting because it is used as the discount rate to calculate the present value of future cash flows.

4. **What are the advantages and disadvantages of using NPV as a capital budgeting technique?**

Answer: The advantages of using NPV are that it considers the time value of money and provides an absolute dollar value for the project's profitability. The disadvantages are that it can be difficult to interpret for projects with multiple cash flows and it does not consider the risk associated with the project.

5. **What are the advantages and disadvantages of using IRR as a capital budgeting technique?**

Answer: The advantages of using IRR are that it is easy to understand and provides a percentage rate of return for the project. The disadvantages are that it can have multiple solutions and is more sensitive to changes in the discount rate.

6. **How does the size and timing of cash flows affect NPV and IRR?**

Answer: The size and timing of cash flows can affect the NPV and IRR calculations. A larger cash flow will have a greater impact on the NPV and IRR calculations than a smaller cash flow. Cash flows received earlier have a greater impact on NPV and IRR than cash flows received later.

7. **What is the relationship between NPV and IRR?**

Answer: NPV and IRR are both methods used to evaluate the profitability of investment projects. A project is considered acceptable if its NPV is positive or if its IRR is greater than the required rate of return. However, there can be situations where the two methods lead to different decisions.

8. **How does the cost of capital affect NPV and IRR?**

Answer: The cost of capital is used as the discount rate in the NPV and IRR calculations. A higher cost of capital will result in a lower NPV and a higher required rate of return for the project to be acceptable using the IRR method.

9. **What are the limitations of using NPV and IRR in capital budgeting?**

Answer: The limitations of using NPV and IRR include their sensitivity to changes in the discount rate, their assumptions about cash flows, and their inability to consider non-financial factors such as environmental impact or social responsibility.

10. **How can sensitivity analysis be used to evaluate the risk associated with a capital investment project?**

Answer: Sensitivity analysis involves examining how changes in assumptions, such as cash flows or discount rates, affect the NPV or IRR of a project. It can be used to evaluate the risk associated with a project by identifying which assumptions have the greatest impact on the project's profitability.

Lec 10 - . Project cash flows, project timing, comparing projects and modified internal rate of return

1. **What is the difference between sunk costs and opportunity costs in project cash flows?**
   Answer: Sunk costs are costs that have already been incurred and cannot be recovered, while opportunity costs are potential benefits that are lost when one alternative is chosen over another.

2. **Why is it important to consider the timing of cash flows in capital budgeting?**
   Answer: The timing of cash flows is important because money received or paid out at different times has different values. It is necessary to adjust for the time value of money to ensure that cash flows are comparable and reflect their true value.

3. **What is the difference between the net present value and the internal rate of return methods for evaluating projects?**
   Answer: The net present value (NPV) method measures the present value of future cash flows, while the internal rate of return (IRR) method calculates the discount rate that makes the NPV equal to zero. NPV is better for comparing different projects, while IRR is better for ranking projects in terms of profitability.

4. **What is the payback period method and how is it calculated?**
   Answer: The payback period method is a capital budgeting technique that calculates the length of time it takes for a project to recover its initial investment. It is calculated by dividing the initial investment by the annual cash inflows.

5. **How does sensitivity analysis help in evaluating project risk?**
   Answer: Sensitivity analysis involves testing the effect of changing certain assumptions or variables on the project's net present value or internal rate of return. It helps identify which assumptions or variables have the greatest impact on the project's profitability, and thus helps evaluate project risk.

6. What is the difference between the profitability index and the net present value methods?
   Answer: The profitability index (PI) is calculated by dividing the present value of future cash flows by the initial investment, while the net present value (NPV) method calculates the present value of future cash flows minus the initial investment. PI is useful for comparing projects with different initial investments, while NPV is better for comparing different projects.

7. **How is the modified internal rate of return (MIRR) different from the regular internal rate of return (IRR)?**
   Answer: The modified internal rate of return (MIRR) takes into account the reinvestment rate of the project's future cash flows, while the regular internal rate of return (IRR) assumes that future cash flows are reinvested at the same rate as the project's initial investment. MIRR is considered a more realistic measure of a project's profitability.

8. **How can the profitability of a project be improved through the use of accelerated depreciation?**
   Answer: Accelerated depreciation allows for a larger portion of the initial investment to be written off in the early years of a project, reducing taxable income and increasing cash flow. This increased cash flow can improve the project's profitability.

9. **What is the difference between mutually exclusive and independent projects?**
   Answer: Mutually exclusive projects are projects where only one can be accepted, while

independent projects are projects that can be accepted or rejected independently of each other.

10. **Why is the cost of capital an important factor in capital budgeting decisions?**
Answer: The cost of capital represents the opportunity cost of investing in a project, and thus is used as the discount rate in net present value and internal rate of return calculations. The cost of capital is important in determining whether a project will generate returns greater than its cost, and thus whether it is a good investment.

Lec 11 - Some special areas of capital budgeting

1. **What are strategic investment decisions in capital budgeting?**
   Answer: Strategic investment decisions in capital budgeting are long-term investment decisions that are made to achieve a company's strategic objectives. These decisions are based on an assessment of the company's current position and future goals.

2. **What is real options analysis in capital budgeting?**
   Answer: Real options analysis in capital budgeting is an approach that considers the value of management flexibility in making investment decisions. It involves assessing the value of potential future opportunities that may arise from the investment and the ability of the company to respond to them.

3. **What are green investment decisions in capital budgeting?**
   Answer: Green investment decisions in capital budgeting are investments made in projects that have a positive impact on the environment. These projects may involve reducing greenhouse gas emissions, using renewable energy sources, or implementing sustainable practices.

4. **What are joint ventures in capital budgeting?**
   Answer: Joint ventures in capital budgeting refer to partnerships between two or more companies to undertake a project or investment. Joint ventures may be formed to share risk or to combine complementary resources and expertise.

5. **What is risk analysis in capital budgeting?**
   Answer: Risk analysis in capital budgeting involves identifying and evaluating the various risks associated with a project or investment. This may include financial, operational, market, and other risks that could impact the success of the investment.

6. **What are divestitures in capital budgeting?**
   Answer: Divestitures in capital budgeting refer to the sale of a portion of the company or a business unit. This may be done to raise funds, streamline operations, or to focus on core business activities.

7. **What is the profitability index in capital budgeting?**
   Answer: The profitability index in capital budgeting is a financial ratio that measures the return on investment for a project. It is calculated as the present value of future cash flows divided by the initial investment.

8. **How does project timing impact capital budgeting decisions?**
   Answer: Project timing is an important factor in capital budgeting decisions as it can impact the timing and magnitude of cash flows. Projects with shorter payback periods or higher net present values may be preferred over longer-term projects, depending on the company's goals and objectives.

9. **What are the key factors to consider when evaluating the environmental impact of a capital budgeting project?**
   Answer: When evaluating the environmental impact of a capital budgeting project, key factors to consider include the potential for greenhouse gas emissions, resource usage, and waste generation. Companies may also consider the impact on local communities and natural habitats.

10. **What is the role of uncertainty in capital budgeting decisions?**
    Answer: Uncertainty is an inherent part of capital budgeting decisions as it is impossible to

predict future events with certainty. Companies must consider the potential impact of uncertain factors, such as changes in market conditions or unexpected costs, when making investment decisions.

Lec 12 - Capital budgeting and interpretation of IRR and NPV with limited capital

1. **What is the difference between the NPV and IRR methods? Which method would you prefer when investing in a new project and why?**

Answer: The NPV method calculates the net present value of cash inflows and outflows, while the IRR method calculates the rate of return that equates the present value of cash inflows with the present value of outflows. I would prefer the NPV method when investing in a new project because it takes into account the time value of money and provides a more accurate picture of the project's profitability.

2. **How can a company decide which projects to invest in when there is limited capital available?**

Answer: The company can use various techniques such as ranking projects by their profitability index (PI) or by their NPV per dollar of investment. This will help the company to choose the projects that provide the highest return on investment with the limited capital available.

3. **How do sunk costs and opportunity costs affect capital budgeting decisions?**

Answer: Sunk costs are costs that have already been incurred and cannot be recovered, and should not be considered when making capital budgeting decisions. Opportunity costs are the costs of the next best alternative foregone, and should be taken into account when making capital budgeting decisions.

4. **What is the difference between mutually exclusive and independent projects? How would you choose between two mutually exclusive projects?**

Answer: Mutually exclusive projects are projects where choosing one project precludes the selection of other projects. Independent projects are projects that can be selected regardless of the choice of other projects. To choose between two mutually exclusive projects, we would select the project with the highest NPV.

5. **What is the difference between the payback period and discounted payback period? Which method do you think is better and why?**

Answer: The payback period is the time required for the initial investment to be recovered from the cash inflows. The discounted payback period takes into account the time value of money. I think the discounted payback period is better because it accounts for the time value of money and provides a more accurate picture of the project's profitability.

6. **How does sensitivity analysis help in capital budgeting decisions?**

Answer: Sensitivity analysis helps in assessing the risk associated with a project by determining the effect of changes in key variables on the project's profitability. This helps in making more informed decisions by identifying the most critical variables and the extent to which they affect the project's profitability.

7. **What is the difference between capital budgeting and operational budgeting? How are they related?**

Answer: Capital budgeting involves making long-term investment decisions, while operational budgeting involves planning short-term operational expenses. The two are related because operational budgets are used to forecast cash inflows and outflows for capital budgeting decisions.

8. **How can a company deal with uncertainty in capital budgeting decisions?**

Answer: A company can deal with uncertainty by using techniques such as scenario analysis, sensitivity analysis, and real options analysis. These techniques help in identifying potential risks and uncertainties associated with a project and provide a more accurate picture of the project's profitability.

9. **What are the advantages and disadvantages of using the modified internal rate of return (MIRR) method over the traditional IRR method?**

Answer: The advantage of using the MIRR method is that it assumes that cash inflows are reinvested at a rate equal to the cost of capital, which is more realistic than the IRR method, which assumes that cash inflows are reinvested at the IRR rate. The disadvantage of using the MIRR method is that it can be more difficult to calculate than the IRR method.

10. **How can a company determine the optimal level of capital investment in a given period?**

Answer: A company can determine the optimal level of capital investment by comparing the expected return on investment to

Lec 13 - Bonds and classification of bonds

1. **What is a bond? Explain its basic features.**
   Ans: A bond is a type of debt security that allows the issuer to raise capital by borrowing funds from investors. The basic features of a bond include the face value, coupon rate, maturity date, and issuer.

2. **What is the difference between a coupon rate and a yield?**
   Ans: The coupon rate is the fixed rate of interest paid on a bond, while the yield is the overall return on the bond, taking into account the purchase price and the coupon payments.

3. **What is a callable bond?**
   Ans: A callable bond is a bond that can be redeemed by the issuer before its maturity date. This option is typically included in the bond's terms and conditions, and the issuer can choose to exercise it if interest rates decline.

4. **What is a convertible bond?**
   Ans: A convertible bond is a type of bond that can be converted into a specified number of shares of the issuer's stock. This feature provides investors with the opportunity to benefit from potential stock price increases, while also providing the security of a fixed-income investment.

5. **What is a zero-coupon bond?**
   Ans: A zero-coupon bond is a type of bond that does not pay regular interest payments. Instead, it is sold at a discount to its face value and redeemed for the face value at maturity, providing investors with a capital gain.

6. **What is the difference between a secured and an unsecured bond?**
   Ans: A secured bond is backed by specific assets of the issuer, while an unsecured bond is not. This means that in the event of default, holders of secured bonds have a higher claim on the issuer's assets.

7. **What is a junk bond?**
   Ans: A junk bond is a type of bond that is rated below investment grade, indicating a higher risk of default. These bonds typically offer higher yields to compensate investors for this risk.

8. **What is the difference between a government bond and a corporate bond?**
   Ans: A government bond is issued by a government entity, while a corporate bond is issued by a company. Government bonds are generally considered to be lower risk, while corporate bonds offer higher yields.

9. **What is a municipal bond?**
   Ans: A municipal bond is a type of bond issued by a state or local government entity to fund public projects, such as schools or roads. These bonds are typically exempt from federal income tax and may also be exempt from state and local taxes.

10. **What is a bond rating? How is it determined?**
    Ans: A bond rating is an assessment of the creditworthiness of a bond issuer, indicating the risk of default. Bond ratings are typically assigned by rating agencies, such as Standard & Poor's or Moody's, and are based on a variety of factors, including the issuer's financial health, industry trends, and economic conditions.

Lec 14 - Bonds valuation

1. **What is the definition of bond valuation?**

Bond valuation refers to the process of calculating the fair market value of a bond. It involves analyzing various factors such as the bond's coupon rate, yield to maturity, time to maturity, and the current market interest rate to determine its worth.

2. **What are the main factors that affect bond valuation?**

The main factors that affect bond valuation include the bond's coupon rate, yield to maturity, time to maturity, and the current market interest rate. Changes in any of these factors can impact the bond's value.

3. **What is the relationship between bond prices and interest rates?**

Bond prices and interest rates have an inverse relationship. When interest rates rise, bond prices fall, and when interest rates fall, bond prices rise.

4. **What is the difference between yield to maturity and current yield?**

Yield to maturity is the total return anticipated on a bond if it is held until maturity, while current yield is the annual income generated by a bond divided by its current market price.

5. **How does the time to maturity affect a bond's valuation?**

The time to maturity of a bond affects its valuation because it determines the number of interest payments that will be received and the amount of principal that will be repaid at maturity.

6. **What is the difference between a premium bond and a discount bond?**

A premium bond is a bond that is priced above its face value, while a discount bond is priced below its face value.

7. **How does the credit rating of a bond issuer affect its valuation?**

The credit rating of a bond issuer affects its valuation because it reflects the issuer's ability to repay the bond's principal and interest. Higher credit ratings generally result in lower risk and higher valuations.

8. **What is the significance of the par value of a bond?**

The par value of a bond represents the amount of principal that will be repaid at maturity. It is also used to calculate the bond's coupon payments.

9. **What is a callable bond?**

A callable bond is a bond that can be redeemed by the issuer before its maturity date. This can result in a loss of income for the bondholder.

10. **How does the yield curve affect bond valuations?**

The shape of the yield curve can affect bond valuations. When the yield curve is steep, long-term bonds generally have higher yields than short-term bonds, while the opposite is true when the yield curve is flat. This can impact the valuation of different types of bonds.

Lec 15 - Bond valuation & yield on bonds

1. **Define bond valuation and explain the components of a bond's price.**
   Answer: Bond valuation refers to the process of determining the fair market value of a bond. The components of a bond's price include the coupon rate, the face value, the maturity date, and the current market interest rate. The price of a bond is calculated by discounting the future cash flows generated by the bond to the present value using the current market interest rate.

2. **What is the yield to maturity of a bond? Explain its importance in bond valuation.**
   Answer: The yield to maturity of a bond is the rate of return an investor can expect to receive if they hold the bond until maturity. It is important in bond valuation because it is used to determine the fair market value of a bond. The yield to maturity takes into account the current market price of the bond, the face value, the coupon rate, and the number of years to maturity.

3. **What is meant by the term "bond yield"? How is it calculated?**
   Answer: Bond yield refers to the rate of return an investor can expect to receive on a bond. It is calculated by dividing the annual interest payment by the current market price of the bond. The resulting percentage represents the bond yield.

4. **What is the difference between current yield and yield to maturity?**
   Answer: The current yield of a bond is the annual income generated by the bond divided by its current market price. It is a simple calculation that does not take into account the time value of money. The yield to maturity, on the other hand, is the rate of return an investor can expect to receive if they hold the bond until maturity. It takes into account the time value of money and factors in the current market price of the bond, the face value, the coupon rate, and the number of years to maturity.

5. **Explain the concept of interest rate risk in relation to bond valuation.**
   Answer: Interest rate risk refers to the risk that the value of a bond will decrease as a result of a change in the market interest rate. When the market interest rate increases, the value of existing bonds decreases because the coupon rate on those bonds becomes less attractive to investors. This means that bond prices are inversely related to interest rates. As interest rates rise, bond prices fall, and vice versa.

6. **What is a zero-coupon bond? How is it valued?**
   Answer: A zero-coupon bond is a bond that does not pay any interest during its life. Instead, the investor receives the face value of the bond at maturity. Zero-coupon bonds are valued by discounting the face value to the present using the current market interest rate. Since zero-coupon bonds do not pay any interest, their value is highly sensitive to changes in the market interest rate.

7. **How is the yield curve used in bond valuation?**
   Answer: The yield curve is a graphical representation of the relationship between bond yields and their respective maturities. The shape of the yield curve is important in bond valuation because it provides information about the current and future state of the economy. A steep yield curve indicates that investors expect interest rates to rise in the future, while a flat yield curve indicates that interest rates are expected to remain stable.

8. **What is the difference between a callable bond and a putable bond?**
   Answer: A callable bond is a bond that allows the issuer to redeem the bond before its maturity date. This means that the investor's cash flows can be interrupted if the bond is called. A putable bond, on the other hand, is a bond that allows the investor to redeem the bond before

its maturity date. This means that the investor has the right to sell the bond back to the issuer at a predetermined price.

9. **What is the difference between a premium bond and a discount bond?**
   Answer

Lec 16 - Introduction to stocks and stock valuation

1. **What is a stock exchange and how does it work?** Answer: A stock exchange is a marketplace where stocks and other securities are bought and sold. Buyers and sellers place orders through brokers who execute the orders on the exchange.

2. **What is market capitalization and how is it calculated?** Answer: Market capitalization is the total value of a company's outstanding shares of stock. It is calculated by multiplying the number of shares outstanding by the current market price of the stock.

3. **What is the difference between growth stocks and value stocks?** Answer: Growth stocks are companies that are expected to grow at a faster rate than the overall market, while value stocks are companies that are considered to be undervalued by the market.

4. **What is the price-to-earnings (P/E) ratio and how is it used in stock valuation?** Answer: The P/E ratio is the current stock price divided by the earnings per share (EPS) of a company. It is used to determine whether a stock is overvalued or undervalued relative to its earnings.

5. **What is the difference between fundamental analysis and technical analysis in stock valuation?** Answer: Fundamental analysis involves analyzing a company's financial statements and economic factors to determine its intrinsic value, while technical analysis uses charts and other tools to identify patterns and trends in a stock's price and trading volume.

6. **What is a dividend yield and how is it calculated?** Answer: Dividend yield is the percentage of a company's current stock price that is paid out annually in dividends. It is calculated by dividing the annual dividend per share by the current stock price.

7. **What is the difference between common stock and preferred stock?** Answer: Common stock represents ownership in a company and gives shareholders voting rights, while preferred stock typically has a fixed dividend rate but no voting rights.

8. **What is the efficient market hypothesis and how does it relate to stock valuati**on? Answer: The efficient market hypothesis suggests that all available information is already reflected in a stock's price, making it impossible to consistently outperform the market through analysis or research.

9. What is the difference between a primary market and a secondary market? Answer: The primary market is where new securities are issued and sold to investors for the first time, while the secondary market is where previously issued securities are bought and sold among investors.

10. **What are some risks associated with investing in the stock market?** Answer: Some risks associated with investing in the stock market include market volatility, economic and political instability, company-specific risks, and the possibility of fraud or insider trading.

Lec 17 - Common stock pricing and dividend growth model

1. **What is the dividend growth model?**
   Answer: The dividend growth model is a method used to estimate the fair value of a stock based on its expected future dividend payments, which are discounted to their present value using an appropriate discount rate.

2. **What is the formula for the dividend growth model?**
   Answer: The formula for the dividend growth model is V0 = D1 / (ke - g), where V0 is the current value of the stock, D1 is the expected dividend payment one year from now, ke is the company's cost of equity, and g is the expected dividend growth rate.

3. **How does the dividend growth model help investors evaluate stocks?**
   Answer: The dividend growth model helps investors evaluate stocks by estimating their fair value based on the expected future cash flows from dividend payments.

4. **What are the limitations of the dividend growth model?**
   Answer: The limitations of the dividend growth model include its reliance on assumptions about the stability of dividend growth rates and the discount rate used, and its inability to account for non-dividend cash flows.

5. **What is the relationship between a company's dividend yield and its stock price?**
   Answer: The dividend yield and stock price have an inverse relationship, meaning that as the stock price increases, the dividend yield decreases, and vice versa.

6. **How does a company's cost of equity impact its stock valuation using the dividend growth model?**
   Answer: The cost of equity is used as the discount rate in the dividend growth model, so an increase in the cost of equity will result in a lower stock valuation, and vice versa.

7. **What is the difference between a constant growth and non-constant growth dividend model?**
   Answer: A constant growth dividend model assumes a steady and predictable dividend growth rate, while a non-constant growth model allows for fluctuating dividend growth rates.

8. **How can a company's historical dividend payments be used in the dividend growth model?**
   Answer: A company's historical dividend payments can provide insights into its past dividend growth rates and help investors make assumptions about its future dividend growth potential.

9. **How does the dividend growth model relate to the concept of intrinsic value?**
   Answer: The dividend growth model is used to estimate the intrinsic value of a stock based on its expected future cash flows, which is the theoretical value of a stock that represents its true worth.

10. **What are the advantages of using the dividend growth model in stock valuation?**
    Answer: The advantages of using the dividend growth model include its simplicity, transparency, and ability to focus on a company's fundamental value drivers.

Lec 18 - Common stock - rate of return & EPS pricing model

1. **What is the common stock - rate of return and EPS pricing model?**
   Answer: The common stock - rate of return and EPS pricing model is a method used to estimate the fair value of a stock based on its expected earnings per share (EPS) and the investor's required rate of return.

2. **What is EPS in the common stock - rate of return and EPS pricing model?**
   Answer: EPS stands for earnings per share, which is the company's net income divided by the number of outstanding shares of stock.

3. **What is the required rate of return in the common stock - rate of return and EPS pricing model?**
   Answer: The required rate of return represents the investor's expected rate of return on the stock, which takes into account the risk associated with the investment.

4. **How is the fair value of a stock calculated using the common stock - rate of return and EPS pricing model?**
   Answer: The fair value of a stock is calculated by dividing the expected EPS by the investor's required rate of return, adjusted for expected growth in EPS.

5. **What does the expected growth rate represent in the common stock - rate of return and EPS pricing model?**
   Answer: The expected growth rate represents the expected rate of increase in the company's earnings per share over time.

6. **Does the common stock - rate of return and EPS pricing model assume a constant or variable growth rate in EPS?**
   Answer: The model assumes a constant growth rate in EPS.

7. **How is the EPS used in the common stock - rate of return and EPS pricing model determined?**
   Answer: The EPS used in the model is the projected EPS for the next five years.

8. **What factors influence the required rate of return in the common stock - rate of return and EPS pricing model?**
   Answer: The required rate of return is influenced by market conditions and the perceived risk associated with the investment.

9. **What is the main limitation of the common stock - rate of return and EPS pricing model?**
   Answer: The main limitation is that it assumes a constant growth rate in EPS, which may not reflect the actual growth rate of the company.

10. **Can the common stock - rate of return and EPS pricing model be used in conjunction with other valuation methods?**
    Answer: Yes, the model can be used in conjunction with other valuation methods to compare and verify the results.

Lec 19 - Introduction to risk., risk and return for single stock investment

1. **What is risk in the context of single stock investment, and why is it important to consider?**
   Answer: Risk refers to the likelihood that an investment may not achieve its expected return or may even experience a loss. It is important to consider because higher returns are usually associated with higher risks. Therefore, investors must balance their risk tolerance with their investment goals.

2. **What is the measure of risk associated with a stock, and how is it calculated?**
   Answer: The measure of risk associated with a stock is typically calculated using standard deviation, which reflects the extent of fluctuations in the stock's returns over a given period.

3. **What factors can contribute to risk in single stock investment, and how can investors manage it?**
   Answer: Factors that can contribute to risk in single stock investment include market volatility, company-specific risks, and external factors like political instability. Investors can manage risk through diversification, which involves spreading investments across different stocks or asset classes.

4. **What is the relationship between risk and return in single stock investment, and why is it important to understand?**
   Answer: The relationship between risk and return in single stock investment is generally positive, meaning that higher returns are usually associated with higher risks. It is important to understand this relationship because investors must weigh the potential for higher returns against the potential for higher risks.

5. **How do investors typically measure the risk of a single stock investment, and what is the significance of this measure?**
   Answer: Investors typically measure the risk of a single stock investment using standard deviation, which reflects the extent of fluctuations in the stock's returns over a given period. The significance of this measure is that it provides investors with a sense of how much the stock's returns might vary over time.

6. **What is the meaning of return in single stock investment, and how is it calculated?**
   Answer: Return in single stock investment refers to the profit or loss generated by an investment, which can be positive or negative. Return is typically calculated as the difference between the purchase price and the selling price of the stock, plus any dividends received.

7. **What are some common sources of company-specific risk in single stock investment, and how can investors manage this risk?**
   Answer: Common sources of company-specific risk in single stock investment include changes in leadership, unexpected legal or regulatory changes, and shifts in consumer preferences. Investors can manage this risk by researching the company's history, leadership, financial health, and other factors that may impact its success.

8. **What is the primary concern of investors when considering single stock investment, and how can this concern be addressed?**
   Answer: The primary concern of investors when considering single stock investment is to balance the potential for higher returns with the potential for higher risks. This concern can be addressed by diversifying investments across different stocks or asset classes.

9. **What is market risk in single stock investment, and how is it different from company-specific risk?**
   Answer: Market risk in single stock investment refers to the risk of a stock's price falling due to overall market trends. It is different from company-specific risk, which refers to risks specific to a particular company, such as changes in leadership or unexpected legal or regulatory changes.

10. **What is the significance of risk management in single stock investment, and what are some common strategies for managing risk?**
    Answer: Risk management is significant in single stock investment because it allows investors to balance risk and return and achieve their investment goals. Common strategies for managing risk include diversification, setting stop-loss orders, and utilizing hedging techniques.

Lec 20 - Risk for single a stock investment probability graph and co-efficient of variation

1. **What is the probability distribution of a stock investment?**
   Answer: The probability distribution of a stock investment is a graphical representation that shows the likelihood of different outcomes based on different levels of risk.

2. **What is the risk-return tradeoff for a single stock investment?**
   Answer: The risk-return tradeoff for a single stock investment is the relationship between the level of risk associated with the investment and the potential return that can be earned.

3. **What is the coefficient of variation?**
   Answer: The coefficient of variation is a statistical measure that is used to measure the risk of an investment relative to its expected return.

4. **How is the probability distribution of a stock investment related to its risk?**
   Answer: The probability distribution of a stock investment is related to its risk because it shows the range of potential outcomes and the likelihood of each outcome based on the level of risk associated with the investment.

5. **How does the coefficient of variation help investors evaluate risk?**
   Answer: The coefficient of variation helps investors evaluate risk by measuring the risk of an investment relative to its expected return. The higher the coefficient of variation, the higher the risk associated with the investment.

6. **What is the expected return of a stock investment?**
   Answer: The expected return of a stock investment is the amount of return that an investor can expect to earn on the investment based on the level of risk associated with the investment.

7. **What is the significance of the probability graph in stock investment?**
   Answer: The probability graph in stock investment is significant as it helps investors to visualize the range of potential outcomes and the likelihood of each outcome based on the level of risk associated with the investment.

8. **How can an investor calculate the coefficient of variation?**
   Answer: An investor can calculate the coefficient of variation by dividing the standard deviation of the investment by its expected return.

9. **How does the coefficient of variation help investors compare the risk of different investments?**
   Answer: The coefficient of variation helps investors compare the risk of different investments by providing a standardized measure of risk that can be used to compare investments with different expected returns.

10. **What is the relationship between risk and return for a single stock investment?**
    Answer: The relationship between risk and return for a single stock investment is that higher levels of risk are generally associated with higher potential returns, but also with a greater likelihood of losses.

Lec 21 - Two stock portfolio theory, risk and expected return

1. **What is a portfolio in the context of stock investments?**
   Answer: A portfolio is a collection of stocks or other securities held by an investor.

2. **What is diversification, and why is it important in stock portfolio theory?**
   Answer: Diversification means spreading your investments across different types of stocks or securities to reduce risk. It is important in portfolio theory because it helps to minimize the impact of any single stock's performance on the overall portfolio.

3. **What is the difference between systematic and unsystematic risk?**
   Answer: Systematic risk refers to risks that are inherent in the entire market or economy, while unsystematic risk is specific to a particular company or industry.

4. **How is expected return calculated in the context of portfolio theory?**
   Answer: Expected return is calculated by taking the weighted average of the expected returns of each stock in the portfolio, where the weights are the proportions of the portfolio invested in each stock.

5. **What is the correlation coefficient, and how is it used in portfolio theory?**
   Answer: The correlation coefficient measures the degree to which two stocks move together. In portfolio theory, it is used to determine the degree of diversification achieved by adding a stock to an existing portfolio.

6. **What is the efficient frontier in portfolio theory?**
   Answer: The efficient frontier is the set of portfolios that achieve the highest possible return for a given level of risk, or the lowest possible risk for a given level of return.

7. **What is the Capital Asset Pricing Model (CAPM), and how is it used in portfolio theory?**
   Answer: The CAPM is a model that describes the relationship between risk and expected return. It is used in portfolio theory to calculate the expected return of a stock or portfolio given its level of risk.

8. **What is the difference between a market portfolio and a risk-free asset?**
   Answer: A market portfolio is a portfolio that contains all stocks in the market, while a risk-free asset is an investment with no risk of loss.

9. **What is the Sharpe ratio, and how is it used in portfolio theory?**
   Answer: The Sharpe ratio measures the excess return earned by a portfolio per unit of risk. It is used in portfolio theory to compare the performance of different portfolios.

10. **What is the importance of regularly rebalancing a stock portfolio?**
    Answer: Regularly rebalancing a stock portfolio helps to maintain the desired level of risk and return, as well as ensure that the portfolio remains diversified. It also helps to avoid the risk of overconcentration in any one stock or sector.

Lec 22 - Portfolio risk analysis and efficient portfolio maps

1. **What is the difference between systematic and unsystematic risk?**
   Ans: Systematic risk is the risk that affects the entire market, while unsystematic risk is the risk that only affects a specific company or industry.

2. **What is portfolio diversification?**
   Ans: Portfolio diversification is the strategy of investing in a variety of assets with different levels of risk to reduce overall investment risk.

3. **What is the efficient frontier in portfolio theory?**
   Ans: The efficient frontier is the set of optimal portfolios that offer the highest expected return for a given level of risk.

4. **How is portfolio risk measured?**
   Ans: Portfolio risk is measured by the standard deviation of returns, which is a statistical measure of the degree to which returns vary from the expected value.

5. **What is the Capital Asset Pricing Model (CAPM)?**
   Ans: The Capital Asset Pricing Model (CAPM) is a financial model that measures the relationship between risk and expected return in a portfolio.

6. **What is the Sharpe ratio?**
   Ans: The Sharpe ratio is a measure of risk-adjusted return that considers the excess return of an investment relative to its risk.

7. **What is the difference between a market portfolio and a diversified portfolio?**
   Ans: A market portfolio is a portfolio that contains all assets in the market, while a diversified portfolio contains a variety of assets with different levels of risk.

8. **What is the concept of correlation in portfolio analysis?**
   Ans: Correlation is a statistical measure that indicates the degree to which two assets move in relation to each other. In portfolio analysis, correlation is used to determine the diversification benefits of including multiple assets in a portfolio.

9. **What is the difference between a minimum variance portfolio and a maximum return portfolio?**
   Ans: A minimum variance portfolio is a portfolio that has the lowest possible risk for a given level of return, while a maximum return portfolio is a portfolio that has the highest possible return for a given level of risk.

10. **What is portfolio optimization?**
    Ans: Portfolio optimization is the process of selecting the optimal combination of assets to achieve a specific investment goal, such as maximizing returns or minimizing risk.