

**Keshav Memorial Institute of Commerce and Science, Narayanguda
Department of Commerce**

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KESHAV MEMORIAL COLLEGE OF COMMERCE AND SCIENCE

Subject- Financial Management

SYLLABUS

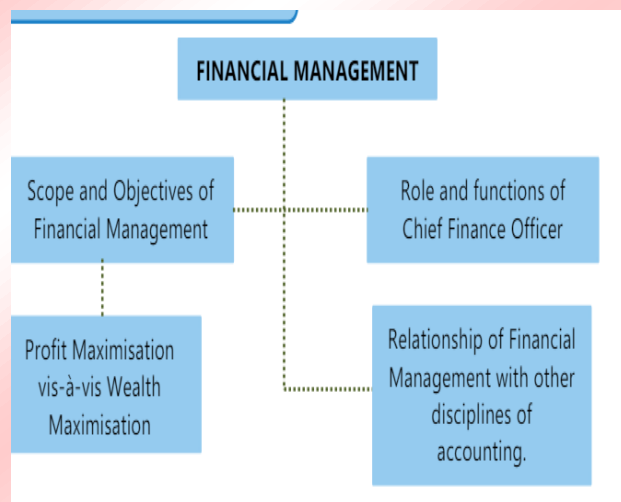
UNIT – I	<p>Financial Management: Meaning - Nature & Scope – Importance - Objectives - Profit Maximization - Wealth Maximization – Changing Role of Finance Manager – Relationship with Other Management Areas – Agency Problem – Organization of Finance Function (Theory).</p> <p>Time Value of Money: Rationale – Future Value of Present Cash Flows: Simple Interest – Compound Interest - Present Value of Future Cash Flows: Single Amount – Series of Cash Flows (Simple Problems).</p>
UNIT – II	<p>LONG-TERM INVESTMENT DECISION:</p> <p>Cost of Capital: Concept – Basic Aspects – Importance – Classification – Computation: Specific Cost of Capital (Debt, Preference, Equity and Retained Earnings) – Weighted Average Cost of Capital (Weights-Book Value, Market Value and Marginal) (Simple Problems).</p> <p>Capital Budgeting: Meaning – Importance – Classification of Projects – Factors - Process – Techniques: Traditional (Payback and ARR) – Modern (NPV, IRR, PI) – Capital Rationing (Simple Problems).</p>
UNIT- III	<p>SHORT-TERM INVESTMENT DECISION:</p> <p>Working Capital Management: Concept – Kinds – Components – Objectives – Need – Operating Cycle - Factors – Methods of Estimating Working Capital: Percentage of Sales Method – Regression Analysis Method – Cash Forecasting Method – Operating Cycle Method – Project Balance Sheet Method (Simple Problems).</p> <p>Management of Current Assets: Management of Cash: Nature – Motives – Models - Management of Receivables: Objectives – Credit Policies – Credit Terms – Collection Policies - Management of Inventory: Objective – Techniques (Simple Problems)</p>

UNIT – IV	FINANCING DECISION: Capital Structure: Meaning – Importance – Factors – Types – Optimal Capital Structure – Theories of Capital Structure: Net Income Approach - Net Operating Income Approach - Traditional Approach - Modigliani and Miller Approach (Simple Problems). Leverages: Meaning – Types – Operating – Financial – Combined – EBIT-EPS Analysis (Simple Problems).
UNIT – V	DIVIDEND DECISION: Dividend Policy: Meaning – Types – Factors – Forms of Dividends – (Theory only) Dividend Theories: Relevance Theories – Walter’s Model – Gordon’s Model – Irrelevance Theory – Miller and Modigliani Theory (Simple Problems).

UNIT-1 INTRODUCTION

FINANCIAL MANAGEMENT MEANING

Financial management refers to the strategic planning, organizing, directing, and controlling of an organization's financial resources and activities to achieve its financial objectives effectively and efficiently. It involves managing various aspects of finance, including budgeting, investing, financing, and monitoring the financial performance of the organization



The primary goal of financial management is to maximize the wealth of the organization's owners or stakeholders by making sound financial decisions. This involves optimizing the allocation of resources, managing risks, and ensuring that the organization's financial activities align with its overall goals and objectives.

Key components of financial management include:

1. **Financial Planning:** Developing financial goals and creating a comprehensive plan to achieve them. This involves forecasting future financial needs, budgeting, and identifying strategies to meet those needs.
2. **Financial Control:** Monitoring and evaluating the organization's financial performance against its plans and objectives. This includes tracking financial metrics, analysing variances, and implementing corrective actions when necessary.
3. **Capital Budgeting:** Evaluating investment opportunities and making decisions about which projects or assets to invest in. This involves assessing the potential returns and risks associated with each investment.
4. **Capital Structure Management:** Determining the optimal mix of debt and equity financing to fund the organization's operations and investments. This includes managing the cost of capital and balancing the trade-offs between risk and return.
5. **Working Capital Management:** Managing the organization's short-term assets and liabilities to ensure liquidity and operational efficiency. This includes managing cash flow, inventory, accounts receivable, and accounts payable.
6. **Risk Management:** Identifying, assessing, and mitigating financial risks that could impact the organization's financial performance. This includes managing risks related to interest rates, exchange rates, credit, market volatility, and other factors.

Overall, effective financial management is essential for ensuring the long-term sustainability and success of an organization. It requires careful planning, prudent decision-making, and ongoing monitoring and adaptation to changing economic conditions and business environments.

Nature and scope

The nature and scope of financial management encompass its fundamental characteristics, objectives, functions, and areas of application within an organization. Here's a breakdown of the nature and scope of financial management:

1. Nature of Financial Management:

- **Interdisciplinary:** Financial management draws on concepts and techniques from various disciplines such as accounting, economics, mathematics, and statistics to analyze and make decisions about financial matters.
- **Dynamic:** Financial management is subject to changes in economic conditions, market trends, regulatory frameworks, and technological advancements, requiring constant adaptation and flexibility in decision-making.
- **Goal-Oriented:** The primary goal of financial management is to maximize the wealth of the organization's owners or shareholders by achieving optimal returns on investment while managing risks effectively.
- **Decision-Oriented:** Financial management involves making decisions regarding the allocation of financial resources, investment opportunities, financing choices, and risk management strategies to achieve the organization's financial objectives.
- **Universal:** Financial management principles and techniques are applicable to organizations across various sectors and industries, regardless of their size, ownership structure, or geographic location.

2. Scope of Financial Management:

- **Financial Planning:** Involves setting financial goals, formulating strategies to achieve them, and creating budgets and forecasts to guide resource allocation and decision-making.
- **Investment Decisions:** Encompasses evaluating and selecting investment opportunities that offer the highest returns relative to their risks, including capital budgeting, project appraisal, and portfolio management.
- **Financing Decisions:** Involves determining the optimal mix of debt and equity financing to fund the organization's operations and investments, considering factors such as cost of capital, leverage, and financial risk.
- **Dividend Decisions:** Entails determining the portion of profits to distribute to shareholders as dividends versus retaining earnings for reinvestment in the business, balancing the interests of shareholders with the organization's growth and capital needs.
- **Working Capital Management:** Focuses on managing the organization's short-term assets and liabilities to ensure liquidity, minimize costs, and optimize operational efficiency.
- **Risk Management:** Involves identifying, assessing, and mitigating financial risks that could impact the organization's financial performance, including market risk, credit risk, liquidity risk, and operational risk.

- **Financial Control:** Encompasses monitoring and evaluating the organization's financial performance, enforcing financial policies and procedures, and taking corrective actions to address deviations from planned objectives.

In essence, the scope of financial management covers a broad range of activities aimed at effectively managing the organization's financial resources to achieve its objectives while maximizing shareholder wealth and ensuring long-term sustainability.

Importance

The importance of financial management cannot be overstated, as it plays a crucial role in the success and sustainability of any organization. Here are several key reasons why financial management is important:

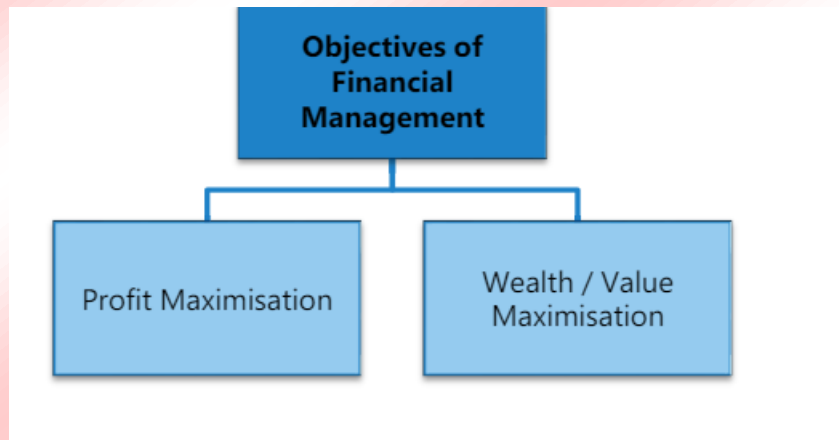
1. **Optimal Resource Allocation:** Financial management helps organizations allocate their financial resources effectively by identifying investment opportunities that offer the highest returns relative to their risks. This ensures that resources are directed towards projects and activities that contribute most to the organization's growth and profitability.
2. **Maximizing Shareholder Wealth:** Financial management aims to maximize the wealth of the organization's owners or shareholders. By making sound financial decisions, such as optimizing capital structure, managing working capital efficiently, and investing in profitable projects, financial managers can enhance shareholder value and attract new investors.
3. **Risk Management:** Financial management involves identifying, assessing, and managing various types of financial risks, including market risk, credit risk, liquidity risk, and operational risk. By implementing risk management strategies, organizations can protect themselves against adverse events and minimize the potential impact on their financial performance.
4. **Financial Planning and Forecasting:** Financial management enables organizations to develop comprehensive financial plans and forecasts, which serve as roadmaps for achieving their strategic objectives. By forecasting future financial needs and trends, organizations can anticipate challenges, seize opportunities, and make informed decisions to navigate uncertain economic conditions.

5. **Enhancing Financial Transparency and Accountability:** Effective financial management promotes transparency and accountability within an organization by ensuring that financial information is accurate, reliable, and accessible to stakeholders. Transparent financial reporting helps build trust with investors, creditors, regulators, and other stakeholders, fostering long-term relationships and mitigating the risk of fraud or mismanagement.
6. **Cost Control and Efficiency:** Financial management involves controlling costs and optimizing financial performance through measures such as budgeting, cost analysis, and performance evaluation. By identifying areas of inefficiency and implementing cost-saving initiatives, organizations can improve their profitability and competitiveness in the marketplace.
7. **Compliance with Legal and Regulatory Requirements:** Financial management ensures that organizations comply with relevant legal and regulatory requirements governing financial reporting, taxation, and corporate governance. By adhering to these standards, organizations can avoid legal penalties, reputational damage, and other adverse consequences associated with non-compliance.

Overall, financial management is essential for the long-term success and sustainability of organizations across all sectors and industries. By effectively managing their financial resources, organizations can achieve their strategic objectives, mitigate risks, and create value for their stakeholders.

Objective

The primary objective of financial management is to maximize the wealth of the organization's owners or shareholders. This overarching goal encompasses several specific objectives and aims to ensure the long-term sustainability and success of the organization. Here are the key objectives of financial management



1. **Maximizing Shareholder Wealth:** The ultimate goal of financial management is to increase the wealth of the organization's owners or shareholders. This is achieved by maximizing the value of the organization through efficient allocation of resources, profitable investments, and effective risk management.
2. **Profit Maximization:** While maximizing shareholder wealth is the ultimate objective, one of the intermediate goals of financial management is to maximize profits. Profitability is essential for generating returns for shareholders, funding growth initiatives, and ensuring the organization's viability in the long run.
3. **Optimizing Capital Structure:** Financial management aims to determine the optimal mix of debt and equity financing to fund the organization's operations and investments. By striking the right balance between debt and equity, financial managers can minimize the cost of capital and maximize the organization's value.
4. **Ensuring Liquidity:** Financial management seeks to maintain adequate levels of liquidity to meet the organization's short-term financial obligations and capital requirements. This involves managing cash flow, maintaining sufficient working capital, and establishing credit lines or reserves to handle unforeseen contingencies.
5. **Achieving Growth:** Financial management plays a crucial role in facilitating the growth and expansion of the organization. This includes identifying growth opportunities, investing in new projects or markets, and allocating resources efficiently to support strategic initiatives that enhance the organization's competitiveness and market position.

6. **Mitigating Financial Risks:** Financial management aims to identify, assess, and mitigate various types of financial risks that could adversely impact the organization's performance and value. This includes managing risks related to market volatility, creditworthiness, interest rates, exchange rates, and operational factors.
7. **Ensuring Financial Stability:** Financial management is concerned with maintaining the financial health and stability of the organization over the long term. This involves implementing robust financial controls, adhering to sound accounting principles, and establishing effective governance mechanisms to safeguard the organization's assets and reputation.

Overall, the objective of financial management is to create value for shareholders while ensuring the organization's sustainability, growth, and resilience in a dynamic and competitive business environment. By achieving these objectives, financial managers contribute to the overall success and prosperity of the organization.

Traditional function of Finance Manager

Traditionally, finance managers are responsible for a range of functions within an organization, focusing on managing financial resources, optimizing financial performance, and supporting strategic decision-making. Here are some of the traditional functions typically associated with finance managers:

1. **Financial Planning and Analysis:** Finance managers are involved in developing and implementing financial plans and budgets that align with the organization's strategic objectives. This includes forecasting future financial performance, analysing variances, and identifying opportunities for improvement.
2. **Capital Budgeting:** Finance managers evaluate investment opportunities and make decisions about allocating capital to projects or initiatives that offer the highest returns relative to their risks. This involves conducting cost-benefit analyses, assessing investment proposals, and prioritizing capital expenditures based on strategic priorities.
3. **Financial Reporting and Analysis:** Finance managers oversee the preparation and presentation of financial statements, including balance sheets, income statements, and cash flow statements. They analyze financial data to assess the organization's performance, profitability, and liquidity, and communicate key insights to stakeholders.

4. **Risk Management:** Finance managers identify, assess, and mitigate financial risks that could impact the organization's operations and financial health. This includes managing risks related to market volatility, creditworthiness, interest rates, currency fluctuations, and other factors that may affect the organization's ability to achieve its objectives.
5. **Capital Structure Management:** Finance managers determine the optimal mix of debt and equity financing to fund the organization's operations and investments. They evaluate different financing options, negotiate terms with lenders or investors, and manage the organization's capital structure to minimize the cost of capital and maximize shareholder value.
6. **Working Capital Management:** Finance managers oversee the management of the organization's short-term assets and liabilities to ensure liquidity, minimize costs, and optimize operational efficiency. This includes managing cash flow, accounts receivable, inventory, and accounts payable to maintain adequate working capital levels.
7. **Financial Control and Compliance:** Finance managers establish and enforce financial controls and policies to ensure compliance with legal and regulatory requirements, accounting standards, and internal guidelines. They monitor financial performance, identify areas of concern, and implement corrective actions to address deviations from planned objectives.
8. **Investor Relations:** Finance managers communicate with investors, analysts, and other stakeholders to provide updates on the organization's financial performance, strategic initiatives, and growth prospects. They participate in investor meetings, earnings calls, and other communication channels to build trust and transparency with the investment community.

Overall, finance managers play a critical role in managing the financial aspects of an organization, supporting decision-making processes, and driving long-term value creation for stakeholders. Their traditional functions encompass a wide range of responsibilities aimed at ensuring the financial health, stability, and success of the organization.

Relationship between Financial management and other Management Areas.

Financial management is closely interconnected with other management areas within an organization. Here's how it relates to some key management functions:

1. **Strategic Management:** Financial management is integral to strategic management as it involves aligning financial goals and resources with the organization's overall strategic objectives. Financial considerations, such as investment decisions, capital allocation, and risk management, play a critical role in shaping the organization's strategic direction and competitiveness.
2. **Operations Management:** Financial management interacts with operations management in various ways. Operations decisions, such as production levels, inventory management, and supply chain optimization, have financial implications in terms of costs, revenues, and cash flow. Financial managers work closely with operations managers to ensure that operational activities are aligned with financial objectives and constraints.
3. **Marketing Management:** Financial management supports marketing management by providing financial insights and analysis to guide marketing decisions. Marketing initiatives, such as pricing strategies, advertising campaigns, and product development, require financial resources and investment considerations. Financial managers collaborate with marketing managers to assess the financial viability of marketing strategies and optimize resource allocation to maximize returns.
4. **Human Resource Management:** Financial management intersects with human resource management in areas such as compensation planning, workforce development, and talent acquisition. Financial managers work with HR managers to design competitive compensation packages, evaluate the financial impact of staffing decisions, and allocate resources for training and development programs. Effective human resource management contributes to cost control, productivity improvement, and overall financial performance.
5. **Information Technology Management:** Financial management relies on information technology systems for financial reporting, budgeting, forecasting, and decision support. Information technology management ensures the availability, reliability, and security of financial information systems, enabling financial managers to access timely and accurate data for analysis and decision-making. Financial and IT managers collaborate to leverage technology solutions that streamline financial processes, enhance data integrity, and support strategic financial objectives.
6. **Supply Chain Management:** Financial management intersects with supply chain management in managing procurement, vendor relationships, and logistics operations. Supply chain decisions, such as sourcing strategies, inventory management, and transportation costs, impact financial performance through their effect on costs, revenues, and working capital. Financial managers collaborate with supply chain managers to optimize supply chain processes, mitigate risks, and improve financial efficiency across the value chain.

Overall, financial management is closely interlinked with other management areas, and effective collaboration and coordination among different functions are essential for achieving organizational goals and maximizing value creation. Integrating financial considerations into strategic, operational, marketing, HR, IT, and supply chain management practices enables organizations to make informed decisions, allocate resources efficiently, and enhance overall performance and competitiveness.

Agency problem



The agency problem refers to conflicts of interest that arise between the goals of principals (such as shareholders) and the actions taken by agents (such as managers or employees) who are supposed to act on behalf of the principals. In business, this misalignment typically occurs when the agent, who is entrusted with making decisions that affect the principal's interests, pursues their own interests instead.

For example, shareholders might want to maximize profits and shareholder value, while managers may prioritize their own job security, salary, or personal goals, which might not always align with maximizing shareholder wealth. This

misalignment can lead to agency costs, such as managerial self-dealing, shirking responsibilities, or making decisions that benefit the agent at the expense of the principal.

To mitigate the agency problem, companies employ various mechanisms such as performance-based compensation, monitoring by boards of directors, independent audits, and regulations aimed at increasing transparency and accountability.

Organization of Finance function

The organization of the finance function within a company can vary depending on the size of the organization, its industry, and its specific needs. However, there are some common structures and roles typically found within the finance function:

1. **Chief Financial Officer (CFO):** The CFO is typically the head of the finance function and is responsible for overseeing all financial activities of the company. This includes financial planning, budgeting, reporting, and analysis. The CFO often serves as a strategic advisor to the CEO and the board of directors.
2. **Finance Team:** Under the CFO, there is usually a team of finance professionals responsible for different aspects of financial management. This team may include roles such as financial controllers, financial analysts, treasury managers, tax specialists, and internal auditors.
3. **Financial Planning and Analysis (FP&A):** This team is responsible for financial planning, budgeting, forecasting, and analysis to support decision-making across the organization. They provide insights into financial performance and help develop strategic plans.
4. **Accounting:** The accounting function is responsible for recording financial transactions, preparing financial statements, and ensuring compliance with accounting standards and regulations. This includes accounts payable, accounts receivable, general ledger, and financial reporting.
5. **Treasury:** The treasury function manages the company's cash flow, liquidity, and capital structure. This includes managing cash and short-term investments, raising capital through debt or equity, managing foreign exchange risk, and overseeing banking relationships.

6. **Tax:** The tax function handles all aspects of taxation, including corporate income tax, sales tax, payroll tax, and international tax issues. They ensure compliance with tax laws and regulations and optimize the company's tax position.
7. **Internal Audit:** The internal audit function provides independent assurance and consulting services to evaluate and improve the effectiveness of risk management, control, and governance processes within the organization. They identify areas of risk and recommend improvements to internal controls.
8. **Financial Systems and Technology:** This team manages the company's financial systems, software, and technology infrastructure. They ensure that financial systems are efficient, reliable, and secure, and they may also be responsible for implementing new technologies to streamline financial processes.

The organization of the finance function may also involve cross-functional collaboration with other departments such as operations, marketing, and human resources to support strategic initiatives and decision-making. Overall, the finance function plays a critical role in driving the financial health and success of the organization.

The Time Value of Money (TVM) is a fundamental concept in finance that states that money today is worth more than the same amount of money in the future due to its potential earning capacity. In other words, a dollar received today is worth more than a dollar received tomorrow because it can be invested or put to productive use to generate returns.

There are several key principles associated with the time value of money:

1. **Future Value (FV):** This concept refers to the value of an investment or cash flow at a future date, based on a certain rate of return. Future value calculations help determine how much an investment will grow over time.
2. **Present Value (PV):** Present value represents the current worth of a future sum of money, discounted back to the present at a certain rate of return. Present value calculations help determine the current value of future cash flows or investments.
3. **Interest Rates:** Interest rates play a crucial role in the time value of money calculations. They represent the cost of borrowing money or the return on investment. The interest rate used in time value of money calculations is often referred to as the discount rate, required rate of return, or opportunity cost of capital.

4. **Compounding:** Compounding refers to the process of earning interest on both the initial principal and the accumulated interest from previous periods. Compounding allows investments to grow exponentially over time.
5. **Discounting:** Discounting is the process of reducing future cash flows to their present value using a discount rate. Discounting is the inverse of compounding and is used to determine the current value of future cash flows.
6. **Time Horizon:** The time horizon represents the length of time over which time value of money calculations are made. Longer time horizons generally result in larger future values for investments due to the effects of compounding.

The time value of money concept is widely used in various financial calculations, including investment analysis, capital budgeting, loan amortization, and retirement planning. Understanding the time value of money allows individuals and businesses to make informed financial decisions and evaluate the trade-offs between receiving money now versus in the future.

The future value of present cash flows is a key concept in finance that helps individuals and businesses understand the potential growth of their investments over time. There are several rationales behind the importance of calculating the future value of present cash flows:

1. **Investment Decision Making:** By calculating the future value of present cash flows, investors can evaluate the potential returns of different investment opportunities. This helps them make informed decisions about where to allocate their capital to achieve their financial goals.
2. **Time Preference:** The future value of present cash flows reflects the time value of money, which acknowledges that a dollar received today is worth more than a dollar received in the future due to its potential earning capacity. Investors generally prefer to receive money sooner rather than later, and understanding the future value of present cash flows helps quantify this preference.
3. **Risk and Return Analysis:** Comparing the future value of present cash flows across different investment options allows investors to assess the trade-offs between risk and return. Investments with higher future values may offer higher potential returns but may also come with greater risks. Analyzing the future value helps investors make risk-adjusted decisions.

4. **Financial Planning:** Individuals and businesses use future value calculations to plan for future financial needs, such as retirement savings, education funds, or capital investments. By projecting the future value of present cash flows, they can determine how much they need to save or invest now to achieve their future financial objectives.
5. **Inflation and Purchasing Power:** Accounting for inflation is crucial when calculating the future value of present cash flows. Inflation erodes the purchasing power of money over time, meaning that a dollar today may not have the same purchasing power in the future. Understanding the future value of present cash flows helps individuals and businesses account for inflation and maintain their purchasing power over time.
6. **Long-Term Wealth Accumulation:** By reinvesting present cash flows and allowing them to grow over time, individuals and businesses can accumulate long-term wealth. Understanding the future value of present cash flows motivates saving and investing behaviors that contribute to wealth accumulation and financial security.

In summary, calculating the future value of present cash flows provides valuable insights into investment opportunities, time preferences, risk and return trade-offs, financial planning, inflation effects, and long-term wealth accumulation. It is an essential tool for making informed financial decisions and achieving financial goals.

Simple Interest

The formula for calculating simple interest is:

$$\text{Simple Interest} = P \times r \times t$$

Where:

- P is the principal amount (the initial amount of money)
- r is the interest rate per period (expressed as a decimal)
- t is the time the money is invested or borrowed for, in years

The result of this formula gives the total amount of interest earned or paid over the specified time period.

In simple interest calculations, the interest amount remains constant over the entire period, as it is based solely on the initial principal amount and does not compound over time. Therefore, the total amount paid or earned at the end of the period is simply the sum of the principal and the interest accrued.

Compound Interest

Compound interest is a method of calculating interest where interest is added to the principal amount, and then the new total becomes the principal for the next period's interest calculation. This process repeats for each period, resulting in the exponential growth of the principal amount over time.

The formula for calculating compound interest is:

$$A = P \times \left(1 + \frac{r}{n}\right)^{nt}$$

Where

- A is the future value of the investment or loan, including interest
- P is the principal amount (the initial amount of money)
- r is the annual interest rate (expressed as a decimal)
- n is the number of times the interest is compounded per year
- t is the time the money is invested or borrowed for, in years

Compound interest calculations result in exponential growth because the interest is calculated not only on the initial principal but also on the accumulated interest from previous periods. This makes compound interest a powerful tool for growing investments over time. The more frequently the interest is compounded, the faster the investment grows.

Present Value of Future Cash Flows:

The present value of future cash flows is a financial concept used to determine the current value of a series of future cash flows, discounted back to the present using an appropriate discount rate. It's a fundamental concept in finance and is used in various applications such as investment analysis, business valuation, and capital budgeting.

The formula for calculating the present value of future cash flows is:

$$PV = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \dots + \frac{CF_n}{(1+r)^n}$$

Where:

- PV is the present value of the future cash flows
- CF_1, CF_2, \dots, CF_n are the cash flows expected to be received in future periods
- r is the discount rate, representing the opportunity cost of capital or the required rate of return
- n is the number of periods into the future the cash flows are expected to occur
- The discount rate used in the formula represents the rate of return that could be earned on an alternative investment of similar risk. It reflects the time value of money, compensating for the fact that a dollar received in the future is worth less than a dollar received today due to factors such as inflation and the ability to earn returns by investing the money elsewhere.
- The present value calculation allows analysts and investors to assess the current worth of future cash flows and make decisions based on their present value. For example, in investment analysis, the present value of future cash flows can be compared to the initial investment to determine whether an investment opportunity is financially attractive. Similarly, in business valuation, the present value of expected future cash flows is used to estimate the intrinsic value of a business.
- Overall, the present value of future cash flows provides a way to quantify the value of uncertain future cash flows in today's terms, facilitating better decision-making in various financial contexts.

Single Amount – Series of Cash Flows

When dealing with a single amount versus a series of cash flows, we're essentially comparing the value of a lump sum of money (single amount) to the combined value of several individual cash flows occurring over time (series of cash flows).

The process involves determining whether it's more financially advantageous to receive a single amount now or to receive a series of cash flows over a specified period in the future, based on their present values.

Here's how we typically approach this comparison:

1. **Calculate Present Value of the Series of Cash Flows:** Using the present value formula, we calculate the present value of each individual cash flow in the series, discounting them back to the present using an appropriate discount rate. Then, we sum up these present values to find the total present value of the series of cash flows.
2. **Compare Present Value to Single Amount:** We compare the total present value of the series of cash flows to the value of the single amount. If the present value of the series of cash flows is greater than the single amount, it may be more advantageous to choose the series of cash flows. Conversely, if the single amount is greater, it may be preferable to take the lump sum.
3. **Consider Other Factors:** Apart from the numerical comparison, other factors may also influence the decision. These factors could include the risk associated with receiving multiple cash flows versus a single amount, the timing and certainty of the cash flows, and the opportunity cost of investing the single amount elsewhere.
4. **Make a Decision:** Based on the comparison and considering other relevant factors, a decision can be made regarding whether to opt for the single amount or the series of cash flows.

This analysis is commonly used in various financial scenarios, such as settlement offers, investment decisions, pension choices, and lottery winnings, where individuals or organizations need to choose between receiving a single amount now or a series of cash flows over time. By comparing their present values, we can assess the relative financial attractiveness of each option and make an informed decision.

UNIT-II: LONG-TERM INVESTMENT DECISION:

Cost of Capital: Concept

The cost of capital is a fundamental financial concept that represents the rate of return that a company must generate on its investments to maintain or increase its value. It's essentially the opportunity cost of using funds in a particular investment or project rather than investing them in another opportunity with a similar risk profile.

There are two main components of the cost of capital:

1. **Debt Cost:** This is the cost associated with raising funds through debt financing, such as loans or bonds. It typically includes interest payments and other fees paid to lenders.
2. **Equity Cost:** This is the cost associated with raising funds through equity financing, such as issuing stocks. It represents the return that shareholders require in exchange for their investment, often referred to as the cost of equity.

The weighted average cost of capital (WACC) is a common method used to calculate the overall cost of capital for a company. It considers the proportion of debt and equity in the company's capital structure and calculates a weighted average of their respective costs.

Understanding the cost of capital is crucial for businesses when making investment decisions, as it helps them determine whether a particular investment will generate returns that exceed its cost of capital and therefore add value to the company. Additionally, it is used as a benchmark for evaluating the performance of existing investments and for setting hurdle rates for new projects.

Basic Aspects

some basic aspects to consider regarding the cost of capital:

1. **Risk and Return:** The cost of capital is influenced by the risk associated with an investment. Generally, investments with higher risk levels are expected to have higher costs of capital because investors require a greater return to compensate for the additional risk.
2. **Debt vs. Equity:** Companies can raise capital through debt (borrowing money) or equity (issuing shares). Debt typically has a lower cost than equity because lenders have a legal claim on assets and are paid before shareholders. However, too much debt can increase financial risk and raise the cost of debt capital.
3. **Market Conditions:** The cost of capital is influenced by prevailing market conditions, including interest rates, inflation rates, and investor sentiment. Changes in these factors can impact the cost of both debt and equity capital.
4. **Company-Specific Factors:** Factors such as the company's creditworthiness, growth prospects, industry dynamics, and capital structure influence its cost of capital. Companies with strong financial health and growth potential may have lower costs of capital.
5. **Weighted Average Cost of Capital (WACC):** WACC is the weighted average of the cost of debt and the cost of equity, taking into account the proportion of debt and equity in a company's capital structure. It reflects the average cost of funds used to finance the company's operations and projects.
6. **Opportunity Cost:** The cost of capital represents the opportunity cost of investing funds in a particular project or asset instead of alternative investments with similar risk profiles. It helps companies assess whether an investment will generate returns that exceed the cost of capital and create value for shareholders.
7. **Capital Budgeting:** Cost of capital is a key input in capital budgeting decisions, such as evaluating investment opportunities, determining project viability, and setting hurdle rates for accepting or rejecting projects.
8. **Market Value vs. Book Value:** When calculating the cost of equity, it's essential to use the market value of equity rather than the book value. Market value reflects investors' perception of the company's future prospects and risk, providing a more accurate estimate of the cost of equity capital.

Understanding these basic aspects of the cost of capital is crucial for financial decision-making and strategic planning within companies.

Importance

The cost of capital is of paramount importance for several reasons

1. Investment Decision Making
2. Capital Budgeting
3. Valuation:
4. Capital Structure Management
5. Cost Control
6. Risk Management
7. Strategic Planning
8. Shareholder Value Maximization

:In summary, the cost of capital is vital for guiding investment decisions, capital allocation, and strategic planning, all of which are essential for the financial health and success of a company.

Classification of Cost of Capital There is no fixed base of classification of cost of capital. It varies according to need, process and purpose. It may be classified as follows

: • **Explicit Cost and Implicit Cost** : Explicit cost is the discount rate that equates the present value of the funds received by the firm net of underwriting costs, with the present value of expected cash outflows. Thus, it is 'the rate of return of the cash flows of financing opportunity'. On the other hand, the implicit cost is the rate of return associated with the best investment opportunity for the firm and its shareholders that will be foregone if the project presently under consideration by the firm were accepted . In the other words, explicit cost relate to raising of funds and implicit costs relate to usage of funds.

• **Average Cost and Marginal Cost:** The average cost is the weighted average of the costs of each component of funds. After ascertaining costs of each source of capital, appropriate weights are assigned to each component of capital. Marginal cost of capital is the weighted average cost of new funds raised by the firms

. • **Future Cost and Historical Cost:** In financial decision making, the relevant costs are future costs. Future cost i.e expected cost of funds to finance the projects is ascertained with the help of historical costs.

• **Specific Cost and Combined Cost:** The costs of individual components of capital are specific costs of capital. The combined cost of capital is the average cost of capital as it is inclusive of cost of capital from all sources. In capital budgeting decisions, combined cost of capital is used for accepting / rejecting the proposals..

Computing Cost of Capital of Individual components

There are four basic sources of long term funds for a business firm : (i) Long-term Debt and Debentures (ii) Preferences share capital, (iii) Equity share capital, (iv) Retained Earnings. Through all of these sources may not be tapped by the firm for funding its activities, each firm will have some of these sources in its capital structure.

The specific cost of each source of funds is the after-tax cost of financing. It can be before-tax, provided the basis is the same for all the sources of finance being considered for calculating the cost of capital. The procedure for determining the costs of debt, procedure for determining the costs of debt, preferences and equity capital as well as retained earnings is discussed in the following sub-sections formula for com

(a) The formula for computing the Cost of Long Term debt at par is

$$K_d = (1 - T) R$$

Where

K_d = Cost of long term debt)

T = Marginal Tax Rate

R = Debenture Interest Rate

(b) In case the debentures are issued at premium or discount, the cost of debt should be calculated on the basis of net proceeds realised. The formula will be as follows:

$$K_d = \frac{I}{N_p} (1 - T)$$

K_d = Cost of debt after tax

I = Annual Interest Payment

N_p = Net Proceeds of Loans

T = Tax Rate

(c) For computing cost of redeemable debts, the period of redemption is considered. The cost of long term debt is the investor's yield to maturity adjusted by the firm's tax rate plus distribution cost. The question of yield to maturity arises only when the loan is taken either at discount or at premium. The formula for cost of debt will be

$$I + \frac{\text{Discount}}{mp} \quad (\text{In case of Premium, } \frac{\text{Premium}}{mp} \text{ will be subtracted})$$

$$\frac{\text{-----}}{p + np} * 100 (1 - T)$$

$$\frac{\text{-----}}{2}$$

where

mp = maturity period

p = nominal or par value

np = net proceeds i.e. (Par value – Discount + Premium)

(d) In case of underwriting and other issuing costs, they are adjusted in the same way as discount is being adjusted in net proceeds and other calculations.

2 Cost of Preference Capital

The preference share represents a special type of ownership interest in the firm. Preference shareholders must receive their stated dividends prior to the distribution of any earnings to the equity shareholders.

$$\text{Cost of Preference Capital} = \frac{\text{Dividend}}{\text{Market Price} - \text{Issue Cost}}$$

Cost of Equity Capital

“Cost of equity capital is the cost of the estimated stream of net capital outlays desired from equity sources” E.W. Walker.

- (a) E / P Ratio Method : Cost of equity capital is measured by earning price ratio.
Symbolically

$$\frac{E_0 \text{ (current earnings per share)}}{P_0 \text{ (current market price per share)}} * 100$$

The limitations of this method are :

- Earnings do not represent real expectations of shareholders.
- Earnings per share is not constant.
- Which earnings-current earnings or average earnings (It is not clear). The method is useful in the following circumstances

: • The firm does not have debt capital

- All the earnings are paid to the shareholders.
- There is no growth in earnings.

(b) E / P Ratio + Growth Rate Method :

This method considers growth in earnings. A period of 3 years is usually being taken into account for growth. The formula will be as follows :

$$\frac{E_0 (1 + b)^3}{P_0}$$

Where $(1 + b)^3 =$ Growth factor where b is the growth rate as a percentage and estimated for a period of three years.

- (c) D / P Ratio Method : Cost of equity capital is measured by dividends price ratio. Symbolically

$$\frac{D_0 \text{ (Dividend per share)}}{P_0 \text{ (Market price per share)}} * 100$$

- (d) **D / P + Growth Rate Method:** The method is comparatively more realistic as i) it considers future growth in dividends; ii) it considers the capital appreciation. Thus

$$P_0 = \frac{D_1}{K_e - g} \quad \text{or} \quad K_e = \frac{D_1}{P_0} + g$$

where,

P_0 = the current price of the equity share

D_1 = the per share dividend expected at the end of year 1

K_e = the risk adjusted rate of return expected an equity shares

. G = the constant annual rate growth in dividends and earnings.

The equation indicate that the cost of equity share can be found by dividing the dividend expected at the end of the year 1 by the current price of the share and adding the expected growth rate.

The Capital Asset Pricing Model (CAPM) uses these beta co-efficient to estimate the required rate of return on the securities.

The CAPM, specifies that the required rate on the share depends upon its beta.

The relationship is : $K_e = \text{riskless rate} + \text{risk premium} \times \text{beta}$

where, K_e = expected rate of return. The current rate on government securities can be used as a riskless rate. The difference between the long-run average rate of returns between shares and government securities may represent the risk premium. During 1926-1981, this was estimated in USA to be 6 percent. Beta co-efficient are provided by the published date or can be independently estimated.

The cost of retained earnings represents the opportunity cost associated with using those earnings to finance projects or investments within the company rather than distributing them to shareholders as dividends or using them for other purposes.

One common method for estimating the cost of retained earnings is the dividend growth model, also known as the Gordon Growth Model or the Dividend Discount Model (DDM). The formula for the cost of retained earnings using the DDM is:

Where:

$$\text{Cost of Retained Earnings} = \frac{\text{Next Year's Dividend per Share}}{\text{Current Market Price per Share}} \times (1 + \text{Growth Rate of Dividends})$$

Next Year's Dividend per Share is the expected dividend per share in the next period.

Current Market Price per Share is the current price per share of the company's stock.

Growth Rate of Dividends is the expected growth rate of dividends over time.

Another approach is the Capital Asset Pricing Model (CAPM), which estimates the cost of equity, including retained earnings, based on the risk-free rate, the market risk premium, and the beta of the company's stock.

Weighted Cost of Capital **Weighted cost of capital** is also called as composite cost of capital, overall cost of capital, weighted marginal cost of capital, combined cost of debt and equity etc. It comprises the costs of various components of financing. These components are weighted according to their relative proportions in the total capital

Capital budgeting

Capital budgeting is a process that businesses use to [evaluate potential major projects](#) or investments. Building a new plant or taking a large stake in an outside venture are examples of initiatives that typically require capital budgeting before they are approved or rejected by management.

Importance of Capital budgeting

- Capital budgeting is crucial for several reasons:
- Strategic Decision Making:
- Resource Allocation
- Maximizing Shareholder Wealth
- Risk Management:
- Long-term Planning:

Classification of Projects

Capital proposal can be classified as

- Independent project
- Mutually exclusive projects
- Replacement Projects
- New Projects
- Expansion Project

Factors

Capital budgeting is a crucial process for any business, as it involves making decisions regarding the allocation of resources for long-term investment projects. Several factors come into play when evaluating capital budgeting decisions:

- **Cost of Capital:** Understanding the cost of raising funds for investment projects is essential. This includes the cost of debt and the cost of equity.
- **Cash Flows:** Projected cash flows associated with the investment project are fundamental. These include initial investment outlay, operating cash inflows, and terminal cash flows.
- **Risk Assessment:** Assessing the risk associated with the investment project is crucial. Higher-risk projects typically require a higher rate of return to compensate for the added risk.
- **Time Value of Money:** Considering the time value of money is vital. Future cash flows are discounted back to their present value using an appropriate discount rate.
- **Project Lifespan:** The lifespan of the investment project is significant. Longer projects may have higher initial costs but potentially higher returns over time.
- **Market Conditions:** Economic conditions, market trends, and industry-specific factors can significantly impact the feasibility of investment projects.

By considering these factors comprehensively, businesses can make informed capital budgeting decisions that align with their strategic objectives and maximize shareholder value.

- Process

Capital budgeting typically involves several stages or processes to evaluate and make decisions about long-term investment projects. Here's a breakdown of the typical process:

1. **Identification of Investment Opportunities:** The process starts with identifying potential investment opportunities that align with the company's strategic goals. This could involve new projects, expansion opportunities, acquisitions, or replacement of existing assets.
2. **Project Proposal Submission:** Once potential investment opportunities are identified, project proposals are developed outlining the details of each opportunity, including the expected cash flows, initial investment required, project lifespan, and potential risks and returns.
3. **Evaluation of Investment Proposals:** Investment proposals are then evaluated using various financial techniques such as Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period, and Profitability Index. These techniques help assess the financial viability and attractiveness of each investment opportunity.
4. **Risk Assessment:** Risk assessment is a crucial step in the capital budgeting process. This involves identifying and analysing the risks associated with each investment opportunity, including market risks, operational risks, regulatory risks, and financial risks.
5. **Cost of Capital Determination:** The cost of capital, which includes the cost of debt and the cost of equity, is determined. This helps in discounting the future cash flows of the investment project to their present value and assessing the project's overall profitability.
6. **Selection of Projects:** Based on the evaluation and risk assessment, investment projects are prioritized and selected for implementation. Projects that meet the company's investment criteria and strategic objectives are approved for further development.
7. **Capital Allocation:** Once projects are selected, the available capital budget is allocated among the approved projects based on their priority and expected returns. This ensures that resources are allocated efficiently to maximize shareholder value.
8. **Implementation and Monitoring:** After project approval, the selected investment projects are implemented according to the project plan. Throughout the implementation phase, progress is monitored closely to ensure that the projects stay on track and within budget.
9. **Performance Evaluation:** Once the investment projects are completed and operational, their performance is periodically evaluated against the initial projections and targets. Any deviations are analysed, and corrective actions are taken if necessary.
10. **Post-Implementation Review:** After the projects have been operational for some time, a post-implementation review is conducted to assess their actual performance and compare it with the initial projections. Lessons learned from the review are used to improve future capital budgeting decisions and project management processes.

By following these steps, businesses can effectively evaluate investment opportunities, allocate capital wisely, and maximize shareholder value over the long term.

Techniques/Methods of Capital Budgeting

1 Payback Period Method

It refers to the time taken by a proposed project to generate enough income to cover the initial investment. The project with the quickest payback is chosen by the company.

Formula:

$$\text{Payback Period} = \frac{\text{Initial Cash Investment}}{\text{Annual Cash Flow}}$$

2 Net Present Value Method (NPV)

Evaluating capital investment projects is what the NPV method helps the companies with. There may be inconsistencies in the cash flows created over time. The cost of capital is used to discount it. An evaluation is done based on the investment made. Whether a project is accepted or rejected depends on the value of inflows over current outflows.

This method considers the time value of money and attributes it to the company's objective, which is to maximize profits for its owners. The capital cost factors in the cash flow during the entire lifespan of the product and the risks associated with such a cash flow. Then, the capital cost is calculated with the help of an estimate.

Formula:

<i>Net Present Value (NPV) =</i>	R_t
	$(1+i)_t$

t = time of cash flow

i = discount rate

R_t = net cash flow

3 Internal Rate of Return (IRR)

IRR refers to the method where the NPV is zero. In such as condition, the cash inflow rate equals the cash outflow rate. Although it considers the time value of money, it is one of the complicated methods.

It follows the rule that if the IRR is more than the average cost of the capital, then the company accepts the project, or else it rejects the project. If the company faces a situation with multiple projects, then the project offering the highest IRR is selected by them.

*Internal Rate of Return = Discount rate that makes NPV=0;
implies discounted cash inflows are equal to discounted
cash outflows*

*Internal Rate of Return Rule = Accept investments if IRR greater than Threshold Rate of
Return, else reject.*

4 Profitability Index

This method provides the ratio of the present value of future cash inflows to the initial investment. A Profitability Index that presents a value lower than 1.0 is indicative of lower cash inflows than the initial cost of investment. Aligned with this, a profitability index great than 1.0 presents better cash inflows and therefore, the project will be accepted.

Formula:

$$\text{Profitability Index} = \frac{\text{Present value of Cash Inflows}}{\text{Initial Investment}}$$

Capital rationing

Capital rationing refers to the situation where a company has limited funds available for investment in capital projects, even though there are potentially profitable investment opportunities. In other words, the company does not have enough capital to fund all projects that meet the investment criteria. This can occur due to internal financial constraints, such as limited borrowing capacity, cash flow limitations, or a desire to maintain a certain level of financial stability.

UNIT-III: SHORT-TERM INVESTMENT DECISION:

Working capital management Concept

Working capital may be defined in two ways, either as the total of current assets or as the difference between the total of current assets and total of current liabilities.

Working capital represents the funds available to a company for its day-to-day operations. It's a measure of a company's liquidity and operational efficiency, indicating the ability to meet short-term financial obligations as they come due. The concept of working capital revolves around the management of current assets and current liabilities. Here's a breakdown:

1. **Current Assets:** These are assets that are expected to be converted into cash or used up within one year or within the operating cycle of the business. Examples include cash, accounts receivable, inventory, and short-term investments.
2. **Current Liabilities:** These are obligations that are expected to be settled within one year or within the operating cycle of the business. Examples include accounts payable, short-term loans, accrued expenses, and taxes payable.

Working capital can be calculated using the following formula:

Working Capital=Current Assets–Current Liabilities

Working capital management involves optimizing the levels of current assets and current liabilities to ensure that the company maintains adequate liquidity while maximizing profitability.

TYPES OF WORKING CAPITAL

Sometimes, working capital is divided into two varieties as: i) Permanent working capital ii) Variable working capital

Permanent Working Capital: Though working capital has a limited life and usually not exceeding a year, in actual practice some part of the investment in that is always permanent.

Variable Working Capital: This is also known as the circulating or transitory working capital. This is the amount of investment required to take care of the fluctuations in the business activity

component of working capital

Working capital is composed of various components, representing different aspects of a company's short-term financial position and operational efficiency. These components are classified into two main categories: current assets and current liabilities. Here's a breakdown of each:

1. **Current Assets:**

- a. **Cash:** This includes physical currency, cash equivalents, and funds available in bank accounts that can be readily used to meet short-term obligations.
- b. **Accounts Receivable:** Amounts owed to the company by customers for goods or services provided on credit. Accounts receivable represent a claim on future cash inflows and are typically converted into cash within a short time frame.
- c. **Inventory:** Goods held by the company for sale or production. Inventory includes raw materials, work-in-progress, and finished goods. Efficient management of inventory levels is crucial for minimizing carrying costs while ensuring product availability.
- d. **Short-term Investments:** Investments in financial instruments with maturities of one year or less. These investments provide liquidity and can be readily converted into cash if needed.
- e. **Prepaid Expenses:** Expenses paid in advance that will be used up or consumed within the current accounting period. Examples include prepaid insurance premiums and prepaid rent.

2. Current Liabilities:

- a. **Accounts Payable:** Amounts owed by the company to suppliers and vendors for goods or services purchased on credit. Accounts payable represent a short-term obligation to pay cash in the future.
- b. **Short-term Borrowings:** Loans or lines of credit with maturity dates of one year or less. These borrowings provide short-term financing to meet working capital needs and operational expenses.
- c. **Accrued Expenses:** Expenses that have been incurred but not yet paid for. Accrued expenses include salaries and wages, utilities, and interest payable.
- d. **Income Taxes Payable:** Taxes owed to tax authorities for the current accounting period but not yet paid. Income taxes payable represent a short-term liability that will be settled in the near future.
- e. **Dividends Payable:** Amounts owed to shareholders as dividends declared by the company's board of directors but not yet paid. Dividends payable represent a short-term obligation to distribute profits to shareholders.

By managing these components effectively, companies can ensure that they have sufficient liquidity to meet short-term obligations while maximizing operational efficiency and profitability. Efficient working capital management is essential for maintaining financial stability and supporting long-term growth initiatives.

operating cycle,

The operating cycle, also known as the cash conversion cycle, is a financial metric that measures the time it takes for a company to convert its investments in inventory into cash through the sale of products or services. It represents the duration from the purchase of raw materials to the collection of cash from customers for the sale of finished goods. The operating cycle consists of two main components:

Inventory Conversion Period: This is the time it takes for a company to convert raw materials into finished goods ready for sale. It starts with the purchase of raw materials and ends when the finished goods are available for sale. The formula to calculate the inventory conversion period is:

$$\text{Inventory Conversion Period} = \frac{\text{Average Inventory}}{\text{Cost of Goods Sold (COGS) per day}}$$

Average Inventory = (Beginning Inventory + Ending Inventory) / 2

COGS per day = Cost of Goods Sold / 365 (or the number of days in the accounting period)

Accounts Receivable Collection Period: This is the time it takes for a company to collect cash from customers after the sale of goods or services on credit. It starts when the sale is made and ends when the cash is collected. The formula to calculate the accounts receivable collection period is:

Accounts Receivable Collection Period = Net Credit Sales per day / Average Accounts Receivable

1. Net Credit Sales per day = Net Credit Sales / 365 (or the number of days in the accounting period)

The operating cycle is the sum of the inventory conversion period and the accounts receivable collection period:

Operating Cycle = Inventory Conversion Period + Accounts Receivable Collection Period

A shorter operating cycle indicates that a company is able to convert its investments in inventory into cash more quickly, which is generally favorable for liquidity and working capital management. Conversely, a longer operating cycle may indicate inefficiencies in inventory management or difficulties in collecting receivables, which can tie up cash and impact profitability. By analysing and optimizing the operating cycle, companies can improve their cash flow, working capital efficiency, and overall financial performance.

There are three methods available to determine the working capital requirement:

- Percentage of revenue or sales

- Regression analysis
- Operating cycle method

Management of Current Assets

Management of Cash

Managing cash effectively is crucial for the financial health and stability of any business. Here are some key strategies for managing cash efficiently:

- ✓ Cash Flow Forecasting:
- ✓ Monitoring and Control:
- ✓ Optimizing Receivable
- ✓ Managing Payables
- ✓ Inventory Management:
- ✓ Investing Idle Cash
- ✓ Access to Financing:
- ✓ Contingency Planning:
- ✓ Cash Management Tools
- ✓ Strategic Decision Making:

Implementing these strategies, businesses can effectively manage cash flow, optimize working capital, and maintain financial resilience in both stable and challenging economic environments.

MOTIVES OF HOLDING CASH

Fixed assets are used to convert the raw materials into finished goods. Investments in current assets cannot be avoided due to constraints in technology, manufacturing process and customer's behaviour of demanding different models at a point close to her/his house and at the point of consumption. Inventory and bills receivables have become essential to continue business

operations more fruitfully. Emphasis is always given to reduce the investments in these assets and thus reduce the working capital cycle. Investment in cash and marketable securities are the least productive assets. Often, firm is not dependent on this asset in the manufacturing process nor is required for creating inventory or selling. Thus, the basic question is why firms hold cash and marketable securities? Some of the reasons for holding cash are listed below.

Transaction Motive: Money is required to settle customers' bills, pay salary and wages to workers, pay duties and taxes, etc. Some cash balance is to be maintained to complete these transaction

Precautionary or Hedging Motive: The transaction motive takes into account the routine cash needs of the firm. It is also based on the assumption that inflows are as per estimation. However, the future cash needs for transaction purposes are uncertain.

Speculative Motive: If the firm intends to exploit the opportunities that may arise in the future suddenly, it has to keep some cash balance. The term "speculative motive" to some extent is a misnomer since cash is not kept to conduct any speculation but merely to exploit opportunity.

Cash management

Cash management is the process of managing a company's cash inflows and outflows to ensure that it has enough liquidity to meet its short-term obligations while maximizing the return on its cash resources. Effective cash management is essential for maintaining financial stability, supporting daily operations, and facilitating business growth.

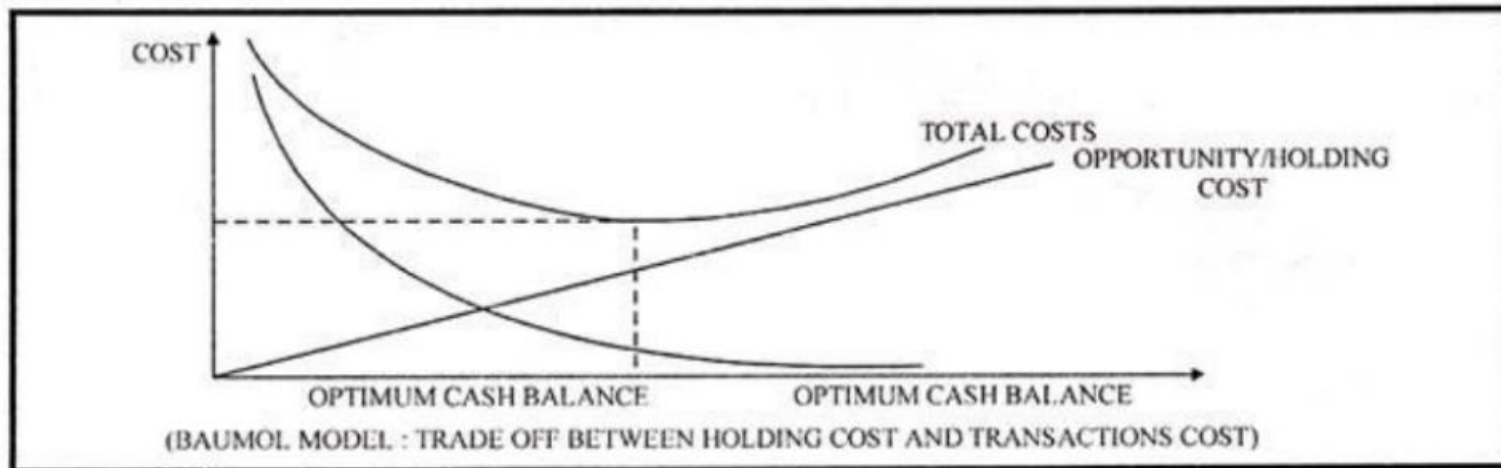
Cash management model

Cash management models are essential tools used by businesses to manage their cash flow effectively, ensuring that they have enough liquidity to meet short-term obligations while optimizing the return on any excess cash. Here are a few key cash management models:

William J. Baumol's Model:

William J. Baumol developed a model (The Transactions Demand for Cash: An Inventory Theoretic Approach) which is usually used in inventory management but has its application in determining the optimal cash balance also. Baumol found similarities between inventory management and cash management.

As Economic Order Quantity (EOQ) in inventory management involves tradeoff between carrying costs and ordering cost, the optimal cash balance is the tradeoff between opportunity cost or cost of borrowing or holding cash and the transaction cost (i.e. the cost of converting marketable securities into cash etc.) The optimal cash balance is reached at a point where the total cost is the minimum. The figure below shows the optimum cash balance.



The Baumol model is based upon the following assumptions :

- (a) The cash needs of the firm are known with certainty.
- (b) The cash disbursements (usage) of the firm occurs uniformly over a period of time and is known with certainty.
- (c) The opportunity cost of holding cash is known and it remains constant.
- (d) The transaction cost of converting securities into cash is known and remains constant.

The Baumol model can also be represented algebraically :

$$C = \sqrt{\frac{2A \times F}{O}}$$

Miller-Orr Model

The Miller-Orr model, developed by Merton Miller and Daniel Orr in 1966, is an extension of the Baumol model and is used when cash flows are unpredictable. This model sets upper and lower control limits for cash balances. When the cash balance reaches the upper limit, excess cash is invested in securities. When it hits the lower limit, securities are sold to replenish the cash balance.

- **Key Variables:**
 - **Upper Limit (H)**

- Lower Limit (L)
- Return Point (Z)
- **Formula for Return Point:**

$$Z = L + \frac{1}{3} \left(\frac{4b\sigma^2}{3i} \right)^{\frac{1}{3}} \quad Z = L + \frac{1}{3} (4b\sigma^2)^{\frac{1}{3}}$$

where:

- σ^2 = Variance of daily net cash flows

3. Stone Model

The Stone model is another approach to cash management that considers both the time value of money and the uncertainty of cash flows. It provides a more dynamic approach by adjusting the cash balance targets based on changes in market conditions and interest rates. This model is less commonly used in practice compared to the Baumol and Miller-Orr models but is valuable in certain contexts.

Practical Considerations

When applying these models, businesses should consider the following:

- **Cash Flow Predictability:** More predictable cash flows make models like Baumol more applicable.
- **Transaction Costs:** High transaction costs can affect the optimal cash balance.
- **Opportunity Costs:** Higher opportunity costs (interest rates) make holding large cash balances less attractive.
- **Market Conditions:** Changes in interest rates and market conditions can affect the parameters and assumptions of these models.

Example Calculation: Baumol Model

Suppose a company needs \$1,000,000 over a year, the transaction cost of converting securities to cash is \$100, and the annual interest rate on securities is 5%.

$$C^* = \sqrt{\frac{2 \times 100 \times 1,000,000}{0.05}} = \sqrt{4,000,000,000} = \$63,245.55$$

$$C^* = 0.052 \times 100 \times 1,000,000 = 4,000,000,000 = \$63,245.55$$

This means the company should aim to maintain a cash balance of \$63,245.55 to minimize costs.

Conclusion

Cash management models are valuable for ensuring liquidity and optimizing cash usage. The Baumol and Miller-Orr models provide structured approaches to managing cash balances, each suitable for different scenarios of cash flow predictability and market conditions. Businesses should tailor these models to fit their specific needs and conditions for optimal cash management.

Management of receivable

Account receivables refer to the outstanding invoices or money which is yet to be paid by your customers. Until it is paid, such invoices or money is accounted as [accounts receivables](#). Also known as bills receivables. You need cash all the time to keep your business running smoothly and ensuring the accounts receivables are paid on time is essential to [manage cash flow efficiently](#).

Management of Receivables is also known as:

- Payment Collection
- Collection Management
- Accounts Receivables

Objectives of receivable management

Even though management of receivables seems to be simple, but it could become a very tedious task to manage, depending on the nature of your business. As your business grows, your processes also evolve and become more and more complex, thus, the accounting software to manage your receivables must mould itself to match up to your company standards and needs. Now to run a business successfully, what is that one thing that you need? Money! Right? So, to keep your cash inflow at its optimum, it is crucial that you keep a close watch your receivables. Thus, below are some of the primary objectives to receivables management:

- Helps improve cash flow
- Reduces losses incurred due to bad debts
- Improved customer satisfaction
- Boost up sales volume

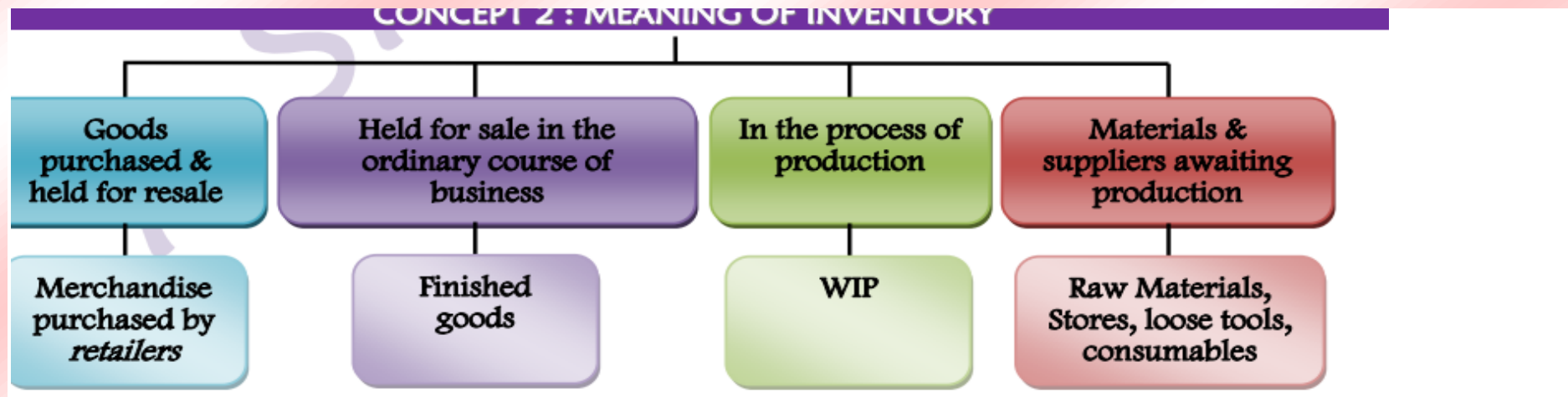
Dimensions of Receivables Management

The three aspects of the dimensions of receivables management. The aspects are: **1.**

Formulation of Credit Policies **2.**

Execution of Credit Policies **S 3.**

Formulation of Collection Policy and Its Execution.



Objective : | Inventory is said to be "Bread & Butter" for every business concern. | The reasons emphasized for valuing stock includes :

- [a] Stock constitutes one of the major parts of total assets employed
- [b] It determines the amount of profit by valuing closing stock
- [c] It even shows the financial position of a company, which reflects in the balance sheet
- . [d] Inventories are subject to obsolescence, spoilage etc

Inventory management techniques

No matter the size of your business, employing some of these common inventory management techniques can be a great way to take control of your stock.

Here are a few key inventory management techniques to consider.

Inventory Management Techniques



- ✓ JIT inventory
- ✓ JIC stock control
- ✓ ABC inventory analysis
- ✓ FIFO
- ✓ LIFO
- ✓ Dropshipping
- ✓ Vendor-managed inventory
- ✓ Cross-docking
- ✓ Cycle counting
- ✓ Economic order quantity

Economic order quantity (EOQ) is the ideal quantity of units a company should purchase to meet demand while minimizing [inventory](#) costs such as holding costs, shortage costs, and order costs. This production-scheduling model was developed in 1913 by Ford W. Harris and has been refined over time.¹ The economic order quantity formula assumes that demand, ordering, and holding costs all remain constant.

Formula for Calculating Economic Order Quantity (EOQ)

The formula for EOQ is:

$$Q = \sqrt{\frac{2DS}{H}}$$

where:

Q = EOQ units

D = Demand in units (typically on an annual basis)

S = Order cost (per purchase order)

H = Holding costs (per unit, per year)

UNIT IV Financial Decision

Capital Structure meaning

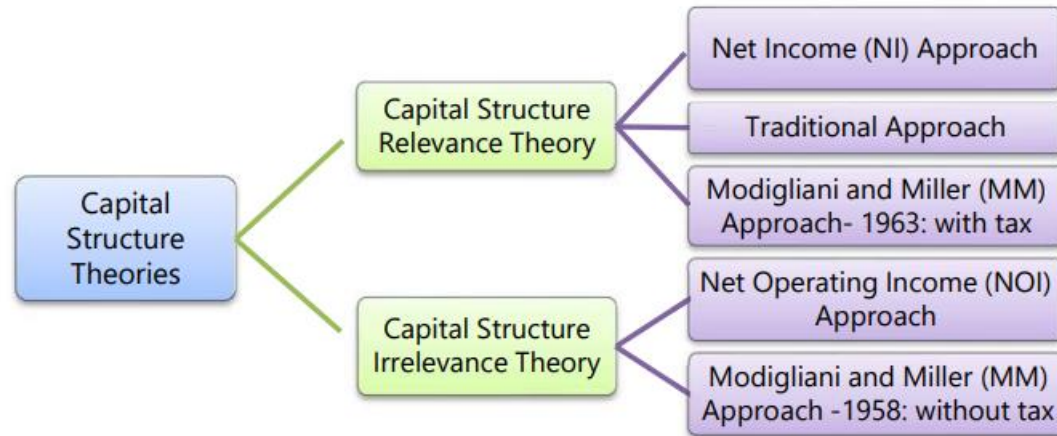
Capital structure is the combination of capitals from different sources of finance. The capital of a company consists of equity share holders' fund, preference share capital and long term external debts. The source and quantum of capital is decided keeping in mind the following factors:

1. **Control:** Capital structure should be designed in such a manner that existing shareholders continue to hold majority stake.
2. **Risk:** Capital structure should be designed in such a manner that financial risk of a company does not increase beyond tolerable limit.
3. **Cost:** Overall cost of capital remains minimum.

C

Capital structure theories

The following approaches explain the relationship between cost of capital, capital structure and value of the firm:



LEVERAGE

Leverage In finance, leverage (also known as gearing or leveraging) refers to the use of debit to supplement investment. Companies usually leverage to increase returns to stock, as this practice can maximize gains (and losses). Leverage is the degree to which an investor or business is utilizing borrowed money

Types of leverage –

1. **Operating leverage** – The operating leverage is a measure of how revenue growth translates into growth in operating income. It is a measure of leverage and how risky (volatile) a company's operating income is. Operating leverage can also be measured in terms of change in operating income for a given change in sales (revenue). Operating leverage reflects the extent to which fixed assets and associated fixed costs are utilized in the business. Degree of operating leverage (DOL) may be defined as the percentage to levering. DOL the Degree of operating leverage (DOL) can be computed in a number of equivalent ways; one way it is defined as the ratio of the percentage change in Operating Income for a given percentage change in Sales
2. **Financial leverage** – • Financial leverage is the ability of the firm to use fixed financial charges to magnify the effects of changes in EBIT on the firm's earnings per share. • In other words, financial leverage may be defined as the payments of fixed rate of interest for the use of fixed interest bearing securities to magnify the rate of return as equity shares. • The use of the fixed-charges sources of funds, such as debt and preference capital along with the owner's equity in the capital structure, is described as financial leverage or gearing or trading on equity.
3. **Degree of financial leverage** – Degree of financial leverage (DFL) may be defined as the percentage change in earnings (earnings per share) that occurs as a result of a percentage in earnings before interest and taxes.
4. **Combined leverage** – If both operating and financial leverage allow us to magnify our returns, and then we will get maximum leverage through their combined use in the form of combined leverage. Degree of combined leverage (DTL) uses the entire income statement and shows the impact of a change in sales or volume on bottom-line earnings per share.

FORMAT OF LEVERAGE

Particular	Amount
Sales (In Rs.)	*
(-) Variable Cost	*
= Contribution	*
(-) Fixed Cost	*
= EBIT	*
(-) Interest	*
= EBT	*
(-) Tax	*
= EAT	*
(-) Preference Dividend	*
= Earning after Preference dividend	*
(-) Equity Dividend	*
= Net Profit (Retained Earning)	*

EBIT = Earnings before Income & Tax – EBT = Earnings Before Tax – EAT = Earnings after Tax

Formulae

Operating Leverage = $\frac{\text{Contribution}}{\text{EBIT}}$ or $\frac{\text{Percentage change in EBIT}}{\text{Percentage change in sales}}$

Leverage are of three types a. Operating leverage b. Financial leverage c. Combined leverage
Sales Revenue

- Variable cost = Contribution - Fixed Cost = EBIT - Interest = PBT - Tax = PAT

Operating leverage is the tendency of the operating profits to vary disproportionately with sales.

Operating Leverage is related to fixed cost. It indicates the impact of changes in sales on operating income. It is calculated as follows :

$$\frac{\text{Contribution}}{\text{EBIT}}$$

Financial Leverage depends upon the ratio of debt and preferred stock together to common shares. It is calculated with the help of EBIT and EBT as below :

$$\frac{\text{EBIT}}{\text{EBT}}$$

Combined Leverage is the multiplication of operating leverage and financial leverage.

Formula -

$$CL = OL \times FL$$

OR

$$CL = \frac{C}{EBIT} \times \frac{EBIT}{EBT}$$

Degree of combined leverage

$$DCL = DOL \times DFL$$

OR

$$DCL = \frac{\%change\ in\ EBIT}{\%change\ in\ sales} \times \frac{\%change\ in\ EBT}{\%change\ in\ EBIT}$$

OR

$$DCL = \frac{\%change\ in\ EBT\ or\ EPS}{\%change\ in\ sales}$$

Financial leverage

5

8

4

A Ltd. has the following capital structure :

	Rs.
Equity share capital (of Rs. 100 each)	1,00,000
10% Preference share capital (of Rs. 100 each)	2,00,000
10% debentures (of Rs. 100 each)	2,00,000

If EBIT is (i) Rs. 1,00,000 (ii) Rs. 80,000 and (iii) Rs. 1,20,000,

Calculate financial leverage under three situations. Assume 50% tax rate.

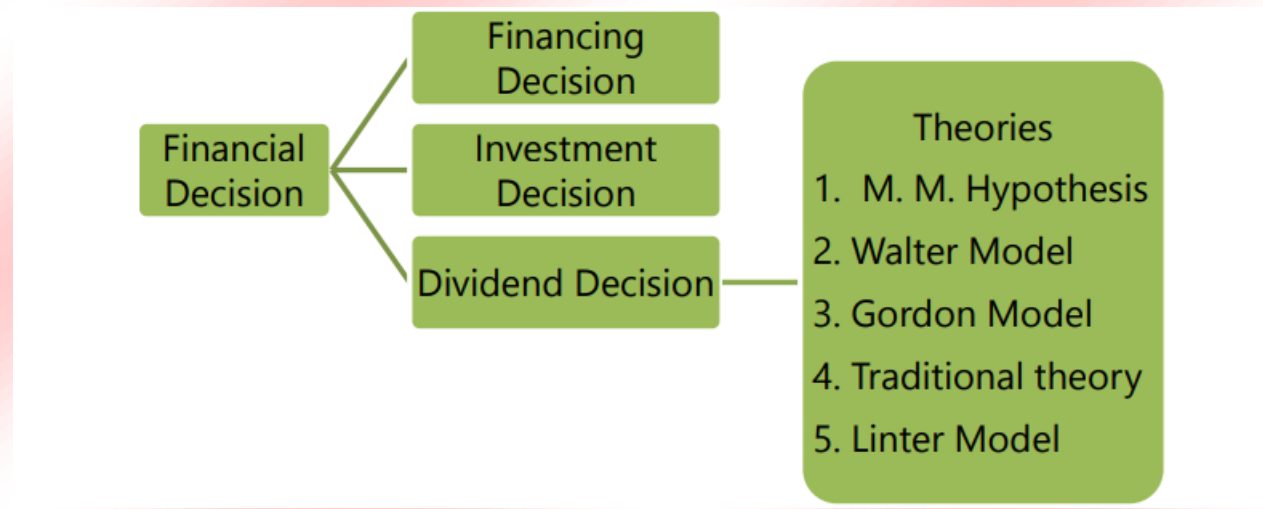
Solution :

Computation of Financial Leverage

Items	(i)	(ii)	(iii)
EBIT	Rs. 1,00,000	Rs. 80,000	Rs. 1,20,000
Less Interest on Debentures	Rs. 20,000	Rs. 20,000	Rs. 20,000
	-----	-----	-----
EBT	Rs. 80,000	Rs. 60,000	Rs. 1,00,000
Less Income Tax	Rs. 40,000	Rs. 30,000	Rs. 50,000
	-----	-----	-----
PAT	Rs. 40,000	Rs. 30,000	Rs. 50,000
Less Preference Dividend	Rs. 20,000	Rs. 20,000	Rs. 20,000
	-----	-----	-----
Earnings for Equity Shareholders	Rs. 20,000	Rs. 10,000	Rs. 30,000
No. of Shares	Rs. 10,000	Rs. 10,000	Rs. 10,000
EPS	2	1	3

	EBIT	Rs. 1,00,000	Rs. 80,000	Rs. 1,20,000
Financial Leverage	-----	-----	-----	-----
	EBT	Rs. 20,000	Rs. 10,000	Rs. 30,000

UNIT 5 DIVIDEND DECISION



A dividend is a payment made by a corporation to its shareholders, usually in the form of cash or additional shares of stock. It represents a portion of the company's profits that is distributed to shareholders as a reward for their investment in the company. Dividends are typically paid out at regular intervals, such as quarterly or annually, though some companies may pay dividends on a more irregular basis.

Key Points about Dividends:

1. Source of Dividends:

- Dividends are usually paid out from the company's profits. If a company has had a profitable year, it may decide to distribute a portion of those earnings to its shareholders.

2. Types of Dividends:

- **Cash Dividends:** The most common type, where shareholders receive a cash payment.
- **Stock Dividends:** Shareholders receive additional shares of the company's stock.
- **Special Dividends:** One-time payments that are usually larger than regular dividends, often resulting from exceptionally strong earnings or other favorable circumstances.

3. Dividend Policy:

- A company's approach to distributing profits can vary. Some companies may prioritize high dividend payouts to attract income-focused investors, while others may reinvest most of their profits back into the company to fuel growth.

4. Dividend Yield:

- This is a financial ratio that shows how much a company pays out in dividends each year relative to its stock price. It is calculated as the annual dividend per share divided by the stock price per share.

5. Importance to Investors:

- For many investors, dividends provide a steady source of income. Dividends can also signal a company's financial health and stability, as consistent or growing dividends may indicate strong future prospects.

Implications of Dividends:

• For Investors:

- Dividends provide a return on investment aside from potential capital gains (increase in stock price).
- They can be particularly attractive to retirees or others needing regular income.

• For Companies:

- Paying dividends can make a company's stock more attractive, potentially increasing demand and the stock price.
- It also reflects a company's confidence in its financial stability and future cash flow.

Dividend Theories:

Various theories help explain how dividends are perceived and their impact on a company's value:

- **M. M. Hypothesis:** Suggests that in a perfect market, a company's value is unaffected by its dividend policy.
- **Walter Model and Gordon Model:** Link dividend policies to company valuation based on profitability and return on investment.
- **Traditional Theory:** Argues that dividends do affect a company's value because investors prefer certain dividends over uncertain future capital gains.
- **Linter Model:** Focuses on how companies set and adjust their dividend policies, typically aiming to maintain consistent and predictable payouts.

In summary, dividends are a key aspect of financial decisions for companies and a significant consideration for investors when evaluating stocks.

Financial Management Important Questions 2023 – 2024

Unit – I

12 Marks Questions - **Theory**

1. Define Financial Management. Discuss its Nature and Scope.
2. Explain the Meaning and Importance of Financial Management.
3. Briefly explain the Objectives of Financial Management (Or) Profit Maximization Vs. Wealth Maximization.
4. Explain the Role of Financial Manager and his Functions.

Problems (Time Value of Money)

1. Future Value of Present Cash Flow.
2. Present Value of Future Cash Flows.
3. Compound Interest / Annuity

Short Questions

1. Agency Problem.
2. Simple Interest (Problem)
3. Series of Cash Flow (Problem).

Unit – II

12 Marks Questions – **Theory & Problems** **Cost of Capital**

1. Explain the Basic Aspects and Importance of Cost of Capital.
2. Briefly explain the concepts and Classification of Coat of Capital.
3. Cost of Debt, Cost of Preference Share Capital, Cost of Equity Share Capital and Cost of Retained Earnings – (Problems – Combined or Combination)
4. ****Weighted Average Cost of Capital – **Book Value and Market Value (Problem)**

Capital Budgeting

1. Explain the meaning and Importance of Capital Budgeting.
2. Briefly explain the Factors of Capital Budgeting.
3. Discuss the Process of Capital Budgeting.
4. ****NPV (Net Present Value) and **IRR (Internal Rate of Return) with **Payback period– (Problem)**

Short Questions

1. Payback Period – (Problem)
2. ARR (Accounting Rate of Return) – (Problem)
3. PI (Profitability Index) – (Problem)
4. Capital Rationing.

Unit – III

Working Capital Management

1. Explain the Kinds and Components of Working Capital.
2. Define the Working Capital Management. Discuss its Need.
3. Explain the meaning of Working Capital and its Objectives.
4. Briefly discuss Operating Cycle and Factors of Working Capital Management.

5. Problems on Operating Cycle (Problems)
6. Estimation of Working Capital Management - Problems

Management of Current Assets

1. State the Nature and Motives of Cash Management.
2. Explain the Models of Cash Management.
3. Explain the Objectives of Receivables Management and its Credit Policies.
4. Discuss the Credit Terms and Collection Policies of Receivables Management.
5. What is Inventory explain its Objectives

Short Questions

1. Cash Management
2. Receivable Management.
3. Working Capital
4. Inventory Management.
5. Credit Policy of Receivable

Unit – IV

Capital Structure

1. Importance of Capital Structure and Factors.
2. Theories of Capital Structure (Net Income Approach, Net Operating Income Approach, Traditional Approach and MM Approach)**
3. EBIT and EPS Analysis – Problem

Leverages

1. Types of Leverages
2. Problems on Operating Leverage, Financial Leverage and Combined Leverage
3. Theory of Operating Leverage, Financial Leverage and Combined Leverage

Short Questions

1. Optimal Capital Structure

2. Problems on Net Income Approach and Net Operating Approach

Unit – V

Dividend Policy

1. Types of Dividend Policy
2. Factors and Forms of Dividend Policy

Dividend Theories

1. Problems - **Walter Model, Gordon's Model and **MM Hypothesis or Model
2. Difference between Relevance and Irrelevance Theory.
3. Practice short problems