SYLLABUS

Class:-B.B.A. II Year

Subject:-Financial Management

UNIT–I	Introduction: Finance function and its objectives, tools for financial analysis, capitalization, over capitalization analysis, under capitalization. Concept of Risk and return.
UNIT–II	Ratio analysis: Meaning, Interpretations of ratios, classification of ratio, funds flow and cash flow analysis.
UNIT– III	Working capital management: Classification of working capital.factors determining the adequate working capital. Requirement management of working capital, Source of Capital, Cost of capital, financial and operating, leverage,
UNIT–IV	Capital Structure: optimum capital structure, Theories of capital structure, Factors influencing capital structure. Capital structure decision of the firm, Shareholder Value Creation, dividend payment and valuation of firms, dividend policy of the firm, Determinants of dividend policy & Types of dividend policy. Hire Purchase and Venture Capital
UNIT–V	Capital budgeting, methods of investments evaluation: payback period, accounting rate of return, discounted cash flow method and internal rate of return. Introduction to Return on Investment: CAPM, APT models & Derivatives

UNIT-I
MEANING OF FINANCIAL MANAGEMENT(***)

Finance is the **study and management of money**, including how individuals, businesses, and governments **raise, allocate, and use funds** over time, while managing the **risks** involve.

Financial Management may be defined as Planning, Organizing, Directing and Controllingof financialactivitiesinabusinessenterprise.Morespecificallyitisconcernedwithoptimalprocurementandeffectiveutilization of funds in a manner that the risk, cost and control considerations are properly balanced in a given situation.

Financial management is concerned with efficient acquisition and allocation of funds. In operational terms, it is concerned with management of flow of funds and involves decisions relating to procurement of funds,investment of funds in long term and short term assets and distribution of earnings to owners. In other words,focus of financial management is to address three major financial decision are as namely, investment; financing; and dividend decisions.

Definition:"Theactivitywhichisconcernedwithacquisitionandutilizationofallmoney/Fundstobeusedinacorporate(Business)Enterprise." ***-Wheeler***

More specifically, Financial Management is concerned with making the following **four decisions:**

1. *Investment decision i.e. ,where and how much to invest in long-term assets and working capital?*
2. *Financing decision i.e. ,from where to raise funds?*
3. *Dividend decisioni.e.,how much earnings to be retained and how much to be distributed?*
4. *Liquidity decision i.e, how much cash in hand is to be maintained with the firm.*

OBJECTIVE OF FINANCIAL MANAGEMENT(***)

The objective of financial management is to maximize the current price of equity shares of the company. However, the current price of equity shares should not be maximized by manipulating the share prices. Rather it should be maximized by making efficient decisions which are desirable for the growth of acompanyandarevaluedpositivelybytheinvestorsatlarge.Adecisionisconsideredefficientifitincreasesthe price of share but is considered as inefficient if it results in decline in the share price. In other words,the objective of financial management is to maximize the wealth of the owners of the company, that is theshareholders. Here wealth maximization means the maximization of the market price of the equity sharesof the company in the long run by making efficient decisions and not by manipulating the share prices. The financial manage rmust identify those avenues of investment;modes of financing,ways of handling various components of working capital which ultimately will lead to an increase in the price of equity share. If share holders are gaining, it implies that all other claimants are also gaining because the equity shareholders get paid only after the claims of all other claimants (such as creditors, employees, lenders) have been duly paid.

Difference between Finance and Financial Management

Aspect	Finance	Financial Management
Scope	Broad – includes personal, corporate, and public finance	Narrow – focuses on managing a firm's financial resources
Focus	Study of money, investments, and markets	Practical application of financial principles in business
Example	Understanding stock markets, banking, or loans	Budgeting, investment decisions, risk management in a company

Nature and Scope of Financial Management:

1. **Details :** Management of flow money : It refer to Inflow and outflow of money. Inflow of moneymeans Entering of money in business from external source and outflow of money refers to consumption ofmoney. Which gives us the Best output of financial Manager need to concentrate over the inflows as well as out flow of money so that there cannot beshortageandexcursiveness offinancialresources.

2 ***Concerns with application of skills in manipulation, we and controlof money :*** In an effective financial Management, there is alwaysa process of applying. Manager skills inManipulate, utilization andcontrol of money. In Financial Management, Controlling of firms financial resources play a vital role that iswhyafinancial manageruseshis skillsinorder tocontrolsuch activities.

3 ***Determining theFinancial needsand Raising ofFunds:***In financial management,afinancialmanager, firstly determining the financial needs of an enterprise and then finding out the best suitablesources for raising them. The sources should be commensurate with needs of business. If the funds neededfor longer period then long term sources of like share capital, debentures, etc can be raise for short term,period,theshortterm sourceslike.TradeBill, Commercialpapercanbe.

4.Proper utilizationof funds:Thoughraisingfundsis important but their effectiveutilization is alsomore important. The funds should be used in such a that maximum benefit is derived from them. Theretires from their use should be more than their cost. It should be ensured that funds do not remain idle atmy

point of time. The funds committed to various operations should be effectively utilized. Those projects would be preferred which are beneficial to the business.

Scope of financial Management:

1. Estimating Financial Requirement
2. Deciding Capital Structure
3. Selecting a source of finance
4. Selecting a Pattern of investment.
5. Proper Cash Management
6. Implementing Financial controls
7. Properuses of surpluses.

1. Estimating Financial Requirements : The first task of a financial manager is to estimate short-term and long-term financial requirements of his business. For this purpose, he will prepare a financialplan for present as well as for future. The amount required for purchasing fixed assets as well as needs offundsfor workingcapitalwillhave to beascertained.

2. Deciding Capital Structure. The capital structure refers to the kind and proportion of differentsecurities for raising funds. After deciding about the quantum of funds required it should be decided whichtype of securities should be raised. Long-term funds should be employed to finance working capital also, ifnot wholly then partially. A decision about various sources for funds should be linked to the cost of raisingfunds.Ifcostof raising fundsis very high then such sources may not be useful for long.

3. Selecting a Source of Finance : After preparing a capital structure, an appropriate source of financeisselected.Variousfromwhichfinancemayberaised,include:sharecapital,debentures,financialinstituti ons, commercial banks, public deposits, etc. If finances are needed for short periods then banks,public deposits and financial institutions may be appropriate, on the other hand, if long-term finances arerequiredthensharecapitalad debenturesmaybe useful.

4. SelectingaPatternofInvestment Whenfundshavebeenprocuredthenadecisionaboutinvestment pattern is to be taken. The selection of an investment pattern is related to the use of funds. Adecision will have to be taken as to which assets are to be purchased? The funds will have to be spent onfixedassets andthenanappropriateportionwillberetainedforworking capital.

5. Proper Cash Management : Cash management **is** alsoan important task of finance manager. He hastoaccessvariouscashneedsatdifferenttimesandthenmakearrangementsforarrangingcash.Cashmay be required to (a) purchase raw materials, (b) make payments to creditors, (c) meet wage bills, (d) meetday to day expenses. The usual sources of cash may be a: (a) cash sales, (b) collection of debts, (c) shortterm arrangements with bank etc. The cash management should be such that neither there is a shortage ofitandnoritisidle.Anyshortageof cashwilldamagethecreditworthinessoftheenterprise.

6. Implementing Financial Controls: An efficient system of financial Management necessitatestheuse of various control devices. Financial control devices generally used are : (a) Return on investment, (b)Budgetary Control, (c), Break Even Analysis, (d) Cost Control, (e) Ratio Analysis (f) Cost of Internal Auditreturnoninvestmentisthebestcontroldevicetoevaluatetheperformanceofvariousfinancialpoliciesthehi gherthis percentage, bettermaybethefinancialperformance.

7. Proper Use of Surpluses. The utilization of profits or surplusesis also an important factor infinancial management. **A** effective use of surplus is essential for expansion and diversification plans andalsoinprotectingtheinterests ofshareholders.

3. Finance Function : Finance function is the most important of all business function. It remains a focus ofall the activities it is possible to substitute or eliminate this function because the business will close downinthe absence of finance.

Approaches to finance functions-

1. Traditional approaches–Accordingtothisapproachthefinancefunctionwasconformedonlyprocurement of funds needed by business on most suitable firms. The utilization of funds was consideredbeyond the purview of finance function Here, it was felt that decision regarding application of funds aretakensame where.

Limitations:

- If completely ignore the decision making to the proper utilization of funds.
- If ignores the important issue of working capital finance and management.
- If ignore issue of allocation of funds.
- If ignore day to day financial problem of organization.

2.Modern Approach : It used in broader firms. It includes both raising and utilisation of funds. Thefinancefunctiondoesnotstoponlybyfindingoutsourcesofraisingenoughfunds,theirproperutilization.According to this approach, it cover financial planning, raising of funds. Allocation of funds and financialcontroletc.

Aims of Finance Function

1. Acquiring sufficient funds.
2. Proper utilization of funds.
3. Increasing profitability
4. Maximizes firms value.

1. Acquiring Sufficient Funds : The main aim of finance function is to assess the financial needs of anenterprise and then finding out suitable sources for raising them. If funds are needed for longer periodsthenlong-term sources likesharecapital,debentures,term loans maybeexplored.

2. Proper Utilization of Funds : Though raising of funds is important but their effective utilization ismore important. The funds should be used in such a way that maximum benefit is derived from them. Thereturnsfromtheiruseshouldbemorethantheircost.Itshouldbeensuredthatfundsdonotremainidleatanypointof time.

3. IncreasingProfitability: Theplanningandcontroloffinancefunctionaimsatincreasingprofitability of the concern. It is true that money generates money. To increase profitability, sufficientfundswillhaveto nor wastes more funds than required.

4. Maximizing Firm'sValue : Finance function also aims at maximizing the value of the firm. It isgenerally said that a concern's value is linked with its profitability. Besides profit, the type of sources usedfor raising funds, the cost of funds, the condition of money market, the demand for products are some other considerations which also influence a firm'svalue.

Sources of Financial information:

1. Banks
2. Financial institution
3. Government agencies
4. Investors
5. Brokers
6. Media
7. Supplier.

Functional Areas Financial Management:

1. Determining financial needs.
2. Selecting the sources of funds.
3. Financial analysis and interpretation
4. Cost volume and profit analysis.
5. Capital Budgeting.
6. Working Capital management

7. Profit Planning and Control.
8. Dividend Policy.

1. Determining financial needs: Afinancemanagerissupposedtomeetfinancialneedsoftheenterprise. For this purpose, heshould determine financial needs of the concern. Funds are needed to meet promotional expenses, fixed and working capital needs.

2. Selecting the Source of Funds: A number of sources may be available for raising funds a concernmay resort to issue of share capital and debentures. Financial institutions may be requested to providelong term funds. A finance manager has to be very careful and cautious in approaching different sources.The terms and conditionsof banks maynotbefavourabletotheconcern.

3. FinancialAnalysisandInterpretation: Theanalysisandinterpretationoffinancialstatementsisan important task of a fiancé manager. He is expected to know about the profitability, liquidity position,short term and long-term financial position of the concern. For this purpose, a number of ratios have to becalculated. The interpretation of various ratios is also essential to reach certain conclusions. Financialanalysis andinterpretationhasbecomeanimportantarea offinancialmanagement.

4. Cost –Volume –Profit Analysis : Cost-volume-profit analysis is an important tool of profit planning.The costs may be subdivided as : fixed costs, variable costs and semi-variable costs. Fixed costs remainconstant irrespective of changes in production. An increase or decrease in volume of production will notinfluence fixed costs. Variable costs, on the other hand, vary in direct proportion to change in production.Semi-variableremainconstantforaperiodandthenbecomevariableforashortperiod.

5. Capital Budgeting : Capital budgeting is the process of making investment decisions in capitalexpenditures. It is an expenditure the benefits of which are expected to be received over a period of timeexceeding one year. Capital budgeting decisions are vital to any organization. An unsound investmentdecisionmayproveto befatalfor theveryexistenceoftheconcern.

6. Working Capital Management : Working capital is the life blood and nerve center of business. Justas circulation of blood is essential in the human body for maintaining life, Working capital is essential to maintain the smooth running of business. No business can run successfully without an adequate amount of working capital. Working capital refers to that part of the firm's capital which is required for financing short term or current assets such as cash, receivables and inventories. It is essential to maintain a proper level of these assets.

7. Profit Planning and Control : Profit planning and control is an important responsibilities of thefinancial manager. Profit maximization is, generally, considered to be an important objective of a business.Profit is also used as a tool for evaluating the performance of management. Profit is determined by thevolumeof revenue andexpenditure.

8. Dividend Policy : Dividend is the reward of the shareholders for investments made by them in theshare of the company. Their investors are interested in earning the maximum return on their investmentwhereas management wantstoretain profitsfor furtherfinancing. Thecompany shoulddistributeareasonableamountasdividendstoitsmembers andretaintherestforitsgrowthandsurvival.

FINANCIAL PLANNING

(**)MEANING OF FINANCIAL PLANNING

Financing Planning means deciding in advance the requirements as well as sources of funds. FinancialPlanning is process of estimating the fund requirements of a business and determining the sources offunds.Thus, there are two aspects of financial planning:

1. How much funds are required to finance

(a)current assets (b)Fixed assets and (c)Future expansion project.

2. From where to raise these funds?

(a) WhetherfundstoberaisedthroughOwners'Funds(equity)orBorrowedFunds(Debt);

(b) HowmuchfundstoberaisedthroughOwners'Funds(equity)–Equityshare,PreferenceShares;reserves &Surplus.

(c) HowmuchfundstoberaisedthroughBorrowedFunds(Debt)–Debentures,Long-termloans.

The aforesaid decisions should be taken keeping in mind three factors viz. Cost, risk and control. Thereshould be a proper mix of various sources in such a manner that the funds are procured at optimum costwiththe leastriskandtheleastdilutionof controlof thepresentowners. .
Financial planning takes into consideration the growth, performance, investments and requirements offunds for the business for a given period of time. The time horizon of financial planning is generally 3-5years.
Short-term financial plans called budgets are also drawn up\ to show the revenues and expenses relatingtospecificoperationforaspecificperiodof 1 yearorless.

IMPORTANCE OF FINANCIAL PLANNING(**)
The importance of financial planning in financial management arises from the following benefit which flowfrom it:
1. Itprovidespoliciesandprocedureswhichmakepossibleacloser cooperationbetweenvariousfunctionsoftheb usinessenterprise.
2. Itaidsthecompanyinpreparingforthefuture.
3. Itprovidesadetailedplanofactionforreducinguncertaintyandfortheproperdirectionofindividualandgroup efforts.
4. Itavoidsconfusionandwastesuchaslossoftime,goodwillandfinancialresources.
5. Ithelpsmanagementtoavoidwasteresultingfromcomplexityofoperations.
6. It tends to relieve top management from detailed and time consuming process as the financial units areknown to everyone. It communicates expectations to all concerned so that they are properly understoodandimplemented.
7. The success or failure of production and distribution functions of the business depends on the financialdecision.

Capitalization

Capitalization refers to the total amount of long-term funds employed in a business. It includes equity share capital, preference share capital, reserves and surpluses, and long-term debt.

Capitalization = Equity Share Capital + Preference Share Capital + Reserves & Surplus + Long-term Debt

Types of Capitalization:

- Equity Capitalization: Based solely on equity capital.
- Debt Capitalization: Heavy reliance on borrowed funds.
- Balanced Capitalization: An optimal mix of equity and debt.

Concept of Over-Capitalization

Over-capitalization is a situation where a company's total capitalization is greater than the real value of its assets. The earning capacity of the company is lower than what its capitalization would suggest. Over-capitalization is a chronic financial problem.

Explanation with Example: Consider a company with a book value of assets at Rs. 25,00,000 and a capitalization of Rs. 25,00,000 (through equity, preference capital and debentures). However, the true value of its assets, based on its earnings capacity, might only be Rs. 15,00,000. This signifies that the company is over-capitalized by Rs. 10,00,000. The excess of Rs. 10,00,000 represents idle funds not generating any profits for the company.

Key Characteristics

- **Book Value > Real Value:** The company's assets are valued at more on paper than their actual worth.
- **Reduced Earning Capacity:** The company's ability to generate profits is lower than it should be.
- **Chronic Financial Disease**: Over-capitalization is a long-term financial problem.

Causes of Over-Capitalization

1. **Assets Acquired at Inflated Prices**: When assets are purchased from promoters at prices higher than their market value, it leads to over-capitalization. The excess price paid does not contribute to the earning capacity of those assets.
2. **Issue of Excessive Finances:** When a company raises more funds than it can profitably use, it leads to over-capitalization. A large portion of those funds remains idle without generating profit.
3. **Huge Borrowings at High Interest Rates**: Taking on significant debt at high interest rates can hinder a company's ability to pay a good return on equity, resulting in over-capitalization.
4. **Liberal Dividend Polic**y: If a company pays out a large portion of its profits as dividends instead of reinvesting in the business, it can hinder growth, reduce earning capacity, and contribute to over-capitalization.
5. **High Rates of Corporate Taxes**: High corporate taxes reduce the company's earnings which can be used for reinvestment purposes. This can further contribute to over-capitalization.

Remedial Actions for Overcapitalization:

Here are various strategies a company can employ to address its overcapitalized state:

1. **Reducing Capital Base**

- **Repurchase Stock:** If the company has excess cash, it can buy back its own shares. This reduces the number of outstanding shares and can increase earnings per share (EPS), making the stock more attractive to investors.
- **Pay Down Debt**: Use excess cash to pay off outstanding loans. This reduces interest expenses and improves the company's financial health.
- **Return Capital to Investors**: If the company cannot find profitable uses for its excess capital, it might consider returning it to shareholders through special dividends or other distributions.

2. Optimizing Asset Utilization

- **Sell Unproductive Assets**: Dispose of assets that are not contributing to the company's profitability. This could include obsolete equipment, unused land, or other non-core assets.

- **Lease Instead of Buying:** Consider leasing assets rather than purchasing them. This reduces the initial capital outlay and may improve cash flow.
- **Increase Asset Turnover**: Focus on utilizing existing assets more efficiently to generate more revenue. Improve processes, optimize scheduling, and find ways to increase output without requiring new investments.

3. Improving Operational Efficiency

- **Cost Cutting Measures**: Analyze and reduce operating expenses. This can involve negotiating better deals with suppliers, improving efficiency, streamlining processes, and reducing waste.
- **Increase Revenue**: Develop strategies to increase sales volume, diversify product offerings, or enter new markets.
- **Optimize Pricing**: Review pricing strategies to ensure they are competitive and profitable.
- **Focus on Profitable Segments**: Concentrate on the most profitable areas of the business and cut back on less profitable ones.

4. Strategic Repositioning

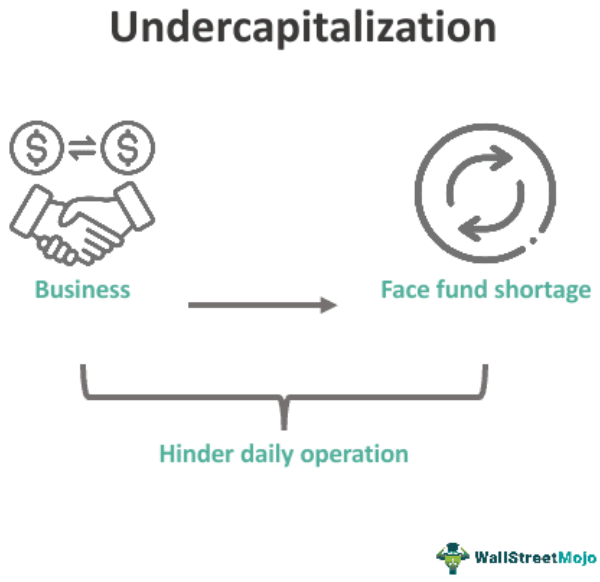
- **Divest Non-Core Businesses**: If the company has diversified into areas that are not performing well, consider selling off non-core businesses to focus on core competencies.
- **Refocus on Growth Opportunities**: Identify and invest in areas with higher growth potential and profitability. This might require shifting resources from underperforming areas.
- **Develop New Products or Services**: Innovate and develop new offerings that can generate new revenue streams and improve overall profitability.

5. Restructuring Capital Structure

- **Debt Refinancing**: If the company has high-interest debt, consider refinancing it with lower interest rates. This reduces interest expenses and improves cash flow.
- **Equity Restructuring**: Reorganizing or consolidating various classes of equity to create a more efficient capital structure.
- **Convert Debt to Equity**: If appropriate, consider converting debt into equity, reducing the company's debt burden.

Under-Capitalization

Under-capitalization occurs when a business doesn't have enough capital to operate effectively and reach its full potential. This can hinder growth, create financial instability, and ultimately threaten the survival of the business. It's the opposite of overcapitalization, where a company has too much capital.



Simply put, under-capitalization means a company doesn't have sufficient funds to cover its operational costs, investments, or growth initiatives. This lack of funding can severely limit a company's ability to compete, innovate, and expand.

Effects of Under-Capitalization

The consequences of under-capitalization can be severe and wide-ranging:

- **Slowed Growth:** Limited funds restrict the ability to expand operations, hire key talent, or enter new markets, hindering growth potential.
- **Missed Opportunities:** The inability to seize market opportunities, develop new products, or respond quickly to customer needs due to lack of capital.
- **Cash Flow Problems:** Difficulty in meeting short-term obligations, paying suppliers, and managing payroll, leading to potential cash flow crises.
- **Inability to Invest in Essential Infrastructure:** Lack of funds to invest in necessary equipment, technology, or facilities, limiting efficiency and productivity.
- **Reduced Profitability:** Increased operating costs, higher interest expenses (due to reliance on short-term loans), and missed opportunities can lead to reduced profitability.
- **Poor Credit Rating:** Difficulty meeting financial obligations can damage the company's credit rating, making it harder to secure future financing.
- **Increased Risk of Failure:** The combination of these factors can significantly increase the risk of business failure or bankruptcy.
- **Damaged Reputation:** Inability to meet commitments to customers or suppliers can damage the company's reputation.
- **Limited Innovation:** Lack of funds to invest in R&D limits a company's ability to innovate and remain competitive.

Causes of Under-Capitalization

Several factors can lead to a company being under-capitalized:

- **Inadequate Initial Funding:** Starting a business with insufficient capital, often due to underestimation of startup costs or over-reliance on personal savings.
- **Poor Financial Planning:** Lack of a comprehensive financial plan that accurately projects capital needs and identifies funding sources.
- **Overly Optimistic Sales Forecasts:** Underestimating the time it takes to generate revenue, leading to a cash shortfall before sales pick up.
- **Unexpected Expenses:** Unforeseen costs that were not accounted for in the budget can deplete available capital.
- **Rapid Growth Without Sufficient Capital:** Experiencing rapid growth that outpaces the company's financial resources, leading to a cash crunch.
- **Difficulty Obtaining Financing:** Struggling to secure loans or attract investors due to poor credit, lack of a proven track record, or unfavorable market conditions.
- **Mismanagement of Funds:** Inefficient spending, poor budgeting, and inadequate cash flow management can contribute to under-capitalization.
- **Economic Downturns:** Economic recessions or industry-specific challenges can impact a company's sales and its ability to secure financing.

Remedies for Under-Capitalization

Addressing under-capitalization requires proactive measures to secure additional funding and improve financial management. Here are some remedies:

1. Securing Additional Funding

- **Equity Financing:**
  - **Angel Investors:** Seek funding from individual investors who provide capital in exchange for equity.
  - **Venture Capital:** Raise capital from venture capital firms that invest in high-growth potential companies.
  - **Strategic Partners:** Partner with other companies that can provide funding and resources.
  - **Initial Public Offering (IPO):** Consider an IPO if the company is large enough and ready for the public market.
- **Debt Financing:**
  - **Bank Loans:** Secure loans from banks or other financial institutions.
  - **Lines of Credit:** Obtain a line of credit that can be accessed as needed.
  - **Small Business Administration (SBA) Loans:** Explore government-backed loan programs for small businesses.
  - **Corporate Bonds:** Issue corporate bonds to raise capital from investors.
- **Alternative Financing:**
  - **Crowdfunding:** Raise small amounts of capital from a large number of individuals online.
  - **Invoice Factoring:** Sell outstanding invoices to a factoring company for immediate cash.
  - **Equipment Leasing:** Lease equipment instead of purchasing it to conserve cash.

2. Improving Financial Management

- **Develop a Robust Financial Plan:** Create a detailed financial plan that includes accurate sales projections, cost estimates, and cash flow forecasts.
- **Effective Budgeting:** Implement a strict budgeting process to track income and expenses, identify areas for cost savings, and ensure resources are allocated effectively.
- **Cash Flow Management:** Monitor cash flow regularly, implement strategies to speed up collections and delay payments when possible, and maintain sufficient cash reserves.
- **Expense Control:** Reduce unnecessary costs, negotiate better rates with suppliers, and cut back on non-essential spending.
- **Inventory Management:** Optimize inventory levels to avoid excessive stock or shortages, minimizing storage costs and waste.
- **Seek Expert Advice:** Consult with financial advisors, accountants, or business mentors to develop a sound financial strategy.

3. Operational Efficiency

- **Increase Revenue:** Focus on increasing sales by exploring new markets, diversifying product offerings, and improving marketing efforts.
- **Improve Productivity:** Streamline processes, train employees, and adopt technology to improve efficiency and reduce operational costs.
- **Strategic Partnerships:** Partner with complementary businesses to expand reach, reduce costs, and share resources.

Concept of Risk And Return

Definition:

- **Risk:** The possibility that the actual return on an investment will differ from the expected return. It includes the chance of losing some or all of the original investment.
- **Return:** The gain or loss made on an investment over a period. It is usually expressed as a percentage of the investment's initial cost.

Concept of Return

Types of Return:

1. **Actual (Realized) Return:**
   - The return actually earned during a period.
   - Includes capital gains + income (e.g., dividends, interest).
2. **Expected Return:**
   - The return an investor anticipates or forecasts.
   - Based on probabilities of various outcomes.

Formula:

a) Single-period Return:

$$\text{Return} = \frac{\text{Income} + (\text{Ending Price} - \text{Beginning Price})}{\text{Beginning Price}} \times 100$$

b) Expected Return:

$$E(R) = \sum [P_i \times R_i]$$

Where:

- E(R) = Expected return
- Pi = Probability of outcome
- Ri = Return in that outcome

Concept of Risk

Types of Risk:

A. Systematic Risk (Market Risk):

- Affects the entire market.
- Cannot be diversified.
- Examples:
  - Interest rate risk
  - Inflation risk
  - Recession
  - Political instability

B. **Unsystematic Risk (Specific Risk):**

- Specific to a company or industry.
- Can be diversified away.
- Examples:
  - Business risk
  - Financial risk

- Management decisions

Measurement of Risk

****1. Standard Deviation (σ):**

- Measures the dispersion of returns from the mean.

σ=∑N(Ri−E(R))2

$$\sigma = \sqrt{\sum \frac{(Ri - E(r)2}{N}}$$

2. **Variance:

- Square of the standard deviation.

****3. Coefficient of Variation (CV):**

- Risk per unit of return.

$$CV = \frac{\sigma}{E(R)}$$

Lower CV is preferred as it indicates lower risk per unit of return.

***4. Beta (β):**

- Measures systematic risk.
- Market beta = 1
  - β > 1: More volatile than the market
  - β < 1: Less volatile than the market
  - β = 1: Moves in line with the market

Relationship Between Risk and Return

Investment Type	Expected Return	Risk Level
Government Bonds	Low	Very Low (Risk-free)
Blue-chip Stocks	Moderate	Moderate
Startups/Speculative Stocks	High	High
Derivatives	Very High	Very High

Note* *General Rule:* ***Higher the risk, higher the expected return (Risk-Return Tradeoff)***

UNIT II

FINANCIAL STATEMENT ANALYSIS

The process of critical evaluation of the financial information contained in the financial statements in order to understand and make decisions regarding the operations of the firm is called 'Financial Statement Analysis'. It is basically a study of relationship among various financial facts and figures as given in a set of financial statements, and the interpretation thereof to gain an insight into the profitability and operational efficiency of the firm to assess its financial health and future prospects.

Financial statement analysis is the process an individual goes through to analyze a company's various financial documents in order to make an informed decision about that business.
While the specific data contained within each financial statement will vary from company to company, each of these documents is designed to offer insight into the health of the company. They are also essential to monitoring a company's performance over time, as well as understanding how a company is progressing toward key strategic initiatives.

Objectives of Analysis of Financial Statements

Analysis of financial statements reveals important facts concerning managerial performance and the efficiency of the firm. Broadly speaking, the objectives ofthe analysis are to apprehend the information contained in financial statementswith a view to know the weaknesses and strengths of the firm and to make aforecast about the future prospects of the firm thereby, enabling the analysts totake decisions regarding the operation of, and further investment in the firm. Tobe more specific, the analysis is undertaken to serve the following purposes(objectives):

- To assess the current profitability and operational efficiency of the firmas a whole as well as its different departments so as to judge the financialhealth of the firm.
- To ascertain the relative importance of different components of thefinancial position of the firm.
- To identify the reasons for change in the profitability/financial position of the firm.
- To judge the ability of the firm to repay its debt and assessing theshort-term as well as the long-term liquidity position of the firm.Through the analysis of financial statements of various firms, an economist canjudge the extent of concentration of economic power and pitfalls in the financialpolicies pursued. The analysis also provides the basis for many governmentalactions relating to licensing, controls, fixing of prices, ceiling on profits, dividend freeze, tax subsidy and other concessions to the corporate sector.

Limitations of Financial Analysis

Though financial analysis is quite helpful in determining financial strengthsand weaknesses of a firm, it is based on the information available in financialstatements. As such, the financial analysis also suffers from various limitationsof financial statements. Hence, the analyst must be conscious of the impact ofprice level changes, window dressing of financial statements, changes inaccounting policies of a firm, accounting concepts and conventions, personaljudgment, etc. Some other limitations of financial analysis are:

1. Financial analysis does not consider price level changes.
2. Financial analysis may be misleading without the knowledge of the changes in accounting procedure followed by a firm.
3. Financial analysis is just a study of reports of the company.
4. Monetary information alone is considered in financial analysis while non-monetary aspects are ignored.
5. The financial statements are preparedon the basis of accounting concept, as such, it does not reflect the

current position.

Challenges in in Conducting Financial Analysis

Tools of financial statement analysis provide valuable insights into a company's financial health, there are several challenges that businesses may face when conducting financial analysis for business. Some of these challenges in financial analysis include:

Data quality issues:

Financial analysis requires accurate and reliable financial data. However, businesses may face challenges in ensuring that their financial data is accurate and up-to-date.

Limited access to data:

Some businesses may face challenges in accessing financial data, particularly if they are a small business or have limited resources.

Lack of expertise:

Financial analysis requires specialized knowledge and expertise. Some businesses may not have the necessary skills or resources to conduct financial analysis effectively.

Time constraints:

Conducting financial analysis can be time-consuming, particularly if businesses have to analyse large amounts of financial data.

Addressing these challenges requires businesses to invest in financial expertise, data management, and technology to ensure that they can conduct financial analysis effectively.

Ratio analysis

Ratio analysis is an accounting method that uses financial statements, like balance sheets and income statements, to gain insights into a company's financial health. Ratio analysis will help determine various aspects of an ***organization including profitability, liquidity and market value.***

Ratio analysis is a helpful tool to determine from the outside what is going on inside of a business because the financial statements required to perform ratio analysis are available to the general public. Company insiders typically do not use ratio analysis because they already have access to much more detailed information that will give them a better view of the company's financial status

Categories of Financial Ratios

1. Liquidity ratios

Liquidity ratios measure a company's ability to meet its debt obligations using its current assets. When a company is experiencing financial difficulties and is unable to pay its debts, it can convert its assets into cash and use the money to settle any pending debts with more ease.

Some common liquidity ratios include the quick ***ratio, the cash ratio, and the current ratio***. Liquidity ratios are used by banks, creditors, and suppliers to determine if a client has the ability to honor their financial obligations as they come due.

2. Solvency ratios

Solvency ratios measure a company's long-term financial viability. These ratios compare the debt levels of a company to its assets, equity, or annual earnings.

Important solvency ratios include the ***debt to capital ratio, debt ratio, interest coverage ratio, and equity multiplier***. Solvency ratios are mainly used by governments, banks, employees, and institutional investors.

3. Profitability Ratios

Profitability ratios measure a business' ability to earn profits, relative to their associated expenses.

Recording a higher profitability ratio than in the previous financial reporting period shows that the business is improving financially. A profitability ratio can also be compared to a similar firm's ratio to determine how profitable the business is relative to its competitors.

Some examples of important profitability ratios include the ***return on equity ratio, return on assets, profit margin, gross margin, and return on capital employed***.

4. Efficiency ratios

Efficiency ratios measure how well the business is using its assets and liabilities to generate sales and earn profits. They calculate the use of inventory, machinery utilization, turnover of liabilities, as well as the usage of equity. These ratios are important because, when there is an improvement in the efficiency ratios, the business stands to generate more revenues and profits.

Some of the important efficiency ratios include the ***asset turnover ratio, inventory turnover, payables turnover, working capital turnover, fixed asset turnover, and receivables turnover ratio.***

5. Coverage ratios

Coverage ratios measure a business's ability to service its debts and other obligations. Analysts can use the coverage ratios across several reporting periods to draw a trend that predicts the company's financial position in the future. A higher coverage ratio means that a business can service its debts and associated obligations with greater ease

1. **Ratio Analysis Formula Liquidity Ratios**

Liquidity Ratios specifically evaluate an enterprise's short-term financial position. These ratios focus on the concept of 'liquidity,' which reflects the firm's capability to fulfill its current financial obligations. Essentially, Liquidity Ratios gauge the business's ability to meet its immediate liabilities with existing resources.

Ratio Analysis Formula Liquidity ratios include:

Current Ratio or Working Capital Ratio:

- Current Ratio = Current Assets/ Current Liabilities

Quick Ratio or Acid Test Ratio or Liquid Ratio:

- Liquid Ratio = Liquid Assets / Current Liabilities

2. Ratio Analysis Formula Solvency Ratios

Solvency ratios are used to calculate the company's capacity to fulfill its long-term obligations upon reaching maturity.

Ratio Analysis Formula Solvency ratios include:

Debt to Equity Ratio:

- Debt to Equity Ratio = Debt/ Equity

Or

- Debt to Equity Ratio = Long Term Loan / Shareholder's Fund or Net Worth

Total Assets to Debt Ratio:

- Total Assets or Debt Ratio = Total Asset/ Debt

Or

- Total Assets to Debt Ratio = Total Assets/ Long Term Loan

Proprietary Ratio:

- Proprietary Ratio = (Proprietor's Fund/ Shareholder's Fund/ Net worth) /Total Assets

Interest Coverage Ratio:

- Interest Coverage Ratio = Net Profit before Interest and Tax / Fix Interest Charge

3. Ratio Analysis Formula Activity Ratios

Activity ratios reflect the efficiency with which Working Capital and Inventory are utilized to generate revenue from operational activities. They signify the rate or frequency at which the capital invested is turned over in the course of conducting business.

Ratio Analysis Formula Activity Ratios include:

Inventory Turnover Ratio or Stock Turnover Ratio:

- Inventory Turnover Ratio = Cost of revenue from operations / Average Inventory

Debtors or Receivables Turnover Ratio:

- Receivables Turnover Ratio = Net Credit Revenue from operations / Average Receivables

Creditors or Payables Turnover Ratio:

- Payable Turnover Ratio = Net Credit Purchases / Average Payable

Working Capital Turnover Ratio:

- Working Capital Turnover Ratio = Net Revenue from operations / Net working Capital

4. Ratio Analysis Formula Profitability Ratios

A company's effectiveness is determined by the profit it makes. Profitability ratios examine different angles of a company's profit performance.

Ratio Analysis Formula Profitability Ratios include:

Ratio Analysis Formula General Profitability Ratios:

Gross Profit Ratio:

- Gross Profit Ratio = (Gross Profit / Net Revenue from operations)*100

Operating Ratio:

- Operating Ratio = (Cost of revenue from operations + operating expenses)*100 / Net revenue from operations

Operating Profit Ratio:

- Operating Profit Ratio = (Operating Profit / Net revenue from operations)*100

Net Profit Ratio:

- Net profit ratio (before tax) =(Net profit before tax / Net revenue from operations)*100
- Net profit ratio (after tax) = (Net profit after tax / Net revenue from operations)*100

Ratio Analysis Formula Overall Profitability Ratios:

Return on Investment:

- Return on Investment = (Net profit before interest and Tax/ Capital Employed) *100

Cash Flow Statement

A cash flow statement is a financial statement that provides aggregate data regarding all cash inflows that a company receives from its ongoing operations and external investment sources. It also includes all cash outflows that pay for business activities and investments during a given period.

The following terms are used in this Standard with the meanings specified:
1 **Cash** comprises cash on hand and demand deposits with banks.
2 **Cash equivalents** are short term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value.
3 **Cash flows** are inflows and outflows of cash and cash equivalents.
4 **Operating activities** are the principal revenue-producing activities of the enterprise and other activities that are not investing or financing activities.
5 **Investing activities** are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.
6 **Financing activities** are activities that result in changes in the size and composition of the owners' capital (including preference share capital in the case of a company) and borrowings of the enterprise.

Operating activities

Cash flows from operating activities are primarily derived from the principal revenue-producing activities of the enterprise. Therefore, they generally result from the transactions and other events that enter into the determination of net profit or loss. Examples of cash flows from operating activities are:
(1) Cash receipts from the sale of goods and the rendering of services;
(2) Cash receipts from royalties, fees, commissions and other revenue;
(3) Cash payments to suppliers for goods and services;
(4) Cash payments to and on behalf of employees;
(5) Cash receipts and cash payments of an insurance enterprise for premiums and claims, annuities and other policy benefits;
(6) Cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities; and
(7) Cash receipts and payments relating to futures contracts, forward contracts, option contracts and swap contracts when the contracts are held for dealing or trading purposes.

Investing activities

The cash flow from investing activities section reports how much money has been spent (or generated) from various investment activities.

Investing activities include purchasing and selling investments, as well as earnings from investments. We'll take a closer look into the different types of investing activities in a moment. In short, you're investing significant amounts of cash into the long-term health of your company for the long-term gains of your operations. During the months of heavy investment and large purchases, a net negative cash flow will be reported in your cash flow from investing statement.

Some examples of cash flows arising from investing activities are as follows:

1. Cash receipts from the sale of fixed assets (including intangibles).
2. Cash payments for acquiring fixed assets (including intangibles).

3. Cash receipts from the sale of shares, warrants, or debt instruments of other organizations (other than receipts for those instruments that are considered to be cash & cash equivalents).
4. Cash payments for acquiring shares, warrants, or debt instruments of other organizations (other than payments for those instruments that are considered to be cash & cash equivalents).
5. Cash receipts of insurance claims for the property involved in an accident.
6. Cash advances and loans made to third parties. However, in the case of financial organizations, cash advances and loans will be treated as cash flows from operating activities.

Cash flow from investing activities= CapEx/purchase of non-current assets + marketable securities + business acquisitions – divestitures (sale of investments

Cash Flow from Financing Activities Formula
The cash flow from financing activities formula is the sum of all cash inflows and outflows. This includes stock repurchases, dividend payments, debt issuance, and debt repayment. In this formula, cash outflows are negative numbers and are represented within parentheses.

Cash Flow from Financing = Debt Issuances + Equity Issuances + (Share Buybacks) + (Debt Repayment) + (Dividends)

In the CFF formula, debt and equity issuances are shown as positive cash inflows since the business is raising capital (i.e., cash proceeds). In contrast, share buybacks, debt repayments, and dividends are represented within parentheses to signify that the item is a cash outflow.

Debt Issuances → Cash Inflow
Equity Issuance → Cash Inflow
Share Buybacks → Cash Outflow
Debt Repayment → Cash Outflow
Dividends → Cash Outflow

Cash flow from operations is calculated using either the direct or indirect method.
Direct Method

The direct method of calculating cash flow from operating activities is a straightforward process that involves taking all the cash collections from operations and subtracting all the cash disbursements from operations. This approach lists all the transactions that resulted in cash paid or received during the reporting period.

Indirect Method
The indirect method of calculating cash flow from operating activities requires you to start with net income from the income statement (see step one above) and make adjustments to "undo" the impact of the accruals made during the reporting period. Some of the most common and consistent adjustments include depreciation and amortization.
The direct and indirect methods will result in the same number, but the process of calculating cash flow from operations differs.

HOW TO CREATE A CASH FLOW STATEMENT
1. **Determine the Starting Balance**
The first step in preparing a cash flow statement is determining the starting balance of cash and cash equivalents at the beginning of the reporting period. This value can be found on the income statement of the same accounting period.
The starting cash balance is necessary when leveraging the indirect method of calculating cash flow from operating activities. However, the direct method doesn't require this information.

2. Calculate Cash Flow from Operating Activities

Once you have your starting balance, you need to calculate cash flow from operating activities. This step is crucial because it reveals how much cash a company generated from its operations.

While the direct method is easier to understand, it's more time-consuming because it requires accounting for every transaction that took place during the reporting period. Most companies prefer the indirect method because it's faster and closely linked to the balance sheet. However, both methods are accepted by Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS).

3. Calculate Cash Flow from Investing Activities

After calculating cash flows from operating activities, you need to calculate cash flows from investing activities. This section of the cash flow statement details cash flows related to the buying and selling of long-term assets like property, facilities, and equipment. Keep in mind that this section only includes investing activities involving free cash, not debt.

4. Calculate Cash Flow from Financing Activity

The third section of the cash flow statement examines cash inflows and outflows related to financing activities. This includes cash flows from both debt and equity financing—cash flows associated with raising cash and paying back debts to investors and creditors.

When using GAAP, this section also includes dividends paid, which may be included in the operating section when using IFRS standards. Interest paid is included in the operating section under GAAP but sometimes in the financing section under IFRS.

5. Determine the Ending Balance

Once cash flows generated from the three main types of business activities are accounted for, you can determine the ending balance of cash and cash equivalents at the close of the reporting period.

The change in net cash for the period is equal to the sum of cash flows from operating, investing, and financing activities. This value shows the total amount of cash a company gained or lost during the reporting period. A positive net cash flow indicates a company had more cash flowing into it than out of it, while a negative net cash flow indicates it spent more than it earned.

Particulars	Amount (₹)
A. Cash Flow from Operating Activities	
Net Profit before Tax and Extraordinary Items	XXXX
Adjustments for:	
- Depreciation	XXXX
- Interest Expense	XXXX
- (Gain)/Loss on Sale of Assets	XXXX
- Other Non-Cash Items	XXXX
Operating Profit before Working Capital Changes	XXXX
Changes in Working Capital:	
- Increase/(Decrease) in Current Assets	XXXX
- Increase/(Decrease) in Current Liabilities	XXXX
Cash Generated from Operations	XXXX
- Income Tax Paid	(XXXX)
Net Cash from Operating Activities (A)	

B. Cash Flow from Investing Activities	
- Purchase of Fixed Assets	(XXXX)
- Sale of Fixed Assets	XXXX
- Purchase/Sale of Investments	XXXX / (XXXX)
- Interest/Dividend Received	XXXX
Net Cash used in Investing Activities (B)	XXXX

C. Cash Flow from Financing Activities	
- Proceeds from Issue of Shares or Debentures	XXXX
- Repayment of Loans	(XXXX)
- Interest Paid	(XXXX)
- Dividend Paid	(XXXX)
Net Cash from/(used in) Financing Activities (C)	XXXX

Net Increase / (Decrease) in Cash & Cash Equivalents (A + B + C)	XXXX
Add: Opening Cash and Cash Equivalents	XXXX
Closing Cash and Cash Equivalents	XXXX

UNIT – III

WORKING CAPITAL MANAGEMENT: CONCEPT, IMPORTANCE AND OBJECTS

INTRODUCTION: It has been often observed that the shortage of working capital leads to the failure of a business. The proper management of working capital may bring about the success of a business firm. The management of working capital includes the management of current assets and current liabilities. A number of companies for the past few years have been finding it difficult to solve the increasing problems of adopting seriously the management of working capital.
There are ***two concepts*** of working capital viz .***quantitative and qualitative***. Some people also define the two concepts as gross concept and net concept.

According to quantitative concept, the amount of working capital refers to 'total of current assets'. Current assets are considered to be gross working capital in this concept.
The qualitative concept gives an idea regarding source of financing capital. According to qualitative concept the amount of working capital refers to "excess of current assets over current liabilities.

Current assets – It is rightly observed that "Current assets have a short life span. These type of assets are engaged in current operation of a business and normally used for short– term operations of the firm during an accounting period i.e. within twelve months. The two important characteristics of such assets are, (i) short life span, and (ii) swift transformation into other form of assets. Cash balance may be held idle for a week or two; account receivable may have a life span of 30 to 60 days, and inventories may be held for 30 to 100 days.
Current liabilities – The firm creates a Current Liability towards creditors (sellers) from whom it has purchased raw materials on credit. This liability is also known as accounts payable and shown in the balance sheet till the payment has been made to the creditors. The claims or obligations which are normally expected to mature for payment within an accounting cycle (1 year) are known as current liabilities. These can be defined as "those liabilities where liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets, or the creation of other current assets, or the creation of other current liabilities."

TYPES OF WORKING CAPITAL

According to the needs of business, the working capital may be classified into following two basis:
1) On the basis of periodicity
2) On the basis of concept
On the basis of periodicity: The requirements of working capital are continuous. More working capital is required in a particular season or the peck period of business activity. On the basis of periodicity working capital can be divided under two categories as under:
1. Permanent working capital
2. Variable working capital

(a) Permanent working capital: This type of working capital is known as Fixed Working Capital. Permanent working capital means the part of working capital which is permanently locked up in the current assets to carry out the business smoothly. The minimum amount of current assets which is required to conduct the business smoothly during the year is called permanent working capital.

For example, investments required to maintain the minimum stock of raw materials or to cash balance. The amount of permanent working capital depends upon the size and growth of company. Fixed working capital can further be divided into two categories as under:
1. Regular Working capital: Minimum amount of working capital required to keep the primary circulation. Some amount of cash is necessary for the payment of wages, salaries etc.
2. Reserve Margin Working capital: Additional working capital may also be required for contingencies that may arise any time. The reserve working capital is the excess of capital over the needs of the regular working capital is kept aside as reserve for contingencies, such as strike, business depression etc.

(b) Variable or Temporary Working Capital: The term variable working capital refers that the level of working capital is temporary and fluctuating. Variable working capital may change from one assets to another and changes with the increase or decrease in the volume of business. The variable working capital may also be subdivided into following two sub-groups.
1. Seasonal Variable Working capital: Seasonal working capital is the additional amount which is required during the active business seasons of the year. Raw materials like raw-cotton or jute or sugarcane are purchased in particular season. The industry has to borrow funds for short period. It is particularly suited to a business of a seasonal nature. In short, seasonal working capital is required to meet the seasonal liquidity of the business.
2. Special variable working capital: Additional working capital may also be needed to provide additional current assets to meet the unexpected events or special operations such as extensive marketing campaigns or carrying of special job etc.

On the basis of concept: on the basis of concept working capital is divided into two categories as under:
(A) Gross Working Capital: Gross working capital refers to total investment in current assets. The current assets employed in business give the idea about the utilization of working capital and idea about the economic position of the company. Gross working capital concepts is popular and acceptable concept in the field of finance.
(B) Net Working Capital: Net working capital means current assets minus current liabilities. The difference between current assets and current liabilities is called the net working capital. If the net working capital is positive, business is able to meet its current liabilities. Net working capital concept provides the measurement for determining the creditworthiness of company.

MEANINGOFWORKINGCAPITAL(***)

Working Capital refers to funds required to be invested in the business for a short period usually upto oneyear.It is also knownasshort-termcapitalorcirculatingcapitalor workingcapital.
Working capital is sometimes known as circulating capital or revolving capital because funds invested incurrent assets are continuously recovered through the realization of cash and again reinvested in currentassets. Thus, the amount keeps on circulating or revolving from cash to current assets and back again tocash.

CONCEPTS/TYPESOFWORKINGCAPITAL

I) Onthe basisofconcept:
a. ***Grossworkingcapital***:Itreferstoallthecurrentassetstakentogether.
b. ***Networkingcapital***:Itisthesurplusofcurrentassetsoverandabovecurrentliabilities.
(i) A**positivenetworkingcapital**occurswhencurrentassetsexceedcurrentliabilities;
(ii) A **negative net working capital** occurs when current liabilities exceed current assets. A negativeworking capital implies -ve liquidity and the company is not likely to be able to payoff even its currentliabilities & hence may considerably damage its reputation. A weak liquidity position is perceived as athreatto the solvencyof thecompany
II) Onthebasis oftime:

a. ***Permanent capital***:

i. *Regular Working capital*: It is the working capital required to ensure circulation of inventories.

ii. *Reserve working capital*:It is the excess amount over the requirement of regular workingcapitalwhichmaybe provided for contingencies.

b. ***Temporary working capital***:

i. *Season l working capital*:Itisrequiredtomeetseasonaldemands.

ii. *Specialworkingcapital*:It is required to meet specialoccasionsuchaslaunchingofextensivemarketingcampaign.

Factors affecting working capital requirements(***)CONFIRMQUESTION(***)

1. *Nature of business*: There are some business which require higher initial capital and lesser working capital where as some business require lower initial capital and larger amounts of working capital.
2. *Creditpolicy*: Liberal credit policy will require higheran dstrict dividend policy will require low working capital.
3. *Productioncycle*:Iflengthofproductioncycleisbigitwillrequirelargerworkingcapitalandviceversa.
4. *Seasonaloperations*:Largeramountsofworkingcapitalisrequiredforseasonalproductsbecausetheyare produced once and sold through out theyear.
5. *Inventorypolicy*:Iffirmwishestomaintainhigherstocklevelsthenhigherworkingcapitalisrequiredandifle sseramount of inventory levelsaremaintained,itwillrequirelesserworkingcapital.
6. *Businesscyclefluctuations*:DuringBoom,higherworkingcapitalisrequiredandlesserworkingcapitalisreq uired duringdepression.

Workingcapitalcycle:Ifthetime gapbetweenrawmaterialspurchasedanditsconversionintocashis biglargeworkingcapitalisrequiredbythefirmandvice vers

Particulars	Previous Year (₹)	Current Year (₹)	Increase (₹)	Decrease (₹)
Current Assets:				
- Cash and Bank Balances				
- Accounts Receivable				
- Inventory/Stock				
- Bills Receivable				
- Prepaid Expenses				
- Other Current Assets				
Total Current Assets (A)				
Current Liabilities:				
- Accounts Payable				
- Bills Payable				
- Outstanding Expenses				
- Short-term Loans				
- Other Current Liabilities				
Total Current Liabilities (B)				
Working Capital (A - B)				

Leverage

In finance, leverage is a strategy that companies use to increase assets, cash flows, and returns, though it can also magnify losses. There are two main types of leverage: financial and operating. To increase financial leverage, a firm may borrow capital through issuing fixed-income securities or by borrowing money directly from a lender.
Operating leverage can also be used to magnify cash flows and returns, and can be attained through increasing revenues or profit margins. Both methods are accompanied by risk, such as insolvency, but can be very beneficial to a business.

Characteristics

- Leverage is the process of using debt (borrowed money) to increase the profits of an investment or enterprise.
- Investors can improve their market power through the use of leverage.
- Leverage is the financing of business assets; rather than selling shares to obtain capital. Businesses can use debt to invest in their operations to boost shareholder value.
- The most popular financial leverage ratios are debt-to-assets and debt-to-equity, which can determine how dangerous a company's position is.
- Leverage is a tool used by businesses to fund their assets. Rather than issuing shares to raise money, companies can use debt to finance operations to boost shareholder value.
- The most popular financial leverage ratios to determine how dangerous a company's position is are debt-to-assets and debt-to-equity.

Advantages of Leverage

Traders and investors typically use leverage to increase profits.

Winnings can become considerably more profitable when more upfront funds grow your initial investment. Furthermore, using leverage gives you access to more expensive investment possibilities that you wouldn't otherwise have with less initial capital.

In short-term, low-risk situations where large amounts of capital are required, leverage can be used. For instance, a growth company may have a short-term need for money during acquisitions or buyouts, leading to a significant mid- to long-term growth opportunity.

Leverage allows innovative businesses to take advantage of opportunities at the correct times to promptly exit their levered position instead of utilizing additional resources to bet on riskier endeavors.

Financial Leverage

When a company uses debt financing, its financial leverage increases. More capital is available to boost returns, at the cost of interest payments, which affect net earnings. Financial leverage signifies how much debt a company has in relation to the amount of money its shareholders invested in it, also known as its equity. This is an important figure because it indicates if a company would be able to repay all of its debts through the funds it raised. A company with a high debt-to-equity ratio is generally considered a riskier investment than a company with a low debt-to-equity ratio.

Financial Leverage Ratio

The financial leverage ratio is an indicator of how much debt a company is using to finance its assets. A high ratio means the firm is highly levered (using a large amount of debt to finance its assets). A low ratio indicates the opposite

The formula used to calculate this ratio is -

DFL = % change in EPS ÷ change in EBIT

Or,

DFL = EBIT ÷ (EBIT - Interest)

*EBIT means Earnings before Interest and Tax

Operating leverage
Operating leverage doesn't take into account borrowed money. Rather, it's a company's ratio of fixed costs to variable costs. Companies with high ongoing expenses, such as manufacturing firms, have high operating leverage. High operating leverages indicate that if a company were to run into trouble, it would find it more difficult to turn a profit because the company's fixed costs are relatively high.

Degree of Operating Leverage (DOL) = % Change in EBIT / % Change in Revenue

Combined Leverage
This type of financial leverage accounts for the total risk of your business. Such leverage aggregates the effects of financial and operating leverage and presents a complete report of your business's financial position. Moreover, this leverage is generally used by capital-intensive companies that have the potential to expand but have low equity. Before applying combined leverage, always remember to study the market conditions and be sure of the future expenses of the business to avoid unnecessary risks.

CL = % change in EPS / % change in sales.

Practical examples

***Question 1*: Calculate Operating, Financial, and Combined Leverage**

Given:

- Sales = ₹5,00,000
- Variable Cost = ₹3,00,000
- Fixed Operating Costs = ₹1,00,000
- Interest Charges = ₹50,000

Solution:

1. **Contribution** = Sales − Variable Cost
   = ₹5,00,000 − ₹3,00,000 = ₹2,00,000
2. **EBIT** = Contribution − Fixed Costs
   = ₹2,00,000 − ₹1,00,000 = ₹1,00,000
3. **EBT** = EBIT − Interest
   = ₹1,00,000 − ₹50,000 = ₹50,000

a) **Degree of Operating Leverage (DOL)**

DOL=Contribution / EBIT = ₹2,00,000 / ₹1,00,000 = 2

(b) **Degree of Financial Leverage (DFL)**

DFL=EBIT / EBT=₹1,00,000 / ₹50,000 = 2

(c) **Degree of Combined Leverage (DCL)**

DCL= DOL× DFL= 2×2= 4

Question 2 Estimation of Working Capital Requirement

ABC Ltd. is preparing a working capital estimate for the coming year. The following information is available:

Particular	Value (₹)
Estimated annual production	60,000 units
Cost per unit:	
→ Raw material cost	₹120
→ Direct labour	₹50
→ Overheads (including depreciation ₹10)	₹30
Selling price per unit	₹250

Time details:

- Raw materials in stock: 1 month
- WIP (50% completion): 0.5 month
- Finished goods in stock: 1 month
- Credit allowed to customers: 2 months
- Credit allowed by suppliers: 1 month
- Lag in wages and overhead payment: 0.5 month
- Cash in hand: ₹50,000

Assume production and sales are even throughout the year. Calculate **Working Capital Requirement** on **cash cost basis**.

Solution: Step 1: **Calculate Cash Cost per Unit**

Component	Per Unit (₹)	Remarks
Raw material	120	Included
Direct labour	50	Included
Overheads	30	Exclude depreciation (₹10)
Total Cash Cost	₹120 + ₹50 + ₹20 = ₹190	

Step 2: Monthly Production

60,000 units / 12 months = 5,000 units / month

Step 3: Calculate Current Assets

1. Raw Materials in Stock (1 month)
   = 5,000 units × ₹120 = ₹6,00,000
2. Work-in-Progress (0.5 month, 50% completion)

- Material: 2,500 units × ₹120 = ₹3,00,000
- Labour + Overheads @ 50%:
  - 2,500 units × (₹50 + ₹20) × 50% = ₹87,500
- Total WIP = ₹3,00,000 + ₹87,500 = ₹3,87,500

3. Finished Goods (1 month)
   = 5,000 units × ₹190 = ₹9,50,000
4. Debtors (2 months)
   = 10,000 units × ₹190 = ₹19,00,000
5. Cash Balance
   = ₹50,000

Total Current Assets =
₹6,00,000 + ₹3,87,500 + ₹9,50,000 + ₹19,00,000 + ₹50,000 = ₹39,87,500

Step 4: Less: Current Liabilities

1. Creditors (1 month)
   = 5,000 units × ₹120 = ₹6,00,000
2. Outstanding wages & overheads (0.5 month)
   = 2,500 units × (₹50 + ₹20) = ₹1,75,000

Total Current Liabilities = ₹6,00,000 + ₹1,75,000 = ₹7,75,000

Final Step: Working Capital Requirement

Working Capital=Current Assets−Current Liabilities
=₹39,87,500−₹7,75,000
=₹32,12,500

UNIT IV

Capital Structure

Capital Structure refers to the mix of debt and equity used by a firm to finance its overall operations and growth.

Capital Structure = Debt + Equity

Objective: To determine the optimum mix that minimizes cost of capital and maximizes the value of the firm.

Optimum capital structure is the best combination of debt and equity that:

- Minimizes Weighted Average Cost of Capital (WACC)
- Maximizes firm value
- Maintains financial flexibility and control

Theories of Capital Structure

A. Net Income (NI) Approach

- Proposed by David Durand
- Assumes no taxes
- More debt = Lower cost of capital = Higher value of firm
- Conclusion: Capital structure affects firm value.

B. Net Operating Income (NOI) Approach

- Proposed by David Durand
- Assumes overall cost of capital is constant
- Increasing debt increases cost of equity
- Conclusion: Capital structure does not affect firm value.

C. Modigliani & Miller (MM) Theory

- In a perfect market (no taxes, no bankruptcy costs), capital structure is irrelevant
- With corporate tax, debt has tax advantage, increasing firm value
- Conclusion:

- Without tax → irrelevant
- With tax → more debt increases value (up to a limit)

D. Traditional Approach

- Initially, increasing debt lowers WACC
- Beyond a point, high debt increases financial risk and cost of capital
- Conclusion: There is an optimum capital structure

Factors Influencing Capital Structure

Factor	Description
Business Risk	Higher risk → prefer equity

Factor	Description
Tax Position	Debt is preferred when interest is tax deductible
Cost of Capital	Firms prefer the cheapest source
Cash Flow Position	Stable cash flows can support more debt
Flexibility	Maintain ability to raise funds in future
Control	Equity may dilute ownership
Regulatory Environment	May limit debt levels
Industry Norms	Peer company behavior matters

Dividend Payment and Valuation of Firms

➢ Dividend policies affect investor perception and may influence firm value.

Models:

- **Walter's Model**
  - If return (r) > cost of capital (k), retain earnings
  - r < k, pay dividends
- **Gordon's Model**
  - Assumes investors prefer certain dividends over uncertain capital gains
  - Growth = br (b = retention ratio, r = return on investment)

A **dividend policy** refers to the firm's decision on **how much profit to distribute** to shareholders and how much to retain.

Determinants of Dividend Policy

Determinant	Explanation
Earnings Stability	Stable profits = regular dividends
Liquidity Position	Cash availability affects payouts
Growth Opportunities	High growth = low dividend
Tax Considerations	DDT (Dividend Distribution Tax), shareholder taxes
Legal Constraints	Companies Act, debt covenants
Control Considerations	Retaining earnings avoids equity dilution
Access to Capital Markets	Easier access = higher dividends possible

Practical example

Question: ABC Ltd. needs ₹10,00,000 **to finance a new project. The company is considering the following** three financing plans**:**

Plan	Equity Financing	Debt Financing	Interest Rate on Debt
A	100% Equity	Nil	-
B	50% Equity	50% Debt	10%
C	25% Equity	75% Debt	10%

- Equity shares are issued at ₹100 each
- Expected **EBIT = ₹2,00,000**
- Tax rate = 30%

Objective:

To determine which capital structure gives the **highest EPS** and thus may be preferable.

Solution:

Step 1: Calculate No. of Equity Shares

- **Plan A:** ₹10,00,000 ÷ ₹100 = 10,000 shares
- **Plan B:** ₹5,00,000 ÷ ₹100 = 5,000 shares
- **Plan C:** ₹2,50,000 ÷ ₹100 = 2,500 shares

Step 2: Calculate EPS for Each Plan

Plan A (100% Equity):

- EBIT = ₹2,00,000
- Less: Interest = 0
- EBT = ₹2,00,000
- Tax @30% = ₹60,000
- **Earnings for Equity = ₹1,40,000**
- No. of Shares = 10,000
- **EPS = ₹1,40,000 ÷ 10,000 = ₹14**

Plan B (50% Debt):

- Debt = ₹5,00,000 @10% → Interest = ₹50,000
- EBIT = ₹2,00,000
- Less: Interest = ₹50,000
- EBT = ₹1,50,000
- Tax @30% = ₹45,000
- **Earnings for Equity = ₹1,05,000**
- No. of Shares = 5,000
- **EPS = ₹1,05,000 ÷ 5,000 = ₹21**

Plan C (75% Debt):

- Debt = ₹7,50,000 @10% → Interest = ₹75,000
- EBIT = ₹2,00,000
- Less: Interest = ₹75,000
- EBT = ₹1,25,000
- Tax @30% = ₹37,500
- **Earnings for Equity = ₹87,500**
- No. of Shares = 2,500
- **EPS = ₹87,500 ÷ 2,500 = ₹35**

Comparison Table

Plan	Equity ₹	Debt ₹	Interest ₹	Shares	EPS (₹)
A	10,00,000	0	0	10,000	₹14
B	5,00,000	5,00,000	50,000	5,000	₹21
C	2,50,000	7,50,000	75,000	2,500	₹35

Conclusion:

- **Plan C** offers the **highest EPS** (₹35), making it the most profitable **in terms of returns to equity holders**.
- However, it also carries **higher financial risk** due to more debt (75%).

Hire Purchase

Hire Purchase is a method of buying goods through an agreement where the buyer pays an initial deposit and then repays the balance in regular installments over time. Ownership of the item remains with the seller or finance company until all payments are made. It is commonly used to purchase expensive goods like vehicles and machinery.

Key Features:

- Initial down payment required
- Ownership transfers after final payment
- Interest is usually charged
- Suitable for consumers and businesses

Example: A business wants to buy a delivery van worth ₹10 lakh.

- It pays ₹2 lakh as a down payment
- The remaining ₹8 lakh is paid in monthly installments over 3 years
- Ownership of the van is transferred only after the last installment is paid

Venture Capital

Venture Capital is a form of private equity financing provided by investors to startups and small businesses with high growth potential. In exchange for capital, investors receive equity or ownership in the company. It is typically used by early-stage companies that cannot access traditional bank loans.

Key Features:

- High risk, high return investment
- Involves equity sharing
- Active involvement of investors
- Helps in business growth and scaling

Example: A tech startup developing a new AI app needs ₹1 crore for product development and marketing.

- A venture capital firm invests ₹1 crore in exchange for 20% equity in the startup

- The firm may also provide strategic guidance
- If the startup grows and is later valued at ₹50 crore, the investor's stake becomes very valuable

Difference between hire purchase and venture capital:

Feature	Hire Purchase	Venture Capital
Definition	Buying goods by paying in installments	Funding for startups in exchange for equity
Ownership Transfer	After final payment	Investor gets ownership (equity) from the start
Used For	Buying vehicles, machinery, equipment	Startup growth, product development, scaling
Payment Method	Down payment + regular installments	Lump-sum or phased capital investment
Interest/Returns	Fixed interest on installments	Return through company growth or IPO/exit
Risk	Low to medium risk for seller	High risk for investor
Control	Buyer has possession but not ownership initially	Investor may influence business decisions

UNIT V

CAPITAL BUDGETING

Capital budgeting is an accounting principle using which companies decide whether to invest in a particular project, as all the investment possibilities may not be rewarding. Companies use capital budgeting to generate a quantitative overview of each asset and investment, and it provides a rational ground for making a judgment or forming an opinion. Capital budgeting is the art of deciding how to spend your company's money wisely. Basically, it is the process of evaluating potential long-term investment opportunities to determine which ones will generate the most profit for a business. It involves analyzing future cash flows, considering the time value of money, and assessing risks. Ultimately, the goal is to choose investments that will help the business grow and thrive.

Features of capital budgeting

- **Long-term**: It involves making long-term investment decisions that will affect your company's financial health.
- **Time-sensitive**: It takes into account the time value of money, which means that a dollar today is worth more than a dollar in the future.
- **Risk-conscious**: Another feature is risk assessment. Businesses must carefully evaluate the potential risks and rewards of each investment opportunity to make informed decisions.
- **Predictive**: Capital budgeting requires accurate financial forecasting, which involves predicting future cash flows and expenses.
- **Needs collaboration**: Finally, capital budgeting requires collaboration and communication among different departments and stakeholders within a company.

Importance of capital budgeting

Informs long-term investment decisions
Reduces risk of unprofitable investments
Maximizes profits by aligning with business goals
Prioritizes investments and allocates resources efficiently
Provides a framework for evaluating opportunities
Promotes long-term growth and success
Enables planning and budgeting for future investments

Stages of Capital Budgeting

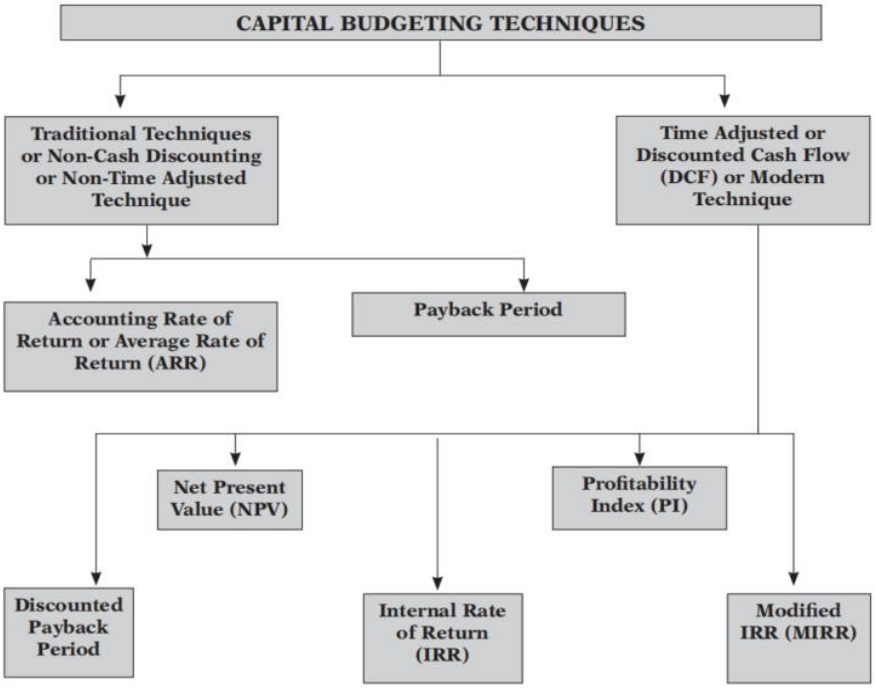
The process of capital budgeting has five stages.
The first stage of capital budgeting is the proposal of new projects that the company can pursue.
The second stage of capital budgeting is concerned with estimating the cash flow of projects. Revenue represents cash inflows from the project, while payments that cover the project's expenses represent cash outflows.
After the proposal of potential projects and the prediction of cash flows, managers examine the projects to see if they are practical.
In the fourth stage, companies select and implement feasible projects.
The fifth and the final stage is concerned with monitoring projects that are in progress.

What is the time value of money?

The time value of money is the idea that receiving a given amount of money today is more valuable than receiving the same amount in the future due to its potential earning capacity. If you invest RS1000 today, that money can start earning interest, for example. In the future, your initial investment will be worth more than RS1000 due to the earnings on that investment. So receiving RS1000 today is more valuable than receiving the same amount in the future. The same idea can be expressed alternatively using

inflation, as the value of RS1000 buys fewer and fewer goods over time due to rising costs.

Method of capital budgeting decision



1. Payback period

The payback period approach allows you to prepare a budget for a new project. It calculates how long it could take for your project to generate enough cash inflows to cover an investment. When utilising this approach, a shorter payback period makes a project more desirable, as you can recover your investment within a shorter time.

Formula:

Payback Period = Initial Cash Investment / Annual Cash Flow

Discounted Payback Period

The discounted payback period is a capital budgeting procedure used to determine the profitability of a project. A discounted payback period gives the number of years it takes to break even from undertaking the initial expenditure, by discounting future cash flows and recognizing the time value of money. The metric is used to evaluate the feasibility and profitability of a given project.

This is particularly useful because companies and investors usually have to choose between more than one project or investment, so being able to determine when certain projects will pay back compared to others makes the decision easier.

The basic method of the discounted payback period is taking the future estimated cash flows of a project and discounting them to the present value. This is compared to the initial outlay of capital for the investment.

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.

3.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:

Profitability Index = Present value of Cash Inflows / Initial Investment

4.Internal Rate of Return (IRR)

The Internal Rate of Return (IRR) method is a capital budgeting technique that determines the expected rate of return of an investment. It is the discount rate that makes the net present value of the project's expected cash inflows equal to the initial investment cost.

IRR is calculated by finding the discount rate that makes the present value of cash inflows equal to the initial investment.

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

Modified IRR (MIRR)

The Modified Internal Rate of Return (MIRR) is a financial metric used to evaluate the profitability of an investment or project. It addresses some of the limitations of the traditional Internal Rate of Return (IRR) by assuming more realistic reinvestment and financing rates. Eliminates the problem of multiple IRRs. Reflects more realistic assumptions for reinvestment. Useful for comparing projects with different cash flow patterns.

Introduction to Return on Investment (ROI)

Return on Investment (ROI) is a key financial metric used to evaluate the profitability or efficiency of an investment. It shows the percentage of return earned on an investment relative to its cost.

ROI = (Net Profit / Cost of investment) x 100

Note** *It measures how much profit is made for every ₹1 invested.*

Also following are the features:

- Expressed as a percentage
- A higher ROI indicates a more profitable investment
- Used in personal finance, business, marketing, and project management
- Simple to calculate, but does not account for time or risk

Example: Suppose you invest ₹50,000 in a business and earn ₹60,000 after one year.

- **Net Profit = ₹60,000 - ₹50,000 = ₹10,000**
- **ROI = (₹10,000 / ₹50,000) × 100 = 20%**

This means you earned a 20% return on your investment.

Capital Asset Pricing Model (CAPM)

Definition:
CAPM is a model used to determine the expected return on an investment based on its risk, using the relationship between risk and return.

Formula:

$$\text{Expected Return } (R) = R_f + \beta\,(R_m - R_f)$$

Where:

- Rf= Risk-free rate
- B = Beta (measure of risk)
- Rm = Expected market return

Key Points:

- Assumes investors are rational and markets are efficient
- Focuses on **systematic risk** (market risk), not unsystematic risk
- Used for pricing risky securities

Example:
If risk-free rate is 4%, market return is 10%, and beta is 1.2, then:

$R = 4 + 1.2(10 - 4) = 11.2\%$

Arbitrage Pricing Theory (APT)

Definition:
APT is a multi-factor model that explains the expected return of an asset using various **macroeconomic factors**, not just market return.

Formula (general form):

$$R = R_f + b_1F_1 + b_2F_2 + \ldots + b_nF_n$$

Where:

- Fn = Risk factors (e.g., inflation, interest rates, GDP growth)

- bn= Sensitivity to each factor

Key Points:

- More flexible than CAPM
- Assumes **no arbitrage** opportunity
- Doesn't rely on market portfolio
- Can use several real-world factors

Example:
If an asset is sensitive to interest rates and inflation, APT includes both factors in return calculation.

Derivatives

Definition:
Derivatives are financial instruments whose value is derived from an underlying asset such as stocks, bonds, commodities, or currencies.

Types:

1. **Forwards** – Customized agreements to buy/sell at a future date at a set price
2. **Futures** – Standardized forward contracts traded on exchanges
3. **Options** – Gives the right, not obligation, to buy/sell an asset
4. **Swaps** – Agreements to exchange cash flows (e.g., interest rate swaps)

Key Points:

- Used for **hedging** risk or **speculation**
- High leverage; high risk and reward
- Common in risk management and portfolio diversification

Example:
A farmer uses a futures contract to lock in a price for selling wheat in 3 months to avoid market price fluctuations.

Difference:

Feature	CAPM	APT	Derivatives
Type	Single-factor model	Multi-factor model	Financial instrument
Focus	Market risk (beta)	Multiple economic risks	Hedging, speculation
Key Assumption	Efficient markets	No arbitrage	Value depends on underlying asset
Use	Asset pricing, expected return	Asset pricing, risk factor analysis	Risk management, trading

Assignment question

1. "The financial manager plays a vital role in management of business." Explain the statement in the light of exclusive functions of the financial manager?
2. Explain the concept of financial analysis. What are the different tools used for the analysis and interpretation of financial statement ?
3. Define working capital. Explain factors affecting working capital requirements of an manufacturing organization.
4. Explain the scope of financial management?
5. What is turnover ratio? give formulas of any two turnover ratios.
6. Discuss any two factors determining the working capital.
7. What is capital structure ? explain.
8. Write a short note on : hire purchase, venture capital?
9. What are the difference between cash flow and fund flow analysis? Explain giving illustration of each of them.
10. What is dividend policy ? explain the various factors determining the dividend policy of a company.
11. Define over capitalization and under capitalization. What are its causes?
12. What is business risk and is it same as financial risk? How does the use of financial leverage affect the financial risk?