SYLLABUS

Class:-B.B.A.IIYear

Subject:-FinancialManagement

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

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

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 otherwords,focusoffinancialmanagementistoaddressthreemajorfinancialdecisionareasnamely,investment; financing;anddividenddecisions.

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

Morespecifically,FinancialManagementisconcernedwithmakingthefollowing**fourdecisions:**

1. *Investmentdecisioni.e.,whereandhowmuchtoinvestinlong-termassetsandworkingcapital?*
2. *Financingdecisioni.e.,fromwheretoraisefunds?*
3. *Dividenddecisioni.e.,howmuchearningstoberetainedandhowmuchtobedistributed?*
4. *Liquiditydecisioni.e,howmuchcashinhandistobemaintainedwiththefirm.*

OBJECTIVEOFFINANCIALMANAGEMENT(***)

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.

Thefinancialmanagermustidentifythoseavenuesofinvestment;modesoffinancing,waysofhandlingvariouscomponents of working capital which ultimately will lead to an increase in the price of equity share. Ifshareholders 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) havebeendulypaid.

Objectivesoffinancialmanagement

Primaryobjectives	**Secondaryobjectives**
1. Profitmaximization.	1.Toensureavailabilityifsufficientamountoffunds at reasonablecosts.
2. Wealthmaximization.	2.Toensureoptimumutilizationoffunds.
	3.Toensuresafetyoffundsthroughcreationofreserves.

NatureandScopeofFinancialManagement: Nature:

1. Managementofflowofmoney.
2. Concept with application of skills in manipulationUseof Control of Money Determining financial needs and Raising of fundsUtilizationof funds

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. Whichgives us the Best output of financial Manager need to concentrate over the inflows as wellasoutflowofmoneysothattherecannotbeshortageandexcursiveness offinancialresources.

2 ***Concerns with application of skills in manipulation, we and controlof money :*** In an effectivefinancial 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 projectswouldbe preferredwhichare beneficialto thebusiness.

ScopeoffinancialManagement:

1. EstimatingFinancialRequirement
2. DecidingCapitalStructure
3. Selectingasourceoffinance
4. SelectingaPatternofinvestment.
5. ProperCashManagement
6. ImplementingFinancialcontrols
7. Properusesofsurpluses.

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 veryhighthensuchsourcesmaynotbe usefulforlong.

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 Auditreturnoninvestmentisthebestcontroldevicetoevaluatetheperformanceofvariousfinancialpoliciesthehigherthis 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.

Approachestofinancefunctions-

1. Traditionalapproaches–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:

a. Ifcompletelyignorethedecisionmakingtotheproperutilizationoffunds.
b. Ifignorestheimportantissueofworkingcapitalfinanceandmanagement.
c. Ifignoreissueofallocationoffunds.
d. Ifignoredaytodayfinancialproblemoforganization.

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.

AimsofFinanceFunction

1. Acquiringsufficientfunds.
2. Properutilizationoffunds.
3. Increasingprofitability
4. Maximizesfirmsvalue.

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 fundsthanrequired.

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 someotherconsiderations which alsoinfluence afirm'svalue.

SourcesofFinancialinformation:
1. Banks
2. Financialinstitution
3. Governmentagencies
4. Investors
5. Brokers
6. Media
7. Supplier.

FunctionalAreasFinancialManagement:
1. Determiningfinancialneeds.
2. Selectingthesourcesoffunds.
3. Financialanalysisandinterpretation
4. Costvolumeandprofitanalysis.
5. CapitalBudgeting.
6. WorkingCapitalmanagement
7. ProfitPlanningandControl.
8. DividendPolicy.

1. Determiningfinancialneeds: Afinancemanagerissupposedtomeetfinancialneedsoftheenterprise. For this purpose, heshould determine financial needs of the concern. Funds are needed tomeetpromotional expenses,fixed andworking capitalneeds.

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.Theterms andconditionsof 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 tomaintain the smooth running of business. No business can run successfully without an adequate amount ofworking capital. Working capital refers to that part of the firm's capital which is required for financingshort term or current assets such as cash, receivables and inventories. It is essential to maintain a properlevelof 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 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.

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 aretwoaspects of financialplanning:

1. **Howmuchfundsarerequiredtofinance**

(a)currentassets (b)Fixedassets and (c)Futureexpansionproject.

2. **Fromwheretoraisethesefunds?**

(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.

IMPORTANCEOFFINANCIALPLANNING(**)
The importance of financial planning in financial management arises from the following benefit which flowfrom it:
1. Itprovidespoliciesandprocedureswhichmakepossibleacloserc ooperationbetweenvariousfunctionsoftheb 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.

UNIT II

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.

UNIT – III

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. ***Permanentcapital***:

i. *RegularWorkingcapital*:Itistheworkingcapitalrequiredtoensurecirculationofinventories.

ii.*Reserveworkingcapital*:Itistheexcessamountovertherequirementofregularworkingcapitalwhichmaybe provided forcontingencies.

b. ***Temporaryworkingcapital***:

i. *Seasonalworkingcapital*:Itisrequiredtomeetseasonaldemands.

ii.*Specialworkingcapital*:Itisrequiredtomeetspecialoccasionsuchaslaunchingofextensivemarketingcampaign.

Factorsaffectingworkingcapitalrequirements(***)CONFIRMQUESTION(***)

1. *Natureofbusiness*:Therearesomebusinesswhichrequirehigherinitialcapitalandlesserworkingcapitalw hereassomebusinessrequirelowerinitialcapitalandlargeramountsofworkingcapital.

2. *Creditpolicy*:Liberalcreditpolicywillrequirehigherandstrictdividendpolicywillrequirelowworking capital.
3. *Productioncycle*:Iflengthofproductioncycleisbigitwillrequirelargerworkingcapitalandviceversa.
4. *Seasonaloperations*:Largeramountsofworkingcapitalisrequiredforseasonalproductsbecausetheyare producedonce andsold throughouttheyear.
5. *Inventorypolicy*:Iffirmwishestomaintainhigherstocklevelsthenhigherworkingcapitalisrequiredandifle sseramountofinventorylevelsaremaintained,itwillrequirelesserworkingcapital.
6. *Businesscyclefluctuations*:DuringBoom,higherworkingcapitalisrequiredandlesserworkingcapitalisreq uired duringdepression.
7. *Workingcapitalcycle*:Ifthetime gapbetweenrawmaterialspurchasedanditsconversionintocashis biglargeworkingcapitalisrequiredbythefirmandvice versa.

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

1. Leverage is the process of using debt (borrowed money) to increase the profits of an investment or enterprise.

2 Investors can improve their market power through the use of leverage.

3. 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.

4. The most popular financial leverage ratios are debt-to-assets and debt-to-equity, which can determine how dangerous a company's position is.

5. 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.

6. 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.

MEANING OF COST OF CAPITAL COMPUTATION OF COST OF CAPITAL

The Cost of Capital is the most important and controvenies crea in Financial Management Capitol Budgeting decisions have a maior impact on the fem and Cost of Capital is used as a criterion to exduate the copha Budgeting decisions Le whether to accept or relect a proiect, Knowledge about cost of capital and tour a influenced by financial leverage, is useful in making capital structure de

important concept in financial dechion making the chief obiective of measuring the cost of capital cha decision criterion in capital budgeting ture decisions.
Salomon Ezra: "Cost of Capital is the minimum required rate of earnings or the cut-off rate of capital expenditure"

Importance of Cost of Capital

The Cost of Capital is very important in Financial Management and plays a crucial role in the following areas:

- **Capital budgeting decisions: The cost of capital is used for discounting cash flows under Net Present Value method for investment proposals. So, it is very useful in capital budgeting decisions.**
- **Capital structure decisions: An optimal capital is that structure at which the value of the firm is maximum and cost of capital is the lowest. So. cost of capital is crucial in designing optimal capital structure**
- **Evaluation of final Performance: Cost of capital is used to evaluate the financial performance of top management. The actual profitably is compared with the actual cost of capital of funds and if profit is greater than the cost of capital the performance nay be said to be satisfactory**
- **Other financial decisions: Cost of capital is also useful in making such other financial decisions as dividend policy capitalization of profits, making the rights**

UNIT IV

A firm needs funds for long term requirements and working capital. These funds are raised through different sources both short term and long term. The long term funds required by a firm are mobilized through owner's funds (equity share, preference shares and retained earnings) and long term debt debentures and bonds. A mix of various long term sources of funds employed by a firm is called capital structure. According to Expert "Capital structure of a company refers to the composition or make-up of its capitalization and it includes all long term capital resources, viz, loans, bonds, shares and reserves" Thus capital

structure is made up of debt and equity securities and refers to permanent financing of o firm Financial Manager has to plan the appropriate mix of different securities in total capitalization in such a way as to minimize the cost of capital and maximize the earning per share to the equity shareholders. There may be four fundamental patterns of capital structure as follows:

Equity capital only (including Reserves and Surplus)

Equity and preference capital

Equity preference and long term debt i.e. debentures, bonds and loans from financial institutions etc.

Equity and long term debt.

Some authors use capital structure and financial structure interchangeably But, both are different concepts Financial structure refers to the way in which the total assets of a firm are financed. In other words, financial structure refers to the entire liabilities side of the Balance Sheet. But, capital structure represents only long term sources of funds and excludes all short term debt and current liabilities. Thus, financial structure is a broader one and capital structure is only part of it.

Features of an Appropriate Capital Structure

A capital structure will be considered to be appropriate if it possesses following features:

- **Profitability: The capital structure of the company should be most profitable. The most profitable capital structure is one that tends to minimize cost of financing and maximize earnings per equity share.**

- **Solvency: The pattern of capital structure should be so devised as to ensure that the firm does not run the risk of becoming insolvent. Excess use of debt threatens the solvency of the company The debt content should not, therefore, be such that which increases risk beyond manageable limits.**

- **Flexibility: The capital structure should be flexible to meet the requirements of changing conditions. Moreover it should also be possible for the company to provide funds whenever needed to finance its profitable activities.**

- **Conservatism: The capital structure should be conservative in the sense that the debt content in the total capital structure does not exceed the limit which the company can bear In other words, it should be such as is commensurate with the company's ability to generate future cash flows.**

- **Control: The capital structure should be so devised that it involves minimum risk of loss of control of the company**

Theories of Capital Structure

the existence of an optimum copital structure is not accepted by all. There are two extreme views or schools of thought regarding the existence of an optimum capital structure. As per cne view, capital structure influences the value of the firm and cost of capital and hence there exists an optimum relevance and hence there exists on optimum capital structure. On the other hand, the other school of thought advocates that capital structure has no relevance and it does not influence the value of the firm and cost of capital. Reflecting these views. different theories of capital structure have been developed. The main contributors to the theories are David Durand. Ezra Solomon, Modigliani and Miller.

The Important theories of capital structure are:

1.Net Income Approach

2. Net Operating Income Approach

3. The Traditional view

4. Modigliani and Miller hypothesis

Assumptions Underlying the Theories:

In order to have a clear understanding of these theories and the relationship between capital structure and value of the firm or cost of capital, the following assumptions are made:

Firms employ only debt and equity.

The total assets of the firm are given.

The firm's total financing remains constant. The degree of leverage can be changed by selling debl to repurchase shares or selling shares to retire debt.

The firm has 100% payout ratio, le... It pays 100% of its earnings as dividends.

The operating earnings (EBIT) of the firm are not expected to grow.

The business risk is assumed to be constant and independent of capital structure and financial risk.

Investors have the same subjective probability distribution of expected future operating earnings for a given firm.

There are no corporate and personal faxes. This assumption it relaxed later.

Nel Operating Income Approach

This net operating income (NOI) approach is also suggested by David Durand. This represent another exam view that capital structure and value of the firm are irrelevant. This capital structure of the fem does not intuerice of capital and value of the firm. The value of the firm (V) is determined as follows

V = S + D = (NQl)/K_{o}

K. The overall cost of capital and depends on the business risk of the firm. It is not affected by financing mix.

The critical assumptions of this theory are:

The market capitalisation the value of the firm as a whole. Thus, the split between debt and equity is not important

2. The business risk remains constant at every level of debt-equity mix

3. There are no corporate taxes

4. The debt capitalisation rate (K_{0}) is constant

The Traditional View

This approach, which is also known as intermediate approach, has been popularised by Fara Solomon compromise between the two extremes of Net Income Approach and Net Operating Income Approach According to this approach, cost of capital con be reduced or the value of the firm con be incrected with a iudicious mix of debt and equity This theory says that cost of capital declines with increase in debt capital voto a masonable level, and later it Increases with a further rise in debt capital

The way in which the overall cost of capital reacts to changes in capital structure can be divided into three stages under traditional position

Modigliani-Miller (MM) Hypothesis

The Modigliani Miller hypothesis is identical with the Net Operating Income Approach. Modigliani and Miller argued that in the absence of faxes the cost of capital and the value of the firm are not affected by the changes in capital structure. In other words, capital structure decisions are irrelevant and value of the firm is independent of debt equity mix.

Basic Propositions:

M-M Hypothesis can be explained in terms of two propositions of Modigliani and Miller. They are

(i) The overall cost of capital (K) and the value of the firm are independent of the capital structure. The total market value of the firm is given by capitalising the expected net operating income by the rate appropriate for that risk class.

(i) The financial risk increases with more debt content in the capital structure. As a result cost of equity (K) increases in a manner to offset exactly the low cost advantage of debt Hence, overall cost of capital remains the same.

DIVIDEND POLICY

introduction:

Dividends are a major cash outlay for many corporations. At fest glance it would appear that a company could atributes as much as possible to please its shareholders, it might seem equally obvious that a firm could invest money for its shareholders instead of paying dividends

A firm's decisions about dividends are often mixed up with other financing and investment decisions. Some firms pay low dividends because management is optimistic about a firm's future and wishes to retain earrings for expansion Another firm might finance capital expenditures largely by borrowing. This releases cash for dividends

the firm's dividend policy must be isolated from other problems of financial management. The dividend policy trade-off between retained earnings on the one hand and paying out cash and issuing shares on the other There are many firms that pay dividends and also issue stock from time to time. They could avoid the stock issues where costs are highest for the firm) by paying lower dividends. Many other firms restrict dividends so that they do

not have issue shares. They on the other hand could occasionally issue stack and increase dividends. Thus both

There are many reasons for paying dividends and there are many reasons for not paying any dividends

What are dividends? What are the various types?

The term dividend usually refers to a cash distribution of earnings. It it comes from other sources it is called a quidating dividing. It mainly has the following types:

Regular dividends are those the company expects to maintain, paid half-yearly (sometimes monthly, quarterly or annually)

Extra dividends are those that may not be repeated.

Special dividends are those that are unlikely to be repeated.

Stock dividends are sometimes paid in shares of stocks. Similar to stock splits, both increase the number of shares outstanding and reduce the stock price.

Why a dividend policy is important?

The dividend policy of a company determines what proportion of earnings is distributed to the shareholders by way of dividends, and what proportion is ploughed back for reinvestment purposes. Since the main objective of Inancial management is to maximize the market value of equity shares, one key area of study is the relationship between the dividend policy and market price of equity shares, in this regard dividend policy assumes significance

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

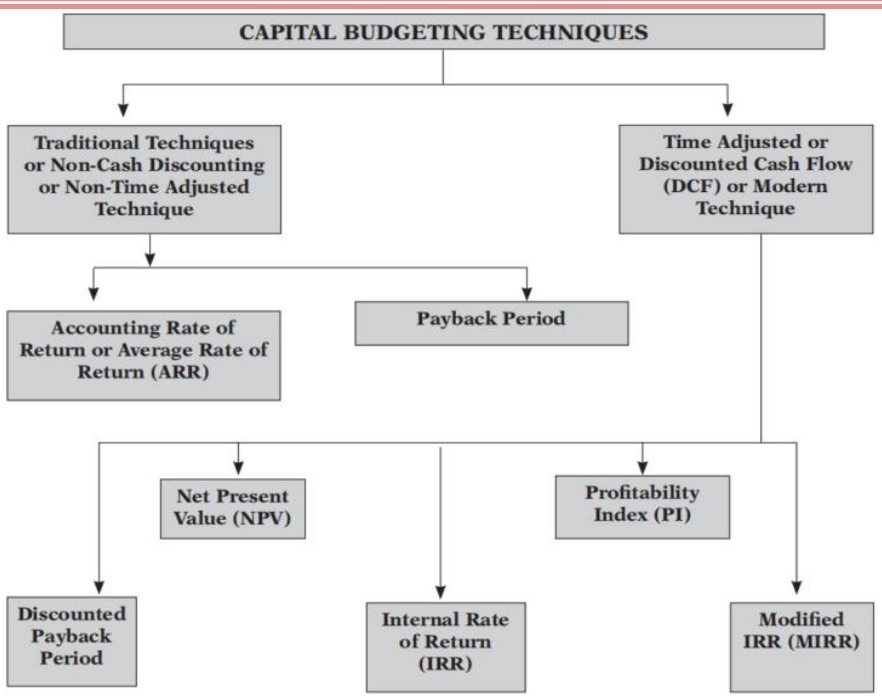
Stages of Capital Budgeting

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

UNIT-V

WorkingCapitalManagement

Q.1 Fromthefollowinginformationpreareastatementshowingtheworkingcapitalrequirements:Budgetedsales(InUnit) 2,60,000 p.a

Analysisofonerupeeofsales:

- RawMaterial 0.30
- DirectLabour 0.40
- Overheads 0.20
- Totalcost 0.90
- Profit 0.10
- Sales 1.00

Itisestimatedthat:

- Rawmaterialsarecarriedinstockfor3weeksandfinishedgoodsfor2weeks.
- Factoryprocessingwilltake3weeks.(Rawmaterial@100%&50%forlabour&overheads
- Supplierswillgive5weekscredit.
- Customerswillrequire8weekscredit.
- Wages&overheadtobeaccruedevenlythroughouttheyear.

[Ans:Rs.51,000]

Q.2 The Management of Vishal Ltd has called for a statement showing the working capital needed tofinance a level of activity of 3,00,000 units of output for the year. The cost structure for the company 'sproduct,forthe abovementionedactivitylevelis detailedbelow:

	Costperunit
• RawMaterials	20
• DirectLabour	5
• Overheads	15
• Total	40
• Profit	10
• Selling price	50

1. Past experience indicates that raw materials are held in stock, on an average for 2 months.Workinprocess(100%completeinregardtomaterialsand50%forlabourandoverheadswillapproxbeto half a month's production.
2. Finishedgoodsremaininwarehouse,onanaverageforamonth.
3. Suppliersofmaterialsextendamonthscredit.
4. Twomonthscreditisallowedtodebtors,calculationofdebtorsmaybemadeatsellingprice.
5. AminimumcashbalanceofRs.25,000isexpectedtobemaintained.
6. Theproductionpatternisassumedtobeevenduringtheyear.Preparethestatementofworkingcapitalrequirements. **[Ans: Rs.44,00,000]**

Q.3 TheBoardofdirectorsofNanakEngineeringCompanyprivateLtdrequestsyoutoprepareastatementshowing the Working Capital Requirements for a level of activity of 1,56,000 units of production. Thefollowing informationis availableforyourcalculations:

(A)	**Perunit(Rs.)**
1. Rawmaterials	90
2. DirectLabour	40
3. Overheads	75
4. Profit	60
5.Selling price per unit	265

(B) Rawmaterialsareinstock,onaverageonemonth.

1. Materialsareinprocess,onaverage2weeks.
2. Finishedgoodsareinstock,onaverageonemonth.
3. Creditallowedbysuppliers,onemonth.
4. Timelaginpaymentofwages1.5weeks.
5. Laginpaymentofoverheadsisonemonth.
6. Debtorsareallowed6weekscredit

20 % of the output is sold against cash. Cash in hand and at bank is expected to be Rs. 60,000. It is to beassumedthatproductioniscarriedonevenlythroughouttheyear,wagesandoverheadsaccruesimilarlyan datime periodof 4weeksisequivalentto amonth.

Q.4 TheBoardofDirectorsofRichandpoorCo.Ltd.requestsyoutopreparestatementsshowingtheworkingcapita lrequirementforalevel ofactivityat1,56,000 units of production.

	Peruntiesof(Rs.)
(A) RawMaterials	180
DirectLabour	80
Overheads	150
Total	410
Profit	120
Selling Priceper unit	530

(B)

(i) Rammaterialsareinstock,onaverageonemonth.
(ii) Materialsareinprocess,onaverage2weeks.
(iii) Finishedgoodareinstock,onaverageonemonth.
(iv) Creditallowedbysuppliers,onemonth.
(v) Timelaginpaymentfromdebtors,2months.
(vi) Averagetimelaginpaymentofwages,1.5weeks.
(vii) Averagetimelaginpaymentofoverheadsisonemonth.

20%Oftheoutputissoldagainstcash.Cashinhandandatbankisexpectedtobe Rs.1,20,000.Itistobe assumed that production is carried on evenly throughout the year, wages, and overheads accrueevenlyandatime periodof 4 weeksisequivalentto month.

Note:WIPassumed50%inrespectoflabourandoverheads**.** **[Ans.1,25,22,000]**

Q.5 Thefollowingdataisavailablefromthecostsheetofa Company.

	(Costperunit)
RawMaterial	50
DirectLabour	20
Overhead(includingdepreciationofRs.10)	40TotalCost
	110
Profit 20	
Selling Price	3130

Additionalinformation.

Average raw material in stock is for one month. Average material in progress is for half month. Creditallowed by suppliers is one month; credit allowed to debtors is one month. Average time lag inpaymentofwages:10days;averagetimelaginpaymentofoverheads30days.25%ofthesalesareoncash basis. Cash balance expected to be Rs. 1,00,000. Finished goods life in the warehouse for onemonth. You are required to prepare a statement showing the working capital needed to finance a leveloftheactivityof50,000unitsofoutput.Productioniscarriedoutevenlythroughouttheyearadwagesand overheadsaccruesimilarly.Stateyouassumptionsisany,clearly.

Q.6 Whilepreparingaprojectreportonbehalfofaclientyouhavecollectedthefollowingfacts.Estimatethenet workingcapitalrequiredforthatproject.Add10%toyourcomputedfiguretoallow

contingencies..

	AmountperunitRs.
Estimatedcostperunitofproductionis:	
RawMaterials	80
DirectorLabour	30
Overhead(exclusiveofdepreciation)	60
TotalCost	170
AdditionalInformation:	
Selling price	Rs.200 perunit
Levelofactivity	1,04,000unitofproductionper annum.
Rawmaterialsinstock	average4weeks
Workinprogress(assume50%completionstagein weeksRespectof conversioncosts)	average 2
Finishedgoods instock	average4weeks
Creditallowedbysuppliers	average4weeks
Creditallowedtodebtors	average8weeks
Laginpaymentofwages	average1.5weeks
Cashatbankisexpectedtobe	Rs. 25,000

Youmayassumethatproductioniscarriedonevenlythroughouttheyear(52weeks)andwagesandoverheads accrue similarly.

Allssalesareoncreditbasisonly. **[Ans.49,66,500]**

Q.7 ThemanagementofRoyalindustrieshascalledforastatementshowingtheworkingcapitaltofinancealevelofactivityof1,80,000unitsofoutputfortheyear.Thecoststructureforthecompanyproductfortheabovementionedactivitylevelindetailedbelow:

	Costperunit(Rs.)
Rawmaterial	20
Directlabour	5
Overheads(includingdepreciationofRs.5perunit)	15
	40
Profit	10
Selling Price	50

AdditionalInformation:(a)MinimumdesiredcashbalanceisRs.20,000.

(b)Rawmaterialsareheldinstockonanaverage,fortwomonths.

(c)Workinprogress(assume50%completionstage)willapproximatetohalf-a-month'sproduction

(d) Finishedgoodsremaininwarehouse,onanaverage,foramonth.

(e) Suppliersofmaterialsextendamonth'screditanddebtorsareprovidedtwomonth'screditcash salesare25%oftotalsales.

(f) There is a time – lag in payment of wages of a month and half a month in the case of overheads.Fromtheabovefactsyouarerequiredtoprepareastatementshowingworkingcapitalrequirements.Note: Depreciation is a non – cash item therefore it has been excluded from total cost as well asworking capital provided by overheads. Work in progress has been assumed to be 50% complete inrespectof labourandoverheads expenses.

Q.8 Thefollowinginformationhasbeensubmittedbyaborrower:

(a) Expectedlevelofproduction1,20,000units.

(b) Rawmaterialtoremaininstockonaverage2months.

(c) Processingperiodforeachunitofproduct1months.

(d) Finishedgoodsremaininstockonanaverage3months.

(e) Creditallowedtothecustomersfromdateofdispatch3months.(/)Sellingprice perunitRs. 10.

(g) Expectedmarginonsale10%

(h) Expectedratiosofcosttosellingprice:
(i) Rawmaterials60% (ii)Directwages10% (iii) Overheads 20%.Youarerequiredtoestimatetheworkingcapitalrequirementsoftheborrower.

Q.9 The management of A Ltd. desires to dctcnnine the quantum of working capital needed to finance theprogrammedformulatedtobeputintooperationwitheffectfromApril2000.Thefollowingpercentages, which various elements of cost bear to the selling price, have bccn extracted from thePerformacostsheet:
Materials50%
Labour20%
Overheads10%
Productionin1999was200000unitsanditisproposedtomaintainthesameduring2000.Thefollowingparticularsareavailable:
(a)Rawmaterialsareexpectedtoremaininstoresforanaverageperiodofone-monthheforeissuetoProduction.
Finishedgoodstostayinthewarehousefortwomonthsontheaveragebeforebeingsoldout.Eachunit ofproductionwillbeinprocess foronemonthontheaverage.
Creditallowedbythesuppliersisonemonth.Creditallowed toDebtorsis twomonths.
Selling priceis Rs.9perunit.
Salesandproductionfollowaconsistentpattern.
PrepareanestimateofworkingcapitalrequirementforALtd.

Q.10 APerformacostsheetofacompanyprovidesthefollowingparticulars:Elementsofcost

RawMaterials	40 %
Labour	10%
Overheads	30%

Thefollowingfurtherparticularsareavailable:

- RawMaterialsaretoremaininstoresonanaverage6weeks.
- Processingtime4weeks.
- Finishedgoodsarerequiredtobeinstockonanaverageperiodof8weeks.
- Creditperiodallowedtodebtors,onaverage10weeks.
- Laginpaymentofwages2weeks.
- Creditperiodallowedbycreditors4weeks.
- Selling priceRs.50perunit.

You are requiredtopreparean estimateofworkingcapitalrequirementsadding10% margin forcontingencies foralevel ofactivityof1,30,000unitsof production.

[Ans:WorkingCapitalrequired=Rs.25,02,500]

Q.11 ThemanagementofALtd.desirestodeterminethequantumofworkingcapitalneededtofinancethe programmed formulated to be put into operation will effect from April 2005 .The followingpercentages which various elements of cost bear to the selling price have been extracted from thePerformacostsheet:

Materials	50%
Labour	20%
Overheads	10%

Productionin1999was2,00,000unitsanditisproposedtomaintainthesameduring2005.Thefollowing particularsareavailable:
(a) Rawmaterialsareexpectedtoremaininstoresforanaverageperiodofonemonthbeforeissuetoproduction.

(b) Finishedgoodstosayinthewarehousefortwomonthsontheaveragebeforebeforebeingsoldout.
(c) Eachunitofproductionwillbeinprocessforonemonthontheaverage.
(d) Creditallowedbythesuppliersinonemonth.
(e) Creditallowedtodebtorsistwomonths.
(f) Sellingpriceis Rs.9perunit.
(g) Salesandproductionfollowaconsistentpattern.
Prepareanestimateofworkingcapitalrequirementfor ALtd.

Q.12 TheannualcapacityofABCLtd.istoproduce1,20,000units.ThesellingpriceisRs.10perunit.Theratiosof costto selling price are as follows:

Rawmaterial	-	20%
DirectWages	-	40%
Overheads	-	30%

Raw material remain in store on an average one month while processing takes two months with fullmaterials and 50% of other expenses, Finished goods remain in warehouse for one month 25% sales ismade against cash and rest at 3 months credit .The supplier provides one month credit and wages arepaid 15 days in arrer. The company requires a minimum cash balance of Rs. 50,000.Prepera statementofworkingcapitalrequirementof ABCLtd. assuming 10%for contingencies.

Q.13. MfgCompanysellsgoodsinthehomemarketandearnsagrossprofitof20%onsales.Itsannualfigures are asfollows:

Sales	3,00,000
Materialsused	1,08,000
Wages	96,000
Mfgexpenses	1,20,000
Administrativeandotherexpenses	30,000
SellingandDistributionexpenses	18,000
Depreciation	12,000
IncomeTaxpayablein4installmentsofwhichonefallsinthenextfinancialyear	60,000

Additionalinformationisasfollows:

- Creditgivenbysuppliersofmaterialsis2months.
- Creditallowedtocustomersis1month.
- Wagesarepaidhalfamonthinarrear.
- Mfgandadministrativeexpensesarepaidonemonthinarrear.
- Sellinganddistributionexpensesarepaidquarterlyinadvance.
- Thecompanywishestokeeponemonthstockofrawmaterialsandalsooffinishedgoods.
- Thecompanybelievesinkeepingcashof Rs.50,000includingtheoverdraftlimitof Rs.20,000notyieldutilize d bythecompany.
- Youarerequiredtoprepareastatementshowingtheworkingcapitalrequirementsofthecompanyadding 10%marginforcontingencies.

[Ans Rs.53,900:DepreciationandIncomeTaxhavebeenignored.]

Q14.'XYZ'Ltd.sellsitsproductsonagrossprofitof*20%*ofsales.Thefollowinginformationisextractedfrom itsannualaccountsfor the yearending31stDec.,1999 :

	Rs	
Sales(At3monthscredit)		40,00,000
RawMaterials		12,00,000
Wages(15DaysinArrears)		9,60,000
ManufacturingandGeneralExpenses(Onemonthinarrear)	12,00,000	
Administration.Expenses(Onemonthinarrear)		4,80,000

SalesPromotionExpenses(PayableHalfYearlyinAdvance) 2,00,000

The company enjoys one months credit from the suppliers of raw material and maintains: two monthsstock of raw materials and one and a half month of finished goods. Cash balance is maintained at Rs.1,00,000 as a precautionary balance. Assuming 10% margin, find out the working capital requirementofXYZLtd.

Leverage

Ingenericsenseleveragemeans**influenceofpower**i.e.utilizingtheexistingresourcestoattainsomethingelse. In finance it means the influence of independent financial variable on dependent financial variable. Itexplainshowthedependentvariablerespondstoaparticularchangeintheindependentvariable.If**X**isanindependent financial variable and **Y** is dependent financial variable, then the leverage which y has with **X**canbe assessed bythe percentagechangein **Y** to apercentage changein**X**.

PercentageChangeinY/PercentageChangeinXMeas ures of Leverage

- Operatingleverage
- FinancialLeverage
- Combined/TotalLeverage

OperatingLeverage

Operatingleverageexaminestheeffectofthechangeinthequantityproducedon EBITof thecompanyandismeasured bycalculatingDegreeof Operating Leverage (DOL)

DOL=%changeinEBIT/% changeinSALES

DOL=CONTRIBUTION/EBIT

Inference: If DOL of a company is 3 it means, a 10% increase or decrease in the level of output willincreaseordecrease theoperatingincome by30%.

OperatingBEP(Q):F/(S-V)orFixedcost/Contribution

FinancialLeverage

Financialleveragemeasurestheeffectofchangein EBIT ontheEPSofthecompany.Financialleveragealsoreferstot hemixofdebtandequityinthecapitalstructureofthecompany.Financialleveragespecifies

DFL=% change inEPS/% changeinEBIT

DFL=EBIT /EBT

FinancialBreakEvenDFL(EBITamount)=EBIT

Combined/CompositeLeverage

Combinationofoperatingandfinancialleveragesisthetotalcombinedleverage.Thusthedegreeoftotalleverage (DCL) is the measure of the output and the EPS of the company. DTL is the product of DOL andDFL.

DCL =% change in EPS /% changein output

DCL=DOL*DFL

=Contribution/EBT

OverallBEP(Q)=F+I+Dp/[(1-t)/(S-V)]

Q1. A company's capital structure consists of Rs. 5, 00,000 (Shares of Rs. 100 each) equity capital and Rs. 2,00,000 10 % Debentures. The sales increased by 20% from 50,000 units to 60,000 units: the selling priceis Rs. 10 per unit; variable cost amount to Rs. 6 per unit and fixed expenses amount to Rs. 1, 00,000.Therateof income taxisassumed to be50percent.

Youarerequiredtocalculate:

1. Thepercentageincreaseinearningspershare.
2. Thedegreeoffinancialleverageat50,000and60,000units.
3. Thedegreeofoperatingleverageat50,000unitsand60,000units.

***[ANS.1)50%2)1.25 &1.173)2 &1.71*]**

Q2. Calculatefinancialleverageandoperatingleverageunder situationAandBandFinancialPlansI andIIrespectively from the following information relating to the operation and capital structure of ABC Ltd.Installedcapacity 1,000 units

Actualproductionandsales 800units

Selling priceperunit Rs. 20

Variablecostperunit Rs . 15

Fixedcost:SituationA Rs. 800

SituationB Rs.1,500

CapitalStructure:

	FinancialPlan I	FinancialPlan II
Equity	Rs.5,000	Rs.7,000
10% Debt	Rs. 5,000	Rs.2,000

HowwillvariouscalculationsbeusefultotheFinancialManagerofthecompany?

[ANS.FL= 1.19,1.067,1.25,1.087 andOL=1.25and1.60]

Q3.BalanceSheetofXLtdason31-3-2000is asfollows:

BalanceSheet

Liabilities	Rs.	Assets	Rs.
EquityCapital(Rs.10per share)	60,000	Netfixedassets	1,50,000
		Currentassets	50,000
10%Debentures	80,000		
Retainedearnings	20,000		
Currentliabilities	40,000		
	2,00,000		2,00,000

Thecompany'stotalassetsturnoverratiois3.ItsfixedoperatingcostsareRs.1,00,000anditsvariable operatingcostratiois40%,theincometaxrateis50%.

1. Calculateforthecompanyallthe3typesofleverages.
2. DeterminethelikelylevelofEBITifEPSisRs.5.

[ANS.1)OL=1.385,FL=1.0317,CL=1.429;2) EBIT=Rs.68,000]

Q4. InformationgivenbelowrelatestoCo.A:

RetainedEarnings,Rs.24,000;PayoutRatio,60%;TaxRate,40%;FinancialLeverage5;OperatingLeverage,4;contributionto Sales, 0.6.

(a) ConstructtheIncomeStatementoftheCompany.

(b) Whatwillbethenewoperatingleverage,0020financialleverageandretainedearnings,ifsalesincreasesby 50%, while payout ratio, fixed cost, interest, and contribution to sales remainunchanged.

Q5.TheselectedfinancialdataforA,BandCcompaniesfortheyearendedDecember31,2000areasfollows

	A	B	C
Variableexpensesasapercentageofsales	$66^{2/3}$	75	50
Interestexpenses	Rs.200	Rs.300	Rs.1,000
Degreeofoperatingleverage	5–1	6–1	2–1

Degreeoffinancialleverage	3–1	4–1	2–1
Incometaxrate	0.50	0.50	0.50

PrepareincomestatementsforA,BandCcompanies.

[ANS.Profitaftertax=Rs.50,Rs.50andRs.500]

Q6. A firmhassales ofRs.10,00,000variablecost Rs.7,00,000andfixedcostRs.2,00,000anddebtofRs. 5,00,000atrateofinterest.Whataretheoperatingandfinancialleverages?

[Ans.=O.L.=2F.L.=2]

Q7.A firm has sales of Rs. 20,00,000 variable cost Rs. 14,00,000 fixed costs of Rs. 4,00,000 and debenturesof 10,00,000 in its capital structure obtained @ 10 percent. What are its financial leverage operatingleverageandcombinedLeverage? **[Ans.= O.L.=3;F.L.= 2]**

Q8.AfirmhassalesofRs.10,00,000variablecostRs.7,00,000andFixedcostRs.2,00,000anddebtofRs. 5,00,000at10%rateofinterest.
Whatareheoperatingandfinancialleverages? **[Ans.= O.L.=3; F.L.= 2]**

Q9. (a) Find the operating leverage from the following:Sales Rs.5,00,000
Variablecosts Rs. 60%
Fixedcosts Rs.1,20,000

(b)Findthefinancialleveragefromthefollowingdata:
Networth Rs.50,00,000
Debt/Equity 3/1
Interestrate 12%
OperatingprofitRs.40,00,000 **[Ans.= O.L.=2.5;F.L.=1.81]**

Q10. The following data are available for X Ltd.:Selling price preunit= Rs. 120
Variable Cost pre unit = Rs.70Fixedcost= Rs.2,00,000

(i) WhatistheoperatingleveragewhenXLtd.Produces andsell6,000units?
(ii) WhatisthepercentagechangethatwilloccurinEBITofXLtd.IfoutputIncreases by5%?

[Ans=O.L.=3 ;(ii) =15%]

Q11.X Corporation has estimated that for a new product its break – even point is 2000 units, if the item issold for Rs. 14 per unit. The cost account department has currently identified variable cost of Rs. 9per unit. Calculate the degree of operating leverage for sales volume of 2,500 units and 3,000 units.What do you infer from the degree of operation leverage at the sales volume of 2,500 units and 3,000units.Andtheirdifference, if any?

[Ans.5&3]

Q12. Calculatedegreeofoperatingleveragefinancialleverageandcombinedleveragefromthefollowingdatasales1, 00,000units@Rs.2 perunit–Rs. 2.00,000
Variable cost per unit @ Rs. 0.07Fixed costs – Rs. 1,00,000Interestcharges– Rs.3,668

[Ans4.33;1.14;4.94]

Q13. Thefollowing financialdatahavebeenfurnishedbyALtd.AndBLtdfortheYearended31.3.2003:

	ALtd.	BLtd.
Operating	3:1	4:1
Financialleverage	2:1	3:1
Interestchargesperannum	Rs.12lakhs	Rs.10Lakhs
Corporatetax rate	40%	40%
Variablecostas %ofsales	60%	50%

Prepareincomestatementofthetwocompanies.

Q.14 Retained Earning of a firm are Rs. 1,26,000. Its pay – put ratio is 30%. It pays 40% tax on income. It'sfinancial leverage and operating are 4.3 and 1.5 respectively. The variable cost to sales revenue is40%determine its salesrevenue.

Q.15 A company has sales of Rs. 5,00,000 variable costs of Rs. 3,00,000 fixed costs of Rs. 1,00,000 and longtermloans of Rs.4,00,000 at10% rateofinterest.Calculatethe compositeleverage.

Q.16 Thefollowingfiguresrelatetotwocompanies

	P.LTD.	Q.LTD. (InRs.lakhs)
Sales	500	1000
Variablecosts	200	300
Contribution	300	700
Fixedcosts	150	400
	150	300
Interest	50	100
Profitbefore Tax	100	200

Youarerequiredto:

(i) Calculatetheoperating,financialandcombinedleveragesforthetwocompanies:and

(ii) Commentontherelativeriskpositionofthem.

Q.17 A firm has sales of Rs. 20,00,000, variable cost of Rs. 14,00,000 and fixed costs of Rs. 4,00,000 and debtof Rs.10,00,000 at 10% rate of interest. What are the operating. Financial and combined Leverages? Ifthe wants to double its Earnings before Interest and Tax (DBIT),How much of rise in sales would beneededona percentage basis?

Q.18 Calculatetheoperatingfinancialandcombinedleveragefromthefollowinginformation:

Interest	Rs.5,000
Sales	Rs.50,000
VariableCost	Rs.25,000
FixedCosts	Rs.15,000

[Ans.O.L.=2.5,C.L.=5]

ALTERNATEFORMULAETOLEVERAGE

Q.19 MalhotraLtd.hasfollowinginformation:

	Rs.InLakhs
EBIT	1120
PBT	320
Fixedcost	700

CalculatePercentagechangeinE.P.S,ifsalesincreasedby5%.

Q.20 ThefollowinginformationisavailableforVasooliBhaiLtd.

Sales	Rs 2,00,000
Less:Variablecost	60,000
Contribution	1,40,000
Fixedcost	1,00,000
EBIT	40,000
Less:Interest	5,000
Profitbeforetax	35,000

1. Usingtheconceptoffinancialleverage,bywhatpercentagewillthetaxableincomeincreaseifEBITincreaseby6 %
2. Usingthe concept of operatingleverage, bywhat percentage willEBITincreaseif thereis10%increaseinsales, and
3. Usingtheconceptofleverage,bywhatpercentagewillthetaxableincomeincreaseifthesalesincreaseby6%. Also verifyinviewof the above figures.

Q.21 ThefollowingistheincomestatementofGolmaalReturnsLtd.fortheyear.

Sales	**Rs50 lacs**
Less:variablecost	10lacs
Contribution	40lacs
Less:Fixedcost	20lacs
EBIT	20lacs
Less:Interest	5lacs
Profitbeforetax	15lacs
Less:Taxat40%	6lacs
Profitaftertax	9lacs
Less:Preferencedividend	1lacs
Profitforequityshareholder	8lacs

Thecompanyhas4,00,000equitysharesissuedtotheshareholders.

a) Findoutthedegreeofdegreeofoperating,FinancialandCombinedleverage.
b) WhatwouldbetheEPSifthesaleslevelincreasesby10%.