MADURAI KAMARAJ UNIVERSITY

(University with Potential for Excellence)

DISTANCE EDUCATION

898

P.G. Diploma in Entrepreneurship

PAPER - IV

PROJECT APPRAISAL & FINANCE

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Syllabus

BUSINESS OPPORTUNITY IDENTIFICATION

Unit - 1

Definition of Project, Planning of a project - Objectives and Goals, Constitution - Setting up of Local Management Committee Project Time table. Presentation of Proposals and feed back.

Unit - 2

Budject and Cash flow projections (Financial plans). - Internal and External Funding Agencies.

Unit - 3

Fund Management and Records - Fund accounting procedures restricted and unrestricted funds - Records with Funding Partners and branches - Records of other sources of income - Ordering, purchasing and stores - Sales (Cash & Credit)

Unit - 4

Property Management - Leases (Tenancy agreement), Costs for water, Electricity, Repairs, Insurance and Cleaning, etc.

Unit - 5

Project Financial Records and Report Preparation - Loan balance and Local funds, Income generating activities, Cost calculations

Unit - 6

Management of Accounting Records - Receipts and Handling Costs - Recording Payments - Bank Accounts - Cash Books - Petty Cash Records - Payroll and Salaries - computerized . Accounting.

Unit - 7

Project Audit - Project Auditors - Internal and External, Project Audit Reports.

Unit - 8

Audit and Evaluation Procedures Annual Audit - Internal Review - Independent Evaluate.

Unit - 9

Types of Finance - Short term - Medium term - Long term - Sources of finance, internal external analysis of financial ratios - Balance Sheet - Credit facilities - Working Capital management, BEP Analysis Taxation Policies and Benefits.

Books for Reference

1. Small Scale Industries and Entrepreneurship - Vasant Desai - Himalaya Publishing House

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Chapter 1

PROJECT MANAGEMENT

Entrepreneurial development is a subject that has assumed great importance and is bound to be one of the dominant topics of discussion during the decades to come. This is as it should be in the context of rapid industrialisation in India. But to create an atmosphere of spontaneous will be cooperate is not all the process. Resistance to change can be resolved by involving people in the process. The remedy lies in fostering an entrepreneurial spirit among the people.

Project:

In the precise sense, a project is a specific activity on which money is spent in the expectation of returns. There is therefore a specific staring point, a specific end point and it is intended to achieve a specific objective. In addition, a project has a specific geographic location and would serve a group of population. The project will have specific authority to implement it.

Every project has three basic attributes: The input characteristics, output characteristics and the social cost benefit characteristics. The input characteristics define what the project will consume. Projects require raw materials, energy, manpower, financial resources and an organisational set up as inputs. In order to make the input characteristics of project explicit, it is necessary to evaluate the nature as well as the magnitude of each of these essential inputs.

The output characteristics of a project define what the project will generate. The project output may take the shape of production of additional goods. On the other hand, the project output may be in the form of provision to additional services. In either case, it is essential to have a broad idea quantitative as well as qualitative of the project outputs. It also becomes necessary in case of quantifiable projects to assess the financial outputs which the project will generate.

Several economists and bankers have defined a project in different ways. The ECAFE Report by a group of experts has defined it as " the smallest unit of investment activity to be considered in the case of programming." The world Bank has defined project as an approval for a capital investment to develop facilities to provide goods and services."

A project should be understood in terms of economic behaviour. Dr. Albert O.Hirchman has said that "the development project can notes purposefulness, some minimum size, a specific location, the introduction of something qualitatively new and the expectation that a sequence of further development moves will be set in motion. Development projects are privileged particles of the development process".

Thus, a project may be defined as a scientifically evolved work plan devised to achieve a specific objective with a specified period of time. The three basic attributes are a course of action, specific objectives and definite time perspective.

A project is a productive activity which can be analysed, appraised and monitored independently. A multi-purpose river valley project is in a sense a gigantic scheme. There are also small projects which call for investments and analysis. A project has specific objectives in terms of geographic location, specific starting and end point, and most important- to serve a target population by achieving good investment returns.

Project Management

Project management is a specialised branch of management capable of differentiation from others based on a variety of factors which include the organisation structure, the process of planning and control, human relation etc.

Project management is two-fold: Financial and Administrative. It is, therefore imperative to understand these two aspects.

An ideal project is one which is carefully selected and prepared, thoroughly appraised/analysed, closely supervised and systematically evaluated. Project management deals with proper identification, formulation and appraisal. These three aspects from the basic foundation for the success of project.

Phase of Project Management

An entrepreneur has to consider carefully various factors from the start to the finish in converting profitable opportunities into realities. The process of project management may be divided into six broad phases that are-> identification, formulation, appraisal, selection, implementation, and management of projects.

The basic tenets of managing projects of all dimensions are:

- Define the objective of the project.
- Determine the constituent tasks.
- Identify important milestones.
- Allocate resources to each task.
- Re-evaluate task relationships and scheduling, pinpointing resource conflicts.
- Execute the project.

The project management is also about total control-during conception, midwifing, and delivery-in a business environment where perpetual change is the only constant. Fail, and you will have fallen victim to the ruthless forces of Darwinian competition that spare none but the fittest. Succeed, and you will have proved your ability to impose a madness of the market.

Phase	Requirements.
1. Identification.	Selection of a project after a careful scanning of the environment of investment opportunity and its likely returns.
2. Formulation	Translation of the idea into a concrete project with scrutiny of its important preliminary as pects.Preparation of feasibility reports.
3. Appraisal.	Searching scrutiny, analysis and evaluation of market, technical, financial and economic vari ables.
	Assessing the profitability, return on investment and break-even points.

4. Selection. Rational choice of a project in the light of objectives and inherent constraints.
5. Implementation Expeditious completion with in the allocated resources.
6. Management. Judicious operation of a project/enterprise with objectives like maximisation of net present value, maximisation of return, and increase in the rate of return at low risk.

Project Management Processes

The process of project management is an integrative one-an action in one area usually effects other areas. Successful project management requires actively managing the interactions.

The common project management processes can be categorised into the following:

i) Operational Management Processes;

These activities are seen as on going activities with neither a clear beginning nor an expected end:

- Planning: Identifying objectives and devising a workable scheme to accomplish them.
- Executing: Co-ordinating people and other resources to carry out the plan.
- Controlling: Ensuring that the objectives are met by measuring progress and taking corrective action when necessary.

ii) Additional Project Management Processes

Project are temporary in nature, they have both an identifiable starting point and an emphasis on timely future termination. The additional processes are:

- Initiating: Recognising that a project should begin and committing to do so.
- Closing: Formalising acceptance of the project and bringing it to an orderly end.

iii) Technical Processes

These vary by application areas to be identified and handled by application experts. These processes are not discrete and in an actual project there will be many overlaps. Basic process interactions occur with in each phase such that closing one phase provides inputs for initiating the next. Thus the planning process must not only provide work done in the current phase for successful completion, but, must also provide some preliminary description of or to be done in later phases. The progressive detailing of the project plan is often called rolling wave plan.

CHAPTER II

PROJECT ANALYSIS

Introduction

Some of the principal lessons that the World Bank has learned in assisting its member countries in managing their investment resources are offered not in the belief that they provide final answers to the formidable problems of development, but in the conviction that better national investment planning, macroeconomic and sector policies, and project work can ease the path of development, bring its benefits to people sooner, and distribute them more equitable.

Throughout the several stages of the project cycle, various dimensions of project work are addressed, both separately and in relation to each other, and in varying degrees of detail.

A) Technical Analysis

Technical analysis also provides an opportunity to consider how a country can best take advantage of its investment plan, policy framework, and development projects to build a capacity to use science and technology effectively throughout the economy. Both trained people and institutions capable of utilizing their skills are required. In the early stages of a ountry's development, the emphasis should be on building local conditions. At her stages, the emphasis should shift to the development of local technology and its integration with imported technology, and to the encouragement of local research and innovation.

B) Economic Analysis

The basic question that economic analysis addresses is how to allocate scarce resources among many competing uses. It seeks to determine not only whether a project can be expected to provide a satisfactory return to the economy, but also whether there is an alternative way of achieving the same objectives that would offer a higher return. The analysis entails a comparison of costs and benefits with and without the project, both discounted to present values, through the use of analytical techniques that by now are highly refined- though no more accurate than the underlying data. Its central concept- that, for purposes of economic analysis, resources should be valued in terms of their opportunity cost to the economy in their best alternative use- is applicable to all economic systems, whether market-oriented, centrally planned, or a combination of the two.

Most lending agencies use cost-benefit analysis to assess the projects they help finance, and many developing countries are applying this analysis in one form or another to project that they fund from public resources. Private industrial enterprises also use cost-benefit analysis for major investments. If done properly, it can be a powerful tool for guiding investment choices.

C) Financial Analysis

Financial Analysis is nothing but it is an a analysis depends on the financial performance of the particular institution.

A financial concern is to recover an appropriate portion of the cost from the beneficiaries or users. A cost recover policy has three separate but related objectives:

⇨ Economic efficiency: The resources provided under a project are used most efficiently when, they are priced in accordance with their marginal or opportunity cost. The extent to which efficiency prices can be applied, however varies widely from sector to sector.

⇨ Income distribution: In the interests of equity, the prices or other charges levied to recover costs should take into account differences in income levels.

⇨ Revenue Generation: Governments in developing countries, being short of resources, need to generate revenue from projects. In addition, revenue earning enterprises need to be made or kept financially viable. If rural and urban development, water supply, and other projects are to be replicable on the scale necessary to reach the large numbers of potential beneficiaries, a substantial contribution from the initial beneficiaries will often have to be secured.

In an ordered financial manner the financial analysis means, analysing financial performance of a company or an industries through the statement which shows the entire financial performances of a particular company/industry.

D) Social Analysis

Social analysis is a relative newcomer among the dimensions of project analysis it focuses on four principal areas...that are as follows,

⇨ The Socio-cultural and demographic characteristics of the project population.

⇨ The way in which the project population is organized to carry out productive activities.

⇨ The project's cultural acceptability, including its capacity for both adapting to people's behaviour and perceived needs and for bringing about changes in them.

⇨ The strategy necessary to elicit commitment from the project population and to ensure their sustained participation throughout the project cycle.

E) Environmental Analysis

It is now widely recognized that environmental analysis is necessary for a country to ensure the sound management and use of its natural resources as an integral part of its strategy for economic growth. Desertification, deforestation, soil erosion, overexploitation of such renewable resources as fisheries, and air and water pollution are lowering the carrying capacity of the environmental degradation. The objective of environmental management should be to achieve a balance between human demands on the natural resource base and the ability of that resource base to meet these demands on a sustainable basis in the interests of future generations as were as those alive today.

F) Procurement Process

Managing the procurement process is important aspect of project implementation. Delays in acquiring the necessary goods and works are likely to be compounded into further delays and increased costs for the project as a whole. Procurement is therefore a process to be carefully planned, organized, and managed, the more so since the number of ways things can go wrong sometimes appears endless.

Procurement must serve three objectives. The first is to help ensure the efficient execution of the project by acquiring goods and works with the optimal combination of quality, price, and delivery time. The second is to promote such national goals as the development of local industry, the balanced regional development of industry, or the support of small-scale enterprises. The third is to comply with the procurement regulations of any external lending institutions helping to finance the project.

G) Use of Consultants

The consultant-client relationship is a close, personal one; when a satisfactory partnership already exists with a particular firm, it may be eminently sensible to continue it. When no such relationship exists, or when for other reasons it is desirable to invite proposals from a short list of qualified firms, the selection process should ensure that price considerations are subordinated to a concern with quality. The cost of consulting services is usually only a small fraction of amount, but the quality of the work performed can have an impact on the final project out of all proportion to the cost.

Project Organisation:

A. Need of a project organisation

Project department is required to supervise the construction work as well as to look after the regular needs of the latest technology, modernisation, automation, etc.

In the large organisations, where the capital expenditure is a major portion in the annual outlay of the company, it would not be advisable to depend only on the contractual agencies for the execution of projects. There must be an in-house project management and control team for ensuring the quality of construction and timely completion of projects.

B. Advantages of Project Organisation:

i) Expertise

By a long experience, the company develops an expertise in the construction activities.

ii) Quality

When a work is done or supervised by its own department, the workmanship is better, as the department is forever chained to answerability.

iii) Consultancy jobs

By long experience in projects, company develops its people in different fields of construction activities related to its areas of operation.

iv) Check on cost and time overrun:

One of the main objectives of the 'project management and control' is to reduce the cost and time overruns in the projects. This task is more facilitated by an experienced project management team.

(v) Better understanding with the operation and project departments:

The in-house project department will have knowledge of the operational activities, existing facilities and entire network of infrastructure throughout the plant or factory. This advantage will not be available to the outside project consultant.

(vi) Organisational Structure at corporate level:

Chairman
↓
Directors
↓
a. Finance.
b. Marketing.
c. Personnel.
d. Projects.
e. Operation.

vii) Organisational structure of project directorate

Director (projects).
↓
Additional Directors.
↓
Joint Directors .

↓

Deputy directors

↓

Senior Managers.

C) Functions of Project Directorate:

1. Planning of investments for the company as a whole .2. Processing of the investment proposals.
3. Monitoring the physical and financial progress of the projects.
4. Finalisation of capital expenditure budget and fund requirements for the long term.
5. providing corporate guidance in finalisation of major contracts including global contracts.
6. To guide the units from time to time on various matters related to formulation, appraisal, approval, execution and monitoring of projects.
7. Co-ordination between the units and government departments on all the matters.

Questions :

1. Define the term 'Project'. State the various feasibility Analysis
2. What is project Planning ? Explain various phases of project planning ?
3. What is meant by project organisation ? State the role & function of Project organisation ?

Chapter - 3

PROJECT FINANCING

Finance is one of the basic requirements of a project which entrepreneur needs to start with in every stage of he project. Project finance is both for short-term and long-term. The sources from which the entrepreneurs can meet their financial needs for their projects are:

Project Financing:

Project financing, as a concept is very old. But it has gained prominence during the last two decades. There was a time when project finance was a fairly simple bank exercise. Of late, many changes in the economic environment have taken place. The figures for total investment in almost any major capital plant development have, by the joint action of inflation and technical innovation, reached dimensions which have become too large for an individual company to accommodate. That bring for the importance of a national approach to project financing:

The gamut of 'feasibility' covers the following areas:

a) to the idea technologically sound – Technical feasibility

b) would it be commercially viability – Commercial viability

c) What would be its economic dimensions – Economic Viability

d) What financial demand would it make on the promoters, the company and outside creditors.

e) What would be the probable sources that can be tapped? What sources should be selected – Financial Plan.

f) Would the project be a paying propositions – financial viability

g) How much would be the manpower requirement and what type of managerial and organisational structure wills it require? - organisational and management structure.

Source of Finance

Finance is the lifeblood of business. The business cannot run efficiently cannot run efficiently if it does not have adequate finance to meet its requirements. The financial requirements of business can be classified into two categories.

i) Short term financial requirements

ii) Long term financial requirements

Short-term funds are required for meeting working capital needs. They are usually required for a period up to one year. They are raised from sources, which can provide funds only for a short period. Taking short-term loans or getting the bill discounted from the commercial banks usually meets the requirements of these funds.

The long-term funds are required to a great extent for meeting the fixed capital requirements of the business. They are require for a period exceeding one year they are sometimes classified as I) intermediate or medium term funds and ii) long term funds.

Classification of Sources of Finance

For the sake of convenience, the different sources of funds can be classified into three categories.

i) Security financing : This includes financing through shares (including both equity and preference shares) and debentures.

ii) Internal financing : This includes financing through depreciation funds and retained earnings.

iii) Loans financing : This includes both short-term and long-term loans.

Security Financing

1. Issue of Shares

This is the most common method of raising long-term funds. Every company in India generally uses this method. A Share may be defined as one of the units into which the share capital of a company has been divided. According to Section 2(46) of the Companies act, "a share is the share in the capital of a company and includes stock except where a distinction between stock and share is expressed or implied".

Types of shares :

A public company can issue two types of shares. They are I) Preference shares and Equity shares.

a) Preference shares ; Preference shares are those, which carry he following referential rights over other classes of shares.

i) A preferential right in respect of a fixed dividend. It may consist of a fixed amount or a fixed rate.

ii) A preferential right as to repayment of capital in the case of winding up of the company in priority to other classes of shares.

Preference shares may be cumulative or non-cumulative, participating or non-participating, redeemable or irredeemable and cumulative convertible preference shares. Financing through preference shares in flexible financing arrangement since payment of dividend is not a legal obligation of the compnay issuing the preference shares. Preference shares are entitled toa fixed rate of dividend.

b) Equity Shares :

These shares are called as ordinary shares of the company. These are shares, which are not preference shares. They do not carry preferential right. They will rank after preference shares for the purpose of dividend and repayment of capital in the event of the comany's winding up. The rate of dividend on these shares is not fixed. It depends on the availability of divisible profits and the intention of the directors. These shares preferred by persons who prefer risk to better return and also wish to have a say in the management of the company.

2. Issue of Debenture

A debenture is a document issued by a company as an evidence of a debt due from the company with or without a charge on the assets of the company. It is a certificate issued by a company under its seal acknowledging a debt due by it to its holders. According to the companies act, the term debenture includes "debenture stock, bonds and any other securities of a company whether constituting a charge of the assets of the company or not".

Debentures can be of various types. Naked debentures are those, which do not carry any charge on the assets of the company. Mortgage debentures are secured by a mortage or charge on the whole or a part of the assets of the company while redeemable debentures can be redeemed only in the event of the company's winding up. Converted into equity shares of the company as per the terms of their issue while inconvertible debentures cannot be so converted.

INERNAL FINANCING

A new company has only external sources of finance. However, an existing company can also generate finance through its internal sources. The two most important sources of internal financing are depreciation and retained earnings. Each of these internal sources are explained below:

1. Depreciation as a source of finance:

Depreciation finds its way into current assets through charging of overheads (including depreciation). The value of closing inventory may include depreciation of fixed assets an element of cost.

Depreciation does not generate funds but it definitely saves funds.

Depreciation reduces taxable income and, therefore, income-tax liability for the period is reduced.

1. Financing through retained earnings

This is the strictly not a method of raising finance but refers to accumulation of profits by the company to finance its developmental activities or repay loans. It is also known as 'internal financing' or 'ploughing back of profits'. This method of raising finance for a company is very useful because on the one hand t does not cost anything to the company and on the other hand it strengthen the financial position of the..company.

LOAN FINANCING

1. Short-term loans/credit

The short-term loans/credit are obtained for working, capital requirements. The following are the important sources of short-term loans/credit;

i) Trade Credit

Trade credit is a spontaneous source of finance which is normally extended to business organisation depending on the custom of the trade and competition prevailing in the industry and relationship of the suppliers and buyers. This form business credit more popular since it contributes to about one-third of the total short-term credit. Also it is a facility where by business firms the suppliers of raw materials, services, components and parts etc., allow to defer the immediate payment to definite future period.

ii) Commercials banks

Banks in India today constitute the major suppliers of working capital credit to any business activity. Recently, however, some term lending financial institutions have also announced schemes for working capital financing. The commercial banks provides advances to the customers in the form of term loans, cash credit, bank overdraft, hypothecation and pledge, and discounting of bills. The commercial banks also act as friend, philosopher and guide to their client business firm in respect of the new ventures to be taken up and the most appropriate sources fro which finances have to be raised by them.

iii) Public deposits

Deposits from the public are one of the important sources of finance particularly for well-established big companies with huge capital base. The period of public deposits is restricted to a maximum three years at a time and hence, this source can provide finance only for short term to medium term, which could be more useful for meeting working capital needs of the company. It is advisable to use the amounts of public deposits for acquiring assets of long-term nature unless its pay back is very short.

iv) Commercial paper

The Commercial paper introduced into the Indian financial market, on the recommendations of the Vaghul Committee has become a popular debt instrument of the corporate would. Commercial paper is a debt instrument for short-term borrowing, that enables highly-related corporate borrowers to diversify their sources of short-term borrowings, and provides an additional financial instrument to investors with a freely negotiable interest rate. The maturity period ranges from three months to less than 1 year. Since it is a short-term debt, the issuing company is required to meet dealers' fee, rating agency fees and any other relevant charges. Commercial paper is short-term unsecured promissory note issued by corporations with high credit rating.

v) Finance Companies

During the last ten years finance companies have assumed an important role in providing and arranging finances for the industry in the following manner.

a) Leasing and Hire purchase

Finance companies help industry in acquisition of capital assets viz., Plant and Machinery, Vehicles, Office Equipments through leasing or hire purchase facilities. Today leasing and hire purchase are so prevalent as a mode of financing that they have become sale aid tools for the automobile and consumer electronic industry.

b) Merchant banking:

Merchant banking is basically a service banking, concerned with providing non-fund based services of arranging funds rather than providing them. The merchant banker merely acts an intermediary, whose main job is to transfer capital from those who own it to those who need it. The merchant banker now acts as an institution which understands the reqirements of the entrepreneurs' promoters on the one hand and financial institution,s banks, stock exchanges and money markets on the other. The services of merchant banker are Project Counselling, Sponsor of issue, Credit syndication, Services of issue, Investment Arrangement, Arrangement for fixed deposit and Equity Research and Investment Counselling etc.,

v) Accrual Accounts

Accrual Accounts re a spontaneous source of finance since they are self-generating. The most common accrual accounts are wage and taxes. In both cases the amount becomes due but is not paid immediately. It is an important source of finance since with increase in scope of he operation of the business with increase in sales, labour costs usually increase and with them the amount of accrued wages also increase. Similarly with increasing in profit the amount of accrued taxes also increases in almost in the same proportion and in the same direction.

vi) Indigenous bankers

Indigenous bankers are private individuals engaged in the business of financing small and local business units. They provide short-term or medium term finance. However, they charge exorbitant rates and are, therefore, considered only as a last resort of finance.

vii) Advances from Customers

Manufacturers and contractors engaged in producing or constructing costly goods involving considerable length of manufacturing or construction time usually demand advance money from their customers at the time of accepting their orders for executing their contracts or supplying the goods. This is cost-free source of finance and really useful in those business where it has become customary to receive advance payment from the customers.

2. Long-term Loans

The term "term" loans" is used for both medium as well as long-term loans. Medium term loans are for periods ranging from 1 to 5 years while long-term loans are for a period from 5 to 15 years. The objectives of the term loans are granted for establishment, renovation, expansion and modernisation of industrial units and meeting the requirements of the core working capital. The Sources of term loans are as follows:

(i). Industrial Development Bank of India

The IDBI which was established in 1964 under an act of parliament, is the principal financial institution for providing credit and other facilities for development of industry. It also promotes or develops industrial units, coordinates working of institutions engaged in financing, and assisting development of such institution. IDBI has been providing direct financial assistance to large and medium industrial units and also helping small and medium industrial concerns through banks and state level financial institutions.

(ii) Industrial Credit and Investment Corporation of India

Industrial Credit and Investment Corporation of India (ICICI) was established in 1955 as a public limited company to encourage and assist industrial units in the country. It provides term loans in Indian and foreign currencies, underwrites issues of shares and debentures, makes direct subscription to the issues and guarantees payment for credit made by others.

(iii) Industrial Finance Corporation of India

The industrial finance corporation of India (IFCI) was set under a statute in 1948 but was recently been converted into a public limited company to give flexibility to its operations. IFCI provides to industrial units, project finance, financial services and promotional services. Under its project finance, financial assistance is available to units in the corporate and cooperative sectors for new units, expansion, diversification and modernisation programme in the form of rupee loans and foreign currency loans, underwriting and direct subscription to shares, debentures, guarantees for deferred payments and foreign currency loans.

(iv) State Finance Corporations

At the state level, state financial corporations have been set up under state financial corporations act 1951. Along with the all India financial institutions they form an integral part of the development financial institutions in the country. There 18 SFCs in the country. They provide financial assistance to small and medium enterprises by term loan, direct subscription to equity/debentures, discounting of bills of exchange and guarantees. SFCs provide equity type assistance under the special capital and seed capital schemes to entrepreneurs having viable projects but lacking adequate funds of their own.

(v) Small Industrial Development Bank of India.

The SIDBI has been established in 1989 to function as an apex bank for tiny and small scale industries. It functions as the principal financial institution for promotion financing and development of industrial concerns in small scale sector and also coordinates functions of institutions engaged in promotion, financing and developing industrial conerns in small scale sector. From 1993 SIDBI is extending direct assistance to small scale units. Such assistance of above Rs.50 laksh is given on a selective basis. SIDBI will also participate with se'ected commercial banks in financing small-scale projects so that working capital will be fully tied up in the case of jointly financed projects.

vi). Shipping Credit and Investment Company of India (SCICI)

The Shipping Credit and Investment Company of India Limikted (SCICI) was set up in 1987 by ICICI for the development of shipping, fishing and related industries and financing projects on the strength of their commercial viability after careful evaluation of each project. The primary function of SCICI is to act as a channel for providing development finance to shipping, deep sea fishing and related industries which inter alia include road and air transportation, aquaculture, feed mill, hatchery, fish processing, on-shore and off-shore oil survey, exploration and production, food processing and associated infrastructure facilities.

(vii). Tourism finance Corporation of India

TFCI was sponsored by IFCI, which commenced operations in 1989 to sanction project loans, lease assistance and direct subscription to shares. Apart from the conventional tourism projects in the accommodation and hospitality segments, assistance sanctioned by IFCI has enabled non-conventional tourism projects like amusement parks, car rental services and air taxi passenger facilities.

Questions

1. State the various sources short term finance to the business enterprises.
2. State the various sources of long-term finance available to the business concerns.
3. Between equity shares and debentures what is profitable for rasing additional long-term Capital for manufacturing company ? Why ?

Chapter - 4

BUDGETARY CONTROL

Meaning of Budget

A budget is a detailed plan of operations for some specific future period. It is an estimate prepared in advance of the period to which it applies. It acts as a business barometer as it is complete programme of the period covered. According to Gordon and shilling law budget may be defined as "a predetermined detailed plan of action developed and distributed as a guide to current operations and as a partial basis for the subsequent evaluation of performance." The Chartered Institute of Management Accountants, London defines a budget as "a financial and / or quantitative statement, prepared prior to a defined period of time, of the policy to be pursued during that period for the purpose of attaining a given objective."

Meaning of Control

Control means, "some sort of systematic effort to compare current performance to a predetermined plan or objective, presumably in order to take only remedial action required". This is general definition of the term. However, as a management function, it has been defined as " the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organisation's goals."

Meaning of Budgetary Control:

The Chartered Institute of Management Accountants, London, defines budgetary control as "the establishment of budgets relating to the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual, action the objective of that policy or to provide a basis for its revision".

According to J.A.Scott, "It is the system of management control and accounting in which all operations are forecasted and so far as possible planned ahead, and the actual results compared with the forecasted and planned ones."[5]

Limitations of Budgetary Control:

Budgetary control is a sound technique of control. But it is not a perfect management tool. Determining the appreciation, it has its own limitations, which are as follows,

1. Budgets are evaluation instruments. They tend to set goals against which the people are measured hence they naturally are complained about.
2. Some of the supervisors tend to use budgeus as "whipping post" in order to release their feelings about many problems.
3. Budgets are thought of as pressure devices. As such they produce the same kind of unfavourable reactions, as do other kinds of pressure, regardless of origin.

4. **Budgeting and changing economy.** The preparation of a budget, which gives a realistic position of the firm's affairs under inflationary pressure and changing government policies, is really difficult. Thus, the accurate position of the business cannot be estimated.
5. **Time factor.** Accuracy in budgeting comes through experience. Management must not expect too much during the development period.
6. **Not a substitute for management.** Budget is only a management tool. It cannot be a substitute for management. Besides that no budgetary programme can be successful unless adequate arrangements are made for supervision and administration.
7. **Co-operation required.** The success of the budgetary control depends upon willing co-operation and teamwork. Budget officer must get co-operation from all departmental managers. These managers must feel the responsibility for achieving or bettering departmental goals laid down in the budget.

Installation of Budgetary Control

Installation of budgetary control in a organization should be installed after taking note essential requisites of budgeting. A careful estimate of the following should be made,

What happened?

What can be made to happen?

What are the objectives to be achieved?

What are the constraints all the time?

What extent their effects could be minimised?

It should be noted that while making estimates for the future, past performance will be a useful basis. However, a mechanical use of past performance will be of no avail. In order to have an effective system of budgetary control, it will be appropriate to take the following steps.

Budget Controller

Of course, the chief executive is ultimately responsible for the budget programme but it will be better if the large part of the supervisory responsibility is designated to an official designated as Budget Controller or Budget Director.

Budget Committee

The budget committee will assist the Budget Controller in this work. The budget committee will consists of heads of the various departments as production, sales, finance, etc. with Budget Controller as its Chairman. It will be the duty of the Budget Committee to submit, discuss and finally approve of the budget figures. Each and every head of the department will have own sub-committee with executives working under him as its members.

Fixing Budget Period

"Budget period" means the period for which a budget is prepared and employed. The budget period will be depending upon (i) the nature of the business (ii) the control techniques to be applied.

Budget Procedure:

After the establishment of budget organisation and fixation of the budget period, the actual work of budgetary control begins. The procedure followed in designing and operating a budgetary control system largely depends upon the nature of the business. However, the usual pattern is as follows:

1. Determination of key factor

Key factor is that factor the extent of whose inf. must first be assessed in order to ensure that functional budgets are reasonably capable of fulfilment. This is also termed as 'principal budget' or 'limiting' or 'Governing' factor.(that may be relating to different functions of a business, e.g., sales, production, purchases, cash, etc.)

2. Making of forecasts:

Forecasts, as explained earlier, means an estimate about the probabilities for a given period of time. It differs from a budget. Budget is and operating and financial plan of a business enterprise. It is a sort of commitment or a target, which the management seeks to attain on the basis of the forecasts made. Forecasts are made regarding sales, production cost and financial requirements of the business. Physical quantities as well as monetary values are estimated separately.

3. Consideration of alternative combinations of forecasts:

Alternative combinations of forecasts are considered with a view to obtain the most efficient overall plan so as to maximise profits. When the largest combination of forecasts is selected the forecasts should be regarded as being finalised.

4. Preparation of budgets:

On finalisation of the forecasts the budgets will be prepared. Production budget will be prepared on the basis of the sales budget and also after taking into consideration the available productive capacities. Different costs of production budgets will also be prepared on the basis of the production budget. All these budgets will be combined and coordinated into one master budget. These budgets may be revise from time to time taking into account the current development.

Objectives of budgetary control:

- To define the goal of the enterprise.
- To provide long and short period plans for attaining these goals.
- To co-ordinate the activities of different departments.
- To operate various cost centres and departments with efficiency and economy.
- To eliminate waste and increase the profitability.
- To estimate capital expenditure requirements for the future.

- To centralise the control system.
- To correct deviations from established standards.
- To fix the responsibility of various individuals in the organisation.
- To ensure that adequate working capital is available for the efficient operation of the business.

Organisation Chart:

There should be a well-defined organisation chart for budgetary control. This will show the authority and responsibility of each executive.

Budget Centre

A budget centre is that part of the organisation for which the budget is prepared. A budget centre may be production department, or a section of the department. The budget centres are also necessary for cost control purposes. The evaluation of performance becomes easy when different centres are established.

Budget Manual

Budget Manual is a book, which contains the procedure to be followed by the executives concerned with the budget. It guides the executives in preparing various budgets. It is the responsibility of the budget officer to prepare and maintains this manual.

Classifications of Budget

According to time

Short-term budget

These budgets are usually for a period of one year. Example cash budget, Material budget etc.

Long term budget

These budgets are for a longer period say 5 – 10 years. Example Capital expenditure budget, research and development budget.

Current Budget

These budgets are for a very short period say a month or a quarter and are related to current conditions.

According to function

A functional budget is a budget, which relates to any functions of an organisation. The following are the functional budgets commonly used.

I) Sales Budget

A sales budget is an estimate of expected sales during the budget period. It may state in terms of money or quantity or both. It contains information's relating to sales month-wise, product wise and area wise. Sales budget should be carefully prepared as the preparation of budgets is dependent on it. The sales manager taking into account the following prepares this budget.

Past sales figures, salesman's estimates, plant capacity, availability of raw materials seasonal fluctuations, availability of finance, competition, orders on hand, other factors like political conditions, government policies etc.

Generally sales factor becomes a key-factor in the majority of cases, and therefore, it is the starting point. This is the most important budget, as it is usually the most difficult to forecast. The sales manager prepares it. In the preparation, the sales manager should consider the following points.

(a) Analysis of the sales of the previous year.

(b) Salesman's assessment.

(c) General trade conditions.

(d) Availability of raw materials.

(e) Availability of funds.

(f) Plant capacity.

(g) Seasonal fluctuations.

(h) Restrictions imposed by the government.

(i) Competition and consumer's preference.

Efficiency of advertising

Sales budget must show in terms of finished products, quantities and price, and its prepared accounting way according to product, territories, periods, types of customer or salesman etc.

ii) Production Budget:

The preparation of production budget dependent on the sales budget. Production budget is an estimate of quantity of goods that must be produced during the budget period. It may be stated in terms of money or quantity or both. Production may be calculated as follows,

Units

Produced = Budgeted sales + Desired closing stock – opening stock.

The production budget is a budget prepared by athe production manager, showing the forecast of output. The objective of the production budget is to determine the quantity of production for a budgeted period. It is in quantity of units to be produced during the budget period. It is based on the sales budget. It is in two types, one part contains the volume of production and the other part shows the cost of production. Apart from the sales budget, optimum utilisation of plant, availability of raw materials, labour etc., are to be considered. It must avoid over work in rush seasons.

iii) Material Budget:

Materials may be direct or indirect. The materials budget deals with only the direct materials. Indirect materials are included in the factory overhead budget. Materials budget can be classified into two categories-materials requirement budget and materials purchase budget. Materials requirement budget is an estimate of total quantities of material required for production during the budget period. The material purchase budget is an estimate of quantities of raw materials to be purchased for production during the budget period.;

iv) Direct labour budget:

This indicates detailed requirement of direct labour and its cost to achieve the production target, this budget is classified into two categories namely, labour requirement and labour recruitment budget. The labour requirement budget gives information regarding the different classes of labour required for each department, their rates of pay and the hours to be spent. The labour recruitment budgets are indirect material, indirect labour indirect expenses.

v) Factory Overhead Budget:

This budget indicates the factory overheads to be incurred in the budget period. The expenses includes in the budget are classified into fixed, variable and semi-variable costs. Fixed expenses are estimated on the basis of past records. Variable expenses are estimated on the basis of budgeted output. Examples of factory overheads are indirect material, indirect labour and indirect expenses.

vi) Selling and Distribution overhead Budget

The budget gives an estimate of selling and idstribution expenses to be incurred in the budget period. For example salesmen's commission, salary, advertisement, transportation costs etc.

vii) Capital Expenditure Budget

This budget shows the estimated expenditure on fixed assets during the budget period. Separate budgets may be prepared ofr each item of assets, if necessary. For example building budget, plant and machinery budget etc. This budget is propared for a long term say 5-10 years.

viii) Cash Budget:

Cash budget represents the amount of cash receipts and payments, and a balance during the budgeted period. It is prepared after all the functional budgets are prepared by the firm or accountant or accounts manager either weekly, monthly, by using the followings,

(i) It ensures sufficient cash for business requirements.

(ii) It proposes arrangements to be made overdraft to meet any shortage of cash.

(iii) It reveals the surplus amount, and the effect of the seasonal fluctuations on cash position.

The objectives of cash budget is the proper co-ordination of total working capital, sales, investment and credit etc.

ix) Labour Budget:

Labour budget is a part of production budget. The personnel department prepares this budget and it shows an estimate of the requirements of labour to meet the production target, on the basis of previous records and budgeted production. This budget gives detailed information relating to the number of workers, rates of wages and cost of labour hours to be employed.

x) Works overhead budget:

It sets out the estimated costs of indirect materials, indirect labour and indirect factory expenses, during the budget period in order to achieve the target. This is classified into fixed, variable and semi-variable. This facilitates preparation of budgets and further department-wise and sub-division to have effective control. The preparation of budget is based on the previous year's records for fixed overheads, and budget targets are verifiod for variable expenses, which are bound to change with the change out put.

xi) Administrative overheads budget:

This budget is covering the expenditure of administrative office and management salaries. It is prepared with the help of past experiences and expected changes in future. The administration cost of each budget centre is drawn separately and incorporated in administrative cost budget.

xii) Selling and Distribution overhead budget:

This budget relates to selling and distribution of products for the budget period and is based on sales budget. It is generally prepared territory-wise by the sales manager of each territory. The costs are divided into fixed, variable and semi-variable and estimated is taken on the basis of past records.

Master Budget:

Finally master budget is prepared incorporating all functional budgets. It is defined as, " The budget may take the form of budgeted profit and loss account and balance sheet. It contains sales, production cost, cash position, debtor, fixed assets, bills payable etc. It also shows the gross and net profits and the important accounting ratios. It has to be approved by the board of directors before it is put into operation.

c) Classifications According to flexibility

➢ Fixed budget:

Fixed budget is also called static budget. It may be defined as, "a budget designed to remain unchanged irrespective of the level of activity actually attained". This is most suited for fixed expenses, which have no relation to the volume of out put. It is ineffective for cost control purposes. It is useless for comparison with actual performance when the level of activity changes.

➢ Flexible Budget:

Flexible budget is also called variable budget. It may be defined as, "A budget designed to change in accordance with the level of activity actually attained". It shows estimated costs and profit at different levels of output. It facilitates comparison of actual performance with the budget at any level of out put. To prepare flexible budget all costs should be classified into fixed, variable and semi-variable. It is more elastic, useful and practical. It is use for the purpose of control.

Zero Base Budgeting:

In order, therefore, to streamline the allocation, to curb this tendency of equalising the expenditure with budgeted figures and to control the costs, a new technique called "Zero Base Budgeting".

It expresses that the followings:

➢ Every budget starts with a zero base.

- No previous figure is to be taken as a base figure for adjustments.
- Each activity is to be examined afresh.
- Every budget allocation is to be justified in the light of anticipated circumstances.
- Alternatives are to be given due consideration.

Benefits from Zero base budget:

- < Effective cost control can be exercised.
- < Careful planning is facilitated.
- < Management by objectives becomes a reality.
- < Uneconomical activities are identified.
- < Inefficiencies are controlled.
- < Scarce resources are allocated and used.
- < Every activity is thoroughly examined and justified clearly.

Questions :

1. What is 'budgetary Control', Bring out steps involved in installation of budgetary control system.
2. What are the various classificaiton of budgets.

Chapter 5

FUNDS FLOW ANALYSIS & STATEMENT

"Funds Flow Analysis' is an evaluation of sources and uses of funds. A statement showing the various "Sources" of funds and "Uses" of funds during a particular period id termed as funds flow statement. It is an important facet of studying present/projected financial position of the concern. In fact, in respect of all advances coming under the Credit Monitoring Arrangement, submission of funds flow statement in Form IV is mandatory. In the case of small borrowers, although not mandatory, the bankers cannot ignore the basic principles underlying the funds flow analysis.

Funds Flow Statement:

The funds flow statement is a report on the movement of funds or working capital. It explains how working capital is raised and used during an accounting. Funds flow statement is called by various names such as statement of sources and application of funds, Sources and uses of funds, Statement of changes in financial position, where got where got where gone statement, Analysis of working capital, Changes and movement of funds statement.

Objectives:

i) to show how the resources have been obtained and used.

ii) To indicate the results of current financial management

iii) To throw light upon the most important changes that have taken place during a specific period

iv) To show how the general expansion of the business has been financed.

v) To indicate the relationship between profits from operation, during of dividend and raising of new capital or term loans.

vi) To have an assessment of the working capital position of the concern.

Meaning of funds

The term "funds" has been defined in a number of ways. In a narrow sense, it means cash only. A fund flow statement prepared on cash basis is called a cash flow statement. In broader senses, the term "fund" refers to all financial resources. How the concept of funds as working capital is the most popular and widely accepted. Working capital is the excess of current assets over current liabilities.

The term "flow" means change and therefore the term "flow of funds" means change in funds or " change in working capital". In other words " flow of funds:" means any increase or decrease in working capital. If the transaction results in the increase of funds it is called a source of funds; if it results in the decrease of funds it is known as an application of funds. If the transaction does not affect the working capital therefore is not flow of funds.

The flow of funds occurs only when a transaction involves one current account and other non-current account. When transac tion involves non-current accounts only, no flow of funds occurs since working capital is not altered.

Uses of funds slow statement

Funds flow statement helps the financial analyst I having a more detailed analysis and understanding of changes n the distribution of resources between two balance sheet debts. In case such study is required regarding the future working capital position of the company, a projected funds flow statement can be prepared. The uses of a funds flow statement can be put as follows:

i) it explains the financial consequences of business operations.

Funds flow statement provides a ready answer to so many conflicting situations, such as;

a) Why the liquid position of the business is becoming more and more unbalanced in spite of business making and more profits?

b) How was it possible to distribute dividends in excess of current earnings or in the presence of a net loss for the period?

c) How the business could have liquid position in spite of business making losses or acquisition of fixed assets?

ii) It answers intricate queries.

a) What is the overall creditworthiness of the enterprise?

b) What are the sources of repayments of the loans taken

c) How much funds are generated through normal business operations?

d) In what ways the management has utilised funds in the past and what are going to be likely uses of funds.

iii) It acts an instrument for allocation of resources:

A projected funds flow statement will help the analyst in finding out how the management is going to allocate the scarce resources for meeting the productive requirements of the business.

iv) It is a test as to effective or otherwise use of working capital:

Funds flow statement is a test of effective use of working capital by the management during a particular period. He adequacy or inadequacy of working capital will tell the financial analyst about the possible steps that the management should take for effective use of surplus working capital or make arrangement in case of inadequacy of working capital.

Preparation of Funds Flow Statement

In order to prepare a fund flow statement it is necessary to find out the "Sources" and "Uses" of funds.

1. Sources of Funds

I) Internal Sources:

The fund from operations is the only internal source of funds. However, following adjustments will be required in the figure of Net

Profit for finding out real funds from operations

Add the following items as they do not result in outflow of funds

a) Depreciation of fixed assets

b) Preliminary expenses or goodwill. Etc written off

c) Contribution to debenture redemption fund, transfer to general reserve , etc.,

d) Provision for taxation and proposed dividends are usually taken as appropriations of profits only and not current liabilities for the purposes of funds flow statement.

e) Loss on the sale of fixed assets.

Deduct the following items, as they do not increase funds.

i) Profit on sale of fixed assets since the full sale proceeds are taken as a separate source of funds and inclusion hee will result in duplication

ii) Profit on revaluation of fixed assets.

iii) Non-operating incomes such as dividend received or accrued dividend, refund of income tax, rent received or accrued rent.

2) External Sources:

i) Funds from long-term loans

Long term loans, such as debentures, borrowing from financial institutions will increase the working capital and therefore, there will be flow of funds. However, if the debentures have been issued in consideration of some fixed assets, there will be no flow of funds.

ii) Sale of fixed assets

Sale of land, building, long-term investment will result in ger eration of funds.

iii) Funds from increase in share capital

Applications of Funds

The uses to which funds are put are called "applications of funds" Following are some of the purposes for which funds may be used:

i) Purchase of fixed assets

Purchase of fixed assets such as land, building, plant, machinery, long term investment, etc., results in decrease of current assets without any decrease in current liabilities. Hence, there will be a flow of funds. But in case of share are issued for acquisition of fixed assets, there will be no flow of funds.

ii) Payment of fixed liabilities

Payment of long term liability, such as redemption of debentures o redemption of redeemable preference shares, results in reduction of working capital and hence it is taken as an application of funds.

iii) Payment of tax liability

Provision for taxation is generally taken as an appropriation of profits and not as an application of funds.

iv) Payment of dividend:

Payment of dividends results in decrease of a fixed liability and, therefore, it affects funds. Generally, recommendation of directors regarding declaration of dividend is simply taken as an appropriation of profits and not as an items affecting working capital.

Technique for preparing a Funds flow Statement

A funds flow statement depicts change in working capital. It will, therefore, be better for the students to prepare first a Schedule of Changes in Working Capital before preparing a Fund Flow Statement.

Schedule of changes in working capital

Working capital is the difference between current assets and current liabilities. The schedule of changes in working capital is prepaid to find out the increase or decrease in working capital during the year. It can be prepared by comparing the current assets and current liabilities of two periods. It may be in the following form:

Items	As on......	As on	Increase	Decrease
<u>Current Assets:</u>				
Cash balance				
Bank Balance				
Marketable Securities				
Accounts Receivables				
Stock in Trade				
Prepaid expenses				
<u>Current Liabilities:</u>				
Bank Overdraft				
Outstanding expenses				
Accounts payable				
Net Increase/Decrease In Working Capital				

Rules for preparing the schedule:

i) Increase in a current assets, results in increase (+) in Working Capital

ii) Decrease in a current assets, results in decrease (–) in Working Capital

iii) Increase in a current liability, results in decrease (-) in working capital

iv) Decrease in a current liability, results in increase (+) in working capital

Funds flow statement

While, preparing a Funds Flow Statement, current assets and current assets and current liabilities are to be ignored. Attention is to be given to changes in fixed assets and fixed liabilities. The statement may be prepared in the following form:

FUNDS FLOW STATEMENT

sue of shares
sue of debentures
ong-term borrowing
ale of fixed assets
Funds from operating

Total sources

Applications of funds:
edemption of redeemable preference shares
edemption of debentures
payment of fixed assets
operating loss
payment of dividends, tax etc.,

Total uses

Net increase/decrease in working capital
(Total sources - total uses)

Questions :

1. Discuss the managerial uses of funds flow statement ? Wha are its limitation.
2. Explain the items of sources & applications of funds.
3. Explain the procedures for preparation of funds flow state ment.

Chapter - 6

CASH FLOW STATEMENT

Cash is a very important role in the entire economic life of a business. The technique of preparing fund flow statement and its utility has been discussed in the preceding chapter. It also pointed that this statement summarises the changes in Fund i.e. Working capital. This statement presents a comprehensive picture of the various compositions of working capital and also portrays those financial transactions, which cause a change in working capital. But the working capital concept of fund comprises, in addition to cash and Bank, other current assets and current liabilities too. Hence, fund flow statement fails to convey the quantum of inflow and outflow of cash. A firm needs cash to make payments to convey the quantum of inflow and outflow of cash. A firm needs cash to make payments to its suppliers, to incur day-to-day expenses and to pay salaries, wages, dividends etc.

Meaning:

A statement prepared from the historical data showing sources and uses of cash is called cash flow statement. It reveals that the inflow and outflow of cash during the particular period. Cash flow statement can be prepared for a year, half-year, quarterly or for any other duration/periodic. The term cash is also used to refer bank balance.

Uses of cash flow statement:

A cash flow statement is a important one to the financial manager or a management. It is an essential tool for short-term financial analysis. Uses are as follow back...

1. Cash Flow Statement facilitates to prepare sound financial policies. It also helps to evaluate current cash position of a firm or a management.
2. A projected cash flow statement can be prepared in order to know the future cash position of a concern so as to enable a firm to plan and coordinate its financial operations properly.
3. It helps in taking loan from banks and other financial institutions. The repayment capacity of the firm can be understood by going through the cash flow statement.
4. It helps the management in taking short-term financial decisions.
5. Cash is the soul and heart of the business. Cash is pivot of all business activities. Present concept is in the business field , Everyone is cash minded. The aim of business is to gather cash. Business is a source while cash is the end. Therefore, it is very useful.
6. The statement explains the causes for poor cash position in spite of substantial profits in a firm by throwing light on various applications of cash made by the firm.

Cash flow from operating activities:

Operating activities are the principal revenue-producing activities of he enterprise and other activities that are not investing and financing activities. Operating activities include cash effects of those transactions and events that enter into the determination of net profit or loss. Following are examples of cash flow from operating activities:

- Cash receipts from the sale of goods and the rendering of services.
- Cash receipts from royalties, fees, commissions, and other revenue.
- Cash payments to suppliers for goods and services.
- Cash payments to and on behalf of employees.
- Cash receipts and payments of an insurance enterprise for premiums and claims, annuities and 'other policy benefits.
- Cash payments or refunds of income-taxes unless they can be specifically identified with financing and investing activities.
- Cash receipts and payments relating to future contracts, forward contracts, option contracts, and swap contracts when the contracts are held for dealing or trading purposes etc.

CASH FROM OPERATIONS:

Particulars	Rs.	Rs.
Funds from operations:		XXXXX
(add) Increase in current liabilities [Excluding bank overdraft].	XXX	
Decrease in current assets. [Excluding cash & bank balance].	XXX	XXXX
		XXXXX
(less) Increase in current assets. [Excluding cash & bank balance]	XXX	
Decrease in current liabilities. [Excluding bank overdraft].	XXX	XXXXX
Cash Flow From Operation:		XXXXX

Cash Flow form investing activities

Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents. In other words, investing activities include transactions and events that involve the purchase and sale of long-term productive assets (e.g., land, building, plant and machinery etc.,) not held for re-sale and other investments. The following are examples of cash flows arising from investing activities:

- Cash payments to acquire fixed assets (including intangibles). These payments include those relating to capitalised research and development costs and self-constructed fixed assets.

- Cash receipts from disposal of fixed assets (including intangibles).
- Cash payments to acquire shares, warrants, or debt instruments of other enterprises and interests in joint ventures (other than payments for those instruments considered to be cash equivalents and those held for dealing or trading purposes).
- Cash receipts from disposal of shares, warrants, or debt instruments of other enterprises and interests in joint ventures(other then receipts from those instruments considered to be cash equivalents and those held for dealing or trading purposes).
- Cash advances and loans made to third parties (other than advances and loans made by a financial enterprise).
- Cash receipts from the repayment of advances and loans made to third parties (other than advances and loans of a financial enterprise).
- Cash receipts and payments relating to future contracts, forward contracts, option contracts, and swap contracts except when the contracts are held for dealing or trading purposes, or the receipts are classified as financing activities.

➢ Cash flows from financing activities:

Financing activities are activities that result in changes in the size and composition of the owner's capital (including preference share capital in the case of a company) and borrowings of the enterprise. Following are the examples of cash flows arising from financing activities:

- Cash proceeds from issuing shares or other similar instruments.
- Cash proceeds form issuing debentures, loans notes, bonds and other short-term borrowing .
- Cash repayments of amounts borrowed.
- Payment of dividend.

Information required for cash flow statement:

The following basic information is needed for the preparation of a cash flow statement:

1 Comparative balance sheets: Balance sheets at the beginning and at the end of the accounting period indicate the amount of changes that have taken place in assets, liabilities and capital.

2 Profit & Loss account: The profit and loss account of the current period enables to determine the amount of cash provided by or used in operations during the accounting period after making adjustments for non-cash, current liabilities.

3 Additional Data: In addition to the above statements, additional data are collected to determine how cash has been provided or used e.g. sale or purchase of assets for cash.

Cash Flow Statement of xyz Ltd. For the year ending.............

Sources	Rs.	Applications	Rs.
Opening Balances:		**Opening Balances:**	
Cash	XX	Bank overdraft.	
Bank	XX		
Cash Inflows:		**Cash outflows:**	
Cash from operations.	XX	Redemption of redeemable preference shares	XX
Issue of shares.	XX	Redemption of debentures.	XX
Rising of long-term loans/debentures.	XX	Repayment of loans.	XX
Sale of fixed assets and investments.	XX	Non-operating expenses.	XX
Non-trading receipts.	XX	Closing balances	XX
		Cash	XX
		Bank	XX
	XXXX		XXXX

Funds Flow Statement vs. cash flow statement

1 Fund flow statement is based on the accrual accounting system. In case of preparation of cash flow statements all transactions effecting the cash or cash equivalents is only taken into consideration.

2 Funds flow statement analysis the sources and application of funds of long-term nature and the net increase or de

crease in long-term funds will be reflected on the working capital of the firm. The cash flow statement will only consider the increase or decrease in current assets and current liabilities in calculating the cash flow of funds from operations.

3 Funds flow analysis is more useful for long range financial planning. Cash flow analysis is more useful for identifying and correcting the current liquidity problems of the firm.

4 Funds flow statement is a broader concept, it takes into account both long-term and short-term funds into account. But cash flow statement only deals with the one of the current assets on balance sheet assets side.

5 Funds flow statement tallies the funds generated from various sources with various uses to which they are put. Cash flow statements starts with the opening balance of cash and reach to the closing balance of cash by proceeding through sources and uses.

Questions :

1. Define and distinguish between funds flow statement and cash flow statement. What significance interences are bought out by the statement of funds flow ?

Chapter - 7

PROPERTY MANAGEMENT

LEASING

Lease is rental agreement that extends for a year or more and involves a series of fixed payments. Generally, firms own fixed assets and report them in their balance sheet. For carrying on economic activity or organising production, the access or use of equipment and building is important than their ownership. Leasing achieves the separation of ownership from economic use. Leasing achieves the separation of ownership from economic use.

There are two parties to a lease. The user of the asset is the lessee who makes periodic payments to the owner of the asset who is called the lessor. Lease agreements contain an option to the lessee to purchase the asset at fair market value at the end of the lease period. The burdens of costs the lessee or lessor have to bear differ according to the type of lease. The lessor is responsible for maintenance, insurance and payment of property taxes in the case of a full service lease. The lessee is responsible for these costs under a net lease.

Importance of leasing

First, the leassee has to take a decision about the asset required and determines the manufacturer or the supplier. He also decides about his other requirements, viz, the design specifications, the price, warranties, terms of delivery, installation and servicing.

Second the lessee then enters into a lease agreement with the lessor. He specifies to him his requirement as determined by him under point 1 above. The lease agreement contains the obligations of the lessor and the lessee as given below:

i) the basic lease period during which the lease is irrevocable.

ii) The timing and amount of periodical rental payments during the basic lease period

iii) Details or any option to renew the lease or to purchase the asset at the end of the basic lease period. In the case of absence of any such option to the lessee, the lessor takes possession of the asset and is entitled to any residual value associated with it.

iv) Details regarding the responsibility for payment of cost of maintenance and repairs, taxes, insurance and other expenses.

Thirdly, after the lease agreement is signed, the lessor contacts the manufacturer or supplier to supply the assets to the lessee. The lessor makes payment to the manufacturer or the supplier after the asset has been delivered, tested and accepted by the lessee.

TYPES OF LEASE AGREEMENT

The Lease Agreements can broadly be put into following four categories:

1. Capital Lease

A capital lease is a long-term arrangement, which is irrevocable during its primary lease period. According to FAS-13 a capital lease is one, which satisfies one or more of the following conditions:

a) the lessor transfers title to the lessee at the end of the lease period.

b) The lease contains an option to purchase the asset at a bargain price

c) The lease period is equal to or greater than 75% of the estimated economic life of the asset

d) At the beginning of the lease, the present value of be minimum lese payments equals or exceeds 90% of the fair value of the leased property to the lessor.

In case of a capital lease, practically all the risk incidental to the ownership of the asset and the benefits arising therefrom are transferred to the lessee, except the legal title which may or may not e equally transferred. The lessee has also to bear cost of insurance, repairs and maintenance of the asset and other related expenses.

2. Operating Lease

A lease which does not satisfy any of the conditions as given above for capital lease is termed as "Operational Lease". Such a lease agreement gives the lessee he right to use the leased property for a limited period of time. It does not give lessee all the benefits and risks that are associated with the asset. The lessor is responsible for the maintenance of the asset, insurance and all other relevant expenditure. An operating lease generally preferred in the following circumstances.

a) Where there is possibility of rapid obsolescence of the asset
b) Where the lessees is interested in tiding over a temporary problem

The operating lease is also termed as an "Open-end lease agreement" since the lessee has the option to terminate the agreement by notice.

3. Sale and Lease back

In case of a sale and lease back arrangement; a firm sells an asset to another person who in turn leases it back to the firm. The asset is generally sold at its market value. The firm receives the sale price in cash and gets the right to use the asset during the basic lease period. The firm makes periodic rental payments to the lessor. The title to the asset now vests with the lessor who is naturally also entitled to any residual value the asset might have at the end of the lease period.

4. Leveraged Leasing:

This form of leasing has become very popular in recent years. This type of lease agreement is used for financing those assets, which require large capital outlays. Such a type of lease arrangement involves three parties – the lessee, the lessor and the lender.

The position of the lessee under a leveraged leasing agreement is the same as in case of any other type of lease. The lessee agrees to make periodic payments over the basis lease period and gets the right to use the asset over the agreed period of time.

Advantages of Leasing:

1. Permits alternative use of funds

A leasing arrangement provides a firm with the use and control over the asset without incurring huge capital expenditure. The firm is required only to make periodical rental payments. Thus, it saves considerable funds for alternative uses.

2. Arranges faster and cheaper credit

It has generally been found that acquisition of assets under a leasing arrangement is cheaper and faster as compared to acquisition of assets through any other source. Leasing companies are more accommodating than banks and financial institutions in respect of terms of financing. The total payments are fixed keeping in view the expected profits and cash generation of individual lessees, which is generally not possible in the case of lending by banks and other similar institutions.

3. Increases lessee's capacity to borrow

Leasing arrangements enable the lessee to utilise more of his funds for working capital purposes in place of low yielding fixed assets. Moreover, acquisition of assets under lease arrangements does not alter the debt-equity ratio of the lessee. Hence, the lessee can resort to further borrowings in case of the need arises.

4. Protects against obsolescence

The lessee can protect himself against the risk of obsolescence by entering into Operating lease agreement in respect of asset which become obsolete at a faster pace.

5.Boon for small firms

Acquisition of assets by means of a leasing arrangement is particularly beneficial to small firms which cannot afford to raise their capacity on account of paucity of financial resources. It, thus serves as a boon for technocrats who are unable to arrange funds even for promoters' contribution of margin money as required by the financial institutions.

6. Absence of restrictive covenants

The financial institutions while lending money usually attach several restrictions on the borrower as regards management, debt-equity norms, declaration of dividend, etc., Such restrictions are absolutely absent in the case of financing through a lease agreement.

7. Trading on tax shield

In case of a non-tax paying lessee, the cost of financing an asset is much higher compared to a tax-paying lessee since the former canot take advantage of tax deduction on interest payment. However, when a tax paying lessor owns the asset, he generally passes a part of the tax benefit to the lessee by means of lower rental charges. As a result of this favour, the real cost of the asset to the lessee works out to e lower than what it would have been if he were the owner of the asset.

8. Invisible Privileges

Under a lease arrangement, the lessee gets a right to use the asset without owing it. Hence the asset acquired on lease does not become part of the property of the lessee. The rental payments are considered to be of a revenue nature. This results in several invisible

a) lowering of due jure capacity as compared to de factto capacity enabling it to avail several government incentives.
b) Escaping asset-based restrictions
c) Increased chances of industry being considered as small scale industry

Disadvantages of Leasing

Acquisition of asset through leasing arrangements also results in certain disadvantages as listed below,

1. Deprived of ownership

In a leasing arrangement, the lessee does not get the ownership of the asset. He gets only a right to use., He is thus unable to recover his rental payments through sale of the asset. Of course, he does benefit in the form of tax saving as a result of rental payments being allowed as an expense for tax purpose.

2. Deprivation of the asset in case of default.

In case the lessee make a default in rental payments, the lessor is entitled, at his will, to take over the asset and the lessee has no right to prevent him from doing so. In case the supplier commits breach of warranties in respect of the leased asset.

4. No protection against supplier's warranties

In case of a lease arrangement, it is the lesor who has purchased the asset from the supplier and not the lessee. Hence, the lessee by himself is not entitled to any protection in case the supplier commits breach of warranties in respect of the leased asset.

CHOICE OF LESSOR

1. Competitive Market Rate

The prospective lessee after having received the lease quotations should ensure that the parameters upon which the quotations are based are identical and competitive with those prevailing in the market. Besides this the lessee must ensure that comparisons are made on the basis of rentals with or without the stamp duty.

2. Supply of Correct Information

Both the lessor and the lessee need from each other plenty of information avoid all future problems.

3. Service Quality

Since in most cases, the liability of maintaining the leased asset rests with the lessor, it is necessary that he is equipped with competent staf-educated and trained in the proper maintenance of the leased asset. This is all the more important because the staff of the lessor may also be required to provide training to the staff of the leases, in the use of the asset leased.

4. Financial Strength

The lessor should be a person of sufficient financial means required for absorbing market fluctuations, particularly regarding the availability of funds. This will ensure that the lessee will get the asset at the required time and at the most competitive rates.

5. Professional Skill

Leasing business requires specialised professional skill. The lessee may not be familiar with all intricacies of the leasing business. It is the lessor who acts as his mentor and guide. The lessor should, therefore, be a person who a) explain to the lessee all legal aspects involved in the lesing transaction b) structure the lease rentals in a way that they fully reflect all important matters relating to the leasing transaction from the timing of payment to the suppliers c)advise the lessee regarding the period over which capital cost will be recovered before the leased asset is worn out or becomes absolete.

6. Proper Documentation

In all financing contracts, documentation is extremely important and particular when long-term period is involved. The lease documents should, therefore, cover all aspects of the lease transaction in a concise and legally satisfactory manner. The terms and conditions should not be vague and must be incorporated in explicit and readily understandable manner by both the parties to the lease agreement.

LEASE EVALUATION

1. Lessor's Viewpoint

The lease evaluation from the point of view of the lessor aims at ascertaining whether to accept a lease proposal or to choose from alternative proposals. As in the case of the evaluation by a lessee, the appraisal method used in the discounted cash flow technique based on the lessors' cash flow. The lease-related cash flow from his angle consists of a) outflows in terms of the initial investment/acquisition of cost of the asset at the inception of the lease; income tax on lease transaction, if any; lease administration expenses such as renal collection charges, expenses on suits for recovery and other directs and so on b) inflows such as lese rentals, management fee, tax shield on depreciation, residual value and security deposit, if any and so on. The internal rate of return is the most commonly adopted technique by the lessor for evaluating a lease transaction.

2. Evaluation by Leassee

According to this method, the following steps will have to be taken for evaluating a lease proposal.

a) the present value of cash flows associated with the "Buying" alternataive wil be ascertained

b) the present value of cash flows under the leasing alternative will be ascertained.

c) the decision between "Buying" and "Leasing" will be made by comparing the NPV under each of the alternatives. The alternative having higher NPV will be preferred.

Question :

1. Write a short notes on 'Lease financing' state its advantage & disadvantage.
2. Differentiate between : a) financial lease and operating lease b) Leverage lease & Sale and lease back
3. Discuss the methods of evaluating the lease proposal.

Chapter - 8

WORKING CAPITAL MANAGEMENT

The working capital management is concerned with the problems that arise in attempting to managem·ent the current assets, the current liabilities and the interrelationship between them. The goal of working capital management is to manage the firm's current assets and liabilities in such a way that a satisfactory level of working capital is maintained. The interaction between current assets and current liabilities is, therefore, the main theme of the theory of working capital management.

Working Capital

Meaning

Working capital is defined as the excess of current assets over current liabilities. Current assets are those assets, which will be converted into cash with in the current accounting period or within the next year as a result of the ordinary operations of the business. They are cash or near cash resources. These include:

- # Cash and bank balances
- # Receivables
- # Inventory
    - Raw materials, stores and spares
    - Work-in-progress
    - Finished goods

Prepaid expenses

Short-term advance.

Temporary investments

The value represented by these assets circulated among several items. Cash is used to buy raw materials, to pay wages and to meet other manufacturing expenses. Finished goods are produced. These are held as inventories. When these are sold, accounts receivables are created. The collection of accounts receivable brings cash into ghee firm. The cycle starts again.

OBJECTIVES OF WORKING CAPITAL MANAGEMENT

The basic objectives of working capital management are as follows:

By optimising the investment in current assets and by reducing the level of current liabilities, the company can reduce the locking up of funds in working capital thereby, it can improve the return on capital employed in the business

The second important objective of working capital management is that the company should always be in a position to meet its current obligations, which should properly be supported by the current assets available with the firm. But maintaining excess funds in working capital means locking of funds without return.

The firm should manage its current assets in such a way that the marginal return on investment in these assets is not less than the cost of capital employed in finance the current assets.

Gross and Net working Capital

Generally the working capital has its significance in two perspectives. 'Gross working capital' and 'Net Working Capital', the term Gross working capital refers to the firm's investment in current assets. The term net working capital refers to the excess of current assets over current liabilities. These gross working capital and net working capital are called balance sheet approach of working capital.

Permanent and Temporary Working Capital

Considering time as the basis of classification, there are two types of working capital viz, 'Permanent and Temporary'. Permanent working capital represents the assets required on continuing basis over the entire year, whereas temporary working capital represents additional assets required at different items during the operation of the year. A firm will finance its seasonal and current fluctuations in business operations through short term debt financing.

Disadvantages of insufficient working capital

The company unable to take advantage of new opportunities or adapt to change

Trade discounts are lost. A company with ample working capital is able to finance large stocks and can therefore place large orders.

- Cash discounts are lost. Some companies will try to persuade their debtors to pay early by offering them a cash discount off the price owed.
- The advantages of being able to offer a credit line to customers are foregone.
- Financial reputation is lost result in non-cooperation from trade creditors in times of difficulty
- There may be concerned action by creditors and will apply to court for winding up.

OPERATING CYCLE

The operating cycle refers to the average time elapses between the acquisition of raw materials and the final cash realisation. "The contimuing flow from cash to suppliers, to inventory, to accounts receivable and back into cash is what is called the operating cycle'. In other words, the term cash cycle refers to the length of time necessary to complete the following cycle of events:

1. Conversion of cash into inventory
2. Conversion of inventory into receivables
3. Conversion of receivables into cash

The operating cycle of working capital is shown in figures –

Factors determining Working Capital Requirements

A firm should plan its operations in such a way that it should have neither too much nor too little working capital. The total working capital requirement is determined by a variety of factors. The factors which influence the need level are discussed below:

1. Nature of Business

The working capital requirements vary from one enterprise to another based on its nature and size. In case of a transport organisation major part of funds would be locked up in fixed assets like motor vehicle, spares and work shed etc., and the working capital component would be negligible. The service organisation or public utilities need lesser working capital than trading and financial organisation. Therefore the requirement of working capital depends upon the nature of business carried by the organisation.

2. Production Cycle

The term production cycle refers to the time involved in the manufacture of goods. It covers the time-span between the procurement of raw materials and the completion of the manufacturing professes leading to the production of finished goods. To sustain such activities the need for working capital is obvious. The longer the time-span, the larger will be tied-up funds and, therefore the larger is the working capital needed and vice versa.

3.Business Cycle

Business fluctuations lead to cyclical and seasonal changes which, in turn, cause a shift in the working capital position, particularly for temporary working capital requirements. The variations in business conditions may be in tow directions I) upward phase ii) downswing phase. During the upswing of business activity, the need for working capital is likely to grow to cover the lag between increased sales and receipt of cash as well as to finance purchases of additional material to cater to the expansion of the level of activity. Additional funds may be required to invest in plan and machinery to meet the increased demand.

4. Production Policy:

Production policy has greater influence on the working capital requirements. There are some products which have seasonal demand. The industrial unit producing such seasonal products have to work to its full capacity or over the capacity. It involves higher degree of risks such as storage, short supply of materials, non-availability of labour and power. So the working capital requirements are less. Jon the other hand, when the production is carried out throughout the year, the funds are being locked up in the form of finished goods for a long time. Hence additional funds are required.

5. Credit Policy

The credit policy influences the requirement of working capital in two ways: I) through credit terms granted by the firm to its customers ii) credit terms available to the firm from its creditors. The credit terms granted to customers have a bearing on the magnitude of working capital by deterring the level of book debts. The credit sales result in higher book debts. Higher book debts mean more working capital. On the other hand if liberal credit terms are avail able from the suppliers of goods the need for working capital is less.

6.Growth and Diversification of Business

Growth and diversification of business call for larger volume of working fund. The need for increased working capital does not follow the growth of business operations but precedes it. Working capital need is in fact assessed in advance in reference to the business plan.

7. Profit policy

The net profit is a source of working capital to the extent that it has been earned in cash. It depends on factors such as nature of product, market share, competition and reputation of the concern. The availability of internal funds for working capital requirements is determined not merely by the pot margin but also by the manner of appropriating profits. The availability of such funds would depend upon the profit appropriations for taxation, dividend, reserves and depreciations.

8. Operating efficiency

The role of management also determines the working capital requirements. Though the management has not control over the external factors like price level changes, market conditions, government policies etc, the policies framed by the management can have a direct impact on it. Further optimum utilisation of available resources and achieving the coordination of employees have considerable influence on working capital requirements. The efficient man agement can achieve high working capital turnover, higher profitability and free circulation of internal funds.

9. Environment Factors:

Political stability in its wake brings in stability in money market and trading world. Things mostly go smooth. Risk ventures are possible with enhanced need for working capital finance. Similarly, availability of local infrastructure facilities- road, transport, storage and market etc., influence business and working capital need as well.

Questions :

1. What is working capital ? Explain the factors which influences working capital needs of a business.
2. What is permanent & temporary Working Capital ?
3. State the various methods of Working Capital financing of a firm.

Chapter - 9

Marginal Costing

A. Define marginal cost and marginal costing. What are its features? State their merits and demerits.?

Marginal costing is one of the most useful techniques available to the management. It guides management in pricing, decision-making and assessment of profitability. It reveals the inter-relationship between cost, volume of sales and profit. It classifies cost into fixed and variable and only variable costs are charged to products. It does not include fixed expenses. Marginal costing is also known as direct costing or variable costing or incremental costing.

According to ICMA, England, "Marginal cost is the amount, at any given volume of output, by which aggregate costs are changed, if the volume of output is increased or decreased by one unit".

Marginal costing is defined as, "the ascertainment of marginal cost and of the effect on profit of changes in volume or type of output by differentiating between fixed and variable costs."

Features of Marginal Costing:

1. All costs are classified into two-fixed and variable.
2. Only the variable costs are treated as the cost of the product.
3. The stock of finished goods and work in progress are valued at marginal cost only.

4. Fixed costs are charged against the contribution earned during the period..
5. Prices are based on marginal cost plus contribution. Contribution is the difference between selling price and variable cost.

Merits

1. Marginal costing assists in taking decisions such as pricing, accepting foreign orders at low price, to make or buy selection of suitable product mix etc.
2. It yields better results when combined with standard costing.
3. It enables effective cost control by dividing costs into fixed and variable costs.
4. It enables the proper apportionment of fixed costs.
5. It avoids the complication of over-recovery or under recovery of overheads.
6. It facilitates the study of relative profitability of different products when a number of product are being manufactured.
7. Inventory valuation becomes more realistic when it is based on marginal cost.
8. Since fixed costs are not absorbed in un saleable stock, there is no question of fictitious or false profits.

Demerits

1. It is difficult to separate fixed and variable costs clearly.
2. There are semi-variable costs. They are not considered in the analysis.
3. It ignores time element. In the long run all costs including fixed costs change. Therefore, comparison of performance between two periods on the basis of contribution is not possible.
4. Since variable overheads are apportioned on estimated basis, problem of under or over recovery cannot be totally eliminated.
5. Price fixation and comparison between two jobs cannot be done without considering fixed costs.
6. Since the stock is valued at marginal cost, in the case of loss of fire, full loss cannot be recovered from the insurance company.
7. Valuation of inventories and profit estimations on marginal costing are objected to by tax authorities.
8. In controlling costs, marginal costing is not useful in concerns where fixed costs are huge in relation to variable costs.
9. It is found unsuitable in industries like ship building, contract etc., where the value of work in progress is high in relation to turnover. If fixed expenses are ignored in valuation of work-in-progress, losses may occur every year till

the contract is completed. On completion there may be huge profit. It may create income tax problems.

10. The systems of budgetary control and standard costing serve the purpose better than marginal costing. Hence this technique is not required.

8. What do you understand by the term "Break-Even Analysis"? Enumerate the

Merits and Demerits?

The study of cost-volume-profit relationship is often referred to as BEA. The term BEA is interpreted in two senses. In its narrow sense, it is concerned with finding out BEP. BEP is the point at which total revenue is equal to total cost. It is the point of no profit, no loss. In its broad sense, it means a system of analysis that can be used to determine the probable profit at any level of production.

Assumptions:

1. All costs are classified into two – fixed and variable.
2. Fixed costs remain constant at all levels of output.
3. Variable costs vary proportionally with the volume of output.
4. Selling price per unit remains constant in spite of competition or changes in the volume of production.
5. There will be no change in operating efficiency.
6. There will be no change in the general price level.
7. Volume of production is the only factor affecting the cost.

8. Volume of sales and volume of production are equal. Hence there is no unsold stock.
9. there is only one product or in the case of multiple products, sales mix remains constant.

Merits:

1. Information provided by the Break Even Chart can be understood more easily then those contained in the profit and loss account and the cost statements.
2. Break Even Chart discloses the relationship between cost, volume and profit. It reveals how changes in costs, selling price and volume of sales influence profit. So, it helps management in decision making.
3. It is very useful for forecasting costs and profits, long term planning and growth.
4. The chart discloses profits at various levels of production.
5. It serves as a useful tool for cost control.
6. It can also be used to study the comparative plant efficiencies of the industry.
7. Analytical Break even chart presents the different elements in the costs – direct material, direct labour, fixed and variable overheads.

Demerits:

1. Break even chart presents only cost volume profits, it ignores other considerations such as capital amount, market

ing aspects and effect of government policy etc. which are necessary in decision making.

2. It is assumed that sales, total cost and fixed cost can be represented as straight lines. In actual practice, this may not be so.
3. It assumes that profit is a function of output. This is not always true. The firm may increase the profit without increasing its output.
4. A major draw back of BEC is its inability to handle production and sales of multiple products.
5. It is difficult to handle selling costs such as advertisement and sales promotion in BEC.
6. It ignores economies of scale in production.
7. Fixed costs do not remain constant in the long run.
8. Semi-variable costs are completely ignored.
9. It assumes production is equal to sales. It is not always true because generally there maybe opening stock.
10. When production increases variable cost per unit may not remain constant but may reduce on account of bulk buying etc.
11. The assumption of static nature of business and economic activities is a well known defect of BEC.
12. In practice, selling price may not remain fixed. More over it may be necessary to give extra discount to sell extra units.

C. Write short notes on :

1. Fixed cost

Expenses that do not vary with the volume of production are known as fixed expenses. Example, Manager's salary, rent ant taxes, insurance etc.

2. Variable cost

Expenses that vary almost in direct proportion to the volume of production or sales are called variable expenses. Example electric power and fuel, packing materials, consumable stores. It should be noted that variable cost per unit is fixed.

3. Contribution

Contribution is the difference between sales and variable costs and it contributes towards fixed costs and profit. Contribution is a sure test to decide whether a product is worthwhile to be continued among different products.

Contribution = sales – variable cost

Contribution = Fixed cost + Profit

4. Margin of Safety

Margin of safety is the excess of sales over the break even sales. It can be expressed in absolute sales amount or in percentages. A large margin of safety indicates the soundness of the business.

Margin of safety = % of sales – Break even sales. (or)

= Profit / P.V.ratio

5. Angle of incidence :

This is the angle between sales line and total cost line at the break even point. It indicates the profit earning capacity of the concern. Large angle of earnings.

6. Profit Volume Ratio:

The Profit Volume Ratio is usually called P.V.Ratio. It is one of the most useful ration contribution to sales is the P/V ratio.

Profit Volume ratio = Contribution / sales X 100.

7. Break Even Point :

Break Even Point refers to the point where total cost is equal to total revenue. It is a point of no profit, no loss. This is also a minimum point of production where total costs are recovered.

BEP(per unit) = Fixed Expenses / contribution Per unit × 100.

BEP = Fixed Expenses / Contribution × sales.

D. What is meant by cost volume profit analysis? State the objectives (Advantages) of such analysis?

Cost-Volume-Profit Analysis is a technique for studying the relationship between cost, volume and profit, profit maximisation is the main objective of all business concerns.

Profits determine the financial position, liquidity and solvency of the company. Profits serve as a yardstick for judging the competence and efficiency of the management. Therefore, every organisation tries to bring under its control all those factors which influence the profits. The amount of profit is determined by the following factors:

(a) Price of the product.

(b) Volume of sales.

(c) Cost of Production (fixed and variable costs).

The three factors cost, volume and profit are inter connected and dependent on one another. For exampk profit depends on sales, selling price depends on cost of expenditure.

In Cost Volume Analysis an attempt is made to analyse variations in cost with variations in volume.

Objectives of CVP-Analysis:

1. CVP analysis is helpful in the preparation of flexibie budget, which indicate cost and profit at various levels of activity.
2. It helps the management in forecasting the profits with reasonable accuracy.
3. It also assists the management in evaluating the performance.
4. It assists in formulating price policy. This enables the management in determining the selling prices of the products especially when the demand for the product is elastic.
5. It helps in controlling costs.

E. Under what circumstances may selling prices be reduced to marginal cost or below marginal cost?

Contribution is the difference between selling price and variable cost. If the selling price is below the variable cost there would be no contribution to cover fixed expences and the firm will incur loss. Hence, efforts should be made to sell the products at a price which is more than the variable cost. Production should be discontinued if the price is below the variable cost. But there are certain circumstances under which selling price may be reduced below variable cost.

However, this can be done only for a short period.

In the following circumstances the selling price of the product may be fixed even below marginal cost.

1. To introduce a new product in the market.
2. To popularise a particular product.
3. To explore a foreign market.
4. To eliminate the competitors from the market.
5. To help the sale of joint products.
6. To avoid the retrenchment of workers.
7. To utilise idle capacity.
8. To dispose off surplus stocks.
9. To retain old customers and prevent loss of future orders.
10. To avoid extra losses that may result from the closure of business.

F. " Marginal costing is a valuable aid for Managerial Decisions" Discuss:

1. Fixation of selling price:

Price is one of the most significant factor that determines the market for the product as well as the volume of profit for the organisation. Under normal circumstances, the price of a product must cover the total costs of that product plus a margin of profit. However under certain special circumstances, price has to be fixed even below the total cost. For instance, when there is a general trade depression or exploring new markets or accepting additional orders, the producer has to cut the price even below the total cost of the concerned product. Under these special circumstances, the concept of marginal cost is usefully applied to fix the prices.

2. Accepting bulk orders or foreign market orders

Some-bulk orders may be received from local dealers or foreign dealers asking for a price which is below the market price. This calls for a decision to accept or reject the order. The order from a local dealer should not be accepted at a price below the market price because it will affect the normal market and goodwill of the company. On the other hand, the foreign dealer should be accepted because it will give additional contribution, as the fixed costs have already been met.

3. Make or buy decision

In a make or buy decision the price quoted by the outside suppliers should be compared with the marginal cost of producing the component parts. If the outside price of the component is lower than the marginal cost of producing it, it is worth buying. On the other hand, if the outside price is higher than the marginal cost, making the component in the factory may be preferred.

4. Selection of suitable product mix;

When a factory manufactures more than one product, a problem is faced by the management as to which product will give maximum profits. The solution is, the products which give the maximum contribution are to be retained and their production should be increased.

5.Key Factor

It is also known as limiting factor or governing factor or scarce factor. A key factor is one which restricts production and profit of a business. It may arise due to the shortage of material, labour, capital, plant capacity or sales. Normally, when there is no limiting factor, the selection of the product will be on the basis of the highest P/V ratio.

6.Maintaining a desired level of profit

Management may be interested in maintaining a desired level of profits. The sales required to earn a desired level of profit can be ascertained by the marginal costing techniques.

7. Decision Making;

Decision making is a process of selecting the best course of action from a number of available alternatives. Problems like selection of method of manufacture, using the production capacity for different products, continuing or dropping of a product showing a loss, expansion or change in market etc. call for a decision. In such cases the decision should be made on the basis of contribution analysis.

Questions :

1. "Break Even Analysis" is the administrative tool for the management to achieve higher profits and efficient operation ? Discuss .
2. Profit -Volume Analysis is a technique of analysis the cost and rofits at various levels of volume ; Explain how such analysis helps management.

UNIT - 10

RATIO ANALYSIS

Introduction:

To analyse the current financial position of a company , ratios computed on the basis of figures appearing in the balance sheet are compared with the norms set for the ratios. Depending upon the purpose, various ratios are used. The ratios discussed here relate to liquidity, circulation level and structure of working capital.

(i). Current Ratio

Current ratio serves a similar purpose and is frequently used. It is also called working capital ration. It is considered as an index of solvency of a company. It indicates the ability of the company to meet its current obligations. Changes in current ratio can, however, be misleading. If a company raises money through commercial paper and invests the amount in marketable securities, net working capital is unaffected but the current ratio changes.

$$= \frac{\text{Current Assets}}{\text{Current liabilities}} \times 100$$

(ii) Acid-test Ratio:

Another ratio which measures immediate solvency is the quick ratio, called by as Acid-test ratio. It includes assets which can be quickly or immediately converted to cash. Such assets include only cash, marketable securities and bills customers have not yet paid (receivables). Inventories are excluded because they cannot be sold at any thing above fire-sale prices. The liquidity arises because finished goods cannot be sold for more than production cost . Quick ratio is computed .

$$= \frac{\text{Cash + marketable securities + receivables}}{\text{Current liabilities}} \times 100.$$

Current Liabilities.

(iii) Net working capital ratio

Net working capital is not a ratio. The difference between current assets and current liabilities is called net working capital. The term current assets refers to assets which in the normal course of business get converted into cash over a short period, usually not exceeding one year.

$$\text{Net working capital ratio} = \frac{\text{Net working capital}}{\text{Net Assets}} \times 100.$$

(iv) Cash Position Ratio (Absolute liquidity ratio)

It is a variation of quick ratio. When liquidity is highly restricted in terms of cash and cash equivalents, this ratio should be calculated. Liquidity ratio measures the relationship between cash and near cash items on the one hand, and immediately maturing obligations on the other. The inventory and the debtors are excluded from current assets, to calculate this ratio.

$$\text{Cash Position ratio} = \frac{\text{Cash marketable securities}}{\text{Current Liabilities}} \times 100$$

(v) Proprietary Ratio

Proprietary Ratio relates the shareholders funds to total assets. It is a variant of the debt equity ratio. This ratio shows the long term or future solvency of the business. It is calculated by dividing shareholders by the total assets.

$$= \frac{\text{Shareholders Funds}}{\text{Total Assets}} \times 100.$$

(vi) Fixed Assets to Proprietors Funds Ratio

This shows the relationship between fixed assets and shareholders funds. The purpose of this ratio is to calculate the percentage of the owners funds invested in fixed assets.

$$\text{FA to PF/R} = \frac{\text{Fixed Assets}}{\text{Proprietors Funds}} \times 100.$$

(vii) Current Assets to Proprietors Fund Ratio

It show sthe relationship between current assets and shareholders funds. The purpose of this ratio is to calculate the percentage of the owners funds invested in fixed assets.

$$\text{Fixed Assets to Shareholders Fund} = \frac{\text{Current Assets}}{\text{Proprietors Funds}} \times 100$$

(viii) Capital Gearing Ratio (CGR)

Capital Gearing Ratio is also known as capitalisation ratio or leverage ratio. Closely related to solvency ratios is the capital gearing ratio which is mainly used ot analyse the capital structure of a company. The term capital gearing or leverage normally refers to the proportion between the fixed interest or dividend bearing funds and non-fixed interest or dividend bearing funds.

$$\text{CGR} = \frac{\text{Fixed Interest bearing Funds}}{\text{Equity share capital}} \times 100.$$

(ix) Debt Equity Ratio: (DER)

The financing of total assets of a business concern is done by owners equity as well as outside debts. How much fund has been provided by the owners and how much by outsiders in the acquisition of total assets is a very significant factor affecting the long-term solvency position of a concern.

$$\text{DER} = \frac{\text{External Equities}}{\text{Internal Equities}} \times 100.$$

(x) Reserves to Equity Share Capital Ratio

It reveals the policy pursued by the company with regard to growth shares. A very high ratio indicates a conservative dividend policy and increased ploughing back of profit. Higher the ratio, better will be the position.

$$R \text{ to } ESC/R = \frac{\text{Revenue Reserves}}{\text{Equity Capital}} \times 100.$$

(xi) Solvency Ratio

It is also known as Debt ratio. It is a difference of 100 and proprietary ratio. This ratio is found out between total assets and external liabilities of the company. External liabilities mean all long period and short period liabilities.

$$= \frac{\text{Total liabilities}}{\text{Total Assets}} \times 100.$$

(xii). Gross Profit Ratio

The Gross Profit Ratio is also known as Gross Margin Ratio, Trading Margin Ratio etc. It is expressed as a "percent ratio". The difference between net sales and cost of goods sold is known as gross profit. Gross profit is highly significant. The earning capacity of the business can be ascertained by taking the margin between cost of goods sold and sales. It is very useful as a test of profitability and management efficiency. It is generally contented that the margin of gross profit should be sufficient enough to recover all operating expenses and other expenses and also leave adequate amount as Net Profit in relation to [illegible]s and owners' equity.

$$GPR = \frac{\text{Gross Profit}}{\text{Net Sales}} \times 100.$$

(xiii) Operating Ratio

This ratio establishes the relationship between total operating expenses and sales. Total operating expenses include cost of goods, administrative expenses, financial expenses and selling expenses. Cost of goods sold are also known as direct operating expenses and the rest are known as other operating expenses.

$$= \frac{\text{Cost of goods sold} + \text{Operating Expenses}}{\text{Net Sales}} \times 100.$$

(xiv) Expenses Ratio

The expenses is also known as supporting ratios to operating ratio. It becomes imperative that each aspect of cost of sales and/or operating expenses should be analysed in detail just to find out as how far concern is able to save or is making over expenditure in respect of different items of expenses.

(a). Factory Expenses Ratio $= \frac{\text{Factory Expenses}}{\text{Net Sales}} \times 100.$

(b). Administrative Expense Ratio $= \frac{\text{Administrative Expenses}}{\text{Net Sales}} \times 100.$

Like that all other expenses will be come.

(xv) Net profit ratio

It is also called Net Profit to Sales Ratio. The profit margin is indicative of management's ability to operate the business with sufficient success not only to recover from revenues of the period, the cost of merchandise or services, the expenses of operating the business and the cost of borrowed funds, but also to leave a margin of reasonable compensation to the owners for providing their capital at risk.

$$= \frac{\text{Net Profit}}{\text{Net Sales}} \times 100.$$

5. Profitability Ratios

(a). Return on Assets

It is an interrelationship between Net profit to total assets.

$$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total Assets}} \times 100.$$

(b) Return on Capital Employed

It is an interrelationship between operating profit an capital employed in the business.

$$= \frac{\text{Operating Profit}}{\text{Capital Employed}} \times 100.$$

(c) Return on share holders equity ratio:

It is an ratio establishes the profitability from the shareholders point of view.

$$= \frac{\text{Net Profit}}{\text{Share holders Fund}} \times 100.$$

6. All other ratios:

$$\text{I.Stock Turnover Ratio} = \frac{\text{Cost of goods sold}}{\text{Average Inventory at cost}} \times 100.$$

$$\text{II. Debtor Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average Debtors}} \times 100.$$

$$\text{Average Debtors} = \frac{\text{Opening debtor + Closing debtors balance}}{2}$$

$$\text{III. Creditor Turnover Ratio} = \frac{\text{Accounts Payable}}{\text{Net Credit Purchase}} \times 365.$$

$$\text{IV. Working Capital Turnover Ratio} = \frac{\text{Cost of sales}}{\text{Net Working Capital}} \times 100.$$

Net working capital = Current assets - Current Liabilities.

$$\text{V. Fixed Assets Turnover Ratio} = \frac{\text{Cost of sales}}{\text{Net Assets}} \times 100.$$

Net Assets = value of assets - Depreciation.

$$\text{VI. Capital Turnover Ratio} = \frac{\text{Cost of sales}}{\text{Capital Employed}} \times 100.$$

$$\text{VII. Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Fixed Interest Charges}} \times 100.$$

$$\text{VIII. Dividend Coverage} = \frac{\text{Net Profit After Tax and Interest}}{\text{Preference Dividend}} \times 100.$$

$$\text{IX. Price Earning Ratio} = \frac{\text{Market Price Per Share}}{\text{Earnings Per Share}} \times 100.$$

Qustions :

1. What do you understand by ratio analysis ? Examine its significance & utility.
2. Ratio analysis is a tool of management for measuring efficiency & guiding business policies" - Discuss
3. Explain how accounting Ratio's one classfied.

Chapter - 11

PROJECT AUDIT

Introduction

In the large organisations, execution of projects and operation activities continue concurrently. New projects are sanctioned every year and similarly already sanctioned projects are completed. This becomes the regular phenomenon in the organisation. The projects are sanctioned for;

- cost
- objectives to achieve
- time schedule
- benefits\techno-economics
- mode of execution

during the execution process, certain problems are faced and at the same time, certain facilitating factors also come across. These favourable and unfavourable factors become important lessons for the ongoing as well as future projects. There fore, it becomes necessary to examine these aspects on completion of project.

(ii) Time limit for preparation of post project evaluation and completion audit report(PCAR)

It is the practice in many organisations to prepare the PCARs after one year of the completion of the project. The period of one year is considered necessary so that the operations of the completed project get stabilised.

(iii) Committees

When the organisation is big and a number of projects including additions, modifications, replacements and balancing facilities are executed and completed, standing committees are constituted. The members are head of the department as chairman, with members from various disciplines such as finance, industrial engineering, projects, operation, etc.

For each shop, the... will be a separate committee. Other members would be common to each committee.

(iv) Proceedings of the Meetings

Constitution of typical committee is given below (For a project in an intergrated steel plant,.

Project Modification of blast furnace no.6 stoves:

Committee

Deputy General Manager (Iron) ... Chairman.

Senior Manager (Blast Furnace) ... Member.

Senior Deputy Director (In-house Design Organisation) ... Member.

Senior Engineer (Project Planning a... Engineering Department) ..Member secretary.

Senior Manager (Finance) ... Member.

Senior Engineer (Industrial Engg..Department) ..Member.

Member secretary will co-ordinate the meeting. He will prepare the back ground papers about the scheme after collecting the required data from the concerned departments.

There may be several meetings to examine the actual data collected with reference to what were envisaged in the sanctioned project.

After it is concluded and agreed by the members on all the aspects, committee's report shall be prepared and signed by the members.

After the PCAR is prepared and signed by the members, the same is processed for the approval of management.

(v) Contents of Post Project Evaluation and Completion Audit Report (PCAR):

For the small and medium project, the PCARs are prepared showing the following details:

(i) Purpose of the project as per sanction.

(ii) Benefits envisaged in the sanctioned project.

(iii) Project approval and execution of project.

(iv) Strategies of implementation.

(v) Accomplishment of the project objectives:

(a) Project facilities.

(b) Addition/deletion of scope of work with reasons.

(c) Benefits achieved.

(vi) Time over-run with reasons.

(vii) Completion cost and cost over-run statement with reasons for variations.

(viii) Problems encountered.

(ix) Lessons learnt.

(x) Conclusion.

(xi) Enclosures to PCAR:

(a) Actual cost.

(b) Cost over run Statement.

(c) Reasons for variation.

(d) Actual benefits achieved.

(e) Performance statistics.

After the PCAR is approved by the competent authority, the same is circulated to all concerned with the highlights of.

- "Lessons learnt".
- Shortcomings experienced in various spheres of execution of project.
- Improvements required in preparation of specifications and tendering process.
- After the approval of project no mid-stream changes in the scope of work are to be allowed.

(vi) Post Project Evaluation and Post Completion Audit Report for the Major Projects

In respect of major projects of expansion, modernisation, technological upgradation, PCAR is prepared in more detail. This is prepared normally by the consultants of the project who possess the facilities and necessary data bank for the project. This would be a detailed exercise and would be prepared in the form of a report.

This book would be a guide book for future projects as well as guide to the new project planners and organisers.

This book (report) will cover all the areas of project management and control, so as to compare the same with the actuals after completion.

Various parts of the completion reports for the major projects are described as under:

- Project planning.
- Construction activities.
- Financing management and review with reference to plan.
- Material management as well as contract management.
- Operation review.
- General.

These are being discussed in detail so as to present the same in the report based on actual achievements with reference to the plan.

Project Planning

Under this section of the completion report, various stages from the formulation till final investment decision making will be covered. It will highlight all aspects and stages of discussions in the organisation itself as well as at the government's level for the projects of Government companies. Project planning will cover the stages from theproject formulation, preparation of feasibility studies reports, detailed projects reports, etc. Finally it will state when the project was sanctioned by various authorities say board of directors, SFC and PIB for the projects of Government companies. Various alternatives considered in the decision making shall be incorporated. Sanctioned cost with the break-up shall be indicated in the completion reports. In the report, profitability projections, product mix together with the objective of the project as planned will be covered.

Project planning work will also include the following aspectal:

- Preliminary investigations.
- Selection of site.
- Preparation of feasibility report, detatiled project report etc. and its scrutiny and approvals.
- Planning for various raw materials, services and other materials.
- Sequence of all the above activities.

Project Organisation

This part of the completion report will cover the project organisation indicating how the whole construction work was planned. An organisation structure of the project department as planned and actually functioned shall be mentioned. This may cover the division of project functions i.e., construction, contracts, procurement, planning and co-ordination, reporting of progress, etc.

Construction Activities

Under this part, construction activities with the following details about the actuals shall be incorporated in the completion report:

- Appointment of consultants for the project
- Construction organisation set up and personnel including including employment of foreign personnel for supervision, erection and commissioning of the project.

- Land acquisition.
- Survey and soil investigations.
- Preliminary and enabling works.

This will include planning for the temporary facilities like, water and electricity, roads and railways, storages covered and open, construction offices, workshop and repair facilities, development of areas for contractor's camp, construction of temporary labour quarters for construction.

- Construction materials used in the projects such as cement, steel, etc.
- Construction plant and equipment used in the project.
- Capital cost estimates as approved, finalised revisions with reasons for variations etc. to be recorded in the completion report.
- Construction schedule-delays and reasons thereof.
- System of reporting.
- Commissioning minima.
- Special construction techniques.
- List of contractors. Types of work with value done by each contractor.
- Others, such as construction norms, problems and difficulties during construction period.

Financial Management:

In this section following aspects shall be incorporated:

- Procedure for award of contracts, its scrutiny, etc.
- Operation of contracts, such as making payment, settlement

of final bills, etc., settlement of extra items, terms and conditions of the contracts, finalisation of escalation claims etc.

- This will also include organisation of finance and accounts section for project.
- Increase in cost of projects and reasons for variations.
- Actual expenditure on completion of the project.
- Profitability of the project as envisaged in the project report and as actuals.

Materials Management

This section will highlight the actual organisation of purchase department, delegation of powers to the various officers in the purchase department and actual functioning of the department.

Operation Review

Under this section, actuals about the project as experienced by the operation department shall be incorporated. This shall include the actual norms for consumption of various raw materials, power and fuels and other consumables, productivity,etc. against the norms as envisaged in the project report.

And in the last, under the General Section, anything of general nature shall be incorporated.

Questions :

1. What is project audit ? State various parts of the completion report for the major project.

Chapter - 12

MANAGEMENT OF ACCOUNTING RECORDS

Last two decades are the birth stage for the business application to the computers. Even that may born before a century, recent past is the growth stage for computer application in business field.

Payroll and Personnel Records

Pay roll accounting was the first commercial area to become widely computerized. The calculation of wages or salaries involves a number of variable but common factors, which relate to the personal details of each employee, such as gross pay or rate for the job, tax code, national insurance, etc.

The facts are retained on backing store together with information which accumulates each time the payroll is run, such as pay-to-date, and tax deducted for the year. Days worked, overtime and any other information relating to the pay package being processed forms the input data for the particular run. The program contains formulae for calculating all the deductions to arrive at net pay. It will also build up records of tax-to-date, pay-to-date etc. It computes these details, prepares a wage-slip for the employee and writes updated information on the backing store for further use before moving on to consider the next employee. All this is integrated into one payroll system which may be made up of a number of related programs. They are not programs necessarily involving lengthy or complicated calculations but they save a considerable amount of repetitive manual effort.

If pay is made in cash, a program can include an analysis to calculate the exact number of notes and coins of each denomination required for the total pay out and for each individual wage packet. Another program might print out cheques to the individual bank account of each employee. Files generated by payroll are frequently enlarged to include such additional information as length of service, qualifications, training, attendance, sickness and vacation records, thus providing comprehensive personnel records.

The overall payroll system with attendant personnel details and records may comprise tens or even several hundreds of different though related programs. Collectively they form a package or a number of packages. A package may be a standard software developed for a particular range of computers or be produced entirely within the business concern. Increasing use is being made of standard packages. Computers essentially process information and it is only information which has to be provided for a package to operate successfully. A package is designed to accept information according to a specified format and the general aim is that it should be readily usable by non-programming personnel.

The expense of a computer and the attendant system is unlikely to be justified for payroll and personnel records alone. The firm would probably use the computer for further analysis based on the payroll program, e.g. the relationship of total wage costs to jobs in hand, total costs to date, individual job costing, etc. This kind of information, if quickly available and up-to-date, makes it easier for management to improve its efficiency by promptly pin-pointing areas of weakness and strength.

Project Management Information system

The various phases of typical project could be broadly identified as feasibility study, detailed project report, Process design, detailed engineering, procurement, construction and commission. To capture, process and analyse information for a quick and timely decisions making in such a dynamic environment of projects with investments to a tune of Rs.3000-4000 million, involving monitoring of 35,000-40,000 activities spanning a life cycle of 36-40 months in preparation prefabrication/construction drawings, procurement of equipment, bulk material allocation construction planning and material allocation, etc., a tool with matching capabilities is inevitable.

The integrated project management system encompasses the following subsystems:

a. Project profile.
b. Activity networks.
c. Engineering.
d. Procurement.
e. Construction.
f. Commissioning.
g. Human resources.
h. Cost/finances, etc.

Major subsystem of the integrated project management wherein computerization has been introduced are:

1.Cost and Benefit Analysis

The system aids a financial analyst in arriving at investment decisions based on various financial criteria such as IRR, NPV, Break Even Analysis, Cost/Benefit ratio, etc. Based on minimum import formats, it generates various financial statements, and the facility to perform sensitivity analysis on different interacting parameters is also available.

2. Project Network Activity Subsystem

The system performs Network analysis and allows monitoring of activities in a project network at a macro level in an interactive way. Based on CPM/PERT techniques the network on both ADM and PDM representations can be handled. It has facilities of handling imposed dates, calendars and generates various reports indicating I-J lists, current and backlog activities, etc.

3. Engineering subsystem:

The system is towards the Engineering activities and tracks the basic documents such as engineering drawings, material requisition, tender specifications. Based on well defined engineering standard schedules, the system monitors the input requirements for the above documents and aids in preparing drawing schedules in a dynamic fashion and tracks the process of these documents.

4. Procurement Subsystem

This system caters to the procurement activities of equipment, right from the material requisition stages, through various procurement phases till the items are delivered at construction sites. Based on well defined milestone cycles, the system tracks the progress of various phases and generates alarm, exception and status reports besides facilitating responses to ad-hoc query through request by forms.

5. Integrated Material Control System

This system deals with the bulk materials which constitute substantial component of project construction. The system generates Isometrics on computer, along with associated material details, and tracks the various activities of procurement phases of these bulk items till they are available at construction sites.

6. Construction Plan

Considering the requirements of construction management, mini/macro computer systems are made available at the project sites during construction. This system helps in monitoring the various inputs such drawings, material, etc. required for construction activities and tracks the progress of various construction work.

7. Material Allocation System

This system , available on the mini/macro computer at construction sites, aids in monitoring he bulk items in terms of their receipt and requirement, and allocates the items in desired quantities to the contractors, based on priorities and needs.

Computer Applications in Finance and Accounts

Such information as is available seems to show that the most popular uses of business computers are in connection with accounting, wages and cost control. This is not, perhaps, surprising in view of the bulk of data that falls under this heading and the comparative simplicity of the systems involved in handling it, while the hopes of eventual savings in staff employed and desire for speed and accuracy of processing must have been motivating forces. Typical commercial applications of computers are in connection with:

1. Invoicing, sales ledger and statements.
2. Stock control and evaluation.
3. Payroll, pay slips, end-of-year tax returns.
4. Purchases ledger.
5. Credit control.
6. Sales and purchase ledger analyaes.
7. Remittance advices and cheques.
8. Budgetary control.
9. Cost accounting, job costs, standard costs, work in progress, labour registers.
10. Assets registers.
11. Hire purchase records.

Financial Accounting Packages

A financial accounting package is a generalized and flexible set of programs which caters to the accounting needs of organisations. A typical financial accounting aims at meeting just this basic need by providing the business picture as of a particular date through financial statements like Profit & Loss a/c and Balance Sheet, as well as keep up-to-date books of accounts like day books, sub-ledger and general ledger. The salient features of a typical financial accounting package are:

Financing Ratios

This is a concise report for top management compiled through shifting of data on hand. Some key accounting ratios or business measurements are presented like current assets to capital, current assets to current liabilities, fixed assets to capital liquidity ratio, profit to sales, profit to capital, sales to inventory, sales to capital, acid test, etc.

Profit and Loss statement

Besides giving year-to-date position, this statement provides current month's performance under each head of expenses and income. To permit evaluation through comparisons, the following additional information is given against each line item of income and expenses;

a. Percentage of each item to sales.
b. Year-to-date last year position-an average developed from given last year's total base.
c. Year-to-date budget picture --an average compile from given total year's budget.

Balance Sheet

Business status as of date along with status as of last month and year end last year presented side by side in the Balance Sheet, making it a comprehensive business trend report for management. Flexibility in presentation as in case of P&L statement is available to Balance Sheet also.

Day Books

These basic registers required to be maintained for record and audit are provided by the system. There can be as many as 100 Day books and various format options are available to the user like double entry, single entry or columnar types.

With the columnar option, normal requirements of Purchases/Sales Tax Registers can be met. In addition, special presentation needs of selected Day Books like daily totals or progressive to-date totals are provided for.

Ledgers

All transactions entered in various Day Books are posted automatically in Sub-Ledgers or directly into the general ledger, thus providing the audit trail and completing the book-keeping efforts. A highly flexible chart of accounts can be developed by the user taking into account future analytical needs, with the help of the 6-digit code structure available in a typical package. Within each such account further sub-ledger classification is normally possible to the extent of 3-duguts. All except the first high order position of the total 9-digit code is user contro

These are only some of the highlights of a financial accounting package. The system design, input/output formats and job control requirements are normally detailed in the user's manual, copy of which is made available at the time of implementation.

Questions

1. In what way computers con contribute in the area of management and accounting information systems.
2. State the significance of computer applications in finance and accounts.