

UNIVERSITY COLLEGE OF ENGINEERING THIRUKKUVALAI.

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NAGAPATTINAM- 610 204.

DEPARTMENT OF CIVIL ENGINEERING

GE1451 ENGINEERING ECONOMICS AND COST ANALYSIS
IMPORTANT QUESTION WITN ANSWER

VOLUME-I

UNIT-II

PART-A

1. What is financial management?

It is concerned with the duties of the financial managers in the business firm. Financial Management is a operational activity of a business that is responsible for obtaining and effectively utilizing the funds for necessary for efficient operation of business.

2. What are the sources of finance?

The source of capita debt and equity

Equity- equity capital, preference capital, internal accruals.

Debt—term loans, debentures, working capital advances, miscellaneous sources.

3. What is the internal generation of funds?

A quantifiable mathematical rate that portrays how quickly a bank is able to generate equity capital. The Internal capital Generation Rate (ICGR) is calculated by dividing the bank retained earnings by the average balance of the combined equity of all stockholder for a given accounting period. The bank retained earnings are found by subtracting dividends paid from net income.

4. What do you mean by shares?

The holder of a share is the owner of the company there is no question offering any security to shareholders they being owners of the company.

5. What is fund flow statement?

A statement of sources and application of funds is a technical device, designed to analyze the changes in the financial conditions of a business enterprise between two balance sheet dates.

6. What is balance sheet?

A balance sheet is a statement which is prepared for the purpose of finding out the assets and liability position of the concern for the particular period.

7. What are the managerial uses and limitations of fund flow statement?

It is not substitute for a financial statement. It gives only some information's about changes in working capital alone; it indicates only the past year's performance and not for the future.it cannot show much accuracy.

8. What is working capital finance?

Working capital is the excess of current assets over current liabilities. Net working capital- current asset

- current liabilities.
 - 9. What are the limitations of financial statement?

It is ignores the changes in price level, the records of past events only many items in the financial statement are based on personal judgment of the accountant.

10. What is commercial paper?

It represents short term unsecured promissory notes issued by firms which enjoy a fairly high credit rating. It is large firms with considerable financial strength are able to issue a commercial paper.

11. What is Equity financing?

Equity financing will always require consideration of ownership profit sharing, Operational control valuation and exit strategies as important issues to be carefully evaluated.

Although equity financing can cover a wide array of capital source type there are in general several overall categories the following summaries may help you in the equity search

12. What is Debt Financing?

Debt financing does not give the lender ownership control but the principal must be repaid with interest length of the loan interest rates security and other term depend upon for what the loan is being used. (Short term: loan for short period (30-180 days) usually made to cover temporary or seasonal need for inventory or personnel)

13. What is Short term borrowing / loan?

Referring to any investment financial plan or anything else lasting for one year or less. Short term investment and financial plan usually involve less uncertainty than long- term investment and financial plan because, generally speaking market trends are more easily predictable for one year than for any longer period. Likewise short term financial plan are more easily amendable as a result of the short time frame . short term financial plan usually involved investing in short term securities such as T-bills or commercial paper

14. What is Financial Accounting?

Accounting is the recording, classifying and summarizing of business transaction in term of cash the preparation of financial report the analysis and interpretation of these report for the information and guidance of management

15. What is External Commercial borrowing?

(ECB) refer to commercial loans (in the form of bank loans buyers credit, suppliers credit securitized instruments (eg: floating rate notes and fixed rate bonds)) availed from non-resident lenders with minimum average maturity of 3 years.

Part-B

11. Discuss the financial decision making in their organization.

Financial management is concerned with the acquisition, financing and management of assets with some overall goals in mind.

These financial decisions are grouped into three categories

Investment decision

Financing decision

Dividend decision

Investment decision- it is the most important financial decision. It is concerned with deciding the total amount of assets to be held in the firm and their competition

- a) Long- term investment decision it refers to the capital expenditure decision. It is also known as capital budgeting. It involves the evaluation of various capital expenditure proposals in terms of their cost, revenue, profit and risks. Payback period, rate or return is widely used for evaluation of investment proposals.
- **b)** Short term investment decision- it is concerned with the management of working capital. It is also known as liquidity decision. It involves decisions regarding investment in current assets, allocation of funds among cash, receivables inventories. Therefore, liquidity decision is influenced by a tradeoff between liquidity and profitability.

Financing decision-debt and equity are two major sources of long earn finance. Use of debt helps to enhance the earnings of the share holders in practice factors such as control management flexibility legal aspects and loan covenants are also considered.

Dividend decision- the finance manager has to decide whether the firm should distribute all the profits, retain all the profits or distribute a portion and retain the balance.

12. Explain the source of finance in your project preceding their activities.

The source of capital debt and equity

Equity - equity capital, preference capital, internal accruals.

Debt —term loans, debentures, working capital advances, miscellaneous sources.

A share sis undoubtedly a movable property a share has also bee an interest having a money value and made up of diverse rights specified under the articles of association.

Under the companies act 1956 a company can issue two types of shares

- 1. **Preference shares** they have a preferential right to be paid dividend during the lifetime of the company.
- 2. **Equity shares** with reference to any company limited by shares are those which are not preference shares. it may rely on the following methods of raising equity capital. Initial public

Offering, right issue, private placement, preferential allotment.

Internal accruals- a firm consist of depreciation charges and retained earning's

Depreciation- represents the allocation of capital expenditure to various periods over which the capital expenditure is expected to benefit the firm.

Retained earnings- it is that portion of equity earnings

Debt

Term loans- it is also referred to as term finance represent a sources of debt finance which is generally repayable in less than 10 years. They are employed to finance acquisition of fixed assets and working capital margin.

Debentures- it includes debenture stock, bonds and any other securities of a company. Whether constituting a charge on the assets of the company sec 2(2).it is a document which either creates a debt or acknowledge.

Working capital advance- cash credit, loan, purchase or discount of bills, letter of credit Miscellaneous sources- these include (deferred credit, lease and hire, unsecured loans and deposits, special schemes of institutions, subsides and sales tax determents and exemptions, short term loan from financial institutions, commercial paper.

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13. What are the techniques of financial statement? Explain in detail.

The techniques of financial statement analysis

a) Comparative statement b) common size statement c) trend analysis

Comparative statement- the single balance sheet shows the assets an liabilities on a certain date. The comparative balance sheet shows the value of assets and liabilities as on different dates. It has two columns for the data of original balance sheets. It is whether the business is moving in a favorable or unfavorable direction.

Common size statements – financial statements present absolute figures. A comparison of absolute figures could be misleading. The figures reported are converted into percentage to some common base. The sales figure is assumed to be 100 and all figures are expressed as a percentage of sales.

Trend analysis- it is very helpful in making a comparative study of the financial statements for several years. In this technique information for a number of years is taken up and one year is taken as the base year. Each item of the base year is taken as 100 and on that basis the percentages for other years are calculated.

14. a) Explain the Fund flow statement procedure.

It is a statement which shows the inflow and out flow of funds between two dates of balance sheet.

So, it is known as the statement of changes in financial position. We all know that balance sheet shows our financial position and inflow and outflow of fund affects it. So, in company level business, it is very necessary to prepare fund flow statement to know what the sources are and what are applications of fund between two dates of balance sheet. Generally, it is prepare after getting two year balance sheet.

According to Prof. Anthony, "The funds flow statement describes the sources from which additional funds were derived and the use of which these funds were put."

Fund flow statements are known with different names

Statement of source and uses of funds

or summary of financial operations

Movement of working capital statement the procedure of fund flow statement.

For making of fund flow statement. It is very necessary to make statement of changes of working capital. Because net increase in working capital is use of fund and net decrease in working capital is If current assets are less than previous year current assets, it means decrease in working capital. Because, relationship between current assets and working capital is positive and if any changes in current assets, working capital will change in same direction.

If current liabilities are more than previous year current liabilities, it means decrease in working capital.

If current liabilities are less than previous year current liabilities, it means increase in working capital. Relationship between working capital and current liabilities are inverse source of fund.

| Particular ↓ previous year ↓ Current year ↓ Effect on working |
|--|
| Increase ↓ Decrease |
| Current Assets |
| P <u>Cash in hand</u> |
| P Bills receivable |
| P Sundry debtors |
| P Temporary <u>investments</u> |
| • Stocks / inventories |
| Prepaid expenses |
| Accrued incomes |
| otal current assets ↓xxxx ↓ xxxxx↓ |
| Current liabilities |
| P Bills payables |
| Sundry creditors |
| P Bank overdraft |
| Short term <u>advances</u> |
| P Dividends payables |
| |
| Provision for taxation |
| Total current Liabilities↓xxxx ↓xxxx ↓ |
| Γotal current Liabilities↓xxxx ↓xxxx ↓ |
| Total current Liabilities↓xxxx ↓xxxx ↓ Working capital |
| Provision for taxation Fotal current Liabilities Working capital CA- CL |
| Total current Liabilities↓xxxx ↓xxxx ↓ Working capital |

Statement showing the fund from operation

because is the source of fund and will show in fund flow statement's source side. So before making fund flow statement, we must make statement showing the fund from operation.

Add non -fund and non operating items which have been already Debited to profit and loss account

- 1. depreciation
- 2. amortization of fictitious and intangible assets
- Þ goodwill
- Þ patents
- Þ trade marks
- Þ preliminary expenses
- Þ discount on issue of shares
- 3. Appropriation of retained earning such as
- Þ Transfer to general reserve
- Þ Dividend equalization fund
- Þ Transfer to sinking fund
- Þ Contingency reserve etc.
- 4. Loss on sale of any non current or fixed assets such as
- Þ Loss on sale of land and building
- Þ Loss on sale of machinery
- Þ Loss on sale of furniture
- P Loss on sale of long term investments
- 5. Dividends including
- Þ Interim dividend
- Þ Proposed dividend

(If it is an appropriation of profit and not taken as current liability)

- 6. Provision for taxation (if it is not taken as current liability)
- 7. Any other non fund / non operating items which have been debited to P/L account

Less Non – Fund or non operating items which have already been credited to profit and loss account

- 1. Profit or gain from the sale of non current / fixed assets such as
- Þ Profit on sale of land and building
- Þ Profit on sale of plant and machinery

Profit on sale of long term investment etc.

- 2. Appreciation in the value of fixed assets such as increase in the value of land if it has been credited to profit and loss account
- 3. Dividends received
- 4. excess provision retransferred to profit and loss account or written back.
- 5. any other non operating item which has been credited to profit and loss account
- 6. opening balance of profit and loss account or retained earnings as given in the balance sheet

3rd Step

Fund flow statement

A) Source of funds

- 1. fund from operation (balance of second step)
- 2. issue of shares capital
- 3. issue of debentures
- 4. raising of long term loans
- 5. receipts from partly paid shares, called up
- 6. amount received from sales of non current or fixed assets
- 7. non trading receipts such as dividend received
- 8. sale of investments (Long term)
- 9. decrease in working capital as per schedule of changes in working capital

 total ----->

 XXXXX ↓

Applications or uses of funds

- 1. Funds lost in operations (Balance negative in second step)
- 2. redemption of preference share capital
- 3. redemption of debentures
- 4. repayment of long term loans
- 5. purchase of long term loans
- 6. Purchase of long term investments
- 7. non trading payments
- 8. Payment of tax
- 9. Payment of dividends
- 10. Increase in working capital (As per positive balance of ist step)

15. from the following balance sheets, prepare fund flow statement.

Answer- increase in working capital Rupees 16200, source of fund- 16200

| liabilities | Dec 1999 | Dec2000 | assests | Dec1999 | Dec2000 |
|-------------|----------|---------|--------------|---------|---------|
| Redeemable | | 10,000 | Fixed assets | 41,000 | 40,000 |
| preference | | | | | |
| shares | | | | | |

| Equity shares | 40,000 | 40,000 | Less depreciation | 11,000 | 15,000 |
|----------------------|--------|--------|-------------------|--------|--------|
| General reserve | 2,000 | 2,000 | | 30,000 | 25,000 |
| Profit loss account | 1,000 | 12,000 | debtors | 20,000 | 24,000 |
| debentures | 6,000 | 7,000 | stock | 30,000 | 35,000 |
| Creditors | | | Prepaid expenses | 300 | 500 |
| Provision for tax | | | cash | 1200 | 3500 |
| Prposed dividend | 5,000 | 5,800 | | | |
| Bank overdraft | 12,500 | 6,800 | | | |
| | 81500 | 88000 | | 81500 | 88000 |

16. Discuss the assistance from government budgeting support and international finance corporations.

The IFC is owned and governed by its member countries, but has its own executive leadership and staff which conduct its normal business operations. It is a <u>corporation</u> whose <u>shareholders</u> are member governments which provide <u>paid-in capital</u> and which have the right to vote on its matters. Originally more financially integrated with the World Bank Group, the IFC was established separately and eventually became authorized to operate as a financially autonomous entity and make independent investment decisions. It offers an array of <u>debt</u> and <u>equity</u> financing services and helps companies face their risk exposures, while refraining from participating in a <u>management</u> capacity. The corporation also offers advice to companies on making decisions, evaluating their impact on the environment and society, and being responsible. It advises governments on building infrastructure and partnerships to further support private sector development.

17. What is Financing? Explain the type of financing Statement?

Financial Statements represent a formal record of the financial activities of an entity. These are written reports that quantify the financial strength, performance and liquidity of a company. Financial Statements reflect the financial effects of business transactions and events on the entity.

The four main types of financial statements are:

1. Statement of Financial Position

Statement of Financial Position, also known as the Balance Sheet, presents the financial position of an entity at a given date. It is comprised of the following three elements:

 Assets: Something a business owns or controls (e.g. cash, inventory, plant and machinery, etc)

- <u>Liabilities:</u> Something a business owes to someone (e.g. creditors, bank loans, etc)
- Equity: What the business owes to its owners. This represents the amount of capital that remains in the business after its assets are used to pay off its outstanding liabilities. Equity therefore represents the difference between the assets and liabilities.

View detailed explanation and Example of Statement of Financial Position

2. Income Statement

Income Statement, also known as the *Profit and Loss Statement*, reports the company's financial performance in terms of net profit or loss over a specified period. Income Statement is composed of the following two elements:

- o **Income:** What the business has earned over a period (e.g. sales revenue, dividend income, etc)
- **Expense:** The cost incurred by the business over a period (e.g. salaries and wages, depreciation, rental charges, etc)

Net profit or loss is arrived by deducting expenses from income.

View detailed explanation and Example of Income Statement

3. Cash Flow Statement

Cash Flow Statement, presents the movement in cash and bank balances over a period. The movement in cash flows is classified into the following segments:

- Operating Activities: Represents the cash flow from primary activities of a business.
- o Investing Activities: Represents cash flow from the purchase and sale of assets other than inventories (e.g. purchase of a factory plant)
- Financing Activities: Represents cash flow generated or spent on raising and repaying share capital and debt together with the payments of interest and dividends.

View detailed explanation and Example of Cash Flow Statement

4. Statement of Changes in Equity

Statement of Changes in Equity, also known as the *Statement of Retained Earnings*, details the movement in owners' equity over a period. The movement in owners' equity is derived from the following components:

- o Net Profit or loss during the period as reported in the <u>income statement</u>
- o Share capital issued or repaid during the period
- Dividend payments
- o Gains or losses recognized directly in equity (e.g. revaluation surpluses)
- o Effects of a change in accounting policy or correction of accounting error

View detailed explanation and Example of Statement of Changes in Equity

18.. Explain short term borrowing and Long term borrowing.

Short Term Loans

Short term loans are generally up to about three years. A popular short term loan is a payday loan. Someone may take a payday loan out in the event of an emergency such as car repairs, taking a vacation, or other unexpected bills. Payday loans are like a cash advance in which the payment comes from your bank account on your next pay date. These are very popular because of the few requirements needed to be approved for the loan. Unlike a long term loan, you can get cash within 48 hours from companies like Online Payday Loans.net and there are no credit checks. These loans are generally up to \$2000.

Another popular short term loan is a flexible loan. This is generally a credit based loan, but up to \$25,000. The term is generally 12 months. Short term loans are at a higher interest rate than a long term loan, capitalizing on the length of your loan. A lender will use the situation that you do not have credit in order to offer the higher interest rate.

Long Term Loans

Long term loans can be taken over an extended amount of time. Most common long term loans are mortgages, student loans, wedding loans, start-up business loans, and home improvement loans. A long term loan is credit based. The better your credit score the better your interest rates will be. A long term loan can be in the form of a secure or an unsecured loan. A secure loan requires a form of collateral or asset, such as a title to your car or your home. An unsecured loan does not require any assets and has a higher interest rate as the lender has more at stake. You can think of this as a line of credit with your bank or a credit card.

Taking a long term loan is generally through a bank or credit union, unlike a short term loan. The amount of the loan will be based on your credit history and current income. With long term loans, you have greater flexibility with payment options. For instance, mortgage loans offer a fixed interest mortgage loan, in which the rate is the same over the term of the loan and the payments are split equally. An adjustable rate mortgage loan's rate can adjust every year. There is also an interest only loan, of which a person can pay only the interest of the loan for a set amount of years, and then start paying on the principal. Unlike short term loans, long term loans can help establish credit.

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