FINANCIAL MANAGEMENT THEORY FOR IPCC

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Scope and Objectives of Financial Management

Q1. Outline the methods and tools of Financial Management. *(Final-Nov. 1996 - 6 marks)*

A. Finance Manager has to decide optimum capital structure to maximise the wealth of the shareholders. For this judicious use of financial leverage or trading on equity is important to increase the return to shareholders. In planning the capital structure, the aim is to have proper mix of debt, equity and retained earnings. EPS Analysis, PE Ratios and mathematical models are used to determine the proper debt-equity mix to derive advantages to the owners and enterprise.

In the area of investment decisions, pay back method, average rate of returns, internal rate of return, net present value, profitability index are some of the methods in evaluating capital expenditure proposals.

In the area of working capital management, certain techniques are adopted such as ABC Analysis, Economic order quantities, Cash management models, etc., to improve liquidity and to maintain adequate circulating capital.

For evaluation of firm's performance, ratio analysis is pressed into service. With the help of ratios an investor can decide whether to invest in a firm or not. Funds flow statement, cash flow statement and projected financial statements help a lot to the finance manager in providing funds in right quantities and at right time.

Q2. Explain Wealth maximisation and Profit maximisation objectives of financial management.

A. Efficient financial management requires the existence of some objectives or goals because judgement as to whether or not a financial decision is efficient must be made in the light of some objective.

(i) **Profit Maximization:** It has traditionally been argued that the objective of a company is to earn profit, hence the objective of financial management is profit maximisation. This implies that the finance manager has to make his decisions in a manner so that the profits of the concern are maximised. Each alternative, therefore, is to be seen as to whether or not it gives maximum profit.

However, profit maximisation cannot be the sole objective of a company. It is at best a limited objective. If profit is given undue importance, a number of problems can arise. Profit maximisation as an objective is too narrow. It fails to take into account the social considerations as also the obligations to various interests of workers, consumers, society, as well as ethical trade practices. If these factors are ignored, a company cannot survive for long. Profit maximisation at the cost of social and moral obligations is a short sighted policy.

(ii) **Wealth / Value Maximisation:** It is the duty of the finance manager to see that the shareholders get good returns on the shares. Hence, the value of the share should increase in the share market. The share value is affected by many things. If a company is able to make good sales and build a good name for itself, in the industry, the company's share value goes up. If the company makes a risky investment, people may lose confidence in the company and the share value will come down. So, this means that the finance manager has the power to influence decisions regarding finances of the company. The decisions should be such that the share value does not decrease. Thus, wealth or value maximisation is the most important goal of financial management.

Many companies have several other goals for the welfare of the society, like improving community life, supporting education and research, solving societal problems, etc. But wealth maximisation means that the company is using its resources in a good manner. If the share value is to stay high, the company has to reduce its costs and use the resources properly. If the company follows the goal of wealth maximisation, it means that the company will promote only those policies that will lead to an efficient allocation of resources.

To achieve wealth maximization, the finance manager has to take careful decision in respect of *Investment, Financing and Dividend payout*.

Q3. Explain as to how the wealth maximisation objective is superior to the profit maximisation objective.

(Final-Nov 1999)(PE2-May 2003 & Nov 2003) (3 marks)

Discuss the conflicts in Profit versus Wealth maximization principle of the firm

(PE2-Nov. 2007 - 4 marks)(PCC June 2009 – 2 marks)

Differentiate between Profit maximization and Value maximization.

A. Profit versus Wealth Maximization Principle of the Firm

The company may pursue profit maximisation goal but that may not result into creation of shareholder value. The profits will be maximized if company grows through diversification and expansion. But all growth may not be profitable. Only that growth is profitable where

ROA > WACC or ROE > K_E or Firms invest in positive NPV profits.

However, profit maximisation cannot be the sole objective of a company. It is at best a limited objective. If profit is given undue importance, a number of problems can arise like the term profit is vague, profit maximisation has to be attempted with a realisation of risks involved, it does not take into account the time pattern of returns and as an objective it is too narrow.

Whereas, on the other hand, wealth maximisation, as an objective, means that the company is using its resources in a good manner. If the share value is to stay high, the company has to reduce its costs and use the resources properly. If the company follows the goal of wealth maximisation, it means that the company will promote only those policies that will lead to an efficient allocation of resources.

The maximisation of a firm's value as reflected in the market price of a share is viewed as a proper goal of a firm. The profit maximisation can be considered as a part of the wealth maximisation strategy.

Q4. In recent years, there have been a number of environmental, pollution and other regulations imposed on businesses. In view of these changes, is maximisation of shareholder wealth still a realistic objective?

A. It is the duty of the finance manager to see that the shareholders get good returns on the shares. Hence, the value of the share should increase in the share market. The share value is affected by many things. If a company is able to make good sales and build a good name for itself, in the industry, the company's share value goes up. If the company makes a risky investment, people may lose confidence in the company and the share value will come down. So, this means that the finance manager has the power to influence decisions regarding finances of the company. The decisions should be such that the share value does not decrease. Thus, wealth or value maximisation is the most important goal of financial management. However an enterprise has other considerations like the obligations to various interests of workers, consumers, society, as well as ethical trade practices.

Many companies have several other goals for the welfare of the society, like improving community life, supporting education and research, solving societal problems, etc. But wealth maximisation means that the company is using its resources in a good manner. If the share value is to stay high, the company has to reduce its costs and use the resources properly. Hence the enterprise has to strike a balance between various social and other considerations while maximising its wealth.

Q5. Discuss the functions of a Chief Financial Officer. *(PE2 May 2004 - 3 marks)*

Write short note on Functions of Finance Manager. *(Final May 1998 - 5 marks)*

A. Functions of a Chief Financial Officer / Finance Manager

The twin aspects viz procurement and effective utilization of funds are the crucial tasks, which the CFO/Finance Manager faces. The Chief Finance Officer / Finance Manager is required to look into financial implications of any decision in the firm. Thus all decisions involving management of funds comes under the purview of CFO / Finance Manager. These are namely

– Estimating requirement of funds

- Decision regarding capital structure
- Investment decisions
- Dividend decision
- Cash management
- Evaluating financial performance
- Financial negotiation
- Keeping in touch with stock exchange quotations & behaviour of share prices

Q6. What are the main responsibilities of a Chief Financial Officer of an organisation? *(PCC May 2007 – 3 marks)*
Explain the role of Finance Manager in the changing scenario of financial management in India. *(PE2 June 2009 – 4 marks)*
Discuss the role of a chief financial officer.

A. **Role / responsibilities of Finance Manager in the Changing Scenario of Financial Management in India**

In the modern enterprise, the finance manager occupies a key position and his role is becoming more and more pervasive and significant in solving the finance problems. The traditional role of the finance manager was confined just to raising of funds from a number of sources, but the recent development in the socio-economic and political scenario throughout the world has placed him in a central position in the business organisation. He is now responsible for shaping the fortunes of the enterprise, and is involved in the most vital decision of allocation of capital like mergers, acquisitions, etc. He is working in a challenging environment which changes continuously.

Emergence of financial service sector and development of internet in the field of information technology has also brought new challenges before the Indian finance managers. Development of new financial tools, techniques, instruments and products and emphasis on public sector undertakings to be self-supporting and their dependence on capital market for fund requirements have all changed the role of a finance manager. His role, especially, assumes significance in the present day context of liberalization, deregulation and globalization.

The chief financial officer of an organisation plays an important role in the company's goals, policies, and financial success. *His main responsibilities include*:

(a) Financial analysis and planning: Determining the proper amount of funds to be employed in the firm.
(b) Investment decisions: Efficient allocation of funds to specific assets.
(c) Financial and capital structure decisions: Raising funds on favourable terms as possible, i.e., determining the composition of liabilities.
(d) Management of financial resources (such as working capital).
(e) Risk Management: Protecting assets.

Note: Chief Financial Officer (CFO) and Finance Manager are one and the same, and can be used inter-changeably.

Q7. Explain two basic functions of Financial Management. *(PE2 Nov 2002 - 4 marks)(PCC Nov 2009 – 3 marks)*
Differentiate between Procurement of funds and Utilization of funds.
What are the two main aspects of the finance function?

A. Two basic functions of Financial Management

Financial Management deals with the procurement of funds and their effective utilization in the business. The first basic function of financial management is procurement of funds and the other is their effective utilization.

(i) **Procurement of funds:** Funds can be procured from different sources, their procurement is a complex problem for business concerns. Funds procured from different sources have different characteristics in terms of risk, cost and control.

The funds raised by issuing equity share poses no risk to the company. The funds raised are quite expensive. The issue of new shares may dilute the control of existing shareholders.

Debenture is relatively cheaper source of funds, but involves high risk as they are to be repaid in accordance with the terms of agreement. Also interest payment has to be made under any circumstances. Thus there are risk, cost and control considerations, which must be taken into account before raising funds.

Funds can also be procured from banks and financial institutions subject to certain restrictions.

Instruments like commercial paper, deep discount bonds, etc also enable to raise funds.

Foreign direct investment (FDI) and Foreign Institutional Investors (FII) are two major routes for raising funds from international sources, besides ADR's and GDR's.

(ii) **Effective utilisation of funds:** Since all the funds are procured at a certain cost, therefore it is necessary for the finance manager to take appropriate and timely actions so that the funds do not remain idle. If these funds are not utilised in the manner so that they generate an income higher than the cost of procuring them then there is no point in running the business.

Q8. Write short note on the following:

(a) Inter relationship between investment, financing and dividend decisions. *(Final-Nov. 1999) (5 marks)*

Differentiate between Investment decisions and Dividend decisions.

Write short note Financing decisions. What decisions are taken by a Finance Manager for maximisation of wealth?

(b) Scope of financial management

(c) Finance function *(PE2-May 2008) (2 marks)*

Importance of financial management

A.

(a) Inter-relationship between Investment, Financing and Dividend Decisions

The finance functions are divided into three major decisions, viz., investment, financing and dividend decisions. It is correct to say that these decisions are inter-related because the underlying objective of these three decisions is the same, i.e. maximisation of shareholders' wealth. Since investment, financing and dividend decisions are all interrelated, one has to consider the joint impact of these decisions on the market price of the company's shares and these decisions should also be solved jointly.

Investment decision: The investment of long term funds is made after a careful assessment of the various projects through capital budgeting and uncertainty analysis. However, only that investment proposal is to be accepted which is expected to yield at least so much return as is adequate to meet its cost of financing. This have an influence on the profitability of the company and ultimately on its wealth.

Financing decision: Funds can be raised from various sources. Each source of funds involves different issues. The finance manager has to maintain a proper balance between long-term and short-term funds. With the total volume of long-term funds, he has to ensure a proper mix of loan funds and owner's funds. The optimum financing mix will increase return to equity shareholders and thus maximise their wealth.

Dividend decision: The finance manager also assists the top management with the decision, as how much profit is to be distributed as dividend and how much profit is to be retained. An optimal dividend pay-out ratio maximises shareholders' wealth.

The above discussion makes it clear that investment, financing and dividend decisions are interrelated and are to be taken jointly keeping in view their joint effect on the shareholders' wealth.

(b) As an integral part of the overall management, financial management is mainly concerned with acquisition and use of funds by an organization. Following aspects are taken up in detail under the study of financial management:

(a) Determination of size of the enterprise and determination of rate of growth.

(b) Determining the composition of assets of the enterprise.

(c) Determining the mix of enterprise's financing i.e. consideration of level of debt to equity, etc.

(d) Analyse planning and control of financial affairs of the enterprise.

The scope of financial management has undergone changes over the years. Until the middle of this century, its scope was limited to procurement of funds under major events in the life of the enterprise such as promotion, expansion, merger, etc. In the modern times, the financial management includes besides procurement of funds, the three different kinds of decisions as well namely, investment, financing and dividend.

(Write few sentences on each of the 3 decisions viz. investment, financing and dividend from preceeding answer)

To ensure maximum return, funds flowing in and out of the firm should be constantly monitored to assure that they are safeguarded and properly utilized.

(c) The finance function / financial management is most important for all business enterprises. It remains a focus of all activities. It starts with the setting up of an enterprise. It is concerned with

- raising of funds
- deciding the cheapest source of finance
- utilization of funds raised
- making provision for refund when money is not required in the business
- deciding the most profitable investment
- managing the funds raised
- and paying returns to the providers of funds in proportion to the risks undertaken by them.

Therefore, it aims at acquiring sufficient funds, utilizing them properly, increasing the profitability of the organization and maximizing the value of the organization and ultimately the shareholder's wealth.

Q9. Explain the limitations of profit maximization objective of Financial Management *(PCC Nov 2007 – 3 marks)*

A. Limitations of Profit Maximization Objective of Financial Management

(a) Time factor is ignored.

(b) It is vague because it is not clear whether the term relates to economic profit, accounting profit, profit after tax or before tax.

(c) The term maximization is also ambiguous.

(d) It ignores the risk factor.

Q10. Differentiate between Financial Management and Financial Accounting. *(ME) (PCC Nov 2009 – 2 marks)*

A. The relationship between financial management and accounting are closely related to the extent that accounting is an important input in financial decision making. Though financial management and accounting are closely related, still they differ in the treatment of funds and also with regards to decision making.

Treatment of Funds: In accounting, the measurement of funds is based on the accrual principle i.e. revenue is recognised at the point of sale and not when collected and expenses are recognised when they are incurred rather than when actually paid. The accrual based accounting data do not reflect fully the financial conditions of the organisation. Whereas, the treatment of funds, in financial management is based on cash flows. The revenues are recognised only when cash is actually received (i.e. cash inflow) and expenses are recognised on actual payment (i.e. cash outflow). Thus, cash flow based returns help financial managers to avoid insolvency and achieve desired financial goals.

Decision making: The purpose of accounting is to collect and present financial data on the past, present and future operations of the organisation. The financial manager uses these data for financial decision making. It is not that the financial managers cannot collect data or accountants cannot make decisions. But the chief focus of an accountant is to collect data and present the data while the financial manager.s primary responsibility relates to financial planning, controlling and decision making. Thus, in a way it can be stated that financial management begins where accounting ends.

Q11. Differentiate between Traditional phase and Modern phase.
Explain evolution of Financial Management.

A. Financial management evolved gradually over the past 50 years. The evolution of financial management is divided into three phases. The three stages of its evolution are:

The Traditional Phase**:** During this phase, financial management was considered necessary only during occasional events such as takeovers, mergers, expansion, liquidation, etc. Also, when taking financial decisions in the organisation, the needs of outsiders to the business was kept in mind.

The Transitional Phase**:** During this phase, the day-to-day problems that financial managers faced were given importance. The general problems related to funds analysis, planning and control were given more attention in this phase.

The Modern Phase**:** Modern phase is still going on. The scope of financial management has greatly increased now. It is important to carry out financial analysis for a company. This analysis helps in decision making. During this phase, many theories have been developed regarding efficient markets, capital budgeting, option pricing, valuation models and also in several other important fields in financial management.

Q12. What are three main considerations in procuring funds?

A. Since funds can be obtained from different sources therefore their procurement is always considered as a complex problem by business concerns. Funds procured from different sources have different characteristics in terms of *risk, cost and control*.

Risk: The funds raised by the issue of equity shares are the best from the risk point of view for the firm, since there is no question of repayment of equity capital except when the firm is under liquidation.

Cost: From the cost point of view, however, equity capital is usually the most expensive source of funds. This is because the dividend expectations of shareholders are normally higher than prevalent interest rate and also because dividend is not allowed as an expense under the Income Tax Act. Also the issue of new shares to public may dilute the control of the existing shareholders. Debentures as a source of funds are comparatively cheaper than the shares because of their tax advantage.

Control: Issue of equity shares leads to dilution of control and owed funds do not carry such disadvantage.

There are thus risk, cost and control considerations which a finance manager must consider while procuring funds. The cost of funds should be at the minimum level for that a proper balancing of risk and control factors must be carried out.

Funds can also be procured from banks and financial institutions; they generally provide funds subject to certain restrictive covenants. These covenants restrict the freedom of the borrower to raise loans from other sources. Besides above there are several other financial instruments used today for raising funds e.g., commercial paper, deep discount bonds etc.

Funds can be raised indigenously as well as from abroad. Foreign Direct Investment (FDI) and Foreign Institutional Investors (FII) are two major routes for raising funds from foreign sources besides ADR (American depository receipts) and GDR.s (Global depository receipts).

Time Value Of Money

Q1. Explain the relevance of time value of money in financial decisions. *(PCC May 2008 – 2 marks)*

A. Time value of money means that worth of a rupee received today is different from the worth of a rupee to be received in future. The preference of money now as compared to future money is known as time preference for money.

- A rupee today is more valuable than rupee after a year due to several reasons:
- Risk: there is uncertainty about the receipt of money in future.
- Preference for present consumption: Most of the persons and companies in general, prefer current consumption over future consumption.
- Inflation: In an inflationary period a rupee today represents a greater real purchasing power than a rupee a year hence.
- Investment opportunities: Most of the persons and companies have a preference for present money because of availabilities of opportunities of investment for earning additional cash flow.
- Many financial problem involve cash flow accruing at different points of time for evaluating such cash flow an explicit consideration of time value of money is required.

Financial Analysis & Planning

Q1. Distinguish between Cash Flow and Fund Flow statement. *(PE2-Nov.2002, May 2004) (3 marks)*

A. Both funds flow and cash flow statements are used in analysis of past transactions of a business firm. The differences between these two statements are given below:

(a) Funds 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 only is taken into consideration.

(b) Funds flow statement analyses the sources and application of funds of long-term nature and the net increase or decrease 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.

(c) 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.

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

Q2. Discuss any three ratios computed for investment analysis. *(PE2--Nov.2004) (3 marks)*

A. Three ratios computed for investment analysis are as follows;

(i) Earning per share $= \dfrac{\text{Profit after tax}}{\text{Number of equity shares outstanding}}$

(ii) Dividend yield ratio $= \dfrac{\text{Equity dividend per share} \times 100}{\text{Market price per share}}$

(iii) Return on capital employed $= \dfrac{\text{Net profit before interest and tax} \times 100}{\text{Capital employed}}$

Q3. Discuss the financial ratios for evaluating company performance on operating efficiency and liquidity position aspects. *(PE2-Nov. 2006) (4 marks)*

Explain how financial ratios help in evaluating performance.

A. (a) **Liquidity Position:** With the help of ratio analysis one can draw conclusions regarding liquidity position of a firm. The liquidity position of a firm would be satisfactory if it is able to meet its current obligations when they become due. This ability is reflected in the liquidity ratios of a firm. The liquidity ratios are particularly useful in credit analysis by banks and other suppliers of short-term loans.

(b) **Long-term Solvency:** Ratio analysis is equally useful for assessing the long-term financial viability of a firm. This aspect of the financial position of a borrower is of concern to the long term creditors, security analysts and the present and potential owners of a business. The long term solvency is measured by the leverage/capital structure and profitability ratios which focus on earning power and operating efficiency.

(c) **Operating Efficiency:** Ratio analysis throws light on the degree of efficiency in the management and utilisation of its assets. The various activity ratios measure this kind of operational efficiency.

(d) **Overall Profitability :** Unlike the outside parties which are interested in one aspect of the financial position of a firm, the management is constantly concerned about the overall profitability of the enterprise. That is, they are concerned about the ability of the firm to meet its short-term as well as long-term obligations to its creditors, to ensure a reasonable return to its owners and secure optimum utilisation of the assets of the firm. This is possible if an integrated view is taken and all the ratios are considered together.

(e) **Inter-firm Comparison:** Ratio analysis not only throws light on the financial position of a firm but also serves as a stepping stone to remedial measures. This is made possible due to inter-firm comparison/comparison with industry averages. An inter-firm comparison would demonstrate the relative position vis-a-vis its competitors. If the results are at variance either with the industry average or with those of the competitors, the firm can seek to identify the probable reasons and, in the light, take remedial measures.

(f) **Financial Ratios for Budgeting:** In this field ratios are able to provide a great deal of assistance, budget is only an estimate of future activity based on past experience, in the making of which the relationship between different spheres of activities are invaluable. It is usually possible to estimate budgeted figures using financial ratios.

Q4. Explain the need of debt-service coverage ratio. *(PCC May 2007 – 2 marks)*

How is Debt service coverage ratio calculated? What is its significance? *(PCC June 2009 – 2 marks)*

A. **Debt Service Coverage Ratio:** Debt service coverage ratio indicates the capacity of a firm to service a particular level of debt i.e. repayment of principal and interest. High credit rating firms target DSCR to be greater than 2 in its entire loan life. High DSCR facilitates the firm to borrow at the most competitive rates. Lenders are interested in this ratio to judge the firm's ability to pay off current interest and installments.

$$\text{Debt service coverage ratio} = \frac{\text{Earnings available for debt service}}{\text{Interest + Installment}}$$

Where, Earning for debt service = Net profit + Non-cash operating expenses like depreciation and other amortizations + Non-operating adjustments like loss on sale of Fixed assets + Interest on Debt Fund

$$\text{Or, Debt Service Coverage Ratio} = \frac{\text{EBITDA}}{\text{Interest} + \dfrac{\text{Principal Repayment Due}}{1 - \text{Tc}}}$$

Q5. Discuss the composition of Return on Equity (ROE) using the DuPont model. *(PCC June 2009 – 3 marks)*

A. **Composition of Return on Equity using the DuPont Model**

There are three components in the calculation of return on equity using the traditional DuPont model- the net profit margin, asset turnover, and the equity multiplier. By examining each input individually, the sources of a company's return on equity can be discovered and compared to its competitors.

(a) ***Net Profit Margin:*** The net profit margin is simply the after-tax profit a company generates for each rupee of revenue.

Net profit margin = Net Income ÷ Revenue

Net profit margin is a safety cushion; the lower the margin, lesser the room for error.

(b) ***Asset Turnover:*** The asset turnover ratio is a measure of how effectively a company converts its assets into sales. It is calculated as follows:

Asset Turnover = Revenue ÷ Assets

The asset turnover ratio tends to be inversely related to the net profit margin; i.e., the higher the net profit margin, the lower the asset turnover.

(c) ***Equity Multiplier:*** It is possible for a company with terrible sales and margins to take on excessive debt and artificially increase its return on equity. The equity multiplier, a measure of financial leverage, allows the investor to see what portion of the return on equity is the result of debt. The equity multiplier is calculated as follows:

Equity Multiplier = Assets ÷ Shareholders' Equity.

Calculation of Return on Equity

To calculate the return on equity using the DuPont model, simply multiply the three components (net profit margin, asset turnover, and equity multiplier.)

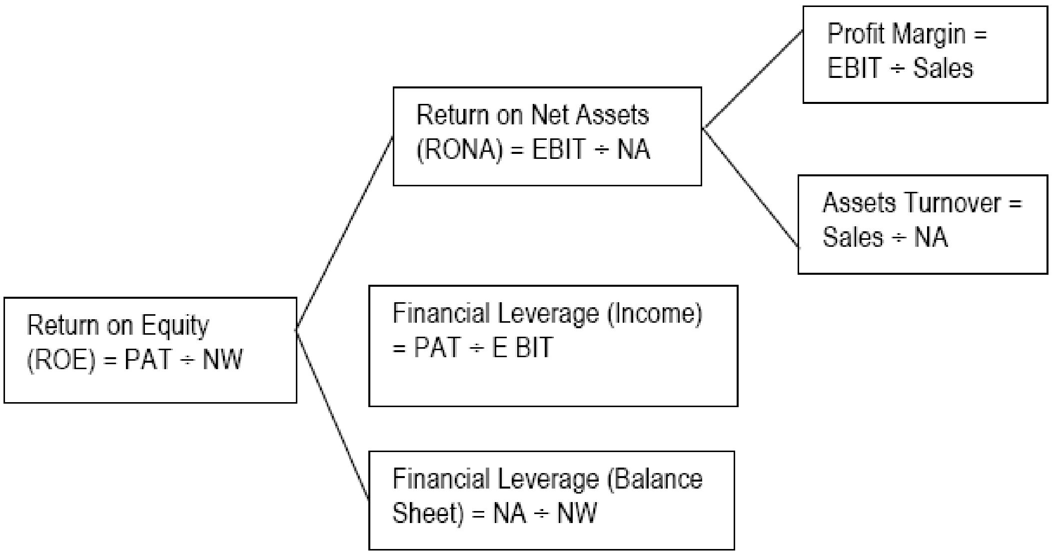
Return on Equity = Net profit margin× Asset turnover × Equity multiplier

Q6. Diagrammatically present the DU PONT CHART to calculate return on equity. *(PCC May 2007 – 3 marks)*

A. **Du Pont Chart**

There are three components in the calculation of return on equity using the traditional DuPont model- the net profit margin, asset turnover, and the equity multiplier. By examining each input individually, the sources of a company's return on equity can be discovered and compared to its competitors.

Return on Equity = (Net Profit Margin) × (Asset Turnover) × (Equity Multiplier)



Du Pont Chart

Q7. How is return on capital employed calculated? What is its significance? *(PCC Nov 2008 – 2 marks)*

A. Return on Capital Employed (ROCE): It is the most important ratio of all. It is the percentage of return on funds invested in the business by its owners. In short, it indicates what returns management has made on the resources made available to them before making any distribution of those returns.

$$\text{Return on Capital Employed} = \frac{\text{Return}}{\text{Capital Employed}} \times 100$$

Where,

Return = Net Profit
± Non-trading adjustments (but not accrual adjustments for amortization of preliminary expenses, goodwill, etc.)
+ Interest on long term debts + Provision for tax
– Interest/Dividend from non-trade investments

Capital Employed = Equity Share Capital
+ Reserve and Surplus
+ Pref. Share Capital
+ Debentures and other long term loan
– Misc. expenditure and losses
– Non-trade Investments.

Intangible assets (assets which have no physical existence like goodwill, patents and trade marks) should be included in the capital employed. But no fictitious asset should be included within capital employed.

Q8. What is quick ratio? What does it signify? *(PCC Nov 2008 – 2 marks)*

A. **Quick Ratio:** It is a much more exacting measure than the current ratio. It adjusts the current ratio to eliminate all assets that are not already in cash (or near cash form). A ratio less than one indicates low liquidity and hence is a danger sign.

$$\text{Quick Ratio} = \frac{\text{Quick Assets.}}{\text{Current Liabilities}}$$

Where,

Quick Assets = Current Assets – Inventory

Another variation of Quick Ratio is :

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Quick Liabilities}}$$

Where,

Quick Liabilities = Current Liabilities – Bank Overdraft – Cash Credit

Q9. What do you mean by Stock Turnover ratio and Gearing ratio? *(PCC Nov 2008 – 3 marks)*

A. Stock Turnover Ratio and Gearing Ratio

Stock Turnover Ratio helps to find out if there is too much inventory build up. An increasing stock turnover figure or one which is much larger than the "average" for an industry may indicate poor stock management. The formula for the Stock Turnover Ratio is as follows :

$$\text{Stock Turnover ratio} = \frac{\text{Cost of Sales}}{\text{Average inventory}} \quad \text{or} \quad \frac{\text{Turnover}}{\text{Average inventory}}$$

Gearing Ratio indicates how much of the business is funded by borrowing. In theory, the higher the level of borrowing (gearing), the higher are the risks to a business, since the payment of interest and repayment of debts are not "optional" in the same way as

dividends. However, gearing can be a financially sound part of a business's capital structure particularly if the business has strong, predictable cash flows. The formula for the Gearing Ratio is as follows :

$$\text{Gearing Ratio} = \frac{\text{Borrowings (all long term debts including normal overdraft)}}{\text{Net Assets or Shareholders' funds}}$$

Q10. Explain briefly the limitations of Financial Ratios. *(PCC Nov 2009 – 2 marks)*

A. The limitations of financial ratios are listed below:

(i) *Diversified product lines:* Many businesses operate a large number of divisions in quite different industries. In such cases ratios calculated on the basis of aggregate data cannot be used for inter-firm comparisons.

(ii) *Financial data are badly distorted by inflation.*

(iii) *Seasonal factors* may also influence financial data. For example, inventory levels vary significantly in a seasonal business.

(iv) *To give a good shape to the popularly used financial ratios (like current ratio, debt- equity ratios, etc.*), the business may make some year-end adjustments.

(v) *Differences in accounting policies and accounting period*: It can make the accounting data of two firms non-comparable as also the accounting ratios.

(vi) *There is no standard set of ratios against which a firm's ratios can be compared*.

(vii) *It is very difficult to generalise whether a particular ratio is good or bad*.

(viii) *Financial ratios are inter-related, not independent*: Viewed in isolation one ratio may highlight efficiency. But when considered as a set of ratios they may speak differently. Such interdependence among the ratios can be taken care of through multivariate analysis.

Financial ratios provide clues but not conclusions. These are tools only in the hands of experts because there is no standard ready-made interpretation of financial ratios.

Q11. Explain the utility/benefit of cash flow analysis.

A. A business enterprise needs sufficient cash to meet its various obligations in the near future such as payment for purchase of fixed assets, payment of debts maturing in the near future, expenses of the business, etc. A historical analysis of the different sources and applications of cash will enable the management to make reliable cash flow projections for the immediate future. It may then plan out for investment of surplus or meeting the deficit, if any.

Cash flow information is useful in assessing the ability of the enterprise to generate cash and cash equivalents and enables users to develop models to assess and compare the present value of the future cash flows of different enterprises. It also enhances the comparability of the reporting of operating performance by different enterprises because it eliminates the effects of using different accounting treatments for the same transactions and events.

Thus, a cash flow analysis is an important financial tool for the management. Its chief advantages are as follows:

- ♦ Helps in efficient cash management.
- ♦ Helps in internal financial management.
- ♦ Discloses the movements of cash.
- ♦ Discloses the success or failure of cash planning.

Q12. *Explain the various limitations of cash flow analysis.*

A. Cash flow analysis is a useful tool of financial analysis. However, it has its own limitations. These limitations are as under:

1. Cash flow statement cannot be equated with the Income Statement. An Income Statement takes into account both cash as well as non-cash items and, therefore, net cash flow does not necessarily mean net income of the business.
2. The cash balance as disclosed by the cash flow statement may not represent the real liquid position of the business since it can be easily influenced by postponing purchases and other payments.

3. Cash flow statement cannot replace the Income Statement or the Funds Flow Statement. Each of them has a separate function to perform.

Q13. Explain Funds Flow Analysis.

A. *Fund* means working capital. Working capital is viewed as the difference between current assets and current liabilities. If we see balance sheets of a company for two consecutive years, we can note that working capital in such Balance Sheets are different.

Another important tool in the hands of finance managers for ascertaining the changes in financial position of a firm between two accounting periods is known as funds flow statement.

Funds flow statement analyses the reasons for change in financial position between two balance sheets. It shows the inflow and outflow of funds i.e., sources and application of funds during a particular period.

Fund Flow Statement summarises for a particular period the resources made available to finance the activities of an enterprise and the uses to which such resources have been put. A fund flow statement may serve as a supplementary financial information to the users.

Q14. Explain uses/importance/analysis of Funds Flow Statement.

A. 1. The funds flow statement helps in answering the following questions:
   (a) Where have the profits gone?
   (b) Why there is an imbalance existing between liquidity position and profitability position of the enterprise?
   (c) Why is the concern financially solid in spite of losses?

2. A projected funds flow statement can be prepared and resources can be properly allocated after an analysis of the present state of affairs.
3. The funds flow statement analysis helps the management to test whether the working capital has been effectively used or not and whether the working capital level is adequate or inadequate for the requirement of business.
4. The funds flow statement analysis helps the investors to decide whether the company has managed funds properly.

<u>Note</u> : *Understand each ratio carefully, theory question can be asked on any ratio.*

Financing Decisions

Q1. Discuss briefly the impact of taxation on Corporate Financing. *(Final-Nov. 1996) (8 marks)*

A. **Impact of Taxation on Corporate Financing:** Tax is levied on the profits of the company. Tax is also levied on the dividends received by the shareholders in their hands though such dividends are declared out of after tax profits. Thus the corporate entity and the owners suffer tax twice in a sense. This pushes the cost of equity capital up. On the other hand interest paid on the debt capital is a deductible expenditure. This reduces the cost of debts. Debt is a less costly source of funds and if the finance manager prudently mixes debt and equity, the weighted average cost of capital will get greatly reduced.

Depreciation is not an outgo in cash but it is deductible in computing the income subject to tax. There will be saving in tax on depreciation and such savings could be profitably employed. Thus both interest and depreciation provide tax shield and have a tendency to increase EPS.

Thus the impact of tax will be felt in cost of capital, earnings per share and the cash inflows which are relevant for capital budgeting and in planning the capital structure.

Tax considerations are important as they affect the liquidity of the concerns. They are relevant in deciding the leasing of the assets, transactions of sale and lease back, and also in floating joint venture in foreign countries where tax rate and concessions may be advantageous.

Q2. Explain, briefly, Modigliani and Miller approach on Cost of Capital.
(Final May 1997)(PE2-Nov. 2002 & May 2007) (10 marks)

Discuss the proposition made in Modigliani and Miller approach in capital structure theory.
(PE2 June 2009 – 4 marks)

Explain in brief the assumptions of Modigliani-Miller theory. *(PCC May 2007 – 2 marks)*

A. **Modigliani and Miller approach to Cost of Capital:** Modigliani and Miller's argue that the total cost of capital of a particular corporation is independent of its methods and level of financing. According to them a change in the debt equity ratio does not affect the cost of capital. This is because a change in the debt equity ratio changes the risk element of the company which in turn changes the expectations of the shareholders from the particular shares of the company. Hence they contend that leverages has little effect on the overall cost of capital or on the market price.

Modigliani and Miller made the following assumptions and the derivations there from:

Assumptions:

(i) Capital markets are perfect. Information is costless and readily available to all investors, there are no transaction costs; and all securities are infinitely divisible. Investors are assumed to be rational and to behave accordingly.

(ii) The average expected future operating earnings of a firm are represented by a subjective random variable. It is assumed that the expected values of the probability distributions of all investors are the same. Implied in the MM illustration is that the expected values of the probability distributions of expected operating earnings for all future periods are the same as present operating earnings.

(iii) Firms can be categorised into "equivalent return" classes. All firms within a class have the same degree of business risk.

(iv) The absence of corporate income taxes is assumed.

Their three basic propositions are :

(i) The total market value of a firm and its cost of capital are independent of its capital structure. The total market value of the firm is given by capitalizing the expected stream of operating earnings at a discount rate considered appropriate for its risk class.

(ii) The cost of equity (ke) is equal to capitalization rate of pure equity stream plus a premium for financial risk. The financial risk increases with more debt content in the capital structure. As a result, ke increases in a manner to offset exactly the use of less expensive source of funds.

(iii) The cut-off rate for investment purposes is completely independent of the way in which the investment is financed. This proposition alongwith the first implies a complete separation of the investment and financing decisions of the firm.

Conclusion: *The theory propounded by them is based on the prevalence of perfect market conditions which are rare to find. Corporate taxes and personal taxes are a reality and they exert appreciable influence over decision making whether to have debt or equity.*

Q3. Discuss the relationship between the financial leverage and firms required rate of return to equity shareholders as per Modigliani and Miller Proposition II. *(PE2-May 2003 & May 2004) (3 marks)*

A. Relationship between the financial leverage and firm's required rate of return to equity shareholders with corporate taxes is given by the following relation:

$$r_E = r_0 + \frac{D}{E}(1 - T_C)(r_O - r_B)$$

Where,

r_E = required rate of return to equity shareholders
r_0 = required rate of return for an all equity firm
D = Debt amount in capital structure
E = Equity amount in capital structure
T_C = Corporate tax rate
r_B = required rate of return to lenders

Q4. Discuss the major considerations in capital structure planning. *(PE2-Nov. 2003, May 2006 & Nov. 2007) (6 marks)*

A. Major considerations in capital structure planning

There are three major considerations, i.e. risk, cost of capital and control, which help the finance manager in determining the proportion in which he can raise funds from various sources.

Although, three factors, i.e., risk, cost and control determine the capital structure of a particular business undertaking at a given point of time.

Risk: The finance manager attempts to design the capital structure in such a manner, so that risk and cost are the least and the control of the existing management is diluted to the least extent. However, there are also subsidiary factors also like – marketability of the issue, maneuverability and flexibility of the capital structure, timing of raising the funds. Risk is of two kinds, i.e., Financial risk and Business risk. Here we are concerned primarily with the financial risk. Financial risk also is of two types:

1. Risk of cash insolvency
2. Risk of variation in the expected earnings available to equity share-holders

Cost of Capital: Cost is an important consideration in capital structure decisions. It is obvious that a business should be at least capable of earning enough revenue to meet its cost of capital and finance its growth. Hence, along with a risk as a factor, the finance manager has to consider the cost aspect carefully while determining the capital structure.

Control: Along with cost and risk factors, the control aspect is also an important consideration in planning the capital structure. When a company issues further equity shares, it automatically dilutes the controlling interest of the present owners. Similarly, preference shareholders can have voting rights and thereby affect the composition of the Board of Directors, in case dividends on such shares are not paid for two consecutive years. Financial institutions normally stipulate that they shall have one or more directors on the Boards. Hence, when the management agrees to raise loans from financial institutions, by implication it agrees to forego a part of its control over the company. It is obvious, therefore, that decisions concerning capital structure are taken after keeping the control factor in mind.

Q5. Discuss the dividend-price approach, and earnings price approach to estimate cost of equity capital.
(PE2-Nov. 2006) (2 marks)

A. In dividend price approach, cost of equity capital is computed by dividing the current dividend by average market price per share. This ratio expresses the cost of equity capital in relation to what yield the company should pay to attract investors. It is computed as:

$$K_e = \frac{D_1}{P_o}$$

Where,

D_1 = Dividend per share in period 1
P_0 = Market price per share today

Whereas, on the other hand, the advocates of earnings price approach co-relate the earnings of the company with the market price of its share. Accordingly, the cost of ordinary share capital would be based upon the expected rate of earnings of a company. This approach is similar to dividend price approach, only it seeks to nullify the effect of changes in dividend policy.

Q6. Discuss the impact of financial leverage on shareholders wealth by using return-on-assets (ROA) and return-on-equity (ROE) analytic framework. *(PE2-May 2003 & May 2004) (3 marks)*

A. The impact of financial leverage on ROE is positive, if cost of debt (after-tax) is less than ROA. But it is a double-edged sword.

$$ROA = \frac{NOPAT}{Sales} \times \frac{Sales}{Capital\ employed}$$

$$ROE = ROA + \frac{D}{E}(ROA - K_d)$$

Where

NOPAT = EBIT * (1 – T_c)

Capital employed = Shareholders funds + Loan funds

D = Debt amount in capital structure

E = Equity capital amount in capital structure

K_d = Interest rate * (1 – T_c) in case of fresh loans of a company.

K_d = Yield to maturity *(1–T_c) in case of existing loans of a company.

Q7. Differentiate between Business risk and Financial risk. *(PCC May 2007 - 3 marks)*

What do you understand by Business Risk and Financial Risk? *(PCC Nov 2009 – 2 marks)*

A. Business Risk and Financial Risk

Business risk refers to the risk associated with the firm's operations. It is uncertainty about the future operating income, i.e. how well can the operating income be predicted? It can be measured by standard deviation of basic earning power ratio.

Whereas, Financial risk refers to the additional risk placed on firm's shareholders as a result of debt use in financing. Companies that issue more debt instruments would have higher financial risk than companies financed mostly by equity. Financial risk can be measured by ratios such as firm's financial leverage multiplier, total debt to assets ratio etc.

Q8. What is optimum capital structure? Explain. *(PCC Nov 2007 – 2 marks)*

Discuss the concept of "Optimal Capital Structure". *(PCC Nov 2008 – 2 marks)*

A. **Optimum Capital Structure:** The optimum capital structure is that capital structure or combination of debt and equity that leads to the maximisation of the value of the firm. The capital structure decision is important to the firm as the optimum capital structure minimises the firm's overall cost of capital and maximises the value of the firm. The use of debt funds in capital structure increases the earnings per share as the interest on debt is tax deductible, which leads to increase in share price. But higher levels of debt funds in capital structure result in greater financial risk and it leads to higher cost of capital and depresses the market price of company's share. Therefore, the firm should try to achieve and maintain the optimum capital structure keeping in view value maximisation objective of the firm.

Q9. Explain the assumptions of Net Operating Income approach (NOI) theory of capital structure. *(PCC Nov 2007 – 3 marks)*

A. Assumptions of Net Operating Income (NOI) Theory of Capital Structure

According to NOI approach, there is no relationship between the cost of capital and value of the firm i.e. the value of the firm is independent of the capital structure of the firm.

Assumptions

(a) The corporate income taxes do not exist.

(b) The market capitalizes the value of the firm as whole. Thus the split between debt and equity is not important.

(c) The increase in proportion of debt in capital structure leads to change in risk perception of the shareholders.

(d) The overall cost of capital (Ko) remains constant for all degrees of debt equity mix.

Q10. Explain the principles of "Trading on equity". *(PCC May 2008 – 2 marks)*

A. The term trading on equity means debts are contracted and loans are raised mainly on the basis of equity capital. Those who provide debt have a limited share in the firm's earning and hence want to be protected in terms of earnings and values represented by equity capital. Since fixed charges do not vary with firms earning before interest and tax, a magnified effect is produced on earning per share. Whether the leverage is favourable, in the sense, increase in earning per share more proportionately to the increased earning before interest and tax, depends on the profitability of investment proposal. If the rate of returns on investment exceeds their explicit cost, financial leverage is said to be positive.

Q10. Discuss the concept of Debt-Equity or EBIT-EPS indifference point, while determining the capital structure of a company. *(PCC June 2009 – 2 marks)*

A. Concept of Debt-Equity or EBIT-EPS Indifference Point while Determining the Capital Structure of a Company

The determination of optimum level of debt in the capital structure of a company is a formidable task and is a major policy decision. It ensures that the firm is able to service its debt as well as contain its interest cost. Determination of optimum level of debt involves equalizing between return and risk.

EBIT – EPS analysis is a widely used tool to determine level of debt in a firm. Through this analysis, a comparison can be drawn for various methods of financing by obtaining indifference point. It is a point to the EBIT level at which EPS remains unchanged irrespective of debt-equity mix. The indifference point for the capital mix (equity share capital and debt) can be determined as follows:

$$\frac{(EBIT - I_1)(1-T)}{E_1} = \frac{(EBIT - I_2)(1-T)}{E_2}$$

Q11. What do you understand by Weighted average Cost of Capital? *(PCC Nov 2009 – 3 marks)*
What do you understand by the term Cost of Capital?

A. WEIGHTED AVERAGE COST OF CAPITAL (WACC)

The capital funding of a company is made up of two components: debt and equity. The cost of capital is the expected return to equity owners (or shareholders) and to debt holders, so weighted average cost of capital tells the return that both stakeholders - equity owners and lenders - can expect. WACC, in other words, represents the investors' opportunity cost of taking on the risk of putting money into a company. This is the weighted average cost of capital.

Thus, weighted average cost of capital is the weighted average after tax costs of the individual components of firm's capital structure. That is, the after tax cost of each debt and equity is calculated separately and added together to a single overall cost of capital.

$$K_0 = \% D(mkt)\ (K_i)\ (1 - t) + (\% Psmkt)\ K_p + (C_s\ mkt)\ Ke$$

Where,

K_0	=	Overall cost of capital
K_i	=	Before tax cost of debt
1 – t	=	1 – Corporate tax rate
K_p	=	Cost of preference capital
Ke	=	Cost of equity
% Dmkt	=	% of debt in capital structure
%Psmkt	=	% of preference share in capital structure
% Cs	=	% of equity share in capital structure.

Securities analysts employ WACC all the time when valuing and selecting investments. In discounted cash flow analysis, WACC is used as the discount rate applied to future cash flows for deriving a business's net present value. WACC can be used as a hurdle rate against which to assess return on investment capital performance. It also plays a key role in economic value added (EVA) calculations.

Investors use WACC as a tool to decide whether or not to invest. The WACC represents the minimum rate of return at which a company produces value for its investors.

Therefore, WACC serves as a useful reality check for investors.

Q12. Explain marginal cost of capital.

A. The marginal cost of capital may be defined as the cost of raising an additional rupee of capital. Since the capital is raised in substantial amount in practice marginal cost is referred to as the cost incurred in raising new funds. Marginal cost of capital is derived, when the average cost of capital is calculated using the marginal weights. The marginal weights represent the proportion of funds the firm intends to employ. To calculate the marginal cost of capital, the intended/proposed financing proportion should be applied as weights to marginal component costs. The marginal cost of capital should, therefore, be calculated in the composite sense. When a firm raises funds in proportional manner and the component.s cost remains unchanged, there will be no difference between average cost of capital (of the total funds) and the marginal cost of capital. The component costs may remain constant upto certain level of funds raised and then start increasing with amount of funds raised. For example, the cost of debt may remain 7% (after tax) till Rs. 10 lakhs of debt is raised, between Rs. 10 lakhs and Rs. 15 lakhs, the cost may be 8% and so on. Same is the case with equity capital. When the components cost start rising, the average cost of capital will rise and the marginal cost of capital will however, rise at a faster rate.

Q13. Explain constraints to Capital Structure.

What fundamental principles should be considered while choosing capital structure / financing pattern?

A. A firm has the choice to raise funds for financing its investment proposals from different sources in different proportions. It can exclusively use debt, preference capital, equity or a combination of any of them.

While choosing a suitable financing pattern, certain fundamental principles should be kept in mind, which are discussed below:

(a) ***Cost Principle:*** According to this principle an ideal pattern or capital structure is one that minimises cost of capital structure and maximises earnings per share (EPS). Debt capital is cheaper than equity capital from the point of its cost because interest is deductible for income tax purpose and dividend is not deductible.

(b) ***Risk Principle:*** There are two risks associated with this principle:

(i) *Business risk:* It is an unavoidable risk because of the environment in which the firm has to operate and business risk is represented by the variability of earnings before interest and tax (EBIT). EBIT varies because revenues and expenses are affected by demand of firm products, variations in prices and proportion of fixed cost in total cost.

(ii) *Financial risk:* It is a risk associated with the availability of earnings per share caused by use of financial leverage.

(c) ***Control Principle****:* While designing a capital structure, the finance manager may also keep in mind that existing management control and ownership remains undisturbed. Issue of new equity will dilute existing control pattern and also it involves higher cost. Issue of more debt causes no dilution in control, but causes a higher degree of financial risk.

(d) ***Flexibility Principle****:* By flexibility it means that the management chooses such a combination of sources of financing which it finds easier to adjust according to changes in need of funds in future too. In attaining flexibility cost considerations should be kept in mind.

If the company is loaded with a debt of 18% and funds are available at 15%, it can return old debt with new debt, at a lesser interest rate.

Besides these principles, other factors such as nature of industry, timing of issue, state of economy & capital market and competition in the industry are also being considered. Thus a finance manager in designing a suitable pattern of capital structure must bring about satisfactory compromise between these important principles.

Q14. Explain Over Capitalisation.

A. It is a situation where a firm has more capital than it needs. This situation mainly arises when the existing capital is not effectively utilized on account of fall in earning capacity of the company. The chief sign of over-capitalisation is the fall in payment of dividend and interest leading to fall in value of the shares of the company.

Causes of over capitalization:

Over-capitalisation arises due to following reasons:

(i) Raising more money through issue of shares or debentures than company can employ profitably.

(ii) Borrowing huge amount at higher rate than rate at which company can earn.

(iii) Excessive payment for the acquisition of fictitious assets such as goodwill etc.

(iv) Improper provision for depreciation, replacement of assets and distribution of dividends at a higher rate.

(v) Wrong estimation of earnings and capitalization.

Consequences/effects of over-capitalisation

Over-capitalisation shall result into following consequences:

(i) Considerable reduction in the rate of dividend and interest payments.

(ii) Reduction in the market price of shares.

(iii) Resorting of .window dressing.

(iv) Some company may opt for reorganization. However, sometimes the matter goes worse, the company may go into liquidation.

Remedies for over-capitalisation

Following steps may be adopted to avoid the evil consequences of over-capitalisation

(i) Company should go for thorough reorganization.

(ii) Buyback of shares.

(iii) Reduction in claims of debenture-holders and creditors.

(iv) Value of share may also be reduced. This will result insufficient funds for the company to carry out replacement of assets.

Q15. Explain Under Capitalisation.

A. It is just reverse of over-capitalisation. It is a state, when its actual capitalization is lower than its proper capitalization as warranted by its earning capacity. This situation normally happens with companies which have insufficient capital but large secret reserves in the form of considerable appreciation in the values of the fixed assets not brought into the books.

Consequences of under capitalization

Under-capitalisation results in following consequences:

(i) The dividend rate will be higher in comparison of similarly situated other companies.

(ii) Market value of shares shall be higher than value of share of other similar companies because their earning rate being considerably more than the prevailing rate on such securities.

(iii) Real value of shares shall be higher than their book value.

Effects of under capitalization

Under-capitalisation has the following effects:

(i) It encourages acute competition. High profitability encourages new entrepreneurs to come into same type of business.

(ii) High rate of dividend encourages the workers. union to demand high wages.

(iii) Normally common people (consumers) start feeling that they are being exploited.

(iv) Management may resort to manipulate the share values.

(v) Invite more government control and regulation on the company and higher taxation also.

Remedies

Following steps may be adopted to avoid the evil consequences of under capitalization.

(i) The shares of the company should be split up. This will reduce dividend per share, though EPS shall remain unchanged.

(ii) Issue of Bonus Shares is the most appropriate measure as this will reduce both dividend per share and the average rate of earning.

(iii) By revising upward the par value of shares in exchange of the existing shares held by them.

Q16. Compare Over Capitalisation and Under Capitalisation.

A. *(Explain over capitalization and under capitalization from previous 2 answers.)*

Both over capitalization and under capitalisation are bad. However, over capitalisation is more dangerous to the company, shareholders and the society than under capitalization. The situation of under capitalization can be handled more easily than the situation of overcapitalisation. Moreover under capitalization is not an economic problem but a problem of adjusting capital structure.

Q17. Compare/distinguish between equity financing and debt financing.

A. Financing a business through borrowing is cheaper than using equity. This is because:

♦ Lenders require a lower rate of return than ordinary shareholders. Debt financial securities present a lower risk than shares for the finance providers because they have prior claims on annual income and liquidation.

♦ A profitable business effectively pays less for debt capital than equity for another reason; the debt interest can be offset against pre-tax profits before the calculation of the corporate tax, thus reducing the tax paid.

♦ Issuing and transaction costs associated with raising and servicing debt are generally less than for ordinary shares.

Types of Financing

Q1. Explain the importance of trade credit and accruals as source of working capital. What is the cost of these sources? *(PE2-May 2003) (2 marks)*

A. Trade credit and accruals as source of working capital refers to credit facility given by suppliers of goods during the normal course of trade. It is a short term source of finance. SSI firms in particular are heavily dependent on this source for financing their working capital needs. The major advantages of trade credit are – easy availability, flexibility and informality.

There can be an argument that trade credit is a cost free source of finance. But it is not. It involves implicit cost . The supplier extending trade credit incurs cost in the form of opportunity cost of funds invested in trade receivables. Generally, the supplier passes on these costs to the buyer by increasing the price of the goods or alternatively by not extending cash discount facility.

Q2. What is debt securitisation? Explain the basics of debt securitisation process.
(PE2-May 2004, Nov. 2004, May 2006 & May 2007) (6 marks)

Explain the concept of Debt securitization. *(PCC May 2008 – 3 marks)*

A. **Debt Securitisation :** It is a method of recycling of funds. It is especially beneficial to financial intermediaries to support the lending volumes. Assets generating steady cash flows are packaged together and against this asset pool, market securities can be issued, e.g. housing finance, auto loans, and credit card receivables.

Process of Debt Securitisation

(i) *The origination function* – A borrower seeks a loan from a finance company, bank, HDFC. The credit worthiness of borrower is evaluated and contract is entered into with repayment schedule structured over the life of the loan.

(ii) *The pooling function* – Similar loans on receivables are clubbed together to create an underlying pool of assets. The pool is transferred in favour of Special purpose Vehicle (SPV), which acts as a trustee for investors.

(iii) *The securitisation function* – SPV will structure and issue securities on the basis of asset pool. The securities carry a coupon and expected maturity which can be asset-based/mortgage based. These are generally sold to investors through merchant bankers. Investors are – pension funds, mutual funds, insurance funds.

The process of securitization is generally without recourse i.e. investors bear the credit risk and issuer is under an obligation to pay to investors only if the cash flows are received by him from the collateral. The benefits to the originator are that assets are shifted off the balance sheet, thus giving the originator recourse to off-balance sheet funding.

Q3. Discuss the risk-return considerations in financing of current assets. *(PE2-Nov. 2004) (4 marks)*

A. The financing of current assets involves a trade off between risk and return. A firm can choose from short or long term sources of finance. Short term financing is less expensive than long term financing but at the same time, short term financing involves greater risk than long term financing.

Depending on the mix of short term and long term financing, the approach followed by a company may be referred as matching approach, conservative approach and aggressive approach.

In matching approach, long-term finance is used to finance fixed assets and permanent current assets and short term financing to finance temporary or variable current assets. Under the conservative plan, the firm finances its permanent assets and also a part of temporary current assets with long term financing and hence less risk of facing the problem of shortage of funds.

An aggressive policy is said to be followed by the firm when it uses more short term financing than warranted by the matching plan and finances a part of its permanent current assets with short term financing.

Q4. Discuss the eligibility criteria for issue of commercial paper. *(PE2-May 2005)(3 marks)*

A. **Eligibility criteria for issuer of commercial paper**

The companies satisfying the following conditions are eligible to issue commercial paper.

1. The tangible net worth of the company is Rs. 5 crores or more as per audited balance sheet of the company.
2. The fund base working capital limit is not less than Rs. 4 crores.
3. The company is required to obtain the necessary credit rating from the rating agencies such as CRISIL, ICRA, CARE etc.
4. The issuers should ensure that the credit rating at the time of applying to RBI should not be more than two months old.

5. The minimum current ratio should be 1.33:1 based on classification of current assets and liabilities.
6. For public sector companies there are no listing requirement but for companies other than public sector, the same should be listed on one or more stock exchanges.
7. All issue expenses shall be borne by the company issuing commercial paper.

Q5. Write short notes on the following:

(a) Global Depository Receipts or Euro Convertible Bonds *(Final–May 1996, 1998)(PE2-May 2003, May 2004 & May 2008) (3 marks)*

(b) American Depository Receipts (ADRs) *(Final–Nov. 1996)(PE2-May 2003, May 2004, May 2006 & May 2008) (6 marks)(PCC June 2009 – 2 marks)*

(c) Bridge Finance *(Final–Nov. 1997)(PE2-May 2003, May 2006 & Nov. 2008) (6 marks)*

(d) Packing Credit *(Final–Nov. 1998) (6 marks)*

(e) Venture capital financing *(PE2-May 2005 & June 2009) (2 marks)(PCC Nov 2008 – 2 marks)*

(f) Methods of Venture Capital Financing *(Final– May 1999)(PE2-Nov. 2002) (6 marks) (PCC Nov 2007 – 3 marks)*

(g) Advantages of Debt Securitisation *(Final–May 2001)(PE2-May 2003) (3 marks)*

Benefits to the originator of Debt Securitization *(PCC June 2009 – 2 marks)*

(h) Deep Discount Bonds vs. Zero Coupon Bonds *(PE2-May 2004) (3 marks)*

Features of Deep Discount Bonds *(PCC Nov 2007 & Nov 2008 – 2 marks)*

(i) Seed capital assistance *(PE2-May 2005 & Nov. 2008) (3 marks)*

(j) Global Depository Receipts vs. American Depository Receipts *(PE2-May 2007) (4 marks)*

A.

(a) **Global Depository Receipts (GDRs):** It is a negotiable certificate denominated in US dollars which represents a Non-US company's publically traded local currency equity shares. GDRs are created when the local currency shares of an Indian company are delivered to Depository's local custodian Bank against which the Depository bank issues depository receipts in US dollars. The GDRs may be traded freely in the overseas market like any other dollar-expressed security either on a foreign stock exchange or in the over-the-counter market or among qualified institutional buyers.

By issue of GDRs Indian companies are able to tap global equity market to raise foreign currency funds by way of equity. It has distinct advantage over debt as there is no repayment of the principal and service costs are lower.

(or)

Euro Convertible Bond: Euro Convertible bonds are quasi-debt securities (unsecured) which can be converted into depository receipts or local shares. ECBs offer the investor an option to convert the bond into equity at a fixed price after the minimum lock in period. The price of equity shares at the time of conversion will have a premium element. The bonds carry a fixed rate of interest. These are bearer securities and generally the issue of such bonds may carry two options viz. call option and put option. A call option allows the company to force conversion if the market price of the shares exceed a particular percentage of the conversion price. A put option allows the investors to get his money back before maturity. In the case of ECBs, the payment of interest and the redemption of the bonds will be made by the issuer company in US dollars. ECBs issues are listed at London or Luxemberg stock exchanges.

An issuing company desirous of raising the ECBs is required to obtain prior permission of the Department of Economic Affairs, Ministry of Finance, Government of India, Companies having 3 years of good track record will only be permitted to raise funds. The condition is not applicable in the case of projects in infrastructure sector. The proceeds of ECBs would be permitted only for following purposes:

(i) Import of capital goods
(ii) Retiring foreign currency debts
(iii) Capitalising Indian joint venture abroad
(iv) 25% of total proceedings can be used for working capital and general corporate restructuring.

The impact of such issues has been to procure for the issuing companies finances at very competitive rates of interest. For the country a higher debt means a forex outgo in terms of interest.

(b) **American Depository Receipts (ADRs):** These are depository receipts issued by a company in USA and are governed by the provisions of Securities and Exchange Commission of USA. As the regulations are severe, Indian companies tap the American market through private debt placement of GDRs listed in London and Luxemberg stock exchanges.

Apart from legal impediments, ADRs are costlier than Global Depository Receipts (GDRs). Legal fees are considerably high for US listing. Registration fee in USA is also substantial. Hence ADRs are less popular than GDRs.

(c) **Bridge Finance:** Bridge finance refers, normally, to loans taken by the business, usually from commercial banks for a short period, pending disbursement of term loans by financial institutions, normally it takes time for the financial institution to finalise procedures of creation of security, tie-up participation with other institutions etc. even though a positive appraisal of the project has been made. However, once the loans are approved in principle, firms in order not to lose further time in starting their projects arrange for bridge finance. Such temporary loan is normally repaid out of the proceeds of the principal term loans. It is secured by hypothecation of moveable assets, personal guarantees and demand promissory notes. Generally rate of interest on bridge finance is higher as compared with that on term loans.

(d) **Packing Credit:** Packing credit is an advance made available by banks to an exporter. Any exporter, having at hand a firm export order placed with him by his foreign buyer on an irrevocable letter of credit opened in his favour, can approach a bank for availing of packing credit. An advance so taken by an exporter is required to be liquidated within 180 days from the date of its commencement by negotiation of export bills or receipt of export proceeds in an approved manner. Thus Packing Credit is essentially a short-term advance.

Normally, banks insists upon their customers to lodge the irrevocable letters of credit opened in favour of the customer by the overseas buyers. The letter of credit and firms' sale contracts not only serve as evidence of a definite arrangement for realisation of the export proceeds but also indicate the amount of finance required by the exporter. Packing Credit, in the case of customers of long standing may also be granted against firm contracts entered into by them with overseas buyers. Packing credit may be of the following types:

(i) *Clean Packing credit:* This is an advance made available to an exporter only on production of a firm export order or a letter of credit without exercising any charge or control over raw material or finished goods. It is a clean type of export advance. Each proposal is weighted according to particular requirements of the trade and credit worthiness of the exporter. A suitable margin has to be maintained. Also, Export Credit Guarantee Corporation (ECGC) cover should be obtained by the bank.

(ii) *Packing credit against hypothecation of goods:* Export finance is made available on certain terms and conditions where the exporter has pledgeable interest and the goods are hypothecated to the bank as security with stipulated margin. At the time of utilising the advance, the exporter is required to submit, alongwith the firm export order or letter of credit, relative stock statements and thereafter continue submitting them every fortnight and whenever there is any movement in stocks.

(iii) *Packing credit against pledge of goods:* Export finance is made available on certain terms and conditions where the exportable finished goods are pledged to the banks with approved clearing agents who will ship the same from time to time as required by the exporter. The possession of the goods so pledged lies with the bank and are kept under its lock and key.

(e) **Venture Capital Financing:** The term venture capital refers to capital investment made in a business or industrial enterprise, which carries elements of risks and insecurity and the probability of business hazards. Capital investment may assume the form of either equity or debt or both as a derivative instrument. The risk associated with the enterprise could be so high as to entail total loss or be so insignificant as to lead to high gains.

The European Venture Capital Association describes venture capital as risk finance for entrepreneurial growth oriented companies. It is an investment for the medium or long term seeking to maximise the return.

Venture Capital, thus, implies an investment in the form of equity for high-risk projects with the expectation of higher profits. The investments are made through private placement with the expectation of risk of total loss or huge returns. High technology industry is more attractive to venture capital financing due to the high profit potential. The main object of investing equity is to get high capital profit at saturation stage.

In broad sense under venture capital financing venture capitalist makes investment to purchase debt or equity from inexperienced entrepreneurs who undertake highly risky ventures with potential of success.

(f) **Methods of Venture Capital Financing:** The venture capital financing refers to financing and funding of the small scale enterprises, high technology and risky ventures. Some common methods of venture capital financing are as follows:

(i) *Equity financing:* The venture capital undertakings generally requires funds for a longer period but may not be able to provide returns to the investors during the initial stages. Therefore, the venture capital finance is generally provided by way of equity share capital. The equity contribution of venture capital firm does not exceed 49% of the total equity capital of venture capital undertakings so that the effective control and ownership remains with the entrepreneur.

(ii) *Conditional Loan:* A conditional loan is repayable in the form of a royalty after the venture is able to generate sales. No interest is paid on such loans. In India Venture Capital Financers charge royalty ranging between 2 to 15 per cent; actual rate depends on other factors of the venture such as gestation period, cash flow patterns, riskiness and other factors of the enterprise. Some Venture Capital financers give a choice to the enterprise of paying a high rate of interest (which could be well above 20 per cent) instead of royalty on sales once it becomes commercially sound.

(iii) *Income Note:* It is a hybrid security which combines the features of both conventional loan and conditional loan. The entrepreneur has to pay both interest and royalty on sales but at substantially low rates. IDBI's Venture Capital Fund provides funding equal to 80-87.5% of the project's cost for commercial application of indigenous technology or adopting imported technology to domestic applications.

(iv) *Participating Debenture:* Such security carries charges in three phases- in the start- up phase, no interest is charged, next stage a low rate of interest is charged upto a particular level of operations, after that, a high rate of interest is required to be paid.

(g) Advantages of Debt Securitisation: Debt securitisation is a method of recycling of funds and is especially beneficial to financial intermediaries to support lending volumes. Simply stated, under debt securitisation a group of illiquid assets say a mortgage or any asset that yields stable and regular cash flows like bank loans, consumer finance, credit card payment are pooled together and sold to intermediary. The intermediary then issue debt securities.

The advantages of debt securitisation to the originator are the following:

(i) The asset are shifted off the Balance Sheet, thus giving the originator recourse to off balance sheet funding.

(ii) It converts illiquid assets to liquid portfolio.

(iii) It facilitates better balance sheet management, assets are transferred off balance sheet facilitating satisfaction of capital adequacy norms.

(iv) The originator's credit rating enhances.

For the investors securitisation opens up new investment avenues. Though the investor bears the credit risk, the securities are tied up to definite assets.

(h) Deep Discount Bonds vs. Zero Coupon Bonds: Deep Discount Bonds (DDBs) are in the form of zero interest bonds. These bonds are sold at a discounted value and on maturity face value is paid to the investors. In such bonds, there is no interest payout during lock-in period.

IDBI was first to issue a Deep Discount Bonds (DDBs) in India in January 1992. The bond of a face value of Rs.1 lakh was sold for Rs. 2,700 with a maturity period of 25 years.

A zero coupon bond (ZCB) does not carry any interest but it is sold by the issuing company at a discount. The difference between discounted value and maturing or face value represent the interest to be earned by the investor on such bonds.

(i) Seed Capital Assistance: The seed capital assistance has been designed by IDBI for professionally or technically qualified entrepreneurs. All the projects eligible for financial assistance from IDBI, directly or indirectly through refinance are eligible under the scheme. The project cost should not exceed Rs. 2 crores and the maximum assistance under the project will be restricted to 50% of the required promoters contribution or Rs 15 lacs whichever is lower.

The seed capital Assistance is interest free but carries a security charge of one percent per annum for the first five years and an increasing rate thereafter.

(j) Global Depository Receipts and American Depository Receipts: Global Depository Receipts (GDR) are basically negotiable certificates denominated in US dollars, that represent a non-US company's publicly traded local currency equity shares. These are created when the local currency shares of Indian company are delivered to the depository's local custodian bank, against which the depository bank issues Depository Receipts in US dollars.

Whereas, American Depository Receipts (ADR) are securities offered by non-US companies who want to list on any of the US exchange. Each ADR represents a certain number of a company's regular shares. ADRs allow US investors to buy shares of these companies without the costs of investing directly in a foreign stock exchange. ADRs are issued by an approved New York bank or trust company against the deposit of the original shares. These are deposited in a custodial account in the US. Such receipts have to be issued in accordance with the provisions stipulated by the SEC USA which are very stringent.

The Indian companies have preferred the GDRs to ADRs because the US market exposes them to a higher level or responsibility than a European listing in the areas of disclosure, costs, liabilities and timing.

Q6. Name the various financial instruments dealt with in the International market.

(PE2 June 2009 – 2 marks)(PCC Nov 2008 – 2 marks)

A. Some of the various financial instruments dealt with in the international market are:

(a) Euro Bonds
(b) Foreign Bonds
(c) Fully Hedged Bonds
(d) Medium Term Notes
(e) Floating Rate Notes
(f) External Commercial Borrowings
(g) Foreign Currency Futures
(h) Foreign Currency Option
(i) Euro Commercial Papers

Q7. Explain the term 'Ploughing back of Profits'. *(PCC May 2007 – 2 marks & Nov 2009 – 1.5 marks)*

A. Ploughing back of Profits: Retained earnings means retention of profit and reinvesting it in the company as long term funds. Such funds belong to the ordinary shareholders and increase the net worth of the company. A public limited company must plough back a reasonable amount of profit every year keeping in view the legal requirements in this regard and its own expansion plans. Such funds also entail almost no risk. Further, control of present owners is also not diluted by retaining profits.

Q8. Explain the concept of leveraged lease. *(PCC Nov 2007 – 2 marks)*

A. **Concept of Leveraged Lease:** Leveraged lease involves lessor, lessee and financier. In leveraged lease, the lessor makes a substantial borrowing, even upto 80 per cent of the assets purchase price. He provides remaining amount – about 20 per cent or so – as equity to become the owner. The lessor claims all tax benefits related to the ownership of the assets. Lenders, generally large financial institutions, provide loans on a nonrecourse basis to the lessor. Their debt is served exclusively out of the lease proceeds. To secure the loan provided by the lenders, the lessor also agrees to give them a mortgage on the asset. Leveraged lease are called so because the high non-recourse debt creates a high degree of leverage.

Q9. Explain the concept of Indian depository receipts. *(PCC Nov 2007 – 2 marks)*

A. **Concept of Indian Depository Receipts:** The concept of the depository receipt mechanism which is used to raise funds in foreign currency has been applied in the Indian capital market through the issue of Indian Depository Receipts (IDRs). Foreign companies can issue IDRs to raise funds from Indian market on the same lines as an Indian company uses ADRs/GDRs to raise foreign capital. The IDRs are listed and traded in India in the same way as other Indian securities are traded.

Q10. Discuss the features of Secured Premium Notes (SPNs). *(PCC May 2008 – 2 marks)*

A. Secured premium notes is issued along with detachable warrant and is redeemable after a notified period of say 4 to 7 years. This is a kind of NCD attached with warrant. It was first introduced by Tisco, which issued the SPNs to existing shareholders on right basis. Subsequently the SPNs will be repaid in some number of equal instalments. The warrant attached to SPNs gives the holder the right to apply for and get allotment of equity shares as per the conditions within the time period notified by the company.

Q11. Explain the concept of closed and open ended lease. *(PCC May 2008 – 2 marks)*

A. In the close-ended lease, the assets gets transferred to the lessor at the end of lease, the risk of obsolescence, residual values etc. remain with the lessor being the legal owner of the assets. In the open-ended lease, the lessee has the option of purchasing the assets at the end of lease period.

Q12. Explain briefly the features of External Commercial Borrowings (ECB). *(PCC May 2008 – 3 marks)*

A. An ECB is a loan taken from non-resident lenders in accordance with exchange control regulations. These loans can be taken from:

- International banks
- Capital markets
- Multilateral financial institutions like IFC, ADB, IBRD etc.
- Export Credit Agencies
- Foreign collaborators
- Foreign Equity Holders.

ECB can be accessed under automatic and approval routes depending upon the purpose and volume.

In automatic there is no need for any approval from RBI / Government while approval is required for areas such as textiles and steel sectors restructuring packages.

Q13. What are the various sources of finance of a business.

A. **Sources of Finance of a Business**

(i) **Long-term**

1. Share capital or Equity share
2. Preference shares
3. Retained earnings
4. Debentures/Bonds of different types
5. Loans from financial institutions
6. Loans from State Financial Corporation

(ii) Medium-term

1. Preference shares
2. Debentures/Bonds
3. Public deposits/fixed deposits for duration of three years
4. Commercial banks
5. Financial institutions
6. State financial corporations

(iii) Short-term

1. Trade credit
2. Accrued expenses and deferred income
3. Commercial banks
4. Fixed deposits for a period of 1 year or less
5. Advances received from customers
6. Various short-term provisions

Q14. Discuss the advantages of raising funds by issue of equity shares. *(PE2 June 2009 – 2 marks)*
What are the advantages and disadvantages of raising funds by issue of equity shares?

A. Advantages:

(i) It is a permanent source of finance. Since such shares are not redeemable, the company has no liability for cash outflows associated with its redemption.

(ii) Equity capital increases the company's financial base and thus helps further the borrowing powers of the company.

(iii) The company is not obliged legally to pay dividends. Hence in times of uncertainties or when the company is not performing well, dividend payments can be reduced or even suspended.

(iv) The company can make further issue of share capital by making a right issue.

Disadvantages:

(i) The cost of ordinary shares is higher because dividends are not tax deductible and also the floatation costs of such issues are higher.

(ii) Investors find ordinary shares riskier because of uncertain dividend payments and capital gains.

(iii) The issue of new equity shares reduces the earning per share of the existing shareholders until and unless the profits are proportionately increased.

(iv) The issue of new equity shares can also reduce the ownership and control of the existing shareholders.

Q16. Discuss the advantages of preference share capital as an instrument of raising funds. *(PCC May 2008 – 2 marks)*
What are the advantages and disadvantages of raising funds by issue of preference shares?

A. Advantages:

(i) No dilution in EPS on enlarged capital base - If equity is issued it reduces EPS, thus affecting the market perception about the company.

(ii) There is leveraging advantage as it bears a fixed charge. Non payment of preference dividends does not force company into liquidity.

(iii) There is no risk of takeover as the preference shareholders do not have voting rights except in case where dividend arrears exist.

(iv) The preference dividends are fixed and pre decided. Hence Preference shareholders do not participate in surplus profits as the ordinary shareholders.

(v) Preference capital can be redeemed after a specified period.

Disadvantages:

(i) One of the major disadvantages of preference shares is that preference dividend is not tax deductible and so does not provide a tax shield to the company. Hence a preference share is costlier to the company than debt e.g. debenture.

(ii) Preference dividends are cumulative in nature. This means that although these dividends may be omitted, they shall need to be paid later.

Q17. What are the types, advantages and disadvantages of raising funds by issue of debentures/bonds?

A. Types:

(i) *Non convertible debentures:* These types of debentures do not have any feature of conversion and are repayable on maturity.

(ii) *Fully convertible debentures:*. Such debentures are converted into equity shares as per the terms of issue in relation to price and the time of conversion. Interest rates on such debentures are generally less than the non convertible debentures because of their carrying the attractive feature of getting themselves converted into shares.

(iii) *Partly convertible debentures:*. Those debentures which carry features of a convertible and a non convertible debenture belong to this category. The investor has the advantage of having both the features in one debenture.

Advantages:

(i) The cost of debentures is much lower than the cost of preference or equity capital as the interest is tax-deductible. Also, investors consider debenture investment safer than equity or preferred investment and, hence, may require a lower return on debenture investment.

(ii) Debenture financing does not result in dilution of control.

(iii) In a period of rising prices, debenture issue is advantageous. The fixed monetary outgo decreases in real terms as the price level increases.

Disadvantages:

(i) Debenture interest and capital repayment are obligatory payments.

(ii) The protective covenants associated with a debenture issue may be restrictive.

(iii) Debenture financing enhances the financial risk associated with the firm.

(iv) Since debentures need to be paid during maturity, a large amount of cash outflow is needed at that time.

Q18. What are the factors that a venture capitalist should consider before financing any risky project?

A. Factors that a venture capitalist should consider before financing any risky project are as follows:

(i) Level of expertise of company's management: Most of venture capitalist believes that the success of a new project is highly dependent on the quality of its management team.

(ii) Level of expertise in production: Venture capital should ensure that entrepreneur and his team should have necessary technical ability to be able to develop and produce new product / service.

(iii) Nature of new product / service: The venture capitalist should consider whether the development and production of new product / service should be technically feasible.

(iv) Future Prospects: Since the degree of risk involved in investing in the company is quite fairly high, venture capitalists should seek to ensure that the prospects for future profits compensate for the risk.

(v) Competition: The venture capitalist should seek assurance that there is actually a market for a new product.

(vi) Risk borne by entrepreneur: The venture capitalist is expected to see that the entrepreneur bears a high degree of risk. This will assure them that the entrepreneur have the sufficient level of the commitments to project as they themselves will have a lot of loss, should the project fail.

(vii) Exit Route: The venture capitalist should try to establish a number of exist routes. These may include a sale of shares to the public, sale of shares to another business, or sale of shares to original owners.

(viii) Board membership: In case of companies, to ensure proper protection of their investment, venture capitalist should require a place on the Board of Directors.

Q19. Distinguish between Financial Lease and Operating Lease.
Explain Financial Lease.
Explain Operating Lease.

A.

	Financial Lease	Operating Lease
1	The risk and reward incident to ownership are passed on to the lessee. The lessor only remains the legal owner of the asset.	The lessee is only provided the use of the asset for a certain time. Risk incident to ownership belong wholly to the lessor.
2	The lessee bears the risk of obsolescence.	The lessee is only provided the use of asset for a certain time. Risks incidental to ownership belong wholly to the lessor.
3	The lessor is interested in his rentals and not in the asset. He must get his principal back along with interest. Therefore, the lease is non-cancellable by either party.	As the lessor does not have difficulty in leasing the same asset to other willing lessor, the lease is kept cancelable by the lessor.
4	The lessor enters into the transaction only as financier. He does not bear the cost of repairs, maintenance or operations.	Usually, the lessor bears cost of repairs, maintenance or operations.
5	The lease is usually full pay out, that is, the single	The lease is usually non-payout, since the lessor

	lease repays the cost of the asset together with the interest.	expects to lease the same asset over and over again to several users.

Q20. Explain the various types of leases.

A. (1) Sales and Lease Back

Under this type of lease, the owner of an asset sells the asset to a party (the buyer), who in turn leases back the same asset to the owner in consideration of a lease rentals. Under this arrangement, the asset are not physically exchanged but it all happen in records only. The main advantage of this method is that the lessee can satisfy himself completely regarding the quality of an asset and after possession of the asset convert the sale into a lease agreement. Under this transaction, the seller assumes the role of lessee and the buyer assumes the role of a lessor. The seller gets the agreed selling price and the buyer gets the lease rentals.

(2) Leveraged Lease

Under this lease, a third party is involved beside lessor and lessee. The lessor borrows a part of the purchase cost (say 80%) of the asset from the third party i.e., lender and asset so purchased is held as security against the loan. The lender is paid off from the lease rentals directly by the lessee and the surplus after meeting the claims of the lender goes to the lessor. The lessor is entitled to claim depreciation allowance.

(3) Sales-aid Lease

Under this lease contract, the lessor enters into a tie up with a manufacturer for marketing the latter.s product through his own leasing operations, it is called a sales-aid-lease. In consideration of the aid in sales, the manufacturers may grant either credit, or a commission to the lessor. Thus, the lessor earns from both sources i.e. from lessee as well as the manufacturer.

(4) Close-ended and open-ended Leases

In the close-ended lease, the assets get transferred to the lessor at the end of lease, the risk of obsolescence, residual value etc., remain with the lessor being the legal owner of the asset. In the open-ended lease, the lessee has the option of purchasing the asset at the end of the lease period.

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Investment Decisions

Q1. Do the profitability index and the NPV criterion of evaluating investment proposals lead to the same acceptance-rejection and ranking decisions? In what situations will they give conflicting results? *(Final-Nov. 1999) (6 marks)*

A. In the most of the situations the Net Present Value Method (NPV) and Profitability Index (PI) yield same accept or reject decision. In general items, under PI method a project is acceptable if profitability index value is greater than 1 and rejected if it less than 1. Under NPV method a project is acceptable if Net present value of a project is positive and rejected if it is negative. Clearly a project offering a profitability index greater than 1 must also offer a net present value which is positive. But a conflict may arise between two methods if a choice between mutually exclusive projects has to be made. Consider the following example:

	Project A	*Project B*
PV of Cash inflows	2,00,000	1,00,000
Initial cash outflows	1,00,000	40,000
Net present value	1,00,000	60,000
P.I	$\frac{2,00,000}{1,00,000} = 2$	$\frac{1,00,000}{40,000} = 2.5$

According to NPV method, project A would be preferred, whereas according to profitability index method project B would be preferred.

This is because Net present value gives ranking on the basis of absolute value of rupees. Whereas profitability index gives ranking on the basis of ratio. Although PI method is based on NPV, it is a better evaluation technique than NPV in a situation of capital rationing.

Q2. Distinguish between Net Present Value and Internal Rate of Return. *(Final-May 2002) (2 marks)*

A. **NPV and IRR:** NPV and IRR methods differ in the sense that the results regarding the choice of an asset under certain circumstances are mutually contradictory under two methods. In case of mutually exclusive investment projects, in certain situations, they may give contradictory results such that if the NPV method finds one proposal acceptable, IRR favours another. The different rankings given by the NPV and IRR methods could be due to size disparity problem, time disparity problem and unequal expected lives.

The net present value is expressed in financial values whereas internal rate of return (IRR) is expressed in percentage terms.

In the net present value cash flows are assumed to be re-invested at cost of capital rate. In IRR reinvestment is assumed to be made at IRR rates.

Q3. Write a short note on internal rate of return. *(Final-May 1996 & Nov. 2008) (4 marks)*

A. **Internal Rate of Return:** It is that rate at which discounted cash inflows are equal to the discounted cash outflows. In other words, it is the rate which discounts the cash flows to zero. It can be stated in the form of a ratio as follows:

$$\frac{\text{Cash inflows}}{\text{Cash Outflows}} = 1$$

This rate is to be found by trial and error method. This rate is used in the evaluation of investment proposals. In this method, the discount rate is not known but the cash outflows and cash inflows are known.

In evaluating investment proposals, internal rate of return is compared with a required rate of return, known as cut-off rate. If it is more than cut-off rate the project is treated as acceptable; otherwise project is rejected.

Q4. "Decision tree analysis is helpful in managerial decisions." Explain with an example. *(PE2-May 2005) (5 marks)*

A. **Significance of Decision Tree Analysis:** It is generally observed that the present investment decision may have several implications for future investments decisions. Such complex investment decisions involve a sequence of decisions over time. It is also argued that since present choices modify future alternatives, industrial activity can not be reduced to a single decision and must be viewed as a sequence of decisions extending from the present time into the future. These sequential decisions are taken on the bases of decision tree analysis. While constructing and using decision tree, some important steps to be considered are as follows:

(i) Investment proposal should be properly defined.

(ii) Decision alternatives should be clearly clarified.

(iii) The decision tree should be properly graphed indicating the decision points, chances, events and other data.

(iv) The results should be analysed and the best alternative should be selected.

Q5. What is Capital rationing? Describe various ways of implementing it. *(PE2-Nov. 2008) (4 marks)*

A. **Capital Rationing:** Generally, firms fix up maximum amount that can be invested in capital projects during a given period of time, say a year. The firm then attempts to select a combination of investment proposals that will be within the specific limits providing maximum profitability and rank them in descending order according to their rate of return; such a situation is of capital rationing.

A firm should accept all investment projects with positive NPV, with an objective to maximise the wealth of shareholders. However, there may be resource constraint due to which a firm may have to select from among various projects. Thus, capital rationing situation may arises when there may be internal or external constraints on procurement of necessary funds to invest in all investment proposals with positive NPVs.

Ways of implementing Capital Rationing

(i) It may be implemented through budgets.

(ii) It can be done by putting up a ceiling when it has been financing investment proposals only by way of retained earnings.

(iii) It can also be done by 'Responsibility Accounting', whereby management may authorise a particular department to make investment only up to a specified limit, beyond which the investment decisions are to be taken by higher-ups.

Q6. Define Modified Internal Rate of Return method. *(PCC May 2007 – 2 marks)*

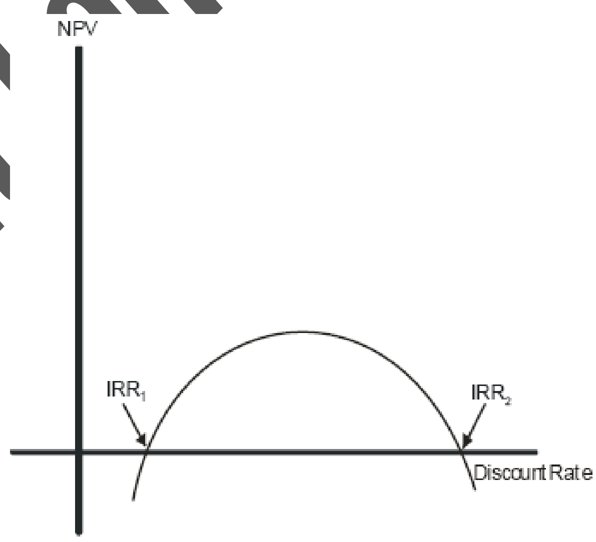
A. **Modified Internal Rate of Return (MIRR):** There are several limitations attached with the concept of the conventional Internal Rate of Return. The MIRR addresses some of these deficiencies. For example, it eliminates multiple IRR rates; it addresses the reinvestment rate issue and produces results, which are consistent with the Net Present Value method.

Under this method, all cash flows, apart from the initial investment, are brought to the terminal value using an appropriate discount rate(usually the cost of capital). This results in a single stream of cash inflow in the terminal year. The MIRR is obtained by assuming a single outflow in the zeroth year and the terminal cash in flow as mentioned above. The discount rate which equates the present value of the terminal cash in flow to the zeroth year outflow is called the MIRR.

Q7. Explain the concept of Multiple Internal Rate of Return. *(PCC Nov 2008 – 3 marks)*

A. **Multiple Internal Rate of Return (MIRR)**

In cases where project cash flows change signs or reverse during the life of a project for example, an initial cash outflow is followed by cash inflows and subsequently followed by a major cash outflow, there may be more than one internal rate of return (IRR). The following graph of discount rate versus net present value (NPV) may be used as an illustration:



In such situations if the cost of capital is less than the two IRRs, a decision can be made easily, however, otherwise the IRR decision rule may turn out to be misleading as the project should only be invested if the cost of capital is between IRR1 and IRR2. To understand the concept of multiple IRRs it is necessary to understand the implicit reinvestment assumption in both NPV and IRR techniques.

Q8. Explain the concept of discounted payback period. *(PCC June 2009 – 3 marks)*

A. Payback period is time taken to recover the original investment from project cash flows. It is also termed as break even period. The focus of the analysis is on liquidity aspect and it suffers from the limitation of ignoring time value of money and profitability. Discounted payback period considers present value of cash flows, discounted at company's cost of capital to estimate breakeven period i.e. it is that period in which future discounted cashflows equal the initial outflow. The shorter the period, better it is. It also ignores post discounted payback period cash flows.

Q9. Explain the term "Desirability Factor". *(PCC Nov 2009 – 1.5 marks)*

A. **Desirability Factor/Profitability Index:** In certain cases we have to compare a number of proposals each involving different amounts of cash inflows. One of the methods of comparing such proposals is to workout what is known as the "Desirability factor" or "Profitability index".. In general terms a project is acceptable if its profitability index value is greater than 1.

Mathematically : The desirability factor is calculated as below:

$$\frac{\text{Sum of discounted cash in flows}}{\text{Initial cash outlay/Total discounted cash outflow (as the case may)}}$$

Q10. Explain capital budgeting.

A. Financing and investment of funds are two crucial financial functions. The investment of funds also termed as capital budgeting requires a number of decisions to be taken in a situation in which funds are invested and benefits are expected over a long period. The term capital budgeting means planning for capital assets. It involves proper project planning and commercial evaluation of projects to know in advance technical feasibility and financial viability of the project.

It includes a financial analysis of the various proposals regarding capital expenditure to evaluate their impact on the financial condition of the company and to choose the best out of the various alternatives.

However, Capital Budgeting excludes certain investment decisions, wherein, the benefits of investment proposals cannot be directly quantified. For example, management may be considering a proposal to build a recreation room for employees. The decision in this case will be based on qualitative factors, such as management-employee relations, with less consideration on direct financial returns.

Purpose Of Capital Budgeting

The capital budgeting decisions are important, crucial and critical business decisions due to following reasons:

(i) **Substantial expenditure:** Capital budgeting decisions involves the investment of substantial amount of funds. It is therefore necessary for a firm to make such decisions after a thoughtful consideration.

(ii) **Long time period:** The capital budgeting decision has its effect over a long period of time. These decisions not only affect the future benefits and costs of the firm but also influence the rate and direction of growth of the firm.

(iii) **Irreversibility:** Most of the investment decisions are irreversible. This is because, as it is difficult to find a buyer for the second-hand capital items.

(iv) **Complex decision:** The capital investment decision involves an assessment of future events, which in fact is difficult to predict.

Q11. Explain Independent projects and mutually exclusive projects.

A. Two projects are said to be independent when acceptance or rejection of one project do not affect the viability of another project. Thus the two projects are said to be independent when the status of one project is not affected by the status of another project.

The decisions are said to be mutually exclusive if two or more alternative proposals are such that the acceptance of one proposal will exclude the acceptance of the other alternative proposals. For instance, a firm may be considering proposal to install a semi-automatic or highly automatic machine. If the firm install a semiautomatic machine it exclude the acceptance of proposal to install highly automatic machine.

Q12. Why is discounted cash flow a superior method for capital budgeting?

A. Discounted cash flow / NPV technique is superior due to following reasons:

(i) NPV method takes into account the time value of money.

(ii) The whole stream of cash flows is considered.

(iii) The net present value can be seen as the addition to the wealth of share holders. The criterion of NPV is thus in conformity with basic financial objectives.

(iv) The NPV uses the discounted cash flows i.e., expresses cash flows in terms of current rupees. The NPVs of different projects therefore can be compared. It implies that each project can be evaluated independent of others on its own merit.

Management of Working Capital

Q1. Enumerate the activities/functions which are covered by Treasury Management.

(PE2-Nov. 2002) (3 marks)(PCC May 2008 – 3 marks & June 2009 – 2 marks)

Write short note on Treasury Management.

A. The key goal of treasury management is planning, organizing and controlling cash assets to satisfy the financial objectives of the organization. The goal may be to maximize the return on the available cash, or minimize interest cost or mobilise as much cash as possible for corporate ventures.

Treasury Management is concerned about the efficient management of liquidity and financial risk in business. Main activities which are covered by Treasury Management are as follows:

(i) *Cash management:* Treasury management in a business organisation is concerned about the efficient collection and repayment of cash to both insiders and to third parties.

(ii) *Currency management:* It manages the foreign currency risk, exchange rate risks etc. It may advise on the currency to be used when invoicing overseas sales.

(iii) *Funding management:* Responsible for planning and sourcing firm's short, medium and long term cash needs. It participates in capital structure, forecasting of future interest and foreign currency rates decision-making process.

(iv) *Banking:* Maintains good relations with bankers and carry out initial negotiations with them for any short term loan.

(v) *Corporate finance:* It advises on aspects of corporate finance including capital structure, mergers and acquisitions.

Q2. Explain the 'Aging Schedule' in the context of monitoring of receivables. *(PE2-Nov. 2004) (3 marks)*

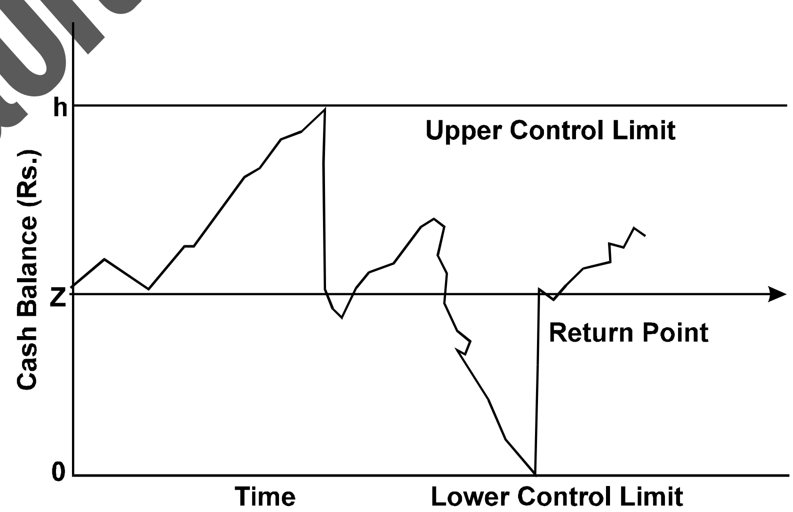
A. **Ageing Schedule:** An important means to get an insight into collection pattern of debtors is the preparation of their 'Ageing Schedule'. Receivables are classified according to their age from the date of invoicing e.g. 0 – 30 days, 31 – 60 days, 61 – 90 days, 91 – 120 days and more. The ageing schedule can be compared with earlier month's figures or the corresponding month of the earlier year.

This classification helps the firm in its collection efforts and enables management to have a close control over the quality of individual accounts. The ageing schedule can be compared with other firms also.

Q3. Discuss Miller-Orr Cash Management model. *(P.E-II-Nov. 2005 & Nov. 2007) (3 marks)*

A. **Miller – Orr Cash Management Model**

According to this model the net cash flow is completely stochastic. When changes in cash balance occur randomly, the application of control theory serves a useful purpose. The Miller – Orr model is one of such control limit models. This model is designed to determine the time and size of transfers between an investment account and cash account. In this model control limits are set for cash balances. These limits may consist of 'h' as upper limit, 'z' as the return point and zero as the lower limit.



MILLER-ORR CASH MANAGEMENT MODEL

When the cash balance reaches the upper limit, the transfer of cash equal to 'h – z' is invested in marketable securities account. When it touches the lower limit, a transfer from marketable securities account to cash account is made. During the period when cash balance stays between (h, z) and (z, 0) i.e. high and low limits, no transactions between cash and marketable securities account is made. The high and low limits of cash balance are set up on the basis of fixed cost associated with the securities transaction, the opportunities cost of holding cash and degree of likely fluctuations in cash balances. These limits satisfy the demands for cash at the lowest possible total costs. The formula for calculation of the spread between the control limits is:

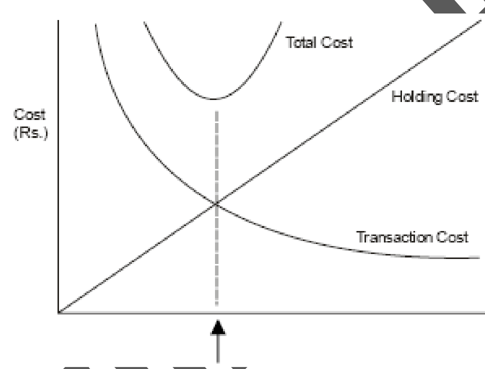
$$\text{Spread} = 3\left(\frac{3/4 \times \text{Transaction Cost} \times \text{Variance of Cashflows}}{\text{Interest rate}}\right)^{1/3}$$

And, the return point can be calculated using the formula:

$$\text{Return point} = \text{Lower limit} + \frac{\text{Spread}}{3}$$

Q4. Explain Baumol's Model of Cash Management. *(PE2-May 2008) (4 marks)*

A. William J. Baumol developed a model for optimum cash balance which is normally used in inventory management. The optimum cash balance is the trade-off between cost of holding cash (opportunity cost of cash held) and the transaction cost (i.e. cost of converting marketable securities in to cash). Optimum cash balance is reached at a point where the two opposing costs are equal and where the total cost is minimum. This can be explained with the following diagram:



Optimum Cash Balance

The optimum cash balance can also be computed algebraically.

$$C = \sqrt{\frac{2U \times P}{S}},$$

Where C = Optimum cash balance
U= Annual (monthly) cash disbursements
P= Fixed cost per transaction
S= Opportunity cost of one rupee p.a. (or p.m)

The model is based on the following assumptions:

(i) Cash needs of the firm are known with certainty.
(ii) The cash is used uniformly over a period of time and it is also known with certainty.
(iii) The holding cost is known and it is constant.
(iv) The transaction cost also remains constant.

Q5. Discuss the meaning and features of 'Commercial paper'. *(PE2- May 2008)(4marks) (PCC May 2007 – 3 marks)*
Short Note on Commercial Paper *(PE2-Nov. 2003) (3 marks)*

A. Commercial Paper and its Features

CP is a short term usance promissory note issued by a company, negotiable by endorsement and delivery, issued at such a discount on face value as may be determined by the issuing company. It is a money market instrument issued by highly rated corporate borrowers for meeting their working capital requirements.

In India corporate borrowers were allowed to issue CP since January, 1990. The main features of CP are:

(i) CP is a short term money market instrument with fixed maturity value.
(ii) It is a certificate evidencing an unsecured corporate debt of short term maturity.

(iii) It is generally issued at discount to face value but it can also be issued in interest bearing form.
(iv) CPs can be directly issued by a company to investors or through banks.
(v) It is an unsecured instrument.

Q6. Discuss the factors to be taken into consideration while determining the requirement of working capital.
(PE2- Nov. 2008 - 4 marks)
Write a short note on Determinants of Working Capital.

A. Factors to be taken into consideration while determining the requirement of working capital:

(i)	Production Policies	(ii)	Nature of the business
(iii)	Credit policy	(iv)	Inventory policy
(v)	Abnormal factors	(vi)	Market conditions
(vii)	Conditions of supply	(viii)	Business cycle
(ix)	Growth and expansion	(x)	Level of taxes
(xi)	Dividend policy	(xii)	Price level changes
(xiii)	Operating efficiency		

Q7. Write short notes on the following:
(a) Different kinds of float with reference to management of cash. *(Final-May 1998, May 1999) (4 marks)*
(b) Factoring *(Final-Nov. 1998)(PE2-Nov. 2003, May 2007 & May 2008) (4 marks)*
(c) Recent changes in Maximum Permissible Bank Finance (MPBF) *(PE2-Nov. 2003) (3 marks)*
(d) William J. Baumal vs. Miller-Orr Cash Management Model *(PE2-May 2004) (3 marks)*

A.

(a) Different Kinds of Float with Reference to Management of Cash: Four kinds of float with reference to management of cash are:

- *Billing float:* An invoice is the formal document that a seller prepares and sends to the purchaser as the payment request for goods sold or services provided. The time between the sale and the mailing of the invoice is the billing float.
- *Mail float:* This is the time when a cheque is being processed by post office, messenger service or other means of delivery.
- *Cheque processing float:* This is the time required for the seller to sort, record and deposit the cheque after it has been received by the company.
- *Banking processing float: This is the time from the deposit of the cheque to the crediting of funds in the sellers account.*

(b) Factoring: Factoring is a new financial service that is presently being developed in India. Factoring involves provision of specialised services relating to credit investigation, sales ledger management, purchase and collection of debts, credit protection as well as provision of finance against receivables and risk bearing. In factoring, accounts receivables are generally sold to a financial institution (a subsidiary of commercial bank-called "Factor"), who charges commission and bears the credit risks associated with the accounts receivables purchased by it.

Its operation is very simple. Clients enter into an agreement with the "factor" working out a factoring arrangement according to his requirements. The factor then takes the responsibility of monitoring, follow-up, collection and risk-taking and provision of advance. The factor generally fixes up a limit customer-wise for the client (seller).

Factoring offers the following advantages which makes it quite attractive to many firms.

(1) The firm can convert accounts receivables into cash without bothering about repayment.
(2) Factoring ensures a definite pattern of cash in flows.
(3) Continuous factoring virtually eliminates the need for the credit department. That is why receivables financing through factoring is gaining popularly as useful source of financing short-term funds requirements of business enterprises because of the inherent advantage of flexibility it affords to the borrowing firm. The seller firm may continue to finance its receivables on a more or less automatic basis. If sales expand or contract it can vary the financing proportionally.
(4) Unlike an unsecured loan, compensating balances are not required in this case. Another advantage consists of relieving the borrowing firm of substantially credit and collection costs and to a degree from a considerable part of cash management.

However, factoring as a means of financing is comparatively costly source of financing since its cost of financing is higher than the normal lending rates.

(c) **Maximum Permissible Bank Finance (MPBF):** The maximum permissible limit for bank finance as recommended and suggested by study groups of RBI was 75% of working capital gap shown as below:

Current assets	100
Less: Non-interest bearing current liabilities	40
Working capital gap	60
Financing from long term-sources 25% of either CA or working capital gap	15
MPBF	45

The RBI vide its credit policy (beginning of 1997) scrapped the concept of MPBF. The salient features of new credit system were:

For borrowers with requirements of upto Rs.25 lakhs credit limit will be computed after detailed discussions with the borrower, without going into detailed evaluation.

For borrowers with requirements above Rs.25 lakhs, but upto Rs.5 crore, credit limit can be offered upto 20% of the projected gross sales of the borrower.

For large borrowers not falling in the above categories, the cash budget systems may be used to identify the working capital needs.

(d) **William J Baumal vs Miller- Orr Cash Management Model :** According to William J Baumal's Economic order quantity model optimum cash level is that level of cash where the carrying costs and transactions costs are the minimum. The carrying costs refers to the cost of holding cash, namely, the interest foregone on marketable securities. The transaction costs refers to the cost involved in getting the marketable securities converted into cash. This happens when the firm falls short of cash and has to sell the securities resulting in clerical, brokerage, registration and other costs.

The optimim cash balance according to this model will be that point where these two costs are equal. The formula for determining optimum cash balance is :

$$C = \sqrt{\frac{2U \times P}{S}},$$

Where C = Optimum cash balance

U= Annual (monthly) cash disbursements

P= Fixed cost per transaction

S= Opportunity cost of one rupee p.a. (or p.m)

Miller-Orr cash management model is a net cash flow stochastic model. This model is designed to determine the time and size of transfers between an investment account and cash account. In this model control limits are set for cash balances. These limits may consist of h as upper limit, z as the return point, and zero as the lower limit.

When the cash balances reach the upper limit, the transfer of cash equal to h-z is invested in marketable securities account. When it touches the lower limit, a transfer from marketable securities account to cash account is made. During the period when cash balance stays between (h, z) and (z, o) i. e. high and low limits no transactions between cash and marketable securities account is made. The high and low limits of cash balance are set up on the basis of fixed cost associated with the securities transactions, the opportunity cost of holding cash and the degree of likely fluctuations in cash balances. These limits satisfy the demands for cash at the lowest possible total costs.

Q8. Differentiate between Factoring and Bills discounting. *(PCC Nov 2009 – 2 marks)*

A. The differences between Factoring and Bills discounting are as follows:

(i) Factoring is called as .Invoice factoring. whereas bills discounting is known as .Invoice discounting.

(ii) In factoring the parties are known as client, factor and debtor whereas in bills discounting they are known as Drawer, Drawee and Payee.

(iii) Factoring is a sort of management of book debts whereas bills discounting is a sort of borrowing from commercial banks.

(iv) For factoring there is no specific Act; whereas in the case of bills discounting, the Negotiable Instrument Act is applicable.

Q9. What are the various forms of bank credit?

A. The bank credit will generally be in the following forms:

Cash Credit: This facility will be given by the banker to the customers by giving certain amount of credit facility on continuous basis. The borrower will not be allowed to exceed the limits sanctioned by the bank.

Bank Overdraft: It is a short-term borrowing facility made available to the companies in case of urgent need of funds. The banks will impose limits on the amount they can lend. When the borrowed funds are no longer required they can quickly and easily be repaid. The banks issue overdrafts with a right to call them in at short notice.

Bills Discounting: The company which sells goods on credit, will normally draw a bill on the buyer who will accept it and sends it to the seller of goods. The seller, in turn discounts the bill with his banker. The banker will generally earmarks the discounting bill limit.

Bills Acceptance: To obtain finance under this type of arrangement a company draws a bill of exchange on bank. The bank accepts the bill thereby promising to pay out the amount of the bill at some specified future date.

Line of Credit: Line of Credit is a commitment by a bank to lend a certain amount of funds on demand specifying the maximum amount.

Letter of Credit: It is an arrangement by which the issuing bank on the instructions of a customer or on its own behalf undertakes to pay or accept or negotiate or authorizes another bank to do so against stipulated documents subject to compliance with specified terms and conditions.

Bank Guarantees: Bank guarantee is one of the facilities that the commercial banks extend on behalf of their clients in favour of third parties who will be the beneficiaries of the guarantees.

Q10. Explain the various costs and benefits of availing trade credit.

A. (a) Cost of availing Trade Credit

Normally it is considered that the trade credit does not carry any cost. However, it carries following costs:

(i) **Price:** There is often a discount on the price that the firm undergoes when it uses trade credit, since it can take advantage of the discount only if it pays immediately. This discount can translate into a high implicit cost.

(ii) **Loss of goodwill:** If the credit is overstepped, suppliers may discriminate against delinquent customers if supplies become short. As with the effect of any loss of goodwill, it depends very much on the relative market strengths of the parties involved.

(iii) **Cost of managing:** Management of creditors involves administrative and accounting costs that would otherwise be incurred.

(iv) **Conditions:** Sometimes most of the suppliers insists that for availing the credit facility the order should be of some minimum size or even on regular basis.

(b) Cost of not taking Trade Credit

On the other hand the costs of not availing credit facilities are as under:

(i) **Impact of inflation:** If inflation persists then the borrowers are favoured over the lenders with the the levels of interest rates not seeming totally to redress the balance.

(ii) **Interest:** Trade credit is a type of interest free loan, therefore failure to avail this facility has an interest cost. This cost is further increased if interest rates are higher.

(iii) **Inconvenience:** Sometimes it may also cause inconvenience to the supplier if the supplier is geared to the deferred payment.

Q11. What are various factors determining the credit policy given to customers?

A. The credit policy is an important factor determining both the quantity and the quality of accounts receivables. Various factors determine the size of the investment a company makes in accounts receivables. They are, for instance:

(i) The effect of credit on the volume of sales;

(ii) Credit terms;

(iii) Cash discount;

(iv) Policies and practices of the firm for selecting credit customers.

(v) Paying practices and habits of the customers.

(vi) The firm.s policy and practice of collection.

(vii) The degree of operating efficiency in the billing, record keeping and adjustment function, other costs such as interest, collection costs and bad debts etc., would also have an impact on the size of the investment in receivables. The rising trend in these costs would depress the size of investment in receivables.

The firm may follow a lenient or a stringent credit policy. Any increase in accounts receivables that is, additional extension of trade credit not only results in higher sales but also requires additional financing to support the increased investment in accounts receivables. The costs of credit investigations and collection efforts and the chances of bad debts are also increased.

Q12. Explain the principles of management of marketable securities.

Write short note on marketable securities.

A. Management of marketable securities is an integral part of investment of cash as this may serve both the purposes of liquidity and cash, provided choice of investment is made correctly. As the working capital needs are fluctuating, it is possible to park excess funds in some short term securities, which can be liquidated when need for cash is felt. The selection of securities should be guided by three principles.

- *Safety*: Return and risks go hand in hand. As the objective in this investment is ensuring liquidity, minimum risk is the criterion of selection.
- *Maturity:* Matching of maturity and forecasted cash needs is essential. Prices of long term securities fluctuate more with changes in interest rates and are therefore, more risky.
- *Marketability:* It refers to the convenience, speed and cost at which a security can be converted into cash. If the security can be sold quickly without loss of time and price it is highly liquid or marketable.

The choice of marketable securities is mainly limited to Government treasury bills, Deposits with banks and Intercorporate deposits. Units of Unit Trust of India and commercial papers of corporates are other attractive means of parking surplus funds. Besides this Money Market Mutual Funds (MMMFs) have also emerged as one of the avenues of short-term investment. There is a lock in period of 30 days after which the investment may be converted into cash.

Q13. Explain the recent developments in cash management.
Explain the various methods/means of cash management.
(Question can be asked on each point also.)

A. Now-a-days, electronic delivery and payment system are becoming increasingly important because of increased competition and the demand for more efficient and convenient capabilities.

(i) **Electronic Fund Transfer:** With the developments which took place in the Information technology, the present banking system is switching over to the computerisation of banks branches to offer efficient banking services and cash management services to their customers. The network will be linked to the different branches, banks. This will help the customers in the following ways:

- Instant updation of accounts.
- The quick transfer of funds.
- Instant information about foreign exchange rates.

(ii) **Zero Balance Account:** For efficient cash management some firms employ an extensive policy of substituting marketable securities for cash by the use of zero balance accounts. Every day the firm totals the cheques presented for payment against the account. The firm transfers the balance amount of cash in the account if any, for buying marketable securities. In case of shortage of cash the firm sells the marketable securities.

(iii) **Money Market Operations:** One of the tasks of *treasury function* of larger companies is the investment of surplus funds in the money market. The chief characteristic of money market banking is one of size. Banks obtain funds by competing in the money market for the deposits by the companies, public authorities, High Networth Investors (HNI), and other banks. Deposits are made for specific periods ranging from overnight to one year. The rates can fluctuate quite dramatically, especially for the shorter-term deposits. Surplus funds can thus be invested in money market easily.

(iv) **Petty Cash Imprest System:** For better control on cash, generally the companies use petty cash imprest system wherein the day-to-day petty expenses are estimated taking into account past experience and future needs and generally a week's requirement of cash will be kept separate for making petty expenses. Again, the next week will commence with the predetermined balance. This will reduce the strain of the management in managing petty cash expenses and help in managing cash efficiently.

(v) **Management of Temporary Cash Surplus**

Temporary cash surpluses can be profitably invested in the following:

- Short-term deposits in Banks and financial institutions.
- Short-term debt market instruments.
- Long-term debt instruments.
- Shares of Blue chip listed companies.

(vi) **Electronic Cash Management System:** Electronically, transfer of data as well as funds play a key role in any cash management system. Various elements in the process of cash management are linked through a satellite. Certain networked cash management system may also provide a very limited access to third parties like parties having very regular dealings of receipts and payments with the company etc. A finance company accepting deposits from public through sub-brokers may give a limited access to sub-brokers to verify the collections made through him for determination of his commission among other things.

Benefits: Good cash management is a conscious process of knowing:

- When, where and how a company.s cash needs will arise.
- Knowing what are the best sources of meeting at a short notice additional cash requirement.
- Maintaining good and cordial relations with bankers and other creditors.

Scientific cash management results in: ***(any 4-6 points are enough)***

- Significant saving in time.

- Decrease in interest costs.
- Less paper work.
- Greater accounting accuracy.
- More control over time and funds.
- Supports electronic payments.
- Faster transfer of funds from one location to another, where required.
- Speedy conversion of various instruments into cash.

Even a multinational organization having subsidiaries worldwide, can pool everything internationally so that the company offset the debts with the surplus monies from various subsidiaries.

The ultimate purpose of scientific cash management is to ensure solvency, liquidity and profitability of the organization as a whole.

(vii) **Virtual Banking:** Broadly virtual banking denotes the provision of banking and related services through extensive use of information technology without direct recourse to the bank by the customer. The origin of virtual banking in the developed countries can be traced back to the seventies with the installation of Automated Teller Machines (ATMs). Subsequently, driven by the competitive market environment as well as various technological and customer pressures, other types of virtual banking services have grown in prominence throughout the world.

Significant Developments:

Following are some of the significant developments:

- Introduction of computerized settlement of clearing transactions
- Use of Magnetic Ink Character Recognition (MICR) technology
- Provision of inter-city clearing facilities and high value clearing facilities
- Electronic Clearing Service Scheme (ECSS)
- Electronic Funds Transfer (EFT) scheme
- Centralised Funds Management System (CFMS)
- Securities Services System (SSS)
- Real Time Gross Settlement System (RTGS)

Advantages

The advantages of virtual banking services are as follows:

- Lower cost of handling a transaction.
- The increased speed of response to customer requirements.
- The lower cost of operating branch network along with reduced staff costs leads to cost efficiency.
- Virtual banking allows the possibility of improved and a range of services being made available to the customer rapidly, accurately and at his convenience.

Q14. Write short note on Playing the float

Explain the method of playing the float in cash management.

A. **Playing the float:** Besides accelerating collections, an effective control over payments can also cause faster turnover of cash. This is possible only by making payments on the due date, making excessive use of draft (bill of exchange) instead of cheques. Availability of cash can be maximized by playing the float.

Different Kinds of Float with reference to Management of Cash: Four kinds of float with reference to management of cash are:

- *Billing float:* An invoice is the formal document that a seller prepares and sends to the purchaser as the payment request for goods sold or services provided. The time between the sale and the mailing of the invoice is the billing float.
- *Mail float:* This is the time when a cheque is being processed by post office, messenger service or other means of delivery.
- *Cheque processing float:* This is the time required for the seller to sort, record and deposit the cheque after it has been received by the company.
- *Banking processing float:* This is the time from the deposit of the cheque to the crediting of funds in the sellers account.

Delaying Payments: A firm can increase its net float by speeding up collections. It can also increase the net float by delayed disbursement of funds from the bank by increasing the mail time. A company may make payment to its outstation suppliers by a cheque and send it through mail. The delay in transit and collection of the cheque, will be used to increase the float.

Q15. Write short note on Management of Working Capital.

A. Working capital management is the functional area of finance that covers all the current accounts of its firm. It is concerned with management of the level of individual current assets and the current liabilities or in other words the management of total working capital.

The various steps in the management of working capital involve:

- *Cash management* . Identify the cash balance which allows for the business to meet day to day expenses, but reduces cash holding costs.
- *Inventory management* . Identify the level of inventory which allows for uninterrupted production but reduces the investment in raw materials and hence increases cash flow; The techniques like Just In Time (JIT) and Economic order quantity (EOQ) are used for this.
- *Debtors management* . Identify the appropriate credit policy, i.e., credit terms which will attract customers, such that any impact on cash flows and the cash conversion cycle will be offset by increased revenue and hence Return on Capital (or vice versa). The tools like Discounts and allowances are used for this.
- *Short term financing* . Inventory is ideally financed by credit granted by the supplier; dependent on the cash conversion cycle, it may however, be necessary to utilize a bank loan (or overdraft), or to .convert debtors to cash. through .factoring. in order to finance working capital requirements.

There are, however, certain constraints in the management of working capital such as:

(i) Non-realisation of the importance of working capital.
(ii) Continuous inflation in the economy.
(iii) The existence of seller.s market or monopoly conditions; and
(iv) High profitability.

(Determinants of working capital may also be written.)

Q16. Write short note on Importance of Adequate/Optimum working capital.
Explain over-trading.

A. The importance of adequate working capital in commercial undertakings can be judged from the fact that a concern needs funds for its day-to-day running. Adequacy or inadequacy of these funds would determine the efficiency with which the daily business may be carried on. A large amount of working capital would mean that the company has idle funds. Since funds have a cost, the company has to pay huge amount as interest on such funds. This results in over capitalization. A firm has, therefore, to be very careful in estimating its working capital requirements.

If the firm has inadequate working capital, it is said to be under-capitalised. Such a firm runs the risk of insolvency. This is because, paucity of working capital may lead to a situation where the firm may not be able to meet its liabilities.

If a firm has insufficient working capital and tries to increase sales, it can easily over-stretch the financial resources of the business. This is called ***overtrading***. Early warning signs of over trading include:

- Pressure on existing cash.
- Exceptional cash generating activities e.g., offering high discounts for early cash payment.
- Bank overdraft exceeds authorized limit.
- Seeking greater overdrafts or lines of credit.
- Part-paying suppliers or other creditors.
- Paying bills in cash to secure additional supplies.
- Management pre-occupation with surviving rather than managing.
- Frequent short-term emergency requests to the bank (to help pay wages, pending receipt of a cheque).

Maintaining adequate working capital is not just important in the short-term. Sufficient liquidity must be maintained in order to ensure the survival of the business in the long-term as well. If a company.s current assets do not exceed its current liabilities, then it may run into trouble with creditors that want their money quickly. The working capital ratio, which measures this ability to pay back can be calculated as current assets divided by current liabilities.

It is understood that a current ratio of 2 for a manufacturing firm implies that the firm has an optimum amount of working capital. This is supplemented by Acid Test Ratio which should be at least 1. As a thumb rule, this may be quite adequate. However, it should be remembered that optimum working capital can be determined only with reference to the particular circumstances of a specific situation. Thus, in a company where the inventories are easily saleable and the sundry debtors are as good as liquid cash, the current ratio may be lower than 2 and yet firm may be sound.

In nutshell, a firm needs to maintain a sound working capital position.

Wishing You All The Best
Remember You Can Do Wonders , Nobody Can Stop You From Achieving Success Except You
Get Up and Keep Going, World Is Waiting For You
— Rasesh Tandon
Believe me it''ll work. So be ready to face such situations

Best of Luck