

<b>Name:</b>	 <b>UPES</b> UNIVERSITY WITH A PURPOSE
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**End Semester Examination, May 2019**

**Programme: Financial Management in Supply Chain Industry**

**Course Code: FINC 7012**

**Course: MBA LSCM**

**Semester: II**

**Time: 03 hrs.**

**Max. Marks: 100**

**Instructions: Scientific Calculator is allowed**

**No of Pages : 8**

**Attempt All Questions**

**SECTION A**

S. No.	Multiple Choice Questions	Marks	CO
Q 1	A loan of Rs.5,00,000 is to be repaid in 10 equal annual installments. If the loan carries a rate of interest of 12% p.a (PVIFA – 5.65), the equated annual installment is a. Rs.75,000 b. Rs.80,000 c. Rs.88,496 d. Rs.95,496	<b>1</b>	<b>2</b>
Q 2	Ke increases with the increase in Debenture and Decrease in Equity. This is the proposition of a. Net Operating Income Approach b. Net Income Approach c. MM Approach d. Walter Approach	<b>1</b>	<b>2</b>
	<b>Differentiate the following</b>		
Q 3	Operating Leverage and Financial Leverage	<b>1</b>	<b>4</b>
Q4	PV of Annuity and FV of Annuity	<b>1</b>	<b>5</b>
Q 5	Profit Maximization and Wealth Maximization	<b>1</b>	<b>3</b>
Q 6	Business Risk and Financial Risk	<b>1</b>	<b>1</b>
Q 7	Rule of 72 and Rule of 69	<b>1</b>	<b>1</b>
Q 8	Kd and Ke	<b>1</b>	<b>2</b>
Q 9	Issue Price and Sale Value	<b>1</b>	<b>4</b>
	<b>Fill in the Blanks</b>		
Q 10	Assumptions of MM Model of Capital Structure are.....	<b>1</b>	<b>5</b>
Q 11	Rate of Interest is 12 % per annum. Compounding is Quarterly. Effective rate on Interest is .....	<b>1</b>	<b>1</b>
Q 12	Capital Structure is defined as.....	<b>1</b>	<b>2</b>

Q 13	PV of Growing Annuity is =.....	1	3
Q 14	Financial Even Break Point refers to.....	1	2
Q 15	Risk Free rate of Return = 10%, Beta = 1.5, Return on Market Portfolio=12.5%, so Ke.....	1	1
Q 16	Arbitrage Argument as per MM Model of Dividend Policy is defined as.....	1	5
Q 17	DFL is calculated as .....	1	2
Q 18	If you Invest today Rs. 10,000 today at a compound interest of 10% p.a. Future Value after 60 years will be.....	1	3
Q 19	Bird in the hand argument is defined as .....	1	4
Q 20	The Aron Company belongs to a risk class of which the appropriate Capitalization Rate is 10%. It currently has 1, 00,000 shares selling at Rs. 100 each. The firm is contemplating the declaration of a Rs. 6 Dividend per share at the end of the current financial year. The company follows MMY Model of Dividend Policy. The price of the shares at the end of the year if dividend is declared will be .....	1	5
<b>SECTION B</b>			
Q 21	Write Short Notes on the following: a. Profit Maximization Approach – Objective of Financial Management <b>2 Marks</b> b. CAPM Model <b>3 Marks</b>	5	4 3
Q 22	The Jeevan Progress Yojana at Rural and Semi Urban branches of SBI is a scheme open to all individuals/firms. A lump sum deposit is remitted and the principal is received with interest at ye rate of 14% p.a. in 12 monthly installments. The Interest is compounded at quarterly intervals  You are required to calculate  a. What is effective rate of Interest per annum b. What is effective rate of interest per month c. What is amount of Initial Deposit to be made to receive Rs. 1000 monthly for 12 months.	5	3
Q 23	Rakesh borrows Rs. 10,00,000 for a Plant at a monthly interest of 1.25%. The loan is to repaid in 12 equal monthly installments payable at the end of each month. Prepare Loan Repayment Schedule	5	4
Q 24:	Briefly Discuss Net Operating Income Model of Capital Structure with example	5	3
<b>SECTION-C</b>			
Q 25	The two companies LG Ltd. and Samsung Ltd. belong to the same risk class. They have	10	3

	everything in common except that the firm Lotus Ltd has 10 % Debentures of Rs. 5 Lakh. EBIT is Rs. 8, 00,000 which would be equal for both the firms. Equity Capitalization Rate is 12.5 % for LG Ltd. and 15 % for Samsung Ltd. Gaurav owns 10 % of the equity shares of the LG Ltd. What arbitrage he will resort to as per MM model		
Q 26	The EPS of Denso Pvt Ltd is Rs.30. The company is examining to adopt dividend payout ratios of 0%,25%, 50%,75% and 100%. Calculate the market value of Company's share using Walter's model of dividend policy if the rate of return on investments is (i) 10% (ii) 18% given the Capitalization Rate (Ke) is 15%. What is your inference?	10	5
Q 27	<p>PTC has existing Capital Structure consisting of Rs. 40,00,000 Equity Capital ( Price Per Share Rs. 100). Company required Rs. 40,00,000 for further expansion. The <b>Company has 4 alternative Financial Plans:</b></p> <ol style="list-style-type: none"> <li>Raise Entire Money in the form of Equity Capital</li> <li>Raise 50% money in the form of Equity Capital and 50% money in the form of Debentures( Interest Rate 5%)</li> <li>Raise 50% money in the form of Equity Capital and 50% money in the form of Preference Shares ( Dividend Rate 5%)</li> <li>Raise Entire Money in the form of Debentures (Interest Rate 6%)</li> </ol> <p>Tax rate 30%</p> <p><b>Which Financial Plan company will choose based on EPS and Financial Breakeven point</b></p>	10	5
	<b>OR</b>		
	Following particulars are collected by an analyst for two companies		

(Rs. in crore)

Particulars	Rich Cap Ltd. (RCL)	Malt Products Ltd. (MPL)
Sales	60	150
Variable cost	22	45
Fixed Cost	20	50
Interest	10	30

**Required:**

- Determine degree of operating leverage, degree of financial leverage and degree of total leverage.
- Give your opinion about riskiness of these firms.

**SECTION-D**

Q 28

The capital structure of J K Industries as on 31.03.2019 is given below. The Company has the following capital structure

	Rs lakh
Equity Capital ( 20 lakh shares at par value)	200
Retained Earnings/ Reserve and Surplus	240
10% Preference Shares ( 20,000 shares at par value)	20
12% Term loans	200
12% Debentures (1,40,000 debentures at par value)	140

The market price per equity share is RS. 50. The next expected dividend per share is Rs. 4.00 and DPS is expected to grow at a constant rate of 16%.

The Preference shares are redeemable at par after 5 years. Face value of the preference share is Rs. 100. Discount on Issue is 5%, Floatation Cost is 3%, Dividend Tax is 2%

Debentures are redeemable at par after 5 years. Face value of the Debenture is Rs. 100. Discount on Issue is 4%, Floatation Cost is 2%, Tax Rate is 30%

Calculate WACC, based upon given weights

15

4

Q 29

**Read the case and answer the following questions**

**Agency Cost**

Most corporate financing decisions in practice reduce to a choice between debt and equity. The finance manager wishing to fund a new project, but reluctant to cut dividends or to make a rights issue, which leads to the decision of borrowing options. The issue with regards to shareholder objectives being met by the management in making financing decisions has come to become a major issue of recent times. This relates to understanding the concept of the agency problem. It deals with the separation of ownership and control of an organization within a financial context. The financial manager can raise long-term funds internally, from the company's cash flow, or externally, via the capital market, the market for funds of more than a year to maturity. This exists to channel finance from persons and organizations with temporary cash surpluses to those with, or expecting to have, cash deficits, i.e. the shareholders.

The agency problem on a firm's capital structure decisions: Potential conflict arises where ownership is separated from management. The ownership of larger companies is widely spread, while the day-to-day control of an organisation's business interests rests in the hands of a few managers who usually have a relatively small proportion of the total shares issued. This can give rise to the problem of managerial incentives. Examples of this include pursuing more perquisites (splendid offices and company cars, etc.) and adopting low-risk survival strategies and satisficing behaviour. This conflict has been explored by Jensen and Meckling (1976), who developed a theory of the firm under agency arrangements. Managers are, in effect, agents for the shareholders and are required to act in their best interest. However, they have operational control of the business and the shareholders receive little information on whether the managers are acting in their best interest. According to Jensen and Meckling (1976), if a wholly-owned firm is managed by the owner, he will make operating decisions that maximize his utility. These decisions will involve not only the benefits he derives from pecuniary returns but also the utility generated by various non-pecuniary aspects of his entrepreneurial activities such as the physical appointments of the office, the attractiveness of the office staff, the level of employee discipline, the kind and amount of charitable contributions, personal relations (friendship, respect and so) with employees, a larger than optimal computer to play with, or purchase of production inputs from friends.

The capital structure of a firm is divided between debt capital and equity. Debt capital is the use of borrowed funds by the management of a firm to carry out its financial decisions. Most companies borrow money on a long-term basis by issuing loan stocks.

The terms of the loan will specify the amount of the loan, rate of interest and date of payment, etc. Equity capital on the other hand is the long-term finance of a firm which is provided by the shareholders of a company. By purchasing a portion of, or shares in, a company, almost anyone can become a shareholder with some degree of control over the company. Ordinary share capital is the main source of new money from shareholders. For an established business, the majority of equity funds will normally be internally generated from successful trading.

Now, the advantages of debt capital centre on its relative cost. Debt capital is usually cheaper than equity because, the pre-tax rate of interest is invariably lower than the return required by shareholders. The issue of asymmetric information to a firm's capital structure: It follows that, to understand how firms behave, we must understand the nature of the contracts and monitoring procedures. Information is not usually available to all parties in business in equal measure. For example, the board of directors will know more about the future prospects of the business than the shareholders, who have to rely on published information. Thus information asymmetry means that investors not only listen to the board's rhetoric and confident projections, but also examine the information content in its corporate actions. This signally effect is most commonly seen in the reaction to dividend declaration and share dealings by the board An increase in dividends signals that the company is expected to be able to sustain that level of cash distribution in the future. Now, shareholders and other investors in a business do not possess all the information available to management. Nor do they always have the necessary expertise to appreciate fully the information they do receive. Capital rationing may arise because senior managers, convinced that their set of investment proposals is wealth-creating, cannot convince a more sceptical group of potential investors who have far less information on which to make an assessment and who may be influenced by the company's recent performance record. According to The practical methods a firm may use to determine its optimal financing mix: For many years, it was thought advantageous to borrow so long as the company's capacity to service the debt was unquestioned. The result would be higher earnings per share and higher share value, provided the finance raised was invested sensibly. The dangers of excessive levels of borrowing would be forcibly articulated by the stock market by a down rating of the shares of a highly geared company. This prompted the concept of an optimal capital structure which maximised company value. However, while the critical gearing ratio is thought to depend on factors such as the steadiness of the company's cash flow and the saleability of its assets, it has proved to be like the Holy Grail, highly desirable but illusory, and difficult to grasp.

***Capital Gearing: A widely-used measure of capital gearing is the ratio of all long-***

**term liabilities (LTL), i.e. amounts falling due after more than one year, to shareholders' funds. This purports to indicate how easily the firm can repay debts from selling assets, since shareholder funds measure net assets:**

Capital gearing = LTL

**Shareholders' funds: There are several drawbacks to this approach. First, the market value of equity maybe considerably higher than the book value, reflecting higher asset values, so this measure may seem unduly conservative. However, the notion of market value needs to be clarified. When a company is forced to sell assets hurriedly in order to repay debts, it is by no means certain that buyers can be found to pay acceptable prices. The break-up values of assets are often lower than those expressed in the accounts, which assume that the enterprise is a going concern.**

Interest Cover and income gearing: The trigger for a debt crisis is usually inability to make interest payments, and the frontline is therefore the size and reliability of the company's income in relation to its interest commitments. Although, in reality, cash flow is the more important consideration, the ability of a company to meet its interest obligations is usually measured by the ratio of profit before tax and interest, to interest charges, known as interest cover, or times interest earned:

**Interest Cover = Profit before interest and tax**

The target capital structure: A solution commonly adopted in practice is to specify a target capital structure. Here, the firm defines what it regards as the optimal long-term gearing ratio, and then attempts to adhere to this ratio in financing future operations. If for example, the optimal ratio is deemed to involve 50 per cent debt and 50 percent equity (i.e. a debt-to-equity ratio of 100 percent), any future activities should be financed in these proportions. For example, a 10 million project would be financed by 5 million debt and 5 million equity, via retained earnings or a rights issue. The corollary is to use the WACC as the cut-off rate for new investment.

When shareholders require 20% and debt costs 7.0% post-tax, the WACC is:

{Cost of equity × equity weighting} + (post-tax cost of debt × debt weighting)

= (20% × 50%) + (7.0% × 50%) = (10% + 3.50%) = 13.50%.

Q 1: How agency problem affects capital structure decisions?

**5 Marks**

	<p>Q 2: How the issue of asymmetric information to a firm's capital structure took place? How it can be prevented? <b>5 Marks</b></p> <p>Q 3: What are the methods by which company can decide optimum financing mix? <b>5 Marks</b></p> <p style="text-align: center;"><b>OR</b></p> <p>Calculate the Price Per Equity Share using Dividend Growth Model – Cost of Equity</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">Last Year Dividend Per Share</td> <td style="text-align: right;">Rs. 10.00</td> </tr> <tr> <td>Duration of Super Normal Growth</td> <td style="text-align: right;">5 Years</td> </tr> <tr> <td>Growth Rate During Super Normal Growth Period</td> <td style="text-align: right;">30%</td> </tr> <tr> <td>Normal Growth Rate after Super Normal Growth Period</td> <td style="text-align: right;">10%</td> </tr> <tr> <td>Ke</td> <td style="text-align: right;">16%</td> </tr> </table> <p style="text-align: right; margin-top: 20px;"><b>15</b></p>	Last Year Dividend Per Share	Rs. 10.00	Duration of Super Normal Growth	5 Years	Growth Rate During Super Normal Growth Period	30%	Normal Growth Rate after Super Normal Growth Period	10%	Ke	16%		
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**No of Pages : 7**

**Attempt All Questions**

**SECTION A**

S. No.	Multiple Choice Questions	Marks	CO
Q 1	Degree of Operating Leverage is defined as a. % change in EBIT/ % change in sales b. % change in sales/ % change in EBIT c. % change in EBIT/%change in EPS d. Both (a) & (c) above	1	2
Q 2	$(D1 / P0) + g$ is used for..... a. $K_e$ b. $K_d$ c. $K_p$ d. $K_o$	1	2
	<b>Differentiate the following</b>		
Q 3	Financing Decision and Investment Decision	1	4
Q4	PV of Rupee and FV of Rupee	1	5
Q 5	Beta>1 and Beta <1	1	3
Q 6	Systematic Risk and Unsystematic Risk	1	1
Q 7	PV of Annuity and PV of Growing Annuity	1	1
Q 8	$K_p$ and $K_r$	1	2
Q 9	Book Value Weight and Market Value Weight	1	4
	<b>Fill in the Blanks</b>		
Q 10	According to NOI Model $K_e =$ .....	1	5
Q 11	$K_p$ is defined as .....	1	1
Q 12	Leverage is defined as.....	1	2
Q 13	PV of Perpetuity is =.....	1	3
Q 14	EBIT EPS Analysis refers to.....	1	2

Q 15	If there are no operating cost , there will be.....	1	1
Q 16	Arbitrage Argument as per MM Model of Dividend Policy is defined as.....	1	5
Q 17	DOL is calculated as .....	1	2
Q 18	The cost of capital decreases with the increase in the Degree of Financial Leverage. This is the proposition of .....Approach	1	3
Q 19	Arbitrage argument as per MM model of capital structure is defined as .....	1	4
Q 20	Company Mahan Ltd. has EPS of Rs. 5 per share , Cost of Equity (Capitalization Rate) = 10%, Rate of Return on Investment = 18%, D/P ratio= 25%. The price per share as per Walter Model is .....	1	5

**SECTION B**

Q 21	Write Short Notes on the following: a. Wealth Maximization Approach – Objective of Financial Management <b>2 Marks</b> b. Dividend Model <b>3 Marks</b>	5	4 3
Q 22	The annuity deposit scheme of PNB provides for fixed monthly income for suitable periods of the depositors choice. The rate of Interest is 12% p.a. which is compounded at quarterly intervals. If an initial deposit of Rs. 10,000 is made for an annuity period of 80 months, what is the amount of monthly annuity?	5	3
Q 23	Calculate the Cost of Debenture for each of the following cases (Redeemable Debentures) by shortcut method.  a. Debentures are sold at par and floatation costs are 5% b. Debentures are sold at 10% premium and flotation costs are 5% of the issue price c. Debentures are sold at 5 % discount and flotation costs are 5% of the issue price  Coupon Rate of Interest on Debentures is 15% and the face value of Debenture is Rs. 100 . Maturity period is 10 Years and Tax rate is 35%	5	4
Q 24:	Briefly Discuss MM Model of Dividend Policy with example	5	3

**SECTION-C**

Q 25	<p>Two companies L &amp; U belong to the equivalent risk group. Two companies are identical in every aspect except that L is a levered and company U is unlevered. The outstanding amount of debt of the levered company is Rs. 30,00,000 @ 10 % debentures. The equity capitalization rate is 20% in levered firm and 15% in unlevered firm. EBIT is Rs. 7,50,000. An investor owns 10% equity shares in company L. Show the arbitrage process according to Modigliani Miller Model of Capital Structure.</p> <p>Does arbitrage according to MM Model holds good ?</p>	10	3																								
Q 26	<p>The EPS of Metallic Company is Rs.20. The company is examining to adopt dividend payout ratios of 0%,25%, 50% ,75% and 100%. Calculate the market value of Company's share using Walter's model of dividend policy if the rate of return on investments is (i) 30% (ii) 16% given the Capitalization Rate (Ke) is 20%. What is your inference?</p>	10	5																								
Q 27	<p>A firm has a capital structure exclusively comprising of ordinary shares amounting to Rs. 25,00,000. The firm wishes to raise additional capital Rs. 25,00,000 for expansion. The firm has three alternative financial plans</p> <ol style="list-style-type: none"> <li>Raise entire amount in the form of equity capital</li> <li>Raise 50% equity and 50% as 5 % Debentures</li> <li>Raise entire amount as 6% Debentures</li> </ol> <p>EBIT are Rs. 3,00,000 , Tax Rate is 35% . Ordinary Shares Existing are 25,000 and Market Price per share is Rs. 100. Which Financial Plan should the form should select by EBIT EPS Analysis?</p> <p style="text-align: center;"><b>OR</b></p> <p>The well established company's most recent Balance Sheet is as follows:</p> <table border="1" data-bbox="232 1297 1278 1734"> <thead> <tr> <th>Liabilities</th> <th>Amount (Rs.)</th> <th>Assets</th> <th>Amount(Rs.)</th> </tr> </thead> <tbody> <tr> <td>Equity Share Capital (Rs. 10 per share)</td> <td>1,20,000</td> <td>Net Fixed Assets</td> <td>3,00,000</td> </tr> <tr> <td>10% Long Term Debt</td> <td>1,60,000</td> <td>Current Assets</td> <td>1,00,000</td> </tr> <tr> <td>Retained Earnings</td> <td>40,000</td> <td></td> <td></td> </tr> <tr> <td>Current Liabilities</td> <td>80,000</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>4,00,000</td> <td></td> <td>4,00,000</td> </tr> </tbody> </table> <p>The Company's total assets turnover ratio is 3, its fixed operating costs are Rs. 2,00,000 and the variable operating cost Ratio is 40%. The Income Tax rate is 35</p>	Liabilities	Amount (Rs.)	Assets	Amount(Rs.)	Equity Share Capital (Rs. 10 per share)	1,20,000	Net Fixed Assets	3,00,000	10% Long Term Debt	1,60,000	Current Assets	1,00,000	Retained Earnings	40,000			Current Liabilities	80,000			Total	4,00,000		4,00,000	10	5
Liabilities	Amount (Rs.)	Assets	Amount(Rs.)																								
Equity Share Capital (Rs. 10 per share)	1,20,000	Net Fixed Assets	3,00,000																								
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Retained Earnings	40,000																										
Current Liabilities	80,000																										
Total	4,00,000		4,00,000																								

	%  Calculate the all three type of Degrees of Leverages		
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**SECTION-D**

Q 28	<p>The following information of Swiggy Ltd is available to you for your perusal:</p> <p style="text-align: center;">The present book value capital structure is as follows:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="border: none;">Debenture</td> <td style="border: none;">(Rs 100 per Debenture)</td> <td style="border: none;">Rs 4,50,000</td> </tr> <tr> <td style="border: none;">Preference Shares</td> <td style="border: none;">(Rs 100 per Share)</td> <td style="border: none;">Rs 3,50,000</td> </tr> <tr> <td style="border: none;">Equity Shares</td> <td style="border: none;">(Rs 100 per Share)</td> <td style="border: none;">Rs 6,50,000</td> </tr> </table> <p style="text-align: center;">Anticipated external financing opportunities are:</p> <ol style="list-style-type: none"> <li>a. Rs 100 per debenture redeemable at par; 5 year maturity, 15% coupon rate , 2.5% flotation cost, 6% discount on Issue</li> <li>b. Rs 100, 12% preference shares redeemable at par: 15 years maturity, 4% flotation cost, Premium 3% on issue</li> <li>c. Equity shares Rs 100; Rs 5 per share of flotation cost, selling price in primary market is Rs 125.</li> </ol> <p>In addition, the dividend expected on the equity shares at the end of the year is Rs 8 per share; the anticipated growth rate in dividends is 8% and the company has the practice of paying all its earnings in the form of dividends. The corporate tax rate is 30%.</p> <p>You are required to determine the weighted average cost of capital using the book value weights</p>	Debenture	(Rs 100 per Debenture)	Rs 4,50,000	Preference Shares	(Rs 100 per Share)	Rs 3,50,000	Equity Shares	(Rs 100 per Share)	Rs 6,50,000	<b>15</b>	<b>4</b>
Debenture	(Rs 100 per Debenture)	Rs 4,50,000										
Preference Shares	(Rs 100 per Share)	Rs 3,50,000										
Equity Shares	(Rs 100 per Share)	Rs 6,50,000										
Q 29	<b>Read the case and answer the following questions</b>		<b>5</b>									

The capital asset pricing model (CAPM) is a mathematical model that offers an explanation about the relationship between investment risk and return. By dividing the covariance of an asset's return by the variance of the market, an asset value can be determined. To ascertain the risk level of a particular asset, the market is evaluated as a whole. Unlike the DCF model, the time value of money is not considered. This model assumes the investors understands the risk involved and trades without cost. Two types of risk is associated with the CAPM model: unsystematic and systematic. Unsystematic risks are company-specific risk. For example, the value of an asset can increase or decrease by changes in upper management or bad publicity. To prevent total loss, the model suggests diversification. Systematic risk is due to general economic uncertainty. The marketplace compensates investors for taking systematic risk but not for taking specific risk. This is because specific risk can be diversified away. Systematic risk can be measured using beta. For example, suppose a stock has a beta of 0.8. The market has an expected annual return of 0.12 and the risk-free rate is .02 Then the stock has an expected one-year return of 0.10.

$$K_e = .02 + .8[.12 - .02] = 0.10$$

According to CAPM, the value of an asset fluctuates because of unpredictable economic shifts. The basis for CAPM is that asset risk is measured by the variance of its return over future periods. (McCullough, 2005) Assets with  $\beta < 1$  will display average movements in return less extreme than the overall market, while those with a  $\beta > 1$  will show return fluctuations greater than the overall market. All other measures of risk is not important. CAPM works best for long-term investments.

$K_i$  = the required return on asset  $i$

$R_f$  = risk-free rate of return on a U.S. Treasury bill

$\beta_i$  = beta coefficient or index of non-diversifiable risk for asset  $i$

$k_m$  = the return on the market portfolio of assets

The Discounted Cash Flow Method, (DCF) summarizes a company cash flow to reflect the time value of money. It can be used to evaluate or compare investments or purchases. Unlike CAPM, DCF uses the present value concept. It puts forth the idea that money invested today should be worth more than money received in the future. Thus, the value of money received in the future is discounted to reflect its lesser value. DCF can be applied to various situations. Business can use the method to prepare budgets and make projections. It can also be used to analyze receipt and disbursements for a particular project or activity. A disadvantage of using DCF is that the model is based on assumptions. (Block, 2008). Predicting future cash flows can be challenging. If the information

used to make an investment decision proves to be incorrect, the value of an asset will decline. The success of this model depends on the investor's ability to make good future projections. The advantage of the CDF models is that it allows an investor to track an organization's cash flow. DCF also provides information that allows investors to compute the value of organization.

Long-term financing provide capital deficit businesses funds for the period over 1 year. To achieve balance in their capital structure, corporations may offer preferred or common stock, leasing or bonds.

For most large US companies, bonds are offered as means of raising revenue. A bond typically includes the par or face value, coupon rate and maturity date. A detailed summary of the terms can also be found on the bond indenture. This legal document is administered by an independent financial trustee. In case of default, the trustee can liquated pledged assets or secured debt to bondholders. Debenture or unsecured bonds are offered by some corporations. Rather than offering specific items as collateral, debenture bonds allows a general claim to be placed against assets. Various repayment methods are available to corporations when bonds mature. In addition to the lump-sum single payment, serial payment and conversions are available options. Serial payments are paid on an installment basis according to their serial number. Conversions are used to retired outstanding debt by converting bonds to common stock. Bond debt offers tax-deductible interest payments. The drawback of bond financing is the debt must be repaid regardless of the economic condition of the company Long-term leasing has become a popular way for business to finance debt. As such FASB requires certain leases to be included in financial statements. A capital lease or financing lease must be reflected on an organization's balance sheet. In comparison to an operating lease, which is usually short-term, a capital lease is a long term obligation. It also transfers ownership of the property to the lessee at the end of the lease. A capital lease also affects the income statement. The property is amortized over the life of the lease and the expense is deducted on an annual basis. Long-term leasing is a lucrative business. The advantage of this type of financing is the lack of a required down payment; lease obligations are not as restrictive as a bond agreement. Tax benefits such as depreciation on equipment and lease payment on land is tax deductible.

Issuing stock is another tool organizations can use to finance business activities. Offering common stock allows organizations to generate income while relinquishes ownership. Long-term financing is more often associated with the need for fixed assets such as property, manufacturing plants, and equipment where the assets will be used in the business for several years. It is also a

practical alternative in many situations where short-term financing requirements recur on a regular basis some control over the organization. Common stock gives shareholders ownership rights and the right to elect board members. Additionally, common stockholders have a residual claim to income. That is all income that is not allotted to preferred shareholders belongs to common shareholders. While a preferred stockholder does not have ownership in a corporation, they have first claims to dividends. Unlike interest due on bonds, it is not mandatory for corporations to pay dividends to preferred stock holders.

Q 1: What are the risks discussed in CAPM Model?

**5 Marks**

Q 2: How  $K_e$  is assessed using CAPM Model

**5 Marks**

Q 3: What are the various means of raising revenue in US Companies ? **5 Marks**

**OR**

The Levered company and the unlevered company is similar in all respects except that the levered company has 6% of Rs200000 debt outstanding. As per NI approach, The value of the two firms is as follows

	UNLEVERED (Rs)	LEVERED(Rs)
Net operating income	60000	60000
Total cost of debt	0	12000
Net earnings	60000	48000
Equity capitalization rate	10%	11.1%
Market value of shares	600000	432000
Market value of debt	0	200000
Total value of the firm	600000	632000

Mr. X holds Rs2000 worth of levered company's shares. Is it possible to reduce his outlay to earn same return through the use of arbitrage? Illustrate **15**