INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

Spring (Summer) 2010 Examinations

Monday, the 17th May 2010

STRATEGIC FINANCIAL MANAGEMENT – (S-601)
STAGE - 6

Time Allowed – 2 Hours 45 Minutes **Maximum Marks – 90**

(i) Attempt all questions.
(ii) Answers must be neat, relevant and brief.
(iii) In marking the question paper, the examiners take into account clarity of exposition, logic of arguments, effective presentation, language and use of clear diagram/ chart, where appropriate.
(iv) Read the instructions printed inside the top cover of answer script CAREFULLY before attempting the paper.
(v) Use of non-programmable scientific calculators of any model is allowed.
(vi) DO NOT write your Name, Reg. No. or Roll No. anywhere inside the answer script.
(vii) Question No.1 – "Multiple Choice Question" printed separately, is an integral part of this question paper.

Marks

Q. 2 (a) Two companies have the following financial data:

	Alpha Limited	Beta Limited
		Rs.(000)
Working capital	31,500	(4,800)
Total assets	150,000	63,000
Total liabilities	66,000	39,000
Equity value (market)	114,000	15,300
Retained earnings	57,000	9,000
Sales	258,000	69,000
Earnings before interest and taxes	36,000	3,900

Required:

Using Altman's model for predicting bankruptcy, determine the Z-score index for each company. Which one of the companies likely to go into bankruptcy on the basis of these indexes? Justify your arguments. 08

(b) Best Limited is a rapid growing company in the Industry. The following data has been taken from the books of Best Limited on December 31, 2009.

	Rs. in million
Sales revenue	3,200
Net income	160
Dividends	96
Total debt	1,200
Total equity	800

Required:

(i) Determine sustainable growth rate (SGR) of Best Limited. 05

(ii) If the company wishes to have SGR of 15% by improving its profit margins, calculate the required net profit margin. 03

(iii) Give your views on the feasibility to attain such SGR (as calculated in (ii) above). 02

Q. 3 (a) On January 1, Quality Printing Limited is considering to sign a 4-year, Rs.9 million term loan from one of the leading banks in the private sector. The loan is payable at the end of the fourth year and would involve execution of loan agreement containing a number of protective terms and conditions as under:

- The company must maintain working capital of Rs.9 million at all times.
- It cannot take any more long-term debt.
- Its total liabilities cannot be more than 60% of its total assets.
- Capital expenditure in any year is limited to depreciation plus Rs.9 million.

PTO

The company's balance sheet as at December 31, before obtaining the term loan, is: **Marks**

			Rs.(000)
Current assets	21,000	Current liabilities	9,000
Net fixed assets	30,000	Long-term debt (due in 5 years)	15,000
		Shareholder's equity	27,000
	51,000		51,000

The proceeds of the term loan will be used to increase Quality Printing Limited's investment in inventories and receivable in response to introducing a new dictionary. The company desires to grow at a rate of 24% per annum (equally applicable to current assets and net fixed assets). Profits after taxes of Rs.4.5 million are expected this year and these profits are further expected to grow to Rs.5.25 million, Rs.6 million and Rs.6.75 million over the subsequent 3 years. The company pays no dividends and does not intend to pay any over the next 4 years. Depreciation in the past year was Rs.7.5 million and this is predicted to grow over the next 4 years at the same rate as the increase in net fixed assets.

Required:

(i) Construct the balance sheet as at December 31, of Quality Printing Limited after incorporating the term loan and over the period of next four years under the growth assumption. 05

(ii) Will the Quality Printing Limited be able to fulfil the restrictive conditions? Substantiate your answer, showing appropriate calculations. 07

(b) Fatima Enterprises is a renowned name in garment industry. It generates almost 75% of its revenue from export. The company has just acquired a large order from Middle East. As a result, it needs an additional amount of Rs.375,000 for working capital immediately. There are three feasible sources of funds as mentioned below:

(i) **Trade credit:** the company buys Rs.250,000 of materials per month and avails discount on the terms of 3/30, net 90.

(ii) **Bank loan:** the company's bank will lend Rs.500,000 at 13%. A 10% compensating balance will be required, which otherwise would not be maintained by the company.

(iii) **A factor** will buy the company's receivables (Rs.500,000 per month), which have a collection period of 60 days. The factor will advance up to 75% of the face value of the receivables at 12% on an annual basis. The factor will also charge a 2% fee on all receivables purchased. It has been estimated that the factor's services will save the company a credit department expense and bad-debt expenses of Rs.7,500 per month.

Required:

On the basis of annual percentage (%) cost, which one of the above alternatives should Fatima Enterprises select? 05

Q. 4 (a) Five Star Limited a pharmaceutical company is going to launch a new syrup, which would be sold over the counter without a prescription. To develop the syrup and to market it on regional basis, it will cost Rs.36 million over the next 2 years, Rs.18 million in each year. Other projections are:

- Expected cash inflows associated with the project for years 3 through 8 are Rs.3 million, Rs.6 million, Rs.12 million, Rs.12 million, Rs.9 million and Rs.3 million, respectively.
- If the project is successful at the end of year 5, the company will have the option to invest additional Rs.30 million to secure country's market.
- The probability of project success is 0.60.
- If the project becomes successful, cash flows are expected to be Rs.18 million higher in each of the year 6 through year 10 with a probability of 0.50, and Rs.12 million higher in each of year 6 through year 10 with a probability of 0.50.
- If the project is not successful, the company will not invest the Rs.30 million and there will be no incremental expected cash flows.
- The company's required rate of return for the project is 14%.

Required:

(i) What is the net present value of the project? Is it acceptable? 05

(ii) What is the worth of the project if we consider the option to expand? Is the project acceptable with the option of expansion? 05

Marks

(b) National Packages Limited (NPL) has to decide between two mutually exclusive investment projects. Each project cost Rs.7,750,000 and has an expected life of 3 years. Annual net cash flows from each project begin one (1) year after the initial investment is made and have the following probability distributions:

Project A		Project B	
Probability	Net Cash Flows Rs.(000)	Probability	Net Cash Flows Rs.(000)
0.2	7,000	0.2	0
0.6	7,750	0.6	7,750
0.2	8,500	0.2	19,000

NPL has decided to evaluate the more risky project at a 12% rate and the less risky project at a 10% rate.

Required:

(i) What is the expected value of the annual net cash flows from each project? What is the coefficient of variation? 06

(ii) What is the risk-adjusted NPV of each project? Which project the company should accept? 03

(iii) If it were known that Project 'B' was negatively correlated with other cash flows of the firm whereas Project 'A' was positively correlated, how would this knowledge affect the decision for opting the project. 01

Q. 5 The following data reflects the current financial position of the Stylish Furniture Limited:

	Rs.
Value of debt (book = market)	2,000,000
Market value of equity	10,514,286
Sales, last 12 months	24,000,000
Variable operating costs (50% of sales)	12,000,000
Fixed operating costs	10,000,000
Tax rate	40%

- At the current level of debt; the costs of debt - Kd is 8% and the cost of equity - Ks is 10.5%.
- Board of Directors question whether or not the capital structure is optimal, so the Director Finance has been asked to consider the possibility of issuing Rs.2 million of additional debt and using the proceeds to repurchase shares.
- It is estimated that if the leverage were increased by raising the level of debt to Rs.4 million, the interest rate on new debt would rise to 9% and Ks would rise to 11.5%.
- If the firm decided to increase its level of debt to Rs.6 million, its cost of the additional debt of Rs.4 million would be 12% and Ks would rise to 15%.
- The original 8% debt is senior and would remain outstanding and its market value would remain at Rs.2 million either company issues additional Rs.2 million or Rs.4 million debt.
- The Stylish Furniture Limited is a zero-growth company, and all its earnings are paid out as dividend.

Required:

(a) Should the firm increase its debt to Rs.4 million? 04

(b) What level of debt should the firm choose: Rs.2 million, Rs.4 million, or Rs.6 million? 03

(c) The market price of the firm's share was originally Rs.20 per share. Calculate the new equilibrium share prices at debt levels of Rs.4 million and Rs.6 million respectively. 03

(d) Calculate the firm's earnings per share if it uses debt of Rs.2 million, Rs.4 million and Rs.6 million. Assume that the firm pays out all of its earnings as dividends. If you find that EPS increases with more debt, does this mean that the firm should choose to increase its debt to Rs.6 million or possibly higher? 04

(e) What would happen to the value of the old debt, if the firm uses more leverage and the old debt are not senior to the new debt? 01

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Marks

Q. 6 (a) The Blue Limited wants to acquire Green Limited by exchanging its 1.6 shares for each share of Green Limited. It anticipates maintaining the existing P/E ratio subsequent to the merger also. The relevant financial data are furnished below:

	Blue Limited	Green Limited
Earnings after taxes (Rs.)	3,000,000	900,000
Number of equity shares outstanding	600,000	150,000
Market price per share (Rs.)	35	40

Required:

(i) What is the exchange ratio based on market prices? 01

(ii) What is pre-merger EPS and the P/E ratio for each company? 02

(iii) What was the P/E ratio used in acquiring Green Limited? 01

(iv) What is EPS of Blue Limited after the acquisition? 01

(v) What is the expected market price per share of the merged company? 01

(b) Global Communications Limited is evaluating the possible acquisition of Star Cable Company (SCC), a regional cable company. The analysts of Global Communications Limited project the following post merger data for SCC at the end of June 30, of each year:

Rs. (000)

YEAR	2011	2012	2013	2014
Net sales	900	1036	1110	1200
Selling and administrative expenses	90	106	120	136
Interest	36	42	48	54

- If the acquisition is made, it will occur on July 1, 2010. All cash flows shown in the income statements are assumed to occur at the end of the year.
- SCC currently has a capital structure with 40% debt, but Global Communications Limited would increase debt to 50% if the acquisition were made.
- SCC pays taxes at 2%, but its income would be taxed at 35%, if it were consolidated.
- SCC's current market-determined beta ratio is 1.40, but the beta would rise to 1.50, if the debt ratio were increased to 50%.
- The cost of goods sold is expected to be 65% of sales, but it could vary somewhat. Depreciation-generated funds would be used to replace worn-out equipment, so they would not be available to the shareholders of Global Communications Limited.
- The risk-free rate is 8% and the market risk premium is 4%.
- Star Cable Company's available cash flows are expected to grow (Terminal growth rate) at a constant rate of 7% after 2014.

Required:

(i) What is the appropriate discount rate for valuing the acquisition? 02

(ii) What is the terminal value? What is the value of SCC to Global Communications Limited's shareholders? 12

THE END

PRESENT VALUE FACTORS						
Year	**10%**	**11%**	**12%**	**13%**	**14%**	**15%**
1	0.909	0.901	0.893	0.885	0.877	0.870
2	0.826	0.812	0.797	0.783	0.769	0.756
3	0.751	0.731	0.712	0.693	0.675	0.658
4	0.683	0.659	0.636	0.613	0.592	0.572
5	0.621	0.593	0.567	0.543	0.519	0.497
6	0.564	0.535	0.507	0.480	0.456	0.432
7	0.513	0.482	0.452	0.425	0.400	0.376
8	0.467	0.434	0.404	0.376	0.351	0.327
9	0.424	0.391	0.361	0.333	0.308	0.284
10	0.386	0.352	0.322	0.295	0.270	0.247