INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

Fall 2012 (February 2013) Examinations

Monday, the 18th February 2013

STRATEGIC FINANCIAL MANAGEMENT – (AF-503)

SEMESTER-5

Extra Reading Time:	**15 Minutes**	**Maximum Marks: 90**	**Roll No.:**	
Writing Time:	**02 Hours 45 Minutes**			

(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.

(viii) **Question Paper must be returned to invigilator before leaving the examination hall.**

Answer Script will be provided after lapse of 15 minutes Extra Reading Time (9:30 a.m. or 2:30 p.m. [PST] as the case may be).

Marks

Q. 2 ABC Ltd., produces helmets for bike riders. The most recent statement of financial position of the company is as under:

ABC Ltd.
Statement of Financial Position as at June 30, 2012

Assets		**Rs. '000'**	**Liabilities and Owners Equity**	**Rs. '000'**
Current assets:			Current liabilities :	
Bank		16,600	Trade payable	24,000
Receivable		40,000	Tax payable	9,000
Inventory		78,000	Dividends payable	15,600
		134,600		**48,600**
Non-current assets:			Owners equity:	
Buildings	48,800		Ordinary shares (Rs.10 per share)	40,000
Less: Accumulated dep.	8,800	40,000	Retained earnings	136,000
Plant and machinery	75,800			
Less: Accumulated dep.	25,800	50,000		
		90,000		**176,000**
Total		**224,600**		**224,600**

During the year ended June 30, 2012, the sales revenue was Rs. 480 million. In order to exploit the market conditions due to recent changes in government legislation, forecasts and assumptions for the next year have been prepared by the directors. However, forecast income statement and statement of financial position are yet to be prepared as per their following forecasts and assumptions:

- Sales for the forthcoming year will be 25% higher than the previous year. Sales are expected to be spread evenly over the year.
- The gross profit margin is expected to be 30% of sales.
- To enhance production, new machinery costing Rs. 114 million will be required at the beginning of the year. A long-term loan will be arranged immediately to finance the purchase of new machinery. At the end of the year, the long-term debt to equity ratio is planned to be 1 : 2.
- The average collection period of receivables will be three times that of previous years and the average payment period for creditors will be one and half (1½) months.

Marks

- The value of inventory at the end of the year will be Rs. 36 million lower than beginning inventory.
- Depreciation charges for buildings and plant and machinery are calculated using the reducing balance method and will be 5% and 20% respectively. Other expenses including interest on loan for the period will be Rs. 109.2 million. There will be no prepayments or accruals at the end of the year.
- Dividends will be declared at the end of the year and the dividend payout ratio will be 50% in line with previous years. The tax rate will be 35% of net profits before taxation. The dividend and tax will be paid after the year end.

Required:

Forecast income statement for the year ended June 30, 2013 and a statement of financial position as at June 30, 2013 (show all of your workings in legible writing). **15**

Q. 3 As a financial analyst of Super Technologies, your first task is to estimate overall cost of capital of the company for making capital budgeting decisions. The data, relevant to your task, is as under:

- **Debt:**
  The company can raise an unlimited amount of debt by selling a 10-year Term Finance Certificates (TFCs) of Rs. 1,000 par value with 8% coupon rate on which annual interest payment will be made. To sell the issue, an average discount of Rs. 50 per TFC would have to be given. The company must also pay floatation cost of Rs. 20 per TFC.
- **Preference Shares:**
  The current price of company's 10% preference shares of Rs. 100 par value is Rs. 114. The company would incur the floatation charges of Rs. 2.90 per share on a new issue.
- **Ordinary Shares:**
  Company's common share is currently selling at Rs. 70 per share. Its last dividend (D_0) was Rs. 6, and dividends are expected to grow at a constant rate of 5% in the foreseeable future. Company's beta is 1.5, the risk free rate is 5%, and the market risk premium is estimated to be 6%. For the bond-yield–plus-premium approach, the firm uses a 4 percentage point risk premium.
- The company's tax rate is 35% and its target capital structure is 30% long-term debt, 10% preference shares, and 60% common equity.

Required:

Calculate:

(a) The pre-tax interest rate on Super Technologies' debt and its after-tax cost of debt. **05**

(b) The company's cost of preference shares. **01**

(c) The company's estimated cost of equity using CAPM approach, the discounted cash flow (DCF) approach and the bond-yield-plus-risk-premium method. **06**

(d) Super Technologies' weighted average cost of capital (WACC) using the discounted cash flow (DCF) approach for cost of equity. **03**

Q. 4 (a) Delta Textile Ltd., has decided for a capital restructuring that involves increasing its existing Rs. 160 million debt to Rs. 250 million. The interest rate on the existing debt is 9% and it is expected to change to 12% for any additional debt. The firm currently has 12 million shares outstanding and the market price per share is Rs. 75.

Required:

Work out the break-even EBIT that Delta Textile Ltd.'s management must be expecting as a result of restructuring. Ignore taxes. **09**

Marks

(b) The Ravi Ltd., has no debt outstanding and its financial data is as under:

	Rupees
Assets (book and market values are same)	12,000,000
EBIT	2,000,000
Market price per share	60
No. of shares outstanding	200,000
Cost of equity	10%
Tax rate	35%

The company is considering to sell 7% term finance certificates (TFCs) at par value of Rs. 1,000 and simultaneously repurchasing some of its own shares. If the company mixes 30% debt into its capital structure based on market values, its cost of equity will rise to 11%, due to increased risk. Since Ravi is a no-growth firm, therefore, all its earnings are paid out as dividends, and its earnings are constant over past many years.

Required:

Work out the:

(i) Effect of use of leverage would have on the value of the firm. **04**

(ii) Ravi's equilibrium market price of a share. **02**

Q. 5 (a) Best Furniture Company is launching a new product for senior executives. The CFO of the Company estimates that the new product will require cash investments of Rs. 1,400,000 at time 0 and Rs.2,000,000 in year 1. He has also estimated that after tax cash inflows of Rs. 500,000 are expected in year 2, Rs. 600,000 in year 3, Rs. 700,000 in year 4, and Rs. 800,000 each year from year 5 to year 10.

Required:

(i) Calculate the payback period of the product. **02**

(ii) If the required rate of return is 15%, what is the net present value (NPV) of the product? Is it acceptable? **07**

(iii) Calculate per share increase or decrease in the wealth of shareholders of Best Furniture Company if the number of shares issued by the company is one million. **01**

(b) The final decision to accept or reject a project is taken by the Managing Director of XYZ Ltd. For decision making he solely depends on the opinion of his Technical, Finance and Logistics Managers. He assigns 50% weightage to Manager Technical; 30% to the opinion of Manager Finance and 20% to the opinion of Manager Logistics. The managers evaluate projects on the basis of net present value (NPV) method.

The firm operates in a low risk industry and divides its various projects into three categories. Class 'A' where the risk is below average and required rate of return is 10%. Class 'B' where the risk is average for the industry and the required rate of return is 13%. Class 'C' where the risk is above average and the required rate of return is 16%.

A project requiring an initial investment of Rs. 20 million with expected cash flows of Rs. 12 million receivable after one year and of Rs. 10 million after two years and Rs. 4 million after three years is ranked in category A, B and C respectively by Manager Logistics, Manager Finance and Manager Technical; and they submit their opinion to the Managing Director accordingly.

Required:

Should the project be accepted or rejected by the Managing Director? Support your answer with evaluation reports of managers showing necessary calculations to arrive at their respective conclusion. **15**

Marks

Q. 6 (a) Briefly explain the risks of overseas investment which are faced by the companies desire to enter into global business. **05**

(b) Alpha Ltd., is considering to take over an unquoted Beta Company. Both the companies are in publishing business for many years. Summary financial statistics for the two companies of the most recent financial year are as follows:

Rupees

	Alpha Ltd.	Beta Company
Non-current assets	18,000,000	8,600,000
Net current assets	12,000,000	5,800,000
Net assets	30,000,000	14,400,000
Issued shares (Nos.)	1,000,000	400,000
EBT	6,154,000	4,300,000
Corporate Tax applicable	35%	35%
Current market price of ordinary share of Rs. 10	48	–
Dividend per share	3.60	4.00
Debt: equity ratio	1:65	1:7
Expected rate of growth in earnings/ dividends	7.5% pa	9% pa

The net book value of tangible non-current assets plus net working capital are the net assets of Beta Company. However:

- A recent valuation of the building was Rs. 3.0 million above the book value.
- Inventory includes few items which have lesser realizable value of Rs. 200,000 than their cost.
- An additional allowance for bad debts of Rs. 1,500,000 could be made due to a dispute.

Growth rates of both the companies should be assumed to be constant per annum.

It has been decided by the board that Beta's shares ought to value not more than 75% of P/E ratio of Alpha Ltd.

Required:

Compute a range of valuations for the business of Beta company using:

(i) Net assets basis. **05**

(ii) Price/ earnings method. **05**

(iii) The dividend growth model. **05**

THE END

PRESENT VALUE FACTOR

Year	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162

CUMULATIVE PRESENT VALUE FACTOR

Year	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	5.076	4.917	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	5.786	5.582	5.389	5.206	5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	7.108	6.802	6.515	6.247	5.995	5.759	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192