



THE OPEN UNIVERSITY OF SRI LANKA
 BACHELOR OF MANAGEMENT STUDIES DEGREE PROGRAMME
 LEVEL 05
 MCU 3208 – FINANCIAL MANAGEMENT & MANAGERIAL ACCOUNTING
 FINAL EXAMINATION - 2008
 DURATION: THREE (03) HOURS

Date : 23rd February 2008

Time: 1.30 p.m. – 4.30 p.m.

INSTRUCTIONS :

Answer only FIVE (05) questions selecting any TWO (02) from Part A and any THREE (03) from Part B

Use of non programmable calculators is allowed.

A present value table is attached herewith.

PART – A

01. Discuss the role of the management accountant in a profit seeking organization. (20 marks)
02. a) “Cost volume profit (CVP) analysis is a study of the interaction of a number of factors.” Explain those factors. (05 marks)
- b) A factory engaged in manufacturing plastic buckets is working to 40% capacity and produces 10,000 basket per annum. The costs and selling price of a basket is as follow.
- | | Rs. |
|---------------|------------------|
| Material | 10.00 |
| Labour | 3.00 |
| Overheads | 5.00 (60% fixed) |
| Selling price | 20.00 |
- If the management decides to operate the factory at 50% capacity, then the selling price falls by 3%, at 90% capacity the selling price falls by 5%. You are required to calculate the Break Even Point at 50% and 90% capacities. (5 marks)

c) Briefly explain the term 'margin of safety' and discuss how it can be used as a guide to measure the strength of a business. (5 marks)

d) An organization manufactures a single product which is sold for Rs.80/- per unit. The organization's total monthly fixed costs are Rs.99,000/- and it has a contribution to sales ratio of 45%. This month, it plans to manufacture and sell 4000 units. What is the organization's margin of safety in this month? (5 marks)

03. a) What is a relevant cost? Explain. (5 marks)

b) Using examples explain why it is important to recognize qualitative factors when presenting information for decision making? (5 marks)

c) The directors of a company are considering a sales budget for the next budget period. From the following information, you are required to calculate

- i. The marginal product cost and the contribution per unit.
- ii. The total contribution resulting from each of following sales mixtures.
- iii. Recommend which of the sales-mixtures should be adopted and why?

	Product A	Product B
	Rs.	Rs.
Direct Material	10.00	9.00
Direct wages	3.00	2.00
Selling price	20.00	15.00
Total fixed cost Rs. 80,000/-		
Variable expenses are allotted to products as 100% of direct wages.		
Sales mixture..		
<ul style="list-style-type: none"> • 100 units of product A and 200 of B • 150 units of product A and 150 of B • 200 units of product A and 100 of B 		

(10 marks)

PART- B

4. a. Define shareholder wealth. Explain how it is measured. (5 marks)
- b. Explain the basic financial decisions (functions). (15 marks)
5. a. "The finance manager should take account of the time value of money in order to make a correct and objective decision." Elucidate this statement with the help of suitable illustrations. (5 marks)
- b. A firm purchases a machinery for Rs.1,000,000/- by making a down payment of Rs.350,000/- and remainder in equal installments of Rs. 150,000/- for six years. What is the rate of interest to the firm? (5 marks)
- c. The face value of a 5 year 10% bond is Rs.1000/- . The interest is payable semi-annually. If required rate of return is 12%, what is the value of the bond? What price would an investor be willing to pay if the interest is payable annually? (5 marks)
- d. Explain the relationship between bond maturity and interest rate risk. (5 marks)
6. a. Briefly explain the following. (6 marks)
- i. Portfolio return
 - ii. Risk of portfolio return
 - iii. Efficient portfolio
- b. An investor has two assets available named X and Y. Asset X has an expected return of 7% and a standard deviation of returns 4%. Asset Y has an expected return of 12% and a standard deviation of returns 6%.
- i. Assume that the investor places a portfolio weight of $\frac{1}{2}$ on asset X and $\frac{1}{2}$ on asset Y. If assets are perfectly positively correlated, calculate the portfolio's expected return and stand and deviation of returns. How would your answer change if the correlation coefficient was 0.5? (8 marks)
 - ii. Draw the efficient frontier for the combination of these two assets if correlation coefficient is +1, 0.5, 0 and -1 . Comment on your results. (6 marks)

07. a. Define cost of capital.

(3 marks)

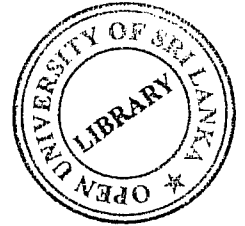
b. How is the cost of capital relevant in capital budgeting decisions?

(3 marks)

c. The following figures have been extracted from the most recent accounts of Devils Ltd.

Balance sheet for the last year.

	Rs. 000'	Rs. 000'
Non current assets		20,000
Current assets		20,000
Equity and liabilities-	5,000	
Ordinary shares (par value 10/-)		
Retained earnings	22,500	
10% debentures	5,000	
9% preference shares (par value Rs.10/-)	2,500	
Current Liabilities	5,000	
Total	40,000	40,000



The current ordinary share price is Rs. 45/- per share. An ordinary dividend of Rs.3.50 per share has just been paid and dividends are expected to increase by 4% per year for the foreseeable future. The current price of a preference share is Rs. 7.62. The company's debenture is currently selling at Rs. 105/-. Company's marginal tax rate is 50%.

Calculate;

- i. The after tax cost of debt.
- ii. Cost of preference shares.
- iii. Cost of ordinary shares.
- iv. The weighted average cost of capital based on existing capital structure.
- v. The weighted average cost of capital based on market value.

(14 marks)

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Table C : Table of Present Value (PVF_{t,i})

Period n	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783
3	0.971	0.924	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693
4	0.961	0.924	0.889	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543
6	0.942	0.888	0.838	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218	0.188	0.163	0.141
17	0.844	0.714	0.605	0.513	0.436	0.377	0.311	0.270	0.231	0.198	0.170	0.146	0.125
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180	0.153	0.130	0.111
19	0.828	0.686	0.570	0.475	0.396	0.331	0.276	0.232	0.194	0.164	0.138	0.116	0.098
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104	0.087
25	0.780	0.610	0.478	0.375	0.295	0.233	0.184	0.146	0.116	0.092	0.074	0.059	0.047
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.075	0.057	0.044	0.033	0.026

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Table D : Table of Present Value of an Annuity (PVAF_{i,n})

Period n	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1	0.990	0.983	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361
4	3.902	3.809	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517
6	5.795	5.601	5.417	5.242	5.076	4.917	4.766	4.623	4.486	4.355	4.231	4.111	3.998
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	4.712	4.564	4.423
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	5.537	5.328	5.132
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	6.207	5.938	5.687
12	11.255	10.575	9.945	9.385	8.863	8.384	7.943	7.536	7.161	6.814	6.492	6.194	5.918
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103	6.750	6.424	6.122
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367	6.982	6.628	6.302
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.060	7.606	7.191	6.811	6.462
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.312	7.824	7.379	6.974	6.604
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022	7.549	7.120	6.729
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201	7.702	7.250	6.840
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365	7.839	7.366	6.938
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.128	8.514	7.963	7.469	7.025
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.823	9.077	8.422	7.843	7.330
30	25.808	22.397	19.600	17.292	15.373	13.765	12.409	11.258	10.274	9.427	8.694	8.055	7.496

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