



THE OPEN UNIVERSITY OF SRI LANKA  
BACHELOR OF MANAGEMENT STUDIES DEGREE PROGRAMME  
LEVEL 05  
FINAL EXAMINATION – 2017  
FINANCIAL MANAGEMENT AND MANAGERIAL ACCOUNTING – MCU3208  
DURATION: THREE (03) HOURS

Date: 29. 07. 2017

Time: 1.30pm – 4.30pm

*Answer only five (5) Questions selecting as follows.*

*Any two (2) questions from part A.*

*Any three (3) questions from part B.*

*Use of a non-programmable calculator is allowed.*

- (1) a) What is meant by management accounting? Explain. (5 marks)  
b) Explain the difference between financial accounting and management accounting. (5 marks)  
c) 'Management Accounting guides and advises management at every step'. Discuss this statement highlighting the advantages of management accounting systems in an organization. (10 marks)

- (2) a. (i) What is meant by Cost Volume Profit (CVP) Analysis? Explain. (04 marks)  
(ii) What are the assumptions of CVP analysis? (04 marks)  
b). A company is planning to introduce a new product to the market. Following are the costs estimated for manufacturing and selling of this new product during the next financial year.

	Rs. (per unit)
Selling Price	120/=
Variable costs	
Direct material	60/=
Direct Labour	40/=
Fixed manufacturing cost	Rs. 350,000/=
Fixed selling and distribution expenses	Rs.100,000/=

You are required to calculate

- (i) Contribution Sales (C/S) Ratio.  
(ii) Units and Sales Value at the break-even- point.  
(iii) Units of this product that will have to be sold in the next year, to earn a profit of Rs. 78,000/=?

- (iv) The break-even quantity and quantity to be sold to earn a profit of Rs. 86,000/= in the next year under each of the following circumstances.
- (I) A discount of 10% is received from the material supplier.
- (II) A motor vehicle is hired for a monthly rental for Rs.8000/= to distribute the products. (12 marks)
- (3) a) Define marginal cost. Discuss the importance of identifying the difference between relevant costs and irrelevant costs. (05 marks)
- b) A factory produces 1000 units of product 'X' for home consumption at the following costs.

			(Rs.) Costs
Direct Materials			40,000
Direct Labour			36,000
Factory overhead			
	Fixed	12,000	
	Variable	20,000	32,000
Administration Overhead			
	Fixed	10,000	
	Variable	16,000	26,000
Total Cost			134,000

The domestic market can consume only 1000 units at a selling price of Rs.155/=. The foreign market for this product can however, consume additional 4000 units if the price is reduced to Rs.125/=. Is the foreign market worth trying? Justify your answer with relevant calculation.

(05 marks)

- c) What factors should managers consider before deciding to accept or reject a special order? (05 marks)
- d) From the following information calculate the selling price of a unit of product 'A'.

	Rs.
Fixed cost per annum	60,000/=
Unit variable cost	10/=
Expected profit	30,000/=

Existing sales - 8000 units

(05 marks)

**PART B**

- (4) a) Explain how profit maximization objective of a firm differs from that of wealth maximization objective. (08 marks)
- b) Discuss the following key financial management decisions.  
i) Financing decisions  
ii) Investment decisions  
iii) Dividend decisions (12 marks)
- (5) a) Explain why a rational investor prefer to receive Re.1/= today rather than having the same tomorrow. (05 marks)
- b) Alpha PLC has decided to make a deposit Rs. 1,000,000/= surplus funds in a bank fixed deposit for a one year period. The bank annual interest rate is 12%.  
i) What is the value of deposit at the end of the year if the bank compounds interest on quarterly basis? (03 marks)  
ii) What is the effective rate of interest that Alpha PLC earns for the deposit? (03 marks)
- (c) You are the financial controller of Beta PLC. On behalf of your organization you are required to negotiate a bank loan of Rs. 1,000,000/= from Alfa Bank. Certain terms of the loan agreement are given below.  
- Loan is to be paid in four (04) equal annual installments.  
- Interest rate is 15% on the outstanding portion of the loan.  
i) What is the value of the annual installment? (04 marks)  
ii) Prepare the loan repayment schedule for the period of four years. (05 marks)
- (6) a) Briefly explain what is meant by an investment portfolio and advantages of investing in a portfolio rather than investing in a single asset. (5 marks)
- b) The securities of firms X and Y have the expected return and standard deviations given below. The expected correlation between the two securities ( $r_{xy}$ ) is 0.1.

	Expected return	Standard deviation
Security X	8%	4%
Security Y	12%	6%

- i) Compute the return and risk for each of the following portfolios;  
 (I) 100% of X (II) 60% of X and 40 % of Y (III) 80% of X and 20 % of Y (09 marks)
- ii) Discuss the results of above 3 different options in terms of a risk and return profile considering the riskiness of each individual security and the proportion invested under each investment option. (03 marks)
- iii) Discuss the relationship between the correlation coefficient of two securities and its effect on portfolio risk. (03 marks)
- (7) (a) i) What do you mean by working capital? (05 marks)  
 ii) With the suitable illustration, explain the difference between permanent and temporary working capital. (05 marks)
- (a) You have been appointed as the new finance manager for XYZ Ltd. You have to give your recommendation for the company's capital budget and needs to estimate its weighted average cost of capital. The market value of the company's current capital structure are: Rs.2 million in debt, Rs.500, 000/= in preference shares and Rs. 2.5 million in ordinary equity. This capital mix will be maintained for future investments.
- The cost of debt (before tax) is 9%. A preference share of the company is sold for Rs.12.50. The company pays dividend of Rs.1.25 per preference share. For ordinary shareholders management expects to pay a fully dividend at the end of the year, Rs.2.50 per share and dividend will increase at an annual rate of 9% thereafter. The current price of the ordinary share is Rs.35/=. The marginal tax rate of the company is 40%.
- (i) Calculate the after tax cost of debt, preference shares and equity capital. (07 marks)  
 (ii) Calculate the weighted Average Cost of capital (WACC) (03 Marks)

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Table A-4 Present Value Interest Factors for a One-Dollar Annuity Discounted at k Percent for n Periods: PVIFA =  $[1 - 1/(1 + k)^n] / k$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8333	0.8065	0.8000	0.7692
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6684	1.6472	1.6265	1.6062	1.5278	1.4568	1.4400	1.3609
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832	2.2459	2.1065	1.9813	1.9520	1.8161
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550	2.7982	2.5887	2.4043	2.3816	2.1662
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522	3.2743	2.9906	2.7454	2.6993	2.4356
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7655	4.6229	4.4859	4.3533	4.2205	4.1114	3.9975	3.8887	3.7845	3.6847	3.3255	3.0205	2.9514	2.6427
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604	4.0386	3.6046	3.2423	3.1611	2.8021
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873	4.3436	3.8372	3.4212	3.3289	2.9247
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.5370	5.3282	5.1317	4.9464	4.7716	4.6065	4.0310	3.5655	3.4631	3.0190
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0238	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188	4.8332	4.1925	3.6819	3.5705	3.0915
11	10.368	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6869	5.4527	5.2337	5.0286	4.3271	3.7757	3.6564	3.1473
12	11.255	10.575	9.9540	9.3851	8.8633	8.3833	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206	5.1971	4.4392	3.8514	3.7251	3.1903
13	12.134	11.348	10.635	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831	5.3423	4.5327	3.9124	3.7801	3.2233
14	13.004	12.106	11.295	10.563	9.8986	9.2952	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245	5.4675	4.6106	3.9616	3.8241	3.2487
15	13.865	12.849	11.938	11.118	10.380	9.7122	9.1079	8.5595	8.0607	7.6061	7.1909	6.8109	6.4624	6.1422	5.8474	5.5755	4.6755	4.0013	3.8593	3.2682
16	14.718	13.578	12.561	11.652	10.838	10.105	9.4466	8.8514	8.3126	7.8237	7.3792	6.9740	6.6039	6.2651	5.9542	5.6685	4.7296	4.0333	3.8874	3.2832
17	15.562	14.292	13.166	12.166	11.274	10.477	9.7632	9.1216	8.5436	8.0216	7.5488	7.1196	6.7291	6.3729	6.0472	5.7487	4.7748	4.0591	3.9099	3.2948
18	16.398	14.992	13.754	12.659	11.690	10.823	10.059	9.3719	8.7556	8.2014	7.7016	7.2497	6.8399	6.4674	6.1280	5.8178	4.8122	4.0799	3.9279	3.3037
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.6036	8.9501	8.3649	7.8393	7.3658	6.9380	6.5504	6.1882	5.8775	4.8435	4.0967	3.9424	3.3105
20	18.046	16.351	14.877	13.590	12.462	11.470	10.584	9.8181	9.1285	8.5136	7.9633	7.4694	7.0248	6.6231	6.2593	5.9288	4.8696	4.1103	3.9539	3.3158
21	18.857	17.011	15.415	14.029	12.821	11.764	10.836	10.017	9.2922	8.6487	8.0751	7.5620	7.1016	6.6870	6.3125	5.9731	4.8913	4.1212	3.9631	3.3198
22	19.660	17.658	15.937	14.451	13.163	12.042	11.061	10.201	9.4424	8.7715	8.1757	7.6446	7.1695	6.7429	6.3587	6.0113	4.9094	4.1300	3.9705	3.3230
23	20.456	18.292	16.444	14.857	13.489	12.303	11.272	10.371	9.5802	8.8832	8.2664	7.7184	7.2297	6.7921	6.3988	6.0442	4.9245	4.1371	3.9764	3.3254
24	21.243	18.914	16.935	15.247	13.799	12.550	11.469	10.529	9.7066	8.9847	8.3481	7.7843	7.2829	6.8351	6.4338	6.0726	4.9371	4.1428	3.9811	3.3272
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.8226	9.0770	8.4217	7.8431	7.3300	6.8729	6.4641	6.0971	4.9476	4.1474	3.9849	3.3286
30	25.808	22.396	19.500	17.292	15.372	13.765	12.409	11.258	10.274	9.4269	8.6938	8.0552	7.4957	7.0027	6.5660	6.1772	4.9789	4.1601	3.9950	3.3321
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.6442	8.8552	8.1755	7.5856	7.0700	6.6166	6.2153	4.9915	4.1644	3.9984	3.3330
36	30.108	25.489	21.832	18.908	16.547	14.621	13.035	11.717	10.612	9.6765	8.8786	8.1924	7.5979	7.0790	6.6231	6.2201	4.9929	4.1649	3.9987	3.3331
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.7791	8.9511	8.2438	7.6344	7.1050	6.6418	6.2335	4.9966	4.1659	3.9995	3.3332
50	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.9148	9.0417	8.3045	7.6752	7.1327	6.6805	6.2483	4.9995	4.1686	3.9999	3.3333

Table A-4 Present Value Interest Factors for a One-Dollar Annuity Discounted at  $k$  Percent for  $n$  Periods:  $PVIFA = [1 - 1/(1 + k)^n] / k$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	18%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8547	0.8474	0.8402	0.8331	0.8261
2	1.9704	1.9416	1.9136	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257	1.6052	1.5852	1.5657	1.5466	1.5278	1.5093
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832	2.2459	2.2098	2.1747	2.1405	2.1072	2.0748
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550	2.7982	2.7433	2.6901	2.6386	2.5887	2.5400
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522	3.2743	3.1996	3.1274	3.0575	2.9898	2.9243
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2305	4.1114	3.9975	3.8887	3.7845	3.6847	3.5884	3.4950	3.4044	3.3165	3.2313
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604	4.0386	3.9216	3.8084	3.6989	3.5929	3.4903
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873	4.3436	4.2066	4.0761	3.9520	3.8341	3.7223
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.5370	5.3282	5.1317	4.9464	4.7716	4.6065	4.4500	4.3010	4.1593	4.0248	3.8973
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188	4.8332	4.6589	4.4950	4.3414	4.1980	4.0645
11	10.368	9.7868	9.2526	8.7605	8.3064	7.8862	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6889	5.4527	5.2337	5.0286	4.8357	4.6530	4.4804	4.3177	4.1648
12	11.255	10.575	9.9540	9.3851	8.8633	8.3833	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206	5.1971	4.9892	4.7961	4.6177	4.4539	4.2946
13	12.134	11.348	10.635	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831	5.3423	5.1187	4.9104	4.7163	4.5354	4.3585
14	13.004	12.106	11.296	10.563	9.8986	9.2959	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245	5.4675	5.2220	4.9870	4.7614	4.5451	4.3378
15	13.865	12.849	11.938	11.118	10.380	9.7122	9.1079	8.5595	8.0607	7.6061	7.1909	6.8109	6.4624	6.1422	5.8474	5.5755	5.3250	5.0850	4.8544	4.6331	4.4206
16	14.718	13.578	12.561	11.652	10.838	10.103	9.4466	8.8514	8.3126	7.8237	7.3792	6.9740	6.6039	6.2661	5.9542	5.6685	5.4080	5.1614	4.9287	4.7048	4.4893
17	15.562	14.292	13.166	12.166	11.274	10.477	9.7632	9.1216	8.5436	8.0216	7.5488	7.1196	6.7291	6.3729	6.0472	5.7487	5.4746	5.2130	4.9631	4.7248	4.4979
18	16.398	14.992	13.754	12.659	11.690	10.823	10.059	9.3719	8.7556	8.2014	7.7016	7.2487	6.8399	6.4674	6.1280	5.8178	5.5312	5.2571	5.0054	4.7651	4.5359
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.6036	8.9501	8.3649	7.8393	7.3558	6.9380	6.5504	6.1982	5.8775	5.5835	5.3030	5.0443	4.7967	4.5582
20	18.046	16.351	14.877	13.590	12.462	11.470	10.584	9.8181	9.1285	8.5136	7.9633	7.4694	7.0248	6.6231	6.2593	5.9288	5.6261	5.3414	5.0817	4.8348	4.5973
21	18.857	17.011	15.415	14.029	12.821	11.764	10.836	10.017	9.2922	8.6487	8.0751	7.5620	7.1016	6.6870	6.3125	5.9731	5.6654	5.3766	5.1057	4.8518	4.6132
22	19.660	17.658	15.937	14.451	13.163	12.042	11.061	10.201	9.4424	8.7715	8.1757	7.6446	7.1695	6.7429	6.3587	6.0113	5.6944	5.3994	5.1264	4.8705	4.6310
23	20.456	18.292	16.444	14.857	13.489	12.303	11.272	10.371	9.5802	8.8832	8.2664	7.7184	7.2297	6.7921	6.3988	6.0442	5.7245	5.4275	5.1514	4.8934	4.6534
24	21.243	18.914	16.936	15.247	13.799	12.550	11.469	10.529	9.7066	8.9847	8.3481	7.7843	7.2829	6.8351	6.4338	6.0726	5.7487	5.4497	5.1716	4.9111	4.6722
25	22.023	19.523	17.413	15.622	14.094	12.793	11.654	10.675	9.8226	9.0770	8.4217	7.8431	7.3300	6.8729	6.4641	6.0971	5.7671	5.4706	5.1904	4.9286	4.6896
30	25.608	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.4269	8.6938	8.0522	7.4957	7.0027	6.5660	6.1772	5.8299	5.5001	5.1861	4.8861	4.6000
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.557	9.6442	8.8552	8.1755	7.5556	7.0700	6.6166	6.2153	5.8591	5.5251	5.2081	4.9061	4.6200
36	30.108	25.489	21.832	18.908	16.547	14.621	13.035	11.717	10.612	9.6765	8.8786	8.1924	7.5679	7.0790	6.6231	6.2201	5.8611	5.5241	5.2041	4.9011	4.6251
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.7791	8.9511	8.2438	7.6344	7.1050	6.6418	6.2335	5.8735	5.5466	5.2216	4.9136	4.6333
45	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.9148	9.0417	8.3045	7.6752	7.1327	6.6805	6.2463	5.8995	5.5614	5.2314	4.9186	4.6433