

THE OPEN UNIVERSITY OF SRI LANKA
BACHELOR OF MANAGEMENT STUDIES DEGREE PROGRAMME
LEVEL 5
FINAL EXAMINATION - 2006
FINANCIAL MANAGEMENT AND MANAGEMENT ACCOUNTING – MCU 3208
DURATION : THREE (03) HOURS



Date : 12th March 2006

Time : 9.30 a.m. – 12.30 p.m.

Answer Five questions as follows
Any two (2) from Part A
Any three (3) from Part B

Non programmable calculators are allowed.
A present value table is attached herewith.

- (1) 'Management Accountant in an organization plays a vital role in its management process'. Discuss this statement by explaining the role and responsibility of the Management Accountant. (20 marks)

- (2) (i) A firm manufactures three products. The following information is related to them.

	Product		
	A	B	C
Sales in units	8000	2000	3000
Selling price per unit (Rs.)	40	60	90
Variable cost per unit (Rs.)	24	30	36

Total fixed cost Rs. 270,000/=

Using the marginal costing approach, prepare an income statement for the manufacturer. (05 marks)

- (ii) List out the assumptions of CVP analysis (05 marks)

- (iii) At present, the manufacturing plant of Laksiri Ltd. is operating at 50% of its capacity.

The following details are related to the plant.

	Rs.
Variable Cost (per unit)	12
Selling Price (per unit)	14
Total Fixed Cost	45,000
Present Production	20,000 units

If an exporter offers to buy 10,000 units per month at the rate of Rs.13 per unit should Laksiri Ltd., accept this offer? Confirm your answer with required calculations. (10 marks)

- (3) (i) Discuss the basic objectives of Standard Costing. (10 marks)
- (ii) Calculate the variable overhead expenditure variance from the following data. (10 marks)

Standard time allowed per unit	05 hours
Standard variable overhead per unit	Rs. 10
Actual variable overhead cost	Rs. 13000
Actual hours worked	6200 hours

PART B

- (4) (i) "At present, profit maximization is not considered as the theoretically logical goal of a business firm." Explain this statement by discussing the limitations of the objective of profit maximization. What is the most realistic objective that is being pursued today? Discuss. (15 marks)
- (ii) If the investment company agrees to pay a return of Rs. 75/= annually into perpetuity and the required rate of return is 10%, what is the present value of the debenture. (05 marks)
- (5) (i) What are the reasons for the differences between the valuation of bonds and preference shares and the valuation of equity shares. (05 marks)
- (ii) A company's shares are currently selling at Rs.50/- per share. A dividend of Rs. 3/- per share is expected. If the dividends are expected to grow at a constant rate of 8%, what is the cost of equity capital for this company? (05 marks)
- (iii) Varuna Ltd. has two investment opportunities, namely X and Y. Their particulars are as follows.

Economic Condition	Probability	Return (%)	
		X	Y
Good	0.4	80	40
Normal	0.3	20	20
Bad	0.3	-50	10

Compute the expected rate of return and standard deviation of security X and security Y. (10 marks)

- (6) (i) Explain the importance of working capital. (05 marks)
- (ii) Star Plus Company Ltd., is planning to introduce a new product to the market at a selling price of Rs.50/=. The estimated annual output is 12,000 units. The unit cost is as follows.

Raw materials	Rs. 20
Labour	Rs. 8
Overheads	Rs. 12

Raw materials are bought on one month credit. Materials sufficient for three months will be kept at its warehouse. The manufacturing cycle is two months and finished goods are in stock on an average of a month. Customers will be allowed two months credit. There is no lag in payment of wages and overheads. Cash float of Rs.20,000/- will normally be held.

Based on the above information, calculate the working capital requirement of the company. (15 marks)

- (7) (i) Name different sources of capital for a manufacturing company and briefly explain the unique features of each source. (05 marks)
- (ii) What are the reasons for cash flow problems in an organization? Explain the short term strategies that can be used by an organization to overcome a cash shortage. (05 marks)
- (iii) A manufacturing company is planning to purchase a new plant at a cost of Rs. 400,000/=. The plant will save Rs. 80,000/= per year from the operating cost of the firm. Its life time is six years and it will have a salvage value of Rs. 5,000/= at its disposal.
- Calculate the NPV if the rate of return desired is 10%. Do you recommend the purchase of this new plant? Give reasons. (10 marks)

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Table A-1 Present Value of \$1 Due at the End of n Periods:

Period	PVIFA = $\frac{1}{(1 + i)^n}$																													
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%										
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	.8772	.8696	.8631	.8475	.8333	.8065	.7813	.7576	.7353										
2	.9803	.9612	.9426	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6501	.6104	.5739	.5407										
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	.6750	.6518	.6293	.5858	.5433	.4851	.4320	.3874	.3519										
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5058	.4613	.3971	.3430	.3003	.2669										
5	.9515	.9057	.8628	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	.5194	.4972	.4781	.4311	.3874	.3181	.2640	.2329	.2049										
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2611	.2174	.1890	.1640										
7	.9327	.8706	.8131	.7599	.7107	.6661	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3530	.3139	.2791	.2021	.1584	.1342	.1126										
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5405	.5019	.4665	.4039	.3506	.3269	.3030	.2660	.2326	.1521	.1084	.0885	.0728										
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	.3075	.2843	.2604	.2255	.1938	.1114	.0687	.0522	.0408										
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.0771	.0344	.0217	.0155										
11	.8963	.8043	.7224	.6496	.5817	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0491	.0062	.0172	.0118										
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	.1685	.1372	.1122	.0267	.0037	.0157	.0104										
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3255	.2887	.2292	.1821	.1625	.1452	.1163	.0935	.0080	.0050	.0171	.0118										
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.3002	.2633	.2066	.1597	.1413	.1252	.0985	.0779	.0092	.0062	.0183	.0130										
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	.3152	.2745	.2394	.1827	.1401	.1229	.1079	.0835	.0649	.0097	.0067	.0188	.0135										
16	.8528	.7284	.6232	.5339	.4581	.3946	.3387	.2919	.2519	.2176	.1631	.1229	.1069	.0920	.0708	.0541	.0099	.0069	.0190	.0137										
17	.8444	.7142	.6050	.5134	.4369	.3714	.3166	.2703	.2303	.1978	.1456	.1078	.0929	.0780	.0600	.0451	.0101	.0071	.0192	.0139										
18	.8360	.7002	.5874	.4926	.4155	.3503	.2959	.2502	.2102	.1799	.1300	.0946	.0808	.0659	.0458	.0319	.0103	.0073	.0194	.0141										
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1915	.1635	.1161	.0829	.0703	.0554	.0313	.0174	.0105	.0075	.0196	.0143										
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1744	.1486	.1037	.0728	.0611	.0462	.0211	.0072	.0103	.0073	.0194	.0141										
21	.8114	.6598	.5375	.4388	.3589	.2942	.2415	.1987	.1637	.1381	.0926	.0638	.0531	.0382	.0131	.0073	.0104	.0074	.0195	.0142										
22	.8034	.6468	.5219	.4220	.3418	.2775	.2257	.1839	.1502	.1248	.0786	.0519	.0422	.0273	.0022	.0074	.0105	.0075	.0196	.0143										
23	.7954	.6342	.5067	.4057	.3256	.2618	.2109	.1703	.1378	.1117	.0659	.0401	.0314	.0165	.0014	.0076	.0107	.0077	.0198	.0145										
24	.7876	.6217	.4919	.3901	.3101	.2470	.1971	.1577	.1264	.1005	.0551	.0303	.0226	.0075	.0024	.0077	.0108	.0078	.0199	.0146										
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0486	.0248	.0171	.0020	.0025	.0078	.0109	.0079	.0200	.0147										
26	.7720	.5976	.4637	.3604	.2812	.2198	.1722	.1352	.1064	.0839	.0402	.0164	.0087	.0036	.0041	.0079	.0110	.0080	.0201	.0148										
27	.7644	.5889	.4502	.3468	.2678	.2074	.1609	.1252	.0976	.0763	.0336	.0098	.0029	.0038	.0043	.0080	.0111	.0081	.0202	.0149										
28	.7568	.5744	.4371	.3335	.2551	.1956	.1504	.1159	.0895	.0693	.0276	.0038	.0019	.0028	.0033	.0071	.0102	.0082	.0203	.0150										
29	.7493	.5631	.4243	.3207	.2429	.1846	.1406	.1073	.0822	.0630	.0224	.0020	.0011	.0020	.0025	.0063	.0094	.0083	.0204	.0151										
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0178	.0012	.0003	.0012	.0017	.0055	.0086	.0085	.0205	.0152										
35	.7059	.5000	.3554	.2534	.1813	.1301	.0937	.0676	.0490	.0356	.0189	.0102	.0075	.0035	.0030	.0037	.0005	.0002	.0001	.0001										
40	.6717	.4529	.3066	.2033	.1420	.0972	.0668	.0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0013	.0002	.0001	.0001	.0001										
45	.6391	.4102	.2644	.1712	.1113	.0727	.0476	.0313	.0207	.0137	.0061	.0037	.0021	.0010	.0003	.0003	.0001	.0001	.0001	.0001										
50	.6080	.3715	.2381	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0024	.0009	.0006	.0003	.0003	.0001	.0001	.0001	.0001										
55	.5785	.3365	.2068	.1157	.0683	.0406	.0242	.0145	.0087	.0053	.0020	.0007	.0005	.0003	.0003	.0001	.0001	.0001	.0001	.0001										

The factor is zero to four decimal places.
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Table A-2 Present Value of an Annuity of \$1 per Period for n Periods:

$$PVIFA_{k,n} = \sum_{t=1}^n \frac{1}{(1+k)^t} = \frac{1 - (1+k)^{-n}}{k} = \frac{1 - \frac{1}{(1+k)^n}}{k}$$

Number of Periods	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9431	0.9340	0.9250	0.9161	0.9073	0.8986	0.8900	0.8815	0.8731	0.8647	0.8564	0.8482	0.8401	0.8320
2	1.9704	1.9116	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6682	1.6467	1.6257	1.6052	1.5851	1.5654	1.5461
3	2.9410	2.8839	2.8877	2.7751	2.7322	2.6920	2.6535	2.6164	2.5807	2.5463	2.5131	2.4811	2.4502	2.4204	2.3916	2.3638	2.3369	2.3109	2.2857
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0975	3.0275	2.9590	2.8920	2.8264	2.7622	2.6993	2.6377	2.5773
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6948	3.6018	3.5112	3.4229	3.3368	3.2528	3.1708	3.0908	3.0127
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2314	4.1144	3.9987	3.8887	3.7845	3.6861	3.5934	3.5066	3.4256
7	6.7282	6.4720	6.2305	6.0021	5.7864	5.5824	5.3899	5.2089	5.0380	4.8764	4.7238	4.5794	4.4426	4.3128	4.1896	4.0728	3.9624	3.8575	3.7581
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7469	5.5358	5.3379	5.1528	4.9800	4.8191	4.6697	4.5314	4.4039	4.2872	4.1813	4.0854
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5162	6.2509	5.9952	5.7590	5.5422	5.3446	5.1657	5.0049	4.8519	4.7064	4.5713	4.4464	4.3315
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0256	6.7101	6.4117	6.1466	5.9022	5.6781	5.4738	5.2887	5.1219	4.9722	4.8313	4.6991	4.5765
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4931	6.1914	5.9277	5.6827	5.4563	5.2482	5.0581	4.8859	4.7315	4.5854
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.4944	6.2025	5.9381	5.7014	5.4821	5.2800	5.0959	4.9296	4.7813
13	12.1337	11.3484	10.6300	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7523	6.4335	6.1472	5.8924	5.6581	5.4448	5.2524	5.0811	4.9308
14	13.0037	12.1052	11.2961	10.5651	9.8886	9.2920	8.7455	8.2442	7.7862	7.3667	7.0011	6.6712	6.3674	6.0897	5.8371	5.6004	5.3885	5.1991	5.0308
15	13.8651	12.8493	11.9379	11.1184	10.3197	9.5422	8.8079	8.1990	7.6207	7.1001	6.7119	6.3557	6.0311	5.7281	5.4456	5.1825	4.9385	4.7124	4.5041
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	7.3740	6.9542	6.5642	6.2041	5.8635	5.5411	5.2368	4.9495	4.6791
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.5396	7.0879	6.6652	6.2712	5.9054	5.5673	5.2471	4.9446	4.6591
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.6978	7.2249	6.7812	6.3664	5.9794	5.6208	5.2804	4.9678	4.6733
19	17.2261	15.6705	14.3338	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.8368	7.3350	6.8591	6.4091	6.0004	5.6228	5.2743	4.9516	4.6471
20	18.0430	16.3514	14.8775	13.5903	12.4622	11.4609	10.5940	9.8181	9.1285	8.5136	7.9494	7.4119	6.9031	6.4131	5.9414	5.5000	5.1413	4.8076	4.4921
21	18.8570	17.0112	15.4150	14.0292	12.8212	11.7641	10.8355	10.0168	9.2922	8.6487	7.9520	7.3820	6.8425	6.3224	5.8211	5.3484	4.9007	4.5470	4.2125
22	19.6604	17.6580	15.9369	14.4511	13.1630	12.0416	11.0812	10.2007	9.4424	8.7715	7.9446	7.3429	6.7729	6.2324	5.7201	5.2364	4.7717	4.4070	4.0625
23	20.4538	18.2022	16.4436	14.8568	13.4864	12.3034	11.2722	10.3711	9.5802	8.8832	7.9784	7.2949	6.6851	6.1248	5.5914	5.0877	4.6030	4.2283	3.8740
24	21.2434	18.7439	16.9355	15.2470	13.7986	12.5504	11.4693	10.5388	9.7066	8.9847	7.7843	6.8951	6.4338	5.8531	5.3294	4.8157	4.3110	3.9173	3.5430
25	22.0232	19.2535	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4041	5.8041	5.2694	4.7467	4.2230	3.8003	3.4070
26	22.7952	20.1210	17.8768	15.9828	14.3752	13.0032	11.8258	10.8100	9.9290	9.1609	7.8957	6.9061	6.4266	5.8162	5.2717	4.7390	4.2053	3.7666	3.3527
27	23.5596	20.7069	18.3270	16.3296	14.6150	13.2105	11.9857	10.9352	10.0266	9.2372	7.9426	6.9252	6.4355	5.8156	5.2694	4.7273	4.1916	3.7456	3.3223
28	24.3164	21.2813	18.7611	16.6631	14.8981	13.4062	12.1371	11.0511	10.1161	9.3066	8.0812	7.0914	6.5807	6.0039	5.3881	4.8464	4.3027	3.8421	3.4227
29	25.0658	21.8444	19.1885	16.9857	15.1411	13.5907	12.2777	11.1584	10.1893	9.3696	8.2025	7.1317	6.6605	6.0599	5.4211	4.8697	4.3150	3.8574	3.4250
30	25.8077	22.3953	19.6004	17.2920	15.3725	13.7618	12.4090	11.2578	10.2737	9.4289	8.0552	7.0027	6.5650	6.1172	5.5168	4.9789	4.4351	3.8693	3.4242
35	29.4086	24.9986	21.4872	18.6646	16.3742	14.4982	12.9477	11.6546	10.5668	9.6442	8.1755	7.0700	6.6166	6.2153	5.5386	4.9915	4.4514	3.9708	3.4248
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.2388	7.1050	6.6418	6.2335	5.5482	4.9966	4.4559	3.9712	3.4250
45	36.0945	29.4902	24.5187	20.7208	17.7741	15.4558	13.5907	12.1084	10.8812	9.8628	8.2025	7.1332	6.6514	6.2421	5.5523	4.9986	4.4664	3.9714	3.4250
50	39.1961	31.4236	25.7298	21.4822	18.3559	15.7619	13.8007	12.2335	10.9817	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.4666	3.9714	3.4250
55	42.1472	33.1748	26.7744	22.1066	18.6335	15.9905	13.9595	12.3186	11.0740	9.9471	8.3170	7.1376	6.6636	6.2482	5.5549	4.9998	4.4666	3.9714	3.4250

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