

**THE OPEN UNIVERSITY OF SRI LANKA  
 BACHELOR OF MANAGEMENT STUDIES (BMS) DEGREE PROGRAMME  
 LEVEL – 05  
 FINAL EXAMINATION – 2012  
 FINANCIAL MANAGEMENT AND MANAGERIAL ACCOUNTING – MCU 3208  
 DURATION: THREE (03) HOURS**



**DATE: 03<sup>rd</sup> March 2012**

**TIME: 9.30 am – 12.30 pm**

**INSTRUCTIONS:**

- (i) Answer only five (05) Questions selecting any Two (02) from Part A and any THREE (03) from Part B.
- (ii) Use of non-programmable calculator is allowed.

(1) “Management Accounting should assist in planning controlling and decision making process of an organization” Discuss this statement.

(20 Marks)

(2) i) Describe the assumptions underlying “CVP (Cost Volume Profit) analysis.

(8 Marks)

ii) X Ltd. And Y Ltd. Sell identical products in the same market. Their budgeted manufacturing costs are as follows.

	X Ltd.,	Y Ltd.,
Unit Selling Price (Rs.)	40.00	40.00
Variable Cost Per Unit (Rs.)	32.00	28.00
Total Fixed Cost (Rs.)	40,000.00	80000.00
Sales Volume (No.of units)	10000	10000

You are required to;

- (a) Calculate the Break-Even Point for each firm.
- (b) Calculate the margin of safety ratio for each firm.
- (c) State the likely effect on the profits of the firm under the conditions of;
  - (i) increasing demand for the product.
  - (ii) falling demand for the product.

(12 Marks)

(3) (i) “Limiting factors depend on the situation” Explain this statement using examples.

(8 Marks)

- (ii) XYZ Ltd., produces three products. X, Y, and Z, using the same machines. The firm is reviewing the production and sales for the next accounting year and the information in relation to the three products is given below.

	Products		
	X	Y	Z
Selling price per unit (Rs.)	20.00	16.00	15.00
Direct Material Cost	5.00	4.00	6.00
Other Variable Cost	3.00	2.00	3.00
Required Machine Hours to produce one unit	6hrs.	2hrs.	1hrs.
Sales Volume (No. of units)	2000	2000	2000

Total fixed cost for the next year is Rs.40,000/=.

- (a) If the company has a maximum machine capacity of 12,000 hours next year, in which order of preference do you think the three products should come?
- (b) What quantities of each products should the company manufacture next year?
- (c) How much profit could the firm yield through this product mix?

(12 Marks)

### PART B

- (4) (i) Compare and contrast the goals of profit maximization and the maximization of shareholder's wealth.
- (ii) Suppose you are evaluating two investments both of which require for you to pay Rs. 275,000/= today. Investment A will pay you Rs. 351,000/= in five years, where as investment B will pay you 406300/= in eight years.
- (a) Based only on the return you would earn from each investment, which investment is better?
- (b) Identify any factors other than the expected return that might be important to consider, when choosing between two investment alternatives.
- (5) (i) Explain the relationship between bond prices and interest rates. Why is it important for investors to understand this relationship?

(12 Marks)

(8 Marks)

(5 Marks)

- (ii) The debenture of the Alfa corporation are perpetuities with 10% coupon. Required rate of return of this type of debenture is 8% and their par value is Rs. 1000/=.

(a) What is the price of the debenture?

(b) If required rate of return on debenture is 12%, what would be the price of the Alfa debenture.

(c) How would you answer to above (a) and (b) change, if the debenture were not perpetuities, but had a maturity of 5 years.

(7 Marks)

- (iii) What are the main factors which contribute towards a change of share prices in a company?

(4 Marks)

- (iv) The growth of Beta corporation's has slowed to a constant rate during the past few years. As a result the company expects its common share dividend to grow at a constant 4% for the remainder of the company's life. A few days ago company paid equity shareholders a Rs.5/= dividend. If the required rate of return is 12%, what is the value of the share?

(4 Marks)

- (6) (i) What is meant by operating cycle? Why is it important in working capital Management? Explain.

(8 Marks)

- (ii) A profoma cost sheet of a company provides the following data.

	Rs.
Cost Per Unit	
Raw Materials	26.00
Direct Labour	10.00
Over-heads	19.50
	55.50
Total Cost (per unit)	55.50
Profit	10.50
	66.00
Selling Price	66.00

The following information is available.

Average raw material in stock	:	One month
Average materials in process	:	Half a month
Finished goods in stock	:	One month
Credit allowed by suppliers	:	One month
Credit allowed to debtors	:	Two months
Time lag in payment of wages	:	Half a month
Time lag in payment of overheads	:	One month

One fourth of sales are on cash basis. Cash balance is expected to be Rs. 60,000/=

You are required to prepare a statement showing the working capital needed to finance a level of activity of 70,000 units of output.

(12 Marks)

- (7) (i) Explain how the investor can reduce risk.

(6 Marks)

- (ii) Universal corporation is planning to invest in a security that has several possible rates of return.

Probability	Return
0.10	-10%
0.20	5%
0.30	10%
0.40	25

Given the above probability distribution of returns,

- a) What is the expected rate of return and the Standard Deviation?  
b) What do the resulting numbers represent?

(7 Marks)

- (iii) An investor holds two equity shares X and Y in equal proportion with the following risk and return characteristics.

	X	Y
Expected return E (R)	23%	18%
Standard deviation ( $\sigma$ )	27%	22%

The returns of these securities have a correlation of 0.5. You are required to calculate.

- (a) Portfolio return and risk

- (b) If the investor wants to reduce the portfolio risk to 14% What is the value of correlation coefficient should be to bring the portfolio risk to the desired level ?

(7 Marks)

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Table A: Compound Value Factor of a Lump Sum (CVF) of Re 1

Year	Interest Rate													
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%
1	1.010	1.020	1.030	1.040	1.050	1.060	1.070	1.080	1.090	1.100	1.110	1.120	1.130	1.140
2	1.020	1.040	1.061	1.082	1.103	1.124	1.145	1.166	1.188	1.210	1.232	1.254	1.277	1.300
3	1.030	1.061	1.093	1.125	1.158	1.191	1.225	1.260	1.295	1.331	1.368	1.405	1.443	1.482
4	1.041	1.082	1.126	1.170	1.216	1.262	1.311	1.360	1.412	1.464	1.518	1.574	1.630	1.689
5	1.051	1.104	1.159	1.217	1.276	1.338	1.403	1.469	1.535	1.611	1.685	1.762	1.845	1.925
6	1.062	1.126	1.194	1.265	1.340	1.419	1.501	1.587	1.677	1.772	1.870	1.974	2.082	2.195
7	1.072	1.149	1.230	1.316	1.407	1.504	1.606	1.714	1.828	1.949	2.076	2.211	2.353	2.502
8	1.083	1.172	1.267	1.369	1.477	1.594	1.718	1.851	1.993	2.144	2.305	2.476	2.658	2.853
9	1.094	1.195	1.305	1.423	1.551	1.689	1.838	1.999	2.172	2.358	2.558	2.773	3.004	3.252
10	1.105	1.219	1.344	1.480	1.629	1.791	1.967	2.159	2.367	2.594	2.839	3.106	3.395	3.707
11	1.116	1.243	1.384	1.539	1.710	1.898	2.105	2.332	2.580	2.853	3.152	3.479	3.836	4.226
12	1.127	1.268	1.426	1.601	1.796	2.012	2.252	2.518	2.813	3.138	3.498	3.896	4.335	4.818
13	1.138	1.294	1.469	1.665	1.886	2.133	2.410	2.720	3.066	3.452	3.883	4.363	4.898	5.492
14	1.149	1.319	1.513	1.732	1.980	2.261	2.579	2.937	3.342	3.797	4.310	4.887	5.535	6.261
15	1.161	1.346	1.558	1.801	2.079	2.397	2.759	3.172	3.642	4.177	4.785	5.474	6.254	7.138
16	1.173	1.373	1.605	1.873	2.183	2.540	2.952	3.426	3.970	4.595	5.311	6.130	7.067	8.137
17	1.184	1.400	1.653	1.948	2.292	2.693	3.159	3.700	4.328	5.054	5.895	6.866	7.986	9.276
18	1.196	1.428	1.702	2.026	2.407	2.854	3.380	3.996	4.717	5.560	6.544	7.690	9.024	10.575
19	1.208	1.457	1.754	2.107	2.527	3.026	3.617	4.316	5.142	6.116	7.263	8.613	10.197	12.056
20	1.220	1.486	1.806	2.191	2.653	3.207	3.870	4.661	5.604	6.727	8.062	9.646	11.523	13.743
25	1.282	1.641	2.094	2.666	3.386	4.292	5.427	6.848	8.623	10.835	13.585	17.000	21.231	26.462
30	1.348	1.811	2.427	3.243	4.322	5.743	7.612	10.063	13.268	17.449	22.892	29.960	39.116	50.950
40	1.489	2.208	3.262	4.801	7.040	10.286	14.974	21.725	31.409	45.259	65.001	93.051	132.782	188.884
50	1.645	2.692	4.384	7.107	11.467	18.420	29.457	46.902	74.358	117.391	184.565	289.002	450.736	700.233

(Contd.)

Table C: Present Value Factor of a Lump Sum (PVF) of Re 1

Interest Rate

Year	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%
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	0.877
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	0.769
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592
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	0.519
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456
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	0.400
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	0.351
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	0.308
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	0.270

Table D: Present Value Factor of an Annuity (PVFA) of Re 1

Interest Rate

Year	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%
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	0.877
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	1.647
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	2.322
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914
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	3.433
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889
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	4.288
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	4.639
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	4.946
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	5.216

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