

THE OPEN UNIVERSITY OF SRI LANKA
COMMONWEALTH EXECUTIVE MASTER OF BUSINESS/PUBLIC
ADMINISTRATION
FINAL EXAMINATION – MAY 2010
MCP 1609 ACCOUNTING AND FINANCE
DURATION : THREE (03) HOURS



Date : 09th May 2010

Time : 9.30 a.m – 12.30 p.m

- *Answer all questions.
- *Non programmable calculators are allowed.
- *Discount tables are provided.

Question 1

- a) What are the limitations of ratio analysis as a technique used in financial statement analysis

4 marks

- b) The following information relates for Mod Manufacturing, and the corresponding industry.

	2005	2006	2007	2008	2009
<i>Mod Manufacturing</i>					
Net profit margin	6%	6%	7%	7.8%	8.5%
Total asset turnover	1.8	1.6	2.2	2.3	2.6
Total assets / Equity	1.7	1.5	1.5	1.3	1.2
<i>Industry Averages</i>					
Net profit margin	5.5%	5.8%	6.2%	6.5%	7%
Total asset turnover	1.7	1.8	2.3	2.4	2.8
Total assets / Equity	2.1	2.0	2.1	2.2	1.9

You are required to

- i. perform a trend analysis on the components of the return on investment and return on stockholders' equity.

8 marks

- ii. Discuss any underlying causes of any trend.

4 marks

c) The balance sheet of Sampath limited as at 31, December is given below.

	2009	2008
	Rs.000	Rs. 000
Fixed Assets	425,000	240,000
<u>Current Assets</u>		
Stocks	560,000	340,000
Debtors	<u>115,000</u>	<u>50,000</u>
	<u>1100,000</u>	<u>630,000</u>
Capital	120,000	120,000
Retained profit	<u>330,000</u>	<u>310,000</u>
	450,000	430,000
<u>Current liabilities</u>		
Creditors	150,000	60,000
Accrued expenses	80,000	0
Bank overdraft	<u>170,000</u>	<u>40,000</u>
Loans	<u>250,000</u>	<u>100,000</u>
	<u>1,100,000</u>	<u>630,000</u>

You are required to comment on liquidity and gearing position of the company. State what steps might be taken to improve the financial position of the company.

9 marks

Total 25 marks

Question 2

a) You are analyzing a project that plans to invest Rs.20 million. The project will take two years to complete and has a life of ten years. Expenditure will be spread out across the two years as;

Today: Rs.10 million

One year from now: Rs.5 million

Two years from now: Rs.5 million

Once the project is completed, you expect to have revenues of Rs.10 million a year for the next ten years. The project will cost Rs.3 million a year to operate, and the depreciation will be Rs.1 million a year. You plan to start it on a land that you bought three years ago for Rs.1 million. At the end of the ten years, it is assumed that the project can be salvaged for book value. The appropriate discount rate is 15%. Ignore taxation.

Calculate the Net Present Value and Internal Rate of Return of the project and give your recommendations.

10 marks

a) Kandy Printers has decided to limit its capital expenditures in the upcoming year to Rs.15 million. The firm has compiled a list of possible investment projects, and generated the following information on each project:

Project	Net Investment	Net Present Value at 12% p.a.
1	Rs.2,250,000	Rs.75,000
2	3,750,000	300,000
3	3,000,000	-200,000
4	4,125,000	330,000
5	1,500,000	60,000
6	7,500,000	615,000
7	4,125,000	900,000
8	3,000,000	300,000

- i. Given KP's capital constraint, which projects should be adopted on the basis of their profitability indexes? (assume the projects are not divisible)
7 marks
- ii. Is there another combination of projects that produces a higher aggregate net present value than the projects adopted in part (i)?
4 marks
- iii. If the projects are divisible, suggest the best mix of projects to be adopted
4 marks
- Total 25 marks

Question 3

- a) Explain the followings with respect to the level of current assets in a firm
- Aggressive policy
 - Conservative policy
- 4 marks
- b) Gurulupotha Industries (GI) balance sheet and income statement for the year ending December 31, 2009 are as follows:

Balance Sheet (Rs. million)

Cash	10.0	Creditors	15.0
Debtors	15.0	Salaries payable	3.0
Inventories	12.0	Long-term debt	15.0
Fixed assets (net)	<u>30.0</u>	Equity	<u>34.0</u>
Total	67.0		67.0

Income Statement (Rs. million)

Net sales	125.0
Cost of sales	75.0
Administrative Expense	30.0
Other expenses	<u>13.0</u>
Earnings	7.0

- i. Determine the length of the firm's cash conversion cycle. 8 marks
 - ii. Give your comments on the efficiency of GI in working capital management 5 marks
 - iii. GI is considering a new credit policy, to be implemented immediately. The existing collection period would be increased to 60 days, which result an increase in sales in each year to 20% of the current volume. The bad debts would be increased from the current level 2% to 3% of sales. Unit selling price, Rs. 100 and 85% variable costs would not be changed. However additional inventories of Rs. 2 million would be required. Company's required rate of return on investments is 20%.

Evaluate the new policy. Give your assumptions, if any. 8 marks
- Total 25 marks**

Question 4

- a) Time value is a core concept in finance. What are the reasons to consider that there is a value for time? 4 marks
- b) Briefly explain the followings 10 marks
 - 1. Diversifiable Vs. non diversifiable risk.
 - 2. Measurement of the market risk

What is the required rate of return on a security that has a beta of 1.35, if the 12 month Treasury bill return is 9% and return on the market portfolio is 16% p.a.?
4 marks

- c) X PLC common stock is currently selling for Rs.20 per share. Security analysts have assigned the following probability distribution to the price of (and rate of return on) X stock one year from now:

Price	Rate of Return	Probability
Rs.16	-20%	0.25
Rs.20	0%	0.30
Rs.24	+20%	0.25
Rs.28	+40%	0.20

Determine the standard deviation of possible rates of return on X stock. 7 marks

Total 25 marks

1%
9901
9803
9706
9610
9515

9420
9327
9235
9143
9053

8963
8874
8787
8700
8613

8528
8444
8360
8277
8195

8114
8034
7954
7876
7798

7720
7644
7568
7493
7419

7059
6717
6391
6080
5785

A-2 P

1%
0.99
1.97
2.94
3.90
4.85

5.79
6.72
7.65
8.56
9.47

10.36
11.25
12.13
13.00
13.86

14.71
15.56
16.39
17.22
18.04

18.85
19.66
20.45
21.24
22.02

22.79
23.55
24.31
25.06
25.80

29.40
32.83
36.09
39.19

PVIF_{kn} = 1 / (1 + k)ⁿ

Table with columns for interest rates (1% to 36%) and rows for periods (1 to 36). The values represent the present value of \$1 due at the end of n periods.

The factor is zero to four decimal places. © 1989 The Dryden Press. All rights reserved.

2 Present Value of an Annuity of \$1 per Period for n Periods:

PVIFA_{kn} = sum from i=1 to n of 1/(1+k)^i = (1 - 1/(1+k)^n) / k = 1/k - 1/(k(1+k)^n)

Table with columns for interest rates (1% to 32%) and rows for periods (1 to 36). The values represent the present value of an annuity of \$1 per period for n periods.