

## EASTERN UNIVERSITY, SRI LANKA

## FACULTY OF COMMERCE AND MANAGEMENT

## SPECIAL REPEAT EXAMINATION FOR THE FINAL YEAR STUDENTS IN BBA

2003/ 2004 (MARCH 2010)

## DAF 3123 MANAGEMENT ACCOUNTING

Answer all questions

Time: 03 Hours

01. (a) Discuss Management Accounting as an effective tool of financial control.

(04 marks)

- (b) A Company manufactures two products L and M using the same equipments and similar processes. An extract of the production data for these products in one period is shown below.

Particulars	L	M
Quantity produced	5000	7000
Direct Labour hours per unit	1	2
Machine hours per unit	3	1
Steps in the period	10	40
Orders handled in the period	15	60

Overhead costs

Rs.

Relating to machine activity	220,000
Relating to production run set-ups	20,000
Relating to handling of orders	45,000

**You are required to:**

- (i) Calculate the production overheads to be absorbed by one unit of each of the products using the following costing methods.
- A traditional Costing approach using a direct labour hour rate to absorb overheads.
  - An Activity Based Costing approach using suitable cost drivers to trace overheads to products.
- (ii) Compare the result under two methods and give your comments.

(16 marks)

02. The Balance Sheet of Alpha (Pvt) Ltd. as at 31.12.2008 and 31.12.2009 are as follows.

<b>Assets</b>	<b>31.12.2009</b>		<b>31.12.2008</b>	
<b><u>Non Current Assets</u></b>				
Land	500,000		500,000	
Building	2,750,000		2,750,000	
Equipment	2,430,000		2,100,000	
	5,680,000		5,350,000	
Accumulated Depreciation	(1,780,000)	3,900,000	(1,500,000)	3,850,000
Investment		530,000		410,000
<b><u>Current Assets</u></b>				
Stock	630,000		510,000	
Debtors	530,000		460,000	
Prepaid insurance	10,000		20,000	
Cash & Bank	150,000	1,320,000	130,000	1,120,000
		<b>5,750,000</b>		<b>5,380,000</b>
<b><u>Liabilities</u></b>				
Share capital		1,650,000		1,510,000
Retained earning		2,800,000		2,460,000
<b><u>Long term liabilities</u></b>				
Mortgage Payable		850,000		1,000,000
<b><u>Current liabilities</u></b>				
Creditor	130,000		170,000	
Notes payable	240,000		150,000	
Wages payable	35,000		20,000	
Interest payable	15,000		10,000	
Income Tax payable	30,000	450,000	60,000	410,000
		<b>5,750,000</b>		<b>5,380,000</b>

Profit and Loss A/c for the year ended 31.12.2009

	Rs.	Rs.
Sales		4,720,000
Cost of goods sold		(2,320,000)
Gross Profit		2,400,000
Less: <i>Other expenses</i>		
Wages	1,420,000	

Insurance	150,000	
Depreciation	400,000	(1,970,000)
Income from operating		430,000
<i>Other income</i>		
Loss on sales of equipment	(60,000)	
Gain on sales of long term investment	150,000	90,000
Profit before interest		520,000
Interest		(50,000)
Profit before tax		470,000
Income tax		(80,000)
Profit after tax		390,000

**Additional Information:**

- i. Equipment with the cost of Rs.200,000 and accumulated depreciation of Rs.120,000 was sold for Rs.20,000 in 2009. Equipment was purchased Rs.530,000 in cash.
- ii. Long term investment with cost of Rs.160,000 were sold for Rs.310,000. Additional long term investment purchased Rs.280,000.
- iii. Note payable in the amount of Rs.200,000 were repaid and new notes payable in the amount of Rs.290,000 were issued for cash during 2009.
- iv. A principle payment of Rs.150,000 was made on the mortgage in 2009.
- v. Common stock was issued for Rs.140,000 in 2009.

**You are required to :**

- (i) Prepare the cash flow statement of Alpha (pvt.) Ltd. for the year ended 31.12.2009 using the direct method
- (ii) List out the operating activities of Alpha (pvt.) Ltd. using the indirect method.

**(20 marks)**

03. (a) Write short notes on 'Working Capital Cycle'.

**(05 marks)**

- (b) What are the important factors which determine the working capital of a business?

**(05 marks)**

- (c) A firm has applied for a working capital finance from a Commercial Bank. You are requested by the bank to prepare an estimate of the working capital requirements of the firm. You may add 10% to your estimated figure to account for exigencies. The following is the firm's projected Profit and Loss Account:

Particulars	Rs.
a. Sales	2,247,000
b. Cost of goods sold	<u>1,637,100</u>
c. Gross profit (a-b)	609,900
d. Administrative expenses	149,800
e. Selling expenses	<u>139,100</u>
f. Profit before tax [c- (d+e)]	321,000
g. Tax provision	<u>107,000</u>
h. Profit after tax (f-g)	<u>214,000</u>

The cost of goods sold (COGS) is calculated as follows:

Particulars	Rs.
Materials used	898,800
Wages and other manufacturing expenses	668,750
Depreciation	<u>251,450</u>
	1,819,000
Less: Stock of finished goods (10% product not yet sold)	<u>181,900</u>
Cost of goods sold	<u>1,637,100</u>

The figures given above relate only to the goods that have been finished, and not to work in progress; goods equal to 15 of the year's production (in term of physical units) are in on progress on an average requiring full material but only 40% of other expenses. The firm has a policy of keeping two months consumption of material in stock.

All expenses are paid one month in arrear. Suppliers of material grant one and a half months credit; sales are 20% cash while remaining sold on two months credit. 70% of income tax has to be paid in advance in quarterly installment.

(10 marks)

04. (a) Define and evaluate the following ratio.

- i. Debt-Equity.
- ii. Interest coverage ratio.
- iii. Return on Investment.

(06 marks)

(b) Summarized Balance Sheet and Profit and Loss Account of a company is given below. Determine the following ratios and comment on the health of the company basing your arguments on the industry averages given in brackets:

Inventory turnover	(10)
Investment turnover	(1.5)
Sales margin	(3.5%)
Profit/Asset employed	(4.0%)
Profit/Net worth	(11.5%)
Average realization time	(45 days)
Debt/Equity	(3.2)

#### Balance Sheet

	Rs. Million		Rs. Million
Equity	96.8	Net block	48.4
Secured loans	17.6	Stocks	66.0
Creditors	13.2	Debtors	22.0
Overdraft	17.6	Bank balance	17.6
Income – tax due	8.8		
	154.0		154.0

#### Profit and loss account

	Rs. Million		Rs. Million
Materials	83.6	Sales	220.0
Manpower	52.8		
Energy	8.0		
Factory expenses	13.2		
Depreciation	4.8		
Selling and distribution	22.0		
Administration	18.0		
Interest	1.6		
Profit	16.0		
	220.0		220.0

Assume Income – tax at 50%

(14 marks)

05. a. Describe Accounting Rate of Return. What are the main strength and weaknesses?

(05 marks)

- b. Jefferson Products (Pvt.) Ltd., is considering purchasing a new automatic press brake, which costs Rs.300,000 including installation and shipping. The machine is expected to generate net cash inflows of Rs.80,000 per year for 10 years. At the end of 10 years, the book value of the machine will be Rs.0, and it is anticipated that the machine will be sold for Rs.100,000. If the press brake project is undertaken, Jefferson will have to increase its net working capital by Rs.75,000. When the project is terminated in 10 years, there no longer will be a need for this incremental working capital, and it can be liquidated and made available to Jefferson for other uses. Jefferson requires a 12 percent annual return on this type of project and its marginal tax rate is 40 percent.
- Calculate the press brake's net present value.
  - Is the project acceptable?
  - What is the meaning of the computed net present value figure?
  - What is the project's internal rate of return?
  - For the press brake project, at what annual rates of return do the net present value and internal rate of return methods assume that the net cash inflows are being reinvested?

(15 marks)