SOUTH EASTERN UNIVERSITY OF SRI LANKA

SECOND YEAR EXAMINATIONS IN BACHELOR OF BUSINESS ADMINISTRATION / COMMERCE (EXTERNAL) - 2008 / 2009 HELD IN AUGUST - 2009

BBA / COM 28 (II) – COST AND MANAGEMENT ACCOUNTING - II

Answer all Questions.

Time: 03 Hours

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01. (a) i. Describe the problem associated with standard costing in the new industrial environment. (2 Marks)

ii. Contrast standard cost and target cost. (2 Marks)

(b) Wills Pvt. Ltd manufactures a product with the following standard costs:

Direct material	40 meters at Rs. 2.70 per meter	Rs. 108
Direct Labour	8 hours at Rs. 18 per hours	Rs. 144
Total standard prime cost per unit of output		Rs. 252

The following information pertains to the month of July 2008.

Direct material purchased	42,000 meters at Rs. 2.76 per meter	= Rs. 115,920
Direct material used	36,000 meters	
Direct labour	7,200 hours at Rs. 18.30 per hour	= Rs. 131,760

Actual July 2008 production was 1,000 units.

You are required to:

Calculate the following variances for the month of July, indicating whether each variance is favourable or unfavourable:

i. Direct material price variance
ii. Direct material quantity variance
iii. Direct labour rate variance
iv. Direct labour efficiency variance.

(10 Marks)

(c) What is the difference between standard and a budget? (2 Marks)

(d) Why does management need to separate direct labour variance into rate variance and efficiency variance? (04 Marks)

(Total 20 Marks)

02. (i) Mercury Manufacturing Limited produces two products (P1 and P2) using two types of raw materials (M3 and M4). The company was preparing its budgets for the year ending 31 December 2008. Expectations for 2008 include the following:

(1) Production and sales:

	P1	P2
Budgeted sales in units	6,000	4,800
Budgeted unit selling price	Rs.500	Rs.1,000
Opening stock of finished goods: in units	600	700
: valuation	Rs.144,000	Rs.182,000
Budgeted closing stock in unit	1,250	650

Normal losses occur at the end of the production process and 5% of the outputs of both products have to be scrapped. It is the company's policy that stock of finished goods is valued on a first-in first-out basis. There is no opening or closing work-in-progress.

(2) Direct materials:

		M3	M4
Raw materials per unit of production:			
P1		10 kg	5 kg
P2		6 kg	8 kg
Opening stock of raw materials	:in kg	20,000 kg	10,000 kg
	: valuation	Rs.200,000	Rs.120,000
Budgeted closing stock in kg		12,000 kg	12,000 kg
Budgeted purchase price per kg		Rs.10	Rs.12

(3) Direct labour:

Standard direct labour time required for producing one unit of P1 and P2 are 30 minutes and 45 minutes respectively. Labour is paid at the rate of Rs.120 per hour.

(4) Factory overheads:

The budgeted factory overheads for the year 2009 are Rs. 362,500. These overheads are to be absorbed in the production cost on a direct labour hour basis.

Required:

For Mercury Manufacturing Limited, prepare the following budgets (a) to (h) for 2008:

(a) Sales budget for each of the two products;

(2 marks)

(b) Production budget (in units) for each of the two products;

(2 marks)

(c) Direct material purchase budget for each of the two materials;

(2 marks)

(d) Direct labour budget for each of the two products;

(2 marks)

(e) Pre-determined factory overhead absorption rate;

(2 marks)

(f) Factory cost of goods produced showing all cost elements for each of the two products;

(3 marks)

(g) Unit production costs for each of the two products, rounded to rupee amount; and

(2 marks)

(h) Budgeted cost of goods sold for each of the two products.

(2 marks)

(ii) Explain the reason why some companies normally prepare the sales budget first among all functional budgets while the other companies start with the labour or other budget first in the budgetary planning process.

(4 marks)

(iii) What is zero based budgeting? How does it differ from other more traditional form of budgeting?

(4 marks)

(Total 25 marks)

03. ABC Company bought a cutting machine; model KC12, on March 2007, for Rs. 50,000 cash. The estimated salvage value and estimated life were Rs. 6,000 and 11 years, respectively.

On March 2008 the company CEO, learned that he could purchase a different cutting machine, Model AC1, for Rs. 80,000 cash. The new machine would save the company an estimated Rs. 7,500 per year in operating costs compared to KC12. AC1 has an estimated salvage value of Rs. 4,000 and an estimated life of 10 years.

The company could get Rs. 30,000 for KC12 on March 2008. The company uses the straight line method for depreciation and 12 percent rate of return.

Required:

i. Compute, for AC1, the

   a. Pay Back Period.
   b. Accounting Rate of Return using the average investment.
   c. Net Present Value
   d. Internal Rate of Return

ii. Should the firm purchase AC1? Why?

(20 Marks)

04. Johnson Chemical Company manufactures a wide variety of industrial chemicals and adhesives. It purchases much of its raw material in bulk from other chemical companies. One chemical, T- Bar is prepared in one of Johnson's own plants. T-Bar is shipped to other Johnston plants at a specified internal price.

The Jonson adhesive plant requires 10,000 barrels of T-Bar per month and can purchase it outside the firm for Rs. 150 per barrel. Johnson T-Bar unit has a capacity of 20,000 barrels per month and is presently selling that amount to outside buyers at Rs. 165 per barrel. The difference between the T-Bar unit's price of Rs. 165 and the outside firm's T-Bar price of Rs. 150, short-term pricing is due to strategy only; the materials are equivalent in quality and functionality. The T-Bar unit's selling cost is Rs. 5 per barrel and its variable cost of manufacturing is Rs. 90 per barrel.

Required:

i. Should the adhesive unit purchase T-Bar inside or outside the firm?

ii. Based on your answer in requirement i, what is T-Bar's proper transfer price?

iii. How would your answer to requirement i and ii change if the T-Bar unit had a capacity of 30,000 barrels per month?

(15 Marks)

05. The income statement of XY for the year ended 31 December 2008 and its balance sheet at that date are as follows:

Income Statement

	Rs. '000	**Rs. '000**
Revenue		1,845
Cost of sales		(758)
Gross Profit		1,087
Distribution Cost	(136)	
Administrative Expenses	(61)	(197)
Profit from Operations		890
Finance Costs		(104)
		786
Income Tax Expenses		(69)
Profit for the Period		**717**

Balance Sheet

	Rs. '000	**Rs. '000**
Assets		
Non-current Assets		
Property, Plant and Equipment		4,002
Current Assets		
Inventories	42	
Trade Receivable	180	
Cash	113	335
Total Assets		**4,377**

Equity and Liabilities		
Capital and Reserves		
Issued Capital (Rs. 1 shares)	600	
Retained Earnings	1,132	1,732
Non-current Liabilities		
Interest bearing Borrowings	2,022	
Deferred Tax	291	2,313
Current liabilities		292
Total Equity and Liabilities		**4,337**

Calculate the following ratios, and interpret the answers:

i. Gross profit margin

ii. Operating profit margin

iii. Net profit margin

iv. Asset turnover

v. Inventory turnover

vi. Return on capital employed

vii. Return on assets

viii. Current ratio

ix. Quick ratio

x. Gearing ratio

(20 Marks)

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