KASNEB

CPA

MANAGEMENT ACCOUNT

5TH **DEC 2012**

QUESTION ONE

a) Metech Ltd is in the process of developing a new product branded "Valida". During its expected life, it is estimated that 16,000 units of "Valida" will be sold at a price of Sh. 250 per unit.

Additional information:

1. The direct material and other non-labour related costs will be Sh. 150 per unit throughout the life of the product.
2. Production is expected to be batches of 1,000 units throughout the life of the product.
3. The direct labour cost is expected to reduce due to the effects of learning for the first 8 batches produced. Thereafter, the labour cost will remain at the same cost per batch as the 8th bath.
4. The direct labour cost of the first batch of 1,000 units is expected to be Sh. 120,000.
5. A learning effect of 80% is expected to occur.
6. The learning index for an 80% learning curve=-0.322.

Required:

i. Average direct labour cost per batch of the first 8 batches. (2 marks)
ii. Direct labour cost of the 8th batch. (3 marks)
iii. Contribution to be earned from the product over its lifetime. (3 marks)

b) Jacob Sueka, the Management Accountant of Reuch Ltd, is in the process of developing the quarterly costs forecast for the financial year 2012/2013. The financial year of Recuh Ltd ends on 30 November every year. Jacob Sueka believes that the following data for the recent eight quarters are representative of costs for the financial year 2012/2013:

Year	**Quarter**	**Cost**
		Sh. "million"
2010/2011	1	740
	2	650
	3	490
	4	1,610
2011/2012	1	830
	2	740
	3	540
	4	1,800

Required:

i. Compute the seasonal indices. (3 marks)
ii. Deseasonalise the data. (2 marks)
iii. Develop the regression equation using the deseasonalised data in (b) (ii) above. (3 marks)

iv. Compute the deseasonalised cost forecast for each of the four quarters of the financial year 2012/2013. (4 marks)

(Total: 20 marks)

QUESTION TWO

a) Maslahi Safaris Ltd is a tour company that operates a fleet of more than 300 vehicles. The company has opened 10 branches in the country which are headed by branch managers. The performance of the manager of each branch is evaluated using financial measures. Many of the branch managers are not happy. They believe that there could be conflict between good performance and achieving short term profits. They are also unhappy that their profits reports include a share of head office costs and other costs that they cannot control.

Required:

i. Discuss why non-financial performance measures are important in the service sector. (4 marks)

ii. Propose with reasons, two non-financial performance measures that Maslahi Safaris Ltd could use to evaluate the performance of the branch managers. (2 marks)

iii. Explain why and how, non-controllable costs should be shown on the profit reports. (2 marks)

b) Bletim Ltd manufactures and sells a single product branded "Resla". The Management Accountant has predicted the sales demand for "Resla" for each of the four quarters of the year 2013 as follows:

Quarter	1	2	3	4
Sales volume (units)	80,000	88,000	152,000	112,000

Additional information:

1. The company has a normal production capacity of 108,000 units per quarter. However, the capacity can be increased by up to 40% by working overtime.
2. The current policy is to manufacture units using a constant level of production system. This means that although the opening and closing levels of inventory for the year are zero units, there are increases and decreases in the quarterly inventory levels.
3. The selling price, variable production costs and contribution per unit for the year 2013 are expected to be as follows:

	Sh.	**Sh.**
Selling price		360
Variable production costs		
Direct materials	120	
Direct labour	140	
Overheads	40	-300
Contribution		60

4. Overtime working will increase the unit direct labour cost by 50% and the unit variable production overheads cost by 30% for those units produced during overtime working.

5. The company incurs a holding cost of Sh. 20 per unit per quarter these costs are not included in the production costs above.
6. The company is considering whether it should change just-in-time (JIT) production system, but is concerned that due to the fluctuating levels of its sales demand, this might not be financially beneficial. If the company changes to a JIT production system:
    - No inventory would be held.
    - There would be no change in the behavior of variable production costs.

Required:

i. Cost of holding for each quarter and the year in total under the current production system. Assume that sales occur evenly during each quarter. (6 marks)
ii. Determine the financial impact of changing to a JIT production system. (6 marks)

(Total: 20 marks)

QUESTION THREE

a) Outline three roles of management accountants. (3 marks)
b) Reexa Ltd is considering renting additional factory space to make two products, Eve and Wye. The management accountant has prepared the following monthly budget for the products:

	Exe	**Wye**	**Total**
Sales (units)	4,000	2,000	6,000
	Sh.	**Sh.**	**Sh.**
Sales revenue	800,000	1,000,000	1,800,000
Variable cost	600,000	-620,000	1,220,000
Fixed production overheads	-99,000	-180,000	-279,000
Fixed administration overheads	-16.000	-20,000	-36.000
	85.000	180.000	265.000

Additional information:
1. The production facilities are interchangeable between the products.
2. Fixed overheads can only be avoided if neither of the products if produced.
3. The computer aided method of production could be used as an alternative to the current manual method assumed in the budget. This would reduce variable costs of production by 15% but increase fixed costs by Sh. 120,000 per month.
4. In order to sell the budgeted units of product Wye, the company will depart from the cash sales policy. The management would offer an average of three months credit with expected bad debts and administration costs amounting to 4% of sales revenue for the product.
5. Both products will be sold at the prices assumed in the budget and no stocks will be held.
6. The company has a cost of capital of 2% per month.

Required:

Breakeven point in units and sales value for each of the method assuming:

i Product Exe alone is sold. (4 marks)

ii. Product Exe and Wye are sold in the ratio 4:1 with product Wye being sold on credit. (4 marks)

iii. Determine the sales revenue in units at which the company would be indifferent between the two methods under conditions (b) (i) and (b) (ii) above. (3 marks)

iv. Explain three factors to be considered in the pricing and sales forecasting for the new method of production. (6 marks)

(Total: 20 marks)

QUESTION FOUR

a) Evaluate any three perspectives which the balanced scorecard focuses on. (6 marks)

b) Explain three advantages of benchmarking. (6 marks)

c) Repoh Ltd, a conglomerate gives a considerable degree of autonomy to divisional managers and rewards them on the basis of the return on investment (ROI) achieved.

Of late, a number of divisional managers are unhappy with the ROI figures and the bonuses they are receiving. Currently, the company has two divisions, P and Q.

The following information is available for the year ended 30 June 2012:

	Division P		**Division Q**	
	Actual	**Budgeted**	**Actual**	**Budgeted**
	Sh. "million"	**Sh. "million"**	**Sh. "million"**	**Sh. "million"**
Sales	40	50	110	96
Assets employed	24	26.8	52	48.5
Profit before interest and tax	4.1	6.5	11.4	6.7
ROI	17.10%	24.30%	21.90%	13.80%

Additional information:

1. The above figures include the apportioned costs for an automated warehouse shared by the two divisions. The data available for this facility for the year ended 30 June 2012 are:

	Actual	**Budgeted**
	Sh. "million"	**Sh. "million"**
Dispatches	150	146
Asset employed	8	8
Operating costs:		
Depreciation	1.6	1.6
Other fixed costs	1.1	0.9
Variable storage costs	0.5	0.5
Variable handling costs	1.3	i t
	4.5	4.1

2. The assets employed had been split equally between the divisions concerned as originally agreed when the warehouse investment was authorized.
3. The operating costs had been split between divisions P and Q in the ratio 2:3 respectively.

Required:

Justifying your answer, recalculate the ROI of the two divisions. (8 marks)

(Total: 20 marks)

QUESTION FIVE

a) Explain two advantages of management participation in budget setting. (4 marks)
Describe two potential problems that might arise in the use of the resulting budget (a) (i) above as a control mechanism. (4 marks)

b) Paintmax Ltd manufactures a paint branded "Rebo" that must be sold in the year of manufacture or else discarded as waste.

Paintmax has two options:
Option **I:** Manufacture "Rebo" at a variable cost of Sh. 40 per litre.
Option **II:** Purchase "Rebo" from an outside supplier at a cost of Sh. 70 per litre.

Additional Information:

1. Paintmax Ltd sells "Rebo".
2. The production process is such that, at least 9,000 litres must be produced during the period.
3. The sales forecast of "Rebo" and their probabilities are:

Demand (litres)	Probability
4,000	0.4
7,000	0.5
11,000	0.1

4. Production levels must be set at the start of the period and cannot be changed during the period.
5. The management of Paintmax Ltd must decide whether to manufacture "Rebo" or purchase it from the outside supplier.

Required:

i. Expected sales demand. (2 marks)
ii. Expected contribution for Option I and Option II. (4 marks)
iii. Standard deviation of the expected contribution for two options. (5 marks)
iv. Advise Paintmax Ltd on the better option if the company is risk averse. (1 mark)

(Total: 20 marks)