KASNEB
CPA
MANAGEMENT ACCOUNT

28th MAY 2014

QUESTION ONE

a) Identify two non-financial performance indicators for evaluating each of the following:
   i. Personnel performance (2 marks)
   ii. Production performance (2 marks)

b) Public sector organizations are often judged by their economy, efficiency and effectiveness. With regard to their budgeting process, the incremental budgeting approach may not be ideal.

Required:

With references to the above statement, explain one advantage and two disadvantages to public sector organizations from using the incremental budgeting approach. (6 marks)

c) Konzi Ltd manufactures and sells three products namely: A , B and C. the budgeted production overhead costs for the financial year ending 30 June 2015 are as follows:

Activity	**Sh. "000"**
Set-up	448,000
Material handling	193,600
Inspection	308.800
Total production overheads	950,400

The budgeted details of the products for the financial year ending 30 June 2015 are as follows:

	Product		
	A	**B**	**C**
Production (units)	10,000	16,000	18,000
Batch size	100	200	300
Number of set-ups per batch	2	3	6
Number of materials movements	16,530	20,938	17,632
Number of inspections	1,188	1,782	2,430

Required:

Using activity based budgeting (ABB), calculate the total budgeted production overheads cost for each product. (10 marks)

(Total: 20 marks)

QUESTION TWO

a) Distinguish between the terms "profit centre" and "cost centre" as used in responsibility accounting. (4 marks)

b) The following data were obtained by Bidii Company Ltd relating to two of its salespersons for the month of January 2014:

	Kavindu	**Otieno**
Gross sales (Sh.)	250,000	180,000
Commissions	20,000	14,400
Sales returns	17,500	9,000
Cost of goods (all variable)	139,000	68,400
Discretionary expenses of sales persons (travel, entertainment)	19,200	21,500

Additional information:

1. Salespersons are paid a basic salary plus an 8% commission on gross sales.
2. The company intends to review its remuneration structure which is currently based on gross sales. This is due to some complaints amongst the salespersons and also to improve profitability.
3. Sales returns are resold at a loss by the firm.

Required:

i. Prepare a performance report for each of the salespersons to determine their respective contribution to the firm's profitability. (8 marks)

ii. Comment on the shortcomings of the current remuneration method based on your answer in (b) (i) above. (6 marks)

iii. Suggest possible corrective measures for addressing the shortcomings in (b) (ii) above. (2 marks)

(Total: 20 marks)

QUESTION THREE

a) Environment management is considered as one of the important issues facing organizations today. An effective environment costing system will not only support an organization's management but might also improve the financial performance of the organization.

Required:

With reference to the above statement, evaluate four ways an environmental costing system could lead to improved financial performance. (8 marks)

b) Delmon Ltd produces two joint products namely. "Pendax" and "Benden" in the ratio of 2:1 respectively. At the split-off point, the products can be sold for industrial use or transferred to the mixing plant for blending and refining. The second option is usually preferred.

The following information relates to the fourth week of April 2014:

	Pendax	**Benden**
Sales (litres)	20,000	10,000
	Sh.	**Sh.**
Price per litre	350	600
Total sales revenue	7,000,000	6,000,000
Joint process costs	3,000,000	1,500,000

Blending and refining costs	2,500,000	2,500,000
Other separable costs	500,000	100,000
Profits	1,000,000	1,900,000

Additional information:

1. Joint process costs are allocated on volume and are 75% fixed and 25% variable.
2. Blending and refining costs are 40% fixed and 60% variable.
3. There are only 4,000 hours available in the blending and refining process which are usually allocated as follows:
    - 3,000 hours are taken up to process "Pendax" and"Bendan" equally.
    - 1,000 hours are used for other work that generates a contribution of Sh. 2,000 per hour
4. With a view to improving the company's profitability, the production manager has suggested that it might be possible to change the mix of the joint process to 3:2 for "Pendax" and"Bendan" respectively at a cost of Sh. 50 for each additional litre of "Bendan" produced by the process.

Required:

Advise the company on whether to change the product mix as suggested by the production manager.
(8 marks)

c) A company sells two products, X and Y with contribution margin ratios of 40% and 30% respectively. The selling prices of the products are Sh. 50 per unit for X and Sh. 25 per unit for Y. Fixed costs amount to Sh. 720,000 a month. Monthly sales average 30,000 units of product X and 40,000 units of product Y.

Required:

i. Assuming that three units of product X are sold for every four units of product Y, calculate the sales volume in shillings and in units, necessary to break down. (3 marks)

ii. Calculate the margin of safety in shillings. (1 marks)

(Total: 20 marks)

QUESTION FOUR

a) Explain four essentials of a good management information reporting system. (4 marks)

b) PQR Ltd is considering introducing a new product. This will involve a fixed cost of Sh. 60,000. There are three uncertain factors namely. selling price, variable cost and volume. The product has a life span of one year. The variables together with their associated probabilities are given as follows:

Selling Price Sh.	**Probability**
40	0.3
55	0.5
60	0.2

Variable cost Sh.	**Probability**

20	0.1
35	0.6
45	0.3

Volume

Units	Probability
35,000	0.4
45,000	0.2
50,000	0.4

Assume that the three variables are statistically independent.

Required:

Simulate the problem and advise the management of PQR Ltd whether to introduce the new product.

Use 25 trials given the following random numbers (8,0,6,0,4,3,6,3,2,1,4,0,3,6,0,5,6,9,1,6,7,3,8,6,2,8,3,1,6,5,1,7,3,9,9,6,4,9,7,7,2,6,9,5,3,0,5,0,1,1,8,,,0,6,4,8, 8,6,9,2,4,0,7,7,0,0,8,4,0,1,6,5,8,4,0,1) . (16 marks)

(Total: 20 marks)

QUESTION FIVE

The following data relate to the daily demand and sales of product Zed and their associated probabilities for Mjengo Hardware Ltd.

Units of Zed sold	Probability
5	0.5
7	0.5

Additional information:

1. Product Zed is purchased for Sh.8 and retails for Sh. 10 per unit
2. The annual operating costs allocated to product Zed are Sh.2,250
3. Each order of product Zed costs Sh. 17.60 and the holding cost per unit of product Zed is Sh. 4.40 annually.
4. The lead times between an order and its delivery has been estimated as follows:

Lead time(days)	Probability
1	0.3
2	0.5
3	0.2

5. Mjengo Hardware Ltd places an order of an item upon the actual level reaching the minimum pre-set re-order level. Any stock outs of a product result in loss of sales.
6. Assume that demand is constant.
7. Assume a 300-day year.

Required:

i. The optimal order size for product Zed (4 marks)

ii. The optimal minimum re-order level of product Zed assuming that Mjengo Hardware Ltd wishes to minimize the expected value of cash flows (consider a range of re-order level of 15-21 units). (16 marks)

(Total: 20 marks)