



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

MAIN EXAMINATION

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AUGUST - DECEMBER 2016 TRIMESTER

FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING AND FINANCE

MBA REGULAR PROGRAMME

CAC 610: MANAGERIAL ACCOUNTING

Date: DECEMBER 2016

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and ANY OTHER TWO Questions

Q1. a) Mose Enterprises gathered the following information on power costs and factory machine usage for the last six months:

| <u>Month</u> | <u>Power Cost(Sh)</u> | <u>Factory Machine Hours</u> |
|--------------|-----------------------|------------------------------|
| January | 24,400 | 13,900 |
| February | 29,200 | 17,600 |
| March | 29,000 | 16,800 |
| April | 22,340 | 13,200 |
| May | 19,900 | 11,600 |
| June | 14,900 | 6,600 |

Required:

Using the high-low method of analyzing costs, answer questions (i), (ii), and (iii).

- What is the estimated variable portion of power costs per factory machine hour? **(3 marks)**
- What is the estimated fixed power cost each month? **(2 marks)**
- If it is estimated that 10,000 factory machine hours will be run in July, what is the expected total power cost for July? **(2 marks)**
- Using your calculator, estimate the variable and fixed power costs. **(2 marks)**
- Which of the two methods would you recommend and why? **(1 mark)**

b) Beauty Shop has provided the following information:

| | <u>March</u> | <u>April</u> | <u>May</u> |
|--------------------------------------|--------------|--------------|------------|
| Projected merchandise purchases (sh) | 65,000 | 75,000 | 80,000 |

Beauty Shop pays 40% of merchandise purchases in the month purchased and 60% in the following month.

General operating expenses are budgeted to be Sh 20,000 per month of which depreciation is Sh 2,000 of this amount. Beauty Shop pays operating expenses in the month incurred.

Required:

Calculate Beauty Shop's budgeted cash payments for May. **(4 marks)**

c) Nambale Manufacturing produces and sells two products, Doshi and Washi. The Company generally sells two units of Doshi for every three units of Washi Sold. The contribution margin is Sh 40 per unit of Doshi and Sh 20 per unit of Washi. The Company has fixed costs of Sh 4,200,000 per year.

- Calculate the total units sold at breakeven. **(3 marks)**
- Assume that total labour hours available for production are 25,000. In addition, product Doshi requires 0.75 hours to produce, and Washi requires 0.25 hours. Advice management of Namable Manufacturing which product should be produced to maximise the total contribution margin. **(5 marks)**

d) Your CEO is concerned about the currently used decision making process in your company. Briefly explain for your CEO what you consider to be the most important aspects the decision making process. **(8 marks)**

Q2. For nearly 20 years, Specialized Coatings (SC) has provided painting and galvanizing services for manufacturing companies. Manufacturers of various products have relied on the quality and prompt services provided by SC and its 20 skilled employees. During the last year, as a result of sharprise in the economy, SC's sales have increased by 30% relative to the previous year. The company has not been able to increase its capacity fast enough, so SC has had to turn work away because it cannot keep up with the customer demands.

Top management is considering the purchase of a sophisticated robotic painting booth. The booth would represent a considerable move in the direction of automation versus manual labour. If SC purchases the booth it would most likely lay off 15 of its skilled painters. To analyze the decision, the company has

compiled production information from the most recent year and then prepared a parallel compilation assuming that the company would purchase the new equipment and lay off the workers. The data is shown below. The company projects that during the last year, it would have been far more profitable if it had used the automated process.

| | <u>Current process</u> | <u>Automated process</u> |
|---------------------|------------------------|--------------------------|
| Sales | Sh 2,000,000 | Sh 2,000,000 |
| Variable costs | 1,500,000 | 1,000,000 |
| Contribution margin | 500,000 | 1,000,000 |
| Fixed costs | <u>380,000</u> | <u>800,000</u> |
| Net income | <u>120,000</u> | <u>200,000</u> |

Required:

- a) Compute and interpret the contribution margin ratio for each process. **(3 marks)**
 - b) Compute the break-even point in shillings of sales under each process. **(3 marks)**
 - c) Using the current level of sales, compute the margin of safety ratio under each process and interpret your findings. **(3 marks)**
 - d) At what level of sales would SC's net income be the same under either approach? **(3 marks)**
 - e) Highlight other important issues that the SC's management should consider in making this decision. **(3 marks)**
- Q3. As sales manager, BaptistaMaranga was given the following static budget report for selling expenses in the Clothing department of Mahesh Clothing Company for the month of October.

As a result of this budget report, Baptista was called into the CEO's office and congratulated on his fine sales performance. He was reprimanded, however, for allowing his costs to get out of control.

| Mahesh Clothing Company | | | |
|--|---------------|---------------|---|
| Clothing Department Budget Report for the month ended October 31, 2016 | | | |
| | <u>Budget</u> | <u>Actual</u> | <u>Budget variance (Favourable F; Unfavourable U)</u> |
| Sales in units | <u>8,000</u> | <u>10,000</u> | <u>2,000 (F)</u> |
| Variable expenses; | | | |
| Sales commissions | Sh 2,400 | Sh2,600 | Sh 200 (U) |
| Advertising expense | 720 | 850 | 130 (U) |
| Travel expense | 3,600 | 4,100 | 500 (U) |

| | | | |
|---------------------|---------------|---------------|----------------|
| Promotional samples | <u>1,600</u> | <u>1,400</u> | <u>200 (F)</u> |
| Total variable | <u>8,320</u> | <u>8,950</u> | <u>630 (U)</u> |
| Fixed expenses; | | | |
| Rent | 1,500 | 1,500 | 0 |
| Sales salaries | 1,200 | 1,200 | 0 |
| Office salaries | 800 | 800 | 0 |
| Depreciation | <u>500</u> | <u>500</u> | <u>0</u> |
| Total fixed | <u>4,000</u> | <u>4,000</u> | <u>0</u> |
| Total expenses | <u>12,320</u> | <u>12,950</u> | <u>630 (U)</u> |

Baptista knew something was wrong with the performance report that he had been given. However, he was not sure what to do, and comes to you for advice.

Required:

- Prepare a budget report based on flexible budget data to help Baptista. **(8 marks)**
- Should Baptista have been reprimanded? Support your position. **(3 marks)**
- Explain what behavioural effects the budgets can have on managers like Baptista and how such effects can be reduced. **(5 marks)**

Q4. Supa Company manufactures a variety of tools and industrial equipment. The company operates through three divisions. Each division is an investment centre. Operating data for the Home division for the year ended 31 October 2016 and relevant budget data in shillings are as follows;

| | <u>Actual</u> | <u>Comparison with Budget</u> |
|--|---------------|-------------------------------|
| Sales | 1,400,000 | 100,000 favourable |
| Variable cost of goods sold | 675,000 | 55,000 unfavourable |
| Variable selling and administrative expenses | 125,000 | 25,000 unfavourable |
| Controllable fixed cost of goods sold | 170,000 | On target |
| Controllable fixed selling and administrative expenses | 80,000 | On target |

Average operating assets for the year for the Home division were Sh 2,000,000 which was also the budgeted amount.

Required:

- Evaluate the manager's performance. **(3 marks)**

- b) Identify which items would likely be investigated by top management. **(3 marks)**
- c) Compute the expected Return on Investment (ROI) in 2016 for the Home division, assuming the following independent changes to actual data:
- i) Variable cost of goods sold is decreased by 5%. **(3 marks)**
 - ii) Average operating assets are decreased by 10%. **(3 marks)**
- c) Prepare a responsibility report for the Home division. **(3 marks)**

END