

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

MAIN EXAMINATION

P.O. Box 62157 00200 Nairobi - KENYA Telephone: 891601-6

JANUARY – APRIL 2019 TRIMESTER

FACULTY OF COMMERCE

MBA REGULAR / ODEL PROGRAMME

CAC 610: MANAGERIAL ACCOUNTING

Date: APRIL 2019Duration: 3 HoursINSTRUCTIONS: Answer Question ONE and any other THREE Questions

| Q1. a) Refer to the film "prosperity" and answer the following quest |
|--|
|--|

| i) | Why is it not correct to use the shareholder | value |
|----|--|----------|
| | maximization principle in business? | (1 mark) |

- ii) How can shareholder value maximization principle support 'higher business purpose?' Explain. (2 marks)
- iii) Advise on the limitation of the traditional business performance evaluation model. (3 marks)
- b) You are the manager of a growing cosmetic products company. You are considering widening the product range by launching a new product, a hair dressing tonic. The incremental profit is Ksh 700 per unit and the necessary investment in equipment is Ksh 39 million. The marketing department has given you the estimated demand as follows:

| Units demanded | 30,000 | 40,000 | 50,000 | 60,000 | 70,000 |
|----------------|--------|--------|--------|--------|--------|
| Probability | 0.05 | 0.10 | 0.20 | 0.30 | 0.35 |

Required:

- i) Compute the expected profits for all the possible events (states of nature).
- ii) Prepare a pay-off table for this decision situation. (2.5 marks)

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- iii) Advise the Board of Directors whether the new product should be introduced. Hint: use the expected value criterion. (3 marks)
- iv) The Board has now resolved to obtain expert information and is in the process of contracting a marketing consultancy firm for this purpose.
 Suggest the maximum amount that your company should be willing to pay for the consultancy. Support your answer with the relevant workings.
 (3 marks)
- c) A company has been examining the behaviour of revenues on the basis of the customers. This is the first step in finding justification for changes in company operations. Due to the increase in operational costs, there has been suggestions that business should operate only on week days.

A multiple regression model has been estimated for this problem and got the following results:

| Analysis of Variance | | | | | | | |
|--|-----------------------------|--------|-------------------|---------------------|-------------------|--------|---------|
| | Source | D F | Sum of Squares | | F Value | Pr > | F |
| | Model | 2 | 2018.89 | 1009.45 | 31216.7 | <.000 | 1 |
| | Error | 7 | 0.23 | 0.03 | | | |
| | Corrected Total | 9 | 2019.12 | | | | |
| | Root MSE 0.18 R-Square 0.99 | | | | | | |
| Dependent Mean 35.3 Adj R-Sq 0.99 7 | | | | | | | |
| Coeff Var 0.51 | | | | | | | |
| Parameter Estimates | | | | | | | |
| | | | | imeter St timate | andard t Error | Value | Pr > t |
| Intercept | | 1 -0 | .64 | 0.16 | -4.14 | 0.0043 | |
| No of weekday customers | | | 1 0 | .40 | 0.02 | 24.83 | <.0001 |
| No of weekend customers | | | 1 0 | .27 | 0.01 | 20.40 | <.0001 |
| | | | | | | | |

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Required:

- i) Establish an estimating function using these results. (1 mark)
- ii) How much does an additional weekend customer add to the revenue per week? (1 mark)
- iii) How much does each weekday customer add to weekly revenue? (1 mark)
- iv) Advise management if the business should operate on weekends on the basis of the results above. (3 marks)
- d) Use the case, "Gomez Electronics, Inc." to answer the following questions.
 - i) Using the data in Exhibits 2 and 3, prepare a sales budget. (3 marks)
 - ii) Refer to exhibit 2. Suggest why the units of production differ from the units of sale. (1 mark)
 - Using the actual sales units as the sales mix for the three products, estimate the breakeven even units of sale for the company and for each of the products. (4 marks)
- Q2. This question is based on the National Geographic Video from the Situation Critical series, *Entebbe Hostage Rescue*:
 - a) What were the main alternatives for the prime minister? (2 marks)
 - b) In your opinion and using the information in the video, was the decision delayed? Justify your opinion using the relevant information from the video. (3 marks)
 - c) Was the decision made under certainty, uncertainty, conflict or risk? Explain (2 marks)
 - d) Evaluate the decision eventually made and justify your criteria. (2 marks)

Q3. Read case material attached "Gomez Electronics, Inc." and answer
 a) Explain the difference between "full-costing" and "direct costing."
 (2 marks)

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- b) Suggest which costing method you would recommend for what purpose. (2 marks)
- Assuming the production budget was as: Model A 8,000 units, Model B – 12, 000 units, and Model C – 5,000 units, prepare the production cost budget for the company. Use the full costing information provided in Exhibit 3. (6 marks)
- Q4. A transport company is studying the total cost of operations. It is assumed that the costs are driven mainly by the kilometres covered. Data for the past four months is shown here

| <u>Month</u> | <u>Kilometres</u> | <u>Total Cost (Sh)</u> |
|--------------|-------------------|------------------------|
| January | 8,000 | 144,000 |
| February | 5,000 | 120,000 |
| March | 7,000 | 141,000 |
| April | 9,000 | 195,000 |

- a) What is the relevant range for the company operations? (1 mark)
- b) Using the high-low method, estimate the company's variable cost per kilometer (2 marks)
- c) Using the high-low method, estimate the company's operational cost that does not vary with kilometres covered. (1 mark)
- d) The company has an objective to breakeven even at 3,000 Kilometres. Suggest how much should be charged per kilometre to achieve this objective. (3 marks)
- e) Illustrate how CVP analysis may be applied in situations of uncertainty. (3 marks)
- **Q5.** A recently sacked manager received compensation of Sh 8,000,000. He has decided to start a business later this year. His investment is in manufacturing a product that he knows has a ready market. He has found a suitable building to rent for his business and has bought a second-hand machinery costing Sh 6,000,000. The machinery has an estimated life of five years from January next year and no residual value. Other pertinent data to this venture are:
 - 1. Production will begin on 1st June and 25% of the following month's sales would be manufactured in June. Each month thereafter the production would consist of 75% of the current month's sales and 25% of the following month's sales.

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- Raw material costing Sh 1,000,000 has been purchased (out of the manager's sh 8,000,000) to enable production to commence and it is intended to buy each month 50% of the materials required for the following month's production requirement. The other 50% would be purchased in the month of production. Payment would be made 30 days after purchase.
- 3. Estimated sales are:

| Month | Units sale | of | Revenue (Sh) |
|----------|---------------|----|--------------|
| June | Nil | | Nil |
| July | 3,200 | | 80,000 |
| August | 3,600 | | 90,000 |
| Septembe | 4,000 | | 100,000 |
| r | | | |
| October | 4,000 | | 100,000 |

- 4. Variable production costs per unit will be: Direct material Sh 7; Direct labour Sh 6; Variable overheads Sh 2
- 5. Direct workers have agreed to have their wages paid into bank accounts on the seventh working day of each month in respect of the previous month's earnings.
- 6. Variable production overheads will be paid as follows; 60% is to be paid in the month following the month it was incurred and 40% is to be paid one month later.
- 7. Fixed overheads will be Sh 4,000 per month. One quarter of this will be paid in the month incurred, one half in the following month, and the remainder represents depreciation on the second-hand machinery
- 8. Estimated amount receivable; 20% of each month's sales will be on cash basis. 50% of each month's sales will be received in the following month, 20% in the third month and 10% will be received after four months.

Required:

Prepare a cash budget for each of the first four months, assuming that overdraft facilities will be made available (10 marks)

END

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