A. M. E. C. E. A<br>MAIN EXAMINATION

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FACULTY OF COMMERCE

## DEPARTMENT OF ACCOUNTING AND FINANCE

ODEL / REGULAR PROGRAMME
CAC 311: INTORDUCTION TO MANAGEMENT ACCOUNTING
Date: DECEMBER 2018 Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and ANY OTHER TWO Questions

Q1. i) Financial and managerial accounting are both concerned with the economic events of an enterprise. Similarities between financial and managerial accounting do exist, but they do have a different focus. Briefly distinguish between financial and managerial accounting as they relate to (1) the primary users, (2) the frequency of reports, (3) the purpose of reports, and (4) the guiding principles.
ii) Any decision situation has three major components. Identify these three components and briefly explain each one of them.
(3 marks)
iii) The following payoff table has been developed for a decision situation to select an option that would give the highest returns. The probabilities for the states of nature 1,2 , and 3 respectively are: $p(1)=0.30, p(2)=0.50$, $p(3)=0.20$.

|  | States of nature |  |  |
| :---: | :---: | :---: | :---: |
| Options | 1 | 2 | 3 |
| A | 500 | 700 | 1000 |
| B | 900 | 400 | 800 |
| C | 700 | 600 | 900 |

Compute the expected monetary value for each option and recommend the decision that should be made.
(4 marks)
iv) Archer Industries sells three different sets of sportswear. Sleek sells for sh 3,000 and has variable costs of sh 1,800; Smooth sells for sh 5,000 and has variable costs of sh 3,000; Potent sells for sh 7,000 and has variable costs of sh 4,500 . The sales mix of the three sets is: Sleek, $50 \%$; Smooth, $30 \%$; and Potent, $20 \%$. Compute the weighted-average unit contribution margin.
(2 marks)
v) Swift Company produces footballs. It incurred the following costs this month:
Direct materials sh 35,000
Direct labour 31,000
Fixed manufacturing overhead
22,000
Variable manufacturing overhead 38,000
Fixed selling and administrative expenses23,000
Variable selling and administrative expenses14,000

## Required:

What are the total product costs for the company under variable costing?
(2 marks)
vi) During 2018, Base Manufacturing produced 60,000 units and sold 55,000 for sh 10 per unit. Variable manufacturing costs were sh 4 per unit. Annual fixed manufacturing overhead was sh 120,000 (sh 2 per unit). Variable selling and administrative costs were sh 1 per unit sold, and fixed selling and administrative costs were sh 30,000.

## Required

Prepare an absorption costing income statement.
(3 marks)
vii) Pit Concrete makes and sells a single product, vases. Two kilograms of sand are needed to make one vase. Budgeted production of vases for the next few months follows:

September 25,000 units
October 31,000 units
The company wants to maintain monthly ending inventories of sand equal to $20 \%$ of the following month's production needs. On August 31, 10,000 kilograms of sand were on hand.

## Required

How much sand should be purchased in September?
viii) GMT Clocks Limited (GMTL) produces several models of clocks. An outside supplier has offered to produce the commercial clocks for GMTL for sh 420 each. GMTL needs 1,200 clocks annually. GMTL has provided the following unit costs for its commercial clocks:

Direct materials
Direct labor
sh 100
140
Variable overhead 80
Fixed overhead (40\% avoidable) 150

## Required

Prepare an appropriate analysis which shows the effect of the make-or-buy decision.
(3 marks)
ix) Identify and briefly explain the three major influences on pricing decisions. (3 marks)
x) Budgetary planning has various benefits to the organizations. Explain briefly any three benefits of budgetary planning to the organization. (3 marks)

Q2. a) A recent accounting graduate from the Catholic University of Eastern Africa evaluated the operating performance of Fasipe Company's four divisions. The following presentation was made to Fasipe's Board of Directors. During the presentation, the accountant made the recommendation to eliminate the Rift Valley Division stating that total net income would increase by Sh 60,000. (See analysis below.)

|  | Other Three Divisions | Rift Valley Division | Total |
| :---: | :---: | :---: | :---: |
| Sales | Sh 2,000,000 | Sh 480,000 | Sh $\overline{2,480,000}$ |
| Cost of Goods Sold | 950,000 | 400,000 | 1,350,000 |
| Gross Profit | 1,050,000 | 80,000 | 1,130,000 |
| Operating Expenses | 800,000 | 140,000 | 940,000 |
| Net Income | Sh 250,000 | Sh (60,000) | Sh 190,000 |

For the other divisions, cost of goods sold is $80 \%$ variable and operating expenses are 70\% variable. The cost of goods sold for the Rift Valley Division is $30 \%$ fixed, and its operating expenses are $75 \%$ fixed. If the division is eliminated, only Sh 15,000 of the fixed operating costs will be eliminated.

## Required:

a) Do you agree with the new accountant's recommendation? Present a schedule to support your answer.
b) Management is often faced with the alternative of continuing to make a product or component internally or going to an external source and purchasing the product or component. In gathering relevant information for these two alternatives, briefly identify the quantitative factors that should
be considered. Are there any qualitative factors that should also be considered?

Q3. a) A recently sacked manager received compensation of Sh 8,000,000. He has decided to start a business next year. His investment is in manufacturing a product that he knows has a ready market. He intends to employ some of his former workers who were also sacked together but they won't start immediately. 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 $4^{\text {th }}$ January and $25 \%$ of the following month's sales would be manufactured in January. Each month thereafter the production would consist of $75 \%$ of the current month's sales and $25 \%$ of the following month's sales.
2. Raw material costing Sh 1,000,000 have 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 of sale | Revenue (Sh) |
| :--- | :---: | :---: |
| January | Nil | Nil |
| February | 3,200 | 80,000 |
| March | 3,600 | 90,000 |
| April | 4,000 | 100,000 |
| May | 4,000 | 100,000 |

4. Variable production cost per unit: 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; $60 \%$ 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 are Sh 4,000 per month. One quarter of this is paid in the month incurred, one half in the following month, and the remainder represents depreciation on the second-hand machinery.
8. Amount receivable; a $5 \%$ cash discount is allowed for payment in the current month, and $20 \%$ of each month's sales qualify for this discount. $50 \%$ of each month's sales are received in the following month, $20 \%$ in the third month and $8 \%$ in the fourth month. The balance of $2 \%$ represents anticipated bad debts.

Required:
a) Prepare a cash budget for each of the first four months, assuming that overdraft facilities will be made available
(17 marks)
b) Calculate the amount receivable from customers in May.

Q4. a) The break-even chart is a useful tool for relating costs and profits to a specific activity. With reference to this statement, concisely explain the assumptions and limitations that you must bear in mind when using this tool in the analysis of costs and profits.
(10 marks)
b) The following details relate to the production and sales of a single product P by a small manufacturing firm during the month of October. Variable cost per unit Sh
Direct materials 480
Direct labour 120
Variable overheads ?
Variable selling and administration overheads 30

The firm's total production overhead budget for the month is Sh 6,000,000 while the projected sales level is Sh 28,800,000. The budgeted net profit for the month is Sh $5,280,000$.

Other details are as follows;
i) Variable overheads are applied on the basis of prime cost at the rate of $15 \%$. The total budget for the month is Sh 2,160,000
ii) The fixed selling and distribution cost budget is Sh 840,000 while the fixed administration cost is Sh 1,560,000 per month.
Required:

1) The budgeted profit and loss account for product $P$ using the contribution costing approach.
(7 marks)
2) The breakeven point for Product $P$ in units and shillings.
