AFRICA
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**COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE**

**NMAC 201: COST ACCOUNTING**

**END OF FIRST SEMESTER EXAMINATION**

**NOVEMBER 2023**

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**DURATION: THREE HOURS**

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## INSTRUCTIONS

You are required to answer questions as instructed

Answer **all** questions

Start **each** question on a new page in your answer booklet

Credit will be awarded for logical, systematic and neat presentations

## QUESTION ONE

Assume that a firm makes 4 products W,X,Y,Z. Data for the past period are as follows:

Direct labour costs $14 per hour:

| **Overhead costs** | $ |
|---|---|
| Short- run variable costs | 8 250 |
| Long-run variable costs: | |
| Scheduling costs | 7 680 |
| Set up costs | 3 600 |
| Material handling costs | 7 650 |
| | 27 180 |

| Product | Output Units | No. of Production runs In period | Direct Labour Hours per unit | Machine hours per unit | Material cost per unit | Material components per unit |
|---|---|---|---|---|---|---|
| W | 25 | 3 | 2 | 2 | $30 | 8 |
| X | 25 | 4 | 4 | 4 | 75 | 5 |
| Y | 250 | 7 | 2 | 2 | 30 | 8 |
| Z | 250 | 10 | 4 | 4 | 75 | 6 |
| Total | | 24 | | | | |

**Required:**

a) Calculate the unit production cost using Activity Based Costing (ABC) with the following cost drivers: (show your workings)

| | |
|---|---|
| Short-term variable costs: | Machine hrs. |
| Scheduling costs: | No. production runs |
| Set up costs: | No of production runs |
| Material handling costs: | No of components |

(20 marks)

b) What are the pros and cons of ABC costing system?                    (5 marks)

## QUESTION TWO

a) The junior accountant in the organisation you work for has just told you that budgeting does not make sense in a hyper-inflationary environment. Give reasons for or against budgeting in such an environment. (10 marks)

b) The Chief Executive officer of the company you work for is considering the budgeting system to adopt. As the Cost Accountant, advice her on whether a Zero Base Budget would be better than a flexible one? (15 marks)

## QUESTION THREE

A new airline is considering starting operations in Zimbabwe. The estimates are as follows:

Selling price = $900 per ticket

Variable cost per unit = $200 per ticket

Fixed costs = $140 000 per month

**Required:**

Using the **COST-VOLUME-PROFIT** (CVP) analysis, you are to calculate the following:

a) The contribution ratio. (2 marks)

b) Number of tickets to be sold to break-even. (3 marks)

c) Sales value at break-even point. (3 marks)

d) Number of tickets needed to be sold to achieve a profit of $70 000. (3 marks)

e) Level of sales value to achieve a profit of $70 000. (3marks)

f) If the taxation rate is 40%, how many tickets will need to be sold to make an after- tax profit of $40 000? (4 marks)

g) If taxation rate is 40%, what level of sales value will achieve an after- tax profit of $70 000? (4 marks)

h) Highlight the importance of CVP analysis to an airline (3 marks)

## QUESTION FOUR

On 1 August 2023 Lee company had beginning inventory 80 units @ $60 per unit

4 Aug received 20 units @ $70 per unit

10 Aug received 20 units @ $80 per unit

11 Aug issued 80 units

12 Aug received 40 units @ $80 per unit

20 Aug issued 50 units

25 Aug returned 10 excess units from the factory to the storeroom- to be recorded at the latest issued price

28 Aug received 60 units @ $90 per unit

Calculate the closing balance using the following methods:

a.  First In First Out (FIFO)                                    (6 marks)

b.  Last In First Out (LIFO)                                     (6 marks)

c.  Average Cost (AVCO)                                          (6 marks)

d.  As the Cost Accountant of Lee company, advise management on which inventory valuation method to use.                     (4 marks)

e.  Explain to management the importance of calculating economic order quantity of a business.                              (3 marks)

**END OF EXAMINATION**