****

**FACULTY OF INFORMATION TECHNOLOGY**

**BACHELOR IN BUSINESS INFORMATION TECHNOLOGY**

**CAT-2**

**BBIT 3105: COST ACCOUNTING FOR INFORMATION SYSTEMS-FT**

**DUE DATE-END OF SATURDAY 8/8/2020**

**Fredah Kioko-103428-3A**

**Instructions**

1. Answer **ALL the Questions below.**
2. The CAT should be **submitted in Microsoft Word Format.**
3. Total marks for the **CAT is 20 Marks (To be converted to out of 30 Marks e.g If you score 15/20 Score out of 30 = (15÷20)\*30 =22.5/30)**

**QUESTION ONE:**

1. Explain what will happen to the ordering cost and the holding cost as the order quantity increases for a material within the stores of Bamburi ltd. **(3 marks)**

If the order quantity of a material within the stores of bamburi ltd increases, the holding capital invested in stock storage charges and staff increases, the ordering cost will decrease given the inverse relationship between the ordering cost and the holding cost.

1. The manager of Strathmore catering services ltd has been concerned by the lack of accurate store records in relation to Soko Baking flour. The manager is worried by the increasing Soko baking flour cost that has been incurred over the last few months. The following information has been extracted from the goods received note, invoices and other source documents.

|  |  |
| --- | --- |
| **Soko Baking Flour** | |
| June 3 | Bought 100 Kgs @ 120 per Kg |
| June 5 | Bought 100 Kgs @ 140 per Kg |
| June 6 | Issued 150 Kgs |
| June 8 | Bought 250 Kgs @ 130 per Kg |
| June 14 | Issued 100 Kgs |
| June 22 | Bought 200 Kgs @ 150 per Kg |
| June 28 | Issued 200 Kgs |
|  |  |

**Required:**

1. Prepare the stock ledger account for Soko Baking flour using the LIFO method Month of June 2020  **(6 marks)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Strathmore Catering stock ledger Account-Soko Baking flour (LIFO)** | | | | | | | | | | |
| **Date** | **Details** | **Receipt** | | | **Issue** | | | **Balance** | | |
| **Quantity**  **(Kgs)** | **Product Price** | **Total Cost** | **Quantity**  **(Kgs)** | **Product**  **Price** | **Total**  **Cost** | **Quantity**  **(Kgs)** | **Product**  **Price** | **Total**  **Cost** |
| June 3 | Purchase | 100 120 12,000 | | |  | | | 100 120 12,000 | | |
| June 5 | Purchase | 100 140 14,000 | | |  | | | 100 120 12,000  100 140 14,000 | | |
| June 6 | Issues |  | | | 100 140 14000  50 120 6,000 | | | 50 100 5,000 | | |
| June 8 | Purchase | 250 130 32,000 | | |  | | | 50 100 5,000  250 130 32,500 | | |
| June 14 | Issues |  | | | 100 130 13,000 | | | 50 100 5,000  150 130 19,500 | | |
| June 22 | Purchase | 200 150 30,000 | | |  | | | 50 100 5,000  150 130 19,500  200 150 30,000 | | |
| June 28 | Issues |  | | | 200 130 30,000 | | | 50 100 5,000  150 130 19,500 | | |
|  | **CLOSING**  **STOCK:** |  | | |  | | | (150\*130=19500) +(50\*100=5000)  =25,500/= | | |

1. From the above stock ledger account calculate the valuation of the closing stock of soko baking flour as at end of the Month of June 2020  **(1 mark)**

*Value of the closing stock :-*

(150\*130=19500) + (50\*100=5000)

=25,500/=

**QUESTION TWO:**

1. Explain how the break even point in units and sales can be computed using the graphical method. **(3 marks)**

The break-even point is graphically computed by plotting a graph of total revenue against the total cost or by plotting the profit function where the area below the breakeven point represents the loss area while the area beyond the break-even point represents the profit area. Using the total revenue against the total cost the following steps are followed, firstly all costs are reviewed and classifying them as either fixed or variable costs. Then Formulating equations for total revenue and total cost, after which the two activity levels are taken and substituted into the total revenue equation to get the sets of x on the X Axis (activities) and Y Axis (total revenue) co-ordinates. Using the same activity levels substitute these into the total cost equation to get two sets of x (activity) and y (total cost) co-ordinates and join them to form a straight line and label it as total revenue. Plot the two sets of co-ordinates for total cost on the chart. Join them to form a straight line and label it as total cost. From that identifying the break-even point is the point where the total revenue equals the total cost and label it on the graph, a step further is identifying the loss and profit making areas, and the margin of safety.

1. Xerox is a company that has been printing T-Shirts for the Kenyan Market for the last two years. The following income statement has been provided for the Xerox printers ltd for the year 2020.The income statement provided below was prepared on the basis of production of 40,000 T-Shirts and Sale of 40,000 T-Shirts during the year 2020.

|  |  |  |
| --- | --- | --- |
| **Xerox Printers ltd** | | |
| **Income Statement** | | |
| **For the year 2020** | | |
|  |  | Shs |
| Sales |  | 12,000,000 |
|  |  |  |
| **Less Variable Production Cost:** |  |  |
| Direct Material Cost | 1,500,000 |  |
| Direct Labour Cost | 900,000 |  |
| Variable Production overhead cost | 1,200,000 |  |
|  | **3,600,000** | **(3,600,000)** |
| **Gross Contribution Margin** |  | 8,400,000 |
| **Less other Variable costs:** |  |  |
| Variable Administration overhead cost | 180,000 | (180,000) |
| Variable Selling & Distribution overhead cost | 200,000 | (200,000) |
|  |  |  |
| **Net Contribution Margin** |  | **8,020,000** |
| **Less Fixed Cost:** |  |  |
| Fixed Production overhead cost | 3,000,000 |  |
| Fixed Administration overhead cost | 1,800,000 |  |
| Fixed Selling & Distribution overhead cost | 300,000 |  |
|  | 5,100,000 | (5,100,000) |
|  |  |  |
| **Net Profit** |  | **2,920,000** |
|  |  |  |

**Required:**

1. Calculate the break-even both in units and sales value using the contribution margin method for Xerox Ltd for the year 2020 **(3 marks)**

Break-even = Fixed /

(Price – variance cost per unit)

FC = 5100000

PRICE = (12000000/40000) = 300

VC = (3600000 + 200000 + 80000) / 40000 = 99.50

= 5100000 / (300 – 99.50)

= 25436.409

25436 T-Shirts

SALES = FC / ((P-V) / Price)

= 5100000 / ((300 – 99.50) / 300)

= 7630922.693

1. Calculate the margin of safety for Xerox Ltd assuming that the actual sales for the year 2020 is as given in the above income statement (i.e Shs 12,000,000) **(1 mark)**

Margin of safety = (12000000 – 7630923)

= 4369072

1. Calculate the number of Units (T-Shirts) that the Xerox ltd will have to produce and sell to earn a target profit of Shs 10,000,000. **(2 Marks)**

*Using the Profit equation method ;-*

TP = P \* Q – (FC + (VC\*Q))

TP = 10000000

P = 300

VC = 99.50

FC = 5100000

10000000 = 300 \*Q - (5100000 + (99.50 \* Q))

10000000 + 5100000 = 300Q - 99.50Q

15100000 = 200.50Q

Q= 75311.7207 (75312 T-Shirts)

1. Explain what will happen to the break-even units if the Fixed Administration overhead cost increases from Shs 1,800,000 to Shs 2,400,000.  **(1 mark)**

**(TOTAL 20 MARKS)**