## AGBM 222: MANAGEMENT ACCOUNT

STREAMS: AGBM
TIME: 2 HOURS
DAY/DATE: MONDAY 17/12/2018
2.30 P.M. - 4.30 P.M.

INSTRUCTIONS:

- Answer question ONE and any other TWO
- Do not write on the question paper


## QUESTION ONE

(a) Distinguish the following terminologies as applied in management accounting
(i) Relevant and irrelevant costs
(ii) Cost unit and unit cost [2 marks]
(iii) Joint product and by-product [2 marks]
(iv) Cost centre and revenue centre [2 marks]
(b) $\quad \mathrm{K}-\mathrm{K}$ ltd has determined that its maintenance cost is primarily a function of machine hours worked in the various production departments. The maintenance cost incurred and the actual machine hours worked during the first five months of the year 2018 were as follows:

| Month | Machine hours <br> (Hours) | Maintenance cost <br> $($ Ksh. $)$ |
| :---: | :---: | :---: |
| January | 1600 | 70,000 |
| Februar | 2400 | 90,000 |
| y |  |  |
| March | 800 | 30,000 |
| April | 3000 | 110,000 |
| May | 2000 | 85,000 |

## AGBM 222

## Required:

1. Determine the estimated cost functions using:
(i) High low method
(ii) Regression analysis method
(iii) Coefficient of determination, $\mathrm{R}^{2}$
2. (i) Using the regression function estimate obtained in (iii) above how much would have been incurred as maintenance cost if machine hours work expected to be 1200 in the month of June 2018?
(ii) The maximum machine hours that would have been worked if maintenance cost had been limited to ksh. 200,000 in June 2018
(c) Highlight any four assumptions of break-even analysis

## QUESTION TWO

(a) DAMCO ltd produces two products X and Z . The following budget has been prepared for the company

|  | X | Z | Total |
| :--- | :---: | :---: | :---: |
| Sales in units (sh) | 240,000 | 80,000 | 320,000 |
| Selling price per unit (sh) | 10 | 20 |  |
| Variable cost per unit (sh) | 8 | 6 |  |

Total fixed cost for the period is sh. 600,000

## Required:

Compute the break-even points for each of the products and for the whole company in units and in shilling.
(b) Mavuno ltd manufactures and sell product Q . The standard production costs per unit of product Q are as follows:

| Material X - 25 metres @ $1 \mathrm{sh} . /$ metres | 25 |
| :---: | :---: |
| Y-10 kg @ 4 sh./kg | 40 |
| Labour; direct labour - $10 \mathrm{hrs} @ 12.5 / \mathrm{hr}$ | 125 |
| Overheads; Variable sh.2.5/hr | 25 |
| Fixed sh. 3/hr | 30 |

- The overheads are absorbed on the basis of direct labour hours
- The budgeted production for the year was 3500 units


## AGBM 222

- During the year ended $31^{\text {st }}$ December 2017, 4000 units of output were produced and actual costs were as follows:

|  | Sh. |
| :--- | :--- |
| Direct material X -96000 metres | 86,400 |
| $Y-31500 \mathrm{~kg}$ | 124,425 |
| Direct labour 31000 hours | 410,750 |
| Overhead: Fixed | 151060 |
| $\quad$ Variable | 143800 |

## Required:

(i) Material price and usage variances
(ii) Labour rate and efficiency variances [3 marks]
(iii) Total variable overhead cost variance [3 marks]
(iv) Fixed overhead volume variance
(c) Define the term scrap as used in process costing

## QUESTION THREE

(a) Explain why marginal costing is preferred for decision making as compared to absorption costing
(b) ABC Ltd, a manufacturing company has the following information relating to product Q Selling price sh. 50 per unit
Cost card
Direct material
ksh. 14 per unit
Direct labour ksh. 16 per unit
Variable production costs
ksh. 10 per unit
Total
ksh. 40

There is a variable selling cost per unit of ksh. 2
The following information relates to the company:
Budgeted production 24,000 units
Page $\mathbf{3}$ of $\mathbf{5}$

## AGBM 222

$\begin{array}{ll}\text { Actual production } & 28,000 \text { units } \\ \text { Actual sales } & 26,000 \text { units }\end{array}$

Actual fixed overheads ksh. 22,000
Actual fixed selling overhead cost ksh. 10,000
There was no opening inventory at the beginning of the year and all variable costs were as per the budget.

## Required:

Prepare a profit and loss statement under marginal costing and absorption costing
marks]

## QUESTION FOUR

(a) Highlight five major differences between job costing and process costing methods of product costing.
(b) Company ' R ' manufactures a chemical that passes through three production process 1,2 and 3. In the month of May 6000 litres of the basic raw material priced at sh.

240,000 were introduced in process 1 . Subsequently, the following costs were incurred.

|  | Total | Process 1 | Process 2 | Process 3 |
| :--- | ---: | ---: | ---: | ---: |
| Direct material | 87,500 | 30,000 | 40,000 | 17,500 |
| Direct labour | 110,000 | 40,000 | 50,000 | 20,000 |
| Direct expenses | 16,900 | 6,000 | 1,600 | 9,300 |

Production overheads are absorbed by each process on the basis of $50 \%$ of direct labour cost.

Normal loss per process were estimated as follows:
Process $1-10 \%$
Process $2-5 \%$
Process 3-8\%

Output of each process were:

## AGBM 222

Process $1-5300$ units
Process $2-5000$ units
Process 3-4700 units
The loss in each process represented scrap which could be sold at the following values
Process 1 - ksh. 20 per unit
Process 2 - ksh. 44 per unit
Process 3 - ksh. 65 per unit

There was no stock of material or work in progress at the beginning or end of the month. The output of each process passes directly to the next process and finally to the finished goods stock account.

## Required:

Prepare separate process accounts for each of the three processes

