TECHNICAL UNIVERSITY OF MOMBASA
SCHOOL OF BUSINESS
Department of Accounting \& Finance
UNIVERSITY EXAMINATION FOR:
BACHELOR OF COMMERCE AND BACHELOR OF BUSINESS ADMINISTRATION

BAC 4204: INTERMEDIATE ACCOUNTING 11 END OF SEMESTER EXAMINATION<br>SERIES: AUGUST 2019<br>TIME: 2 HOURS<br>DATE: AUGUST, 2019

## Instructions to Candidates

You should have the following for this examination
-Answer Booklet, examination pass and student ID
This paper consists of FIVE questions. Question one is Compulsory. Answer any other two questions.
Do not write on the question paper.

## QUESTION ONE

(a) Discuss the assumption of CVP analysis
(b) Kojos Ltd. manufactures and sells a single item of farm machinery, which is distributed through anetwork, at a sales price of sh.1,250 per item. The budgeted sales for the 2012 year are 36,000 units, which represents $60 \%$ of the firm's capacity. The following production information has been provided:
sh.
Direct Materials
17,820,000
Direct Labour
1,980,000
Production Overhead - Fixed
12,740,000

- Variable

1,226,000
Sales/Distribution Overhead - Fixed
2,110,000

- Variable

214,000
Requirement:
(i) Calculate the breakeven cost in units and sales revenue
(4 Marks)
(ii) Define and calculate the margin of safety, expressed in \% terms.
(4 Marks)
(iii) The Sales Director proposes to expand to $80 \%$ capacity by reducing the sales price by $10 \%$ and spending an additional $€ / £ 3,000,000$ on advertising. Calculate the impact of this
proposal on breakeven, margin of safety and profitability and advise management whether this proposal should be adopted.
(8 Marks)
(iv) Outline the limitations of using the analysis outlined in part (iii) above in a decision making context.
(4 Marks)

## QUESTION TWO

Hayes Ltd. produces and sells one product only. The standard cost and selling price forone unit is as follows:
sh.
Direct material - 10 kilograms at sh. 15 per kg 150
Direct wages - 5 hours at sh. 8 per hour 40
Variable cost 190
Selling price 300
The budgeted fixed production overhead cost is sh. 45,000 and sales of 750 units were budgeted. Hayes Ltd uses a marginal costing system.
During April 2013 the actual results were as follows: sh.
Sales 700 units @ sh. 320
224,000
Direct materials: $7,500 \mathrm{Kg} \quad 111,750$
Direct wages 3,400 hours 27,880
Fixed production overhead 37,000
Total Costs $\quad 176,63$
Profit
47,370
Note: Hayes Ltd. does not hold any inventories.

## Required:

(a) Calculate the following variances:
i. Sales price;
ii. Sales volume;
iii. Material price;
iv. Material usage;
v. Labour rate;
vi. Labour efficiency;
vii. Fixed overhead expenditure;
viii. Fixed overhead volume.
(10 Marks)
(b) Outline two possible reasons for each of the material usage and labour rate variances calculated in part (a) above.
(4 Marks)
(c) Briefly list and explain three benefits and three limitations of a standard costing system.
(6 Marks)

## QUESTION 3

Kenny Ltd. makes three products, A, B and C, of which unit costs, machine hours and selling prices are as follows:

Machine hours per unit
Labour hours per unit

| Product A | Product B | Product C |
| :---: | :---: | :---: |
| 10 | 12 | 14 |
| 1.2 | 0.8 | 0.4 |
| Sh. | sh. | sh. |


| Direct materials @ sh. 0.50 per kg | 7 | 6 | 5 |
| :--- | :---: | :---: | :---: |
| Direct wages @ sh.7.50 per hour | 9 | 6 | 3 |
| Variable overheads | 3 | 3 | 3 |
| Variable cost per unit | -19 | 15 | 11 |
| Selling price per unit | 25 | 20 | 15 |
| Contribution per unit | $\boxed{6}$ | -5 | 4 |

Sales demand for the period is limited as follows.
Units
Product A $\quad 4,000$
Product B $\quad 6,000$
Product C 6,000
Mattie Kenny, the CEO of Kenny Ltd. has stated "the supply of materials and machine capacity in any period is unlimited. However there is a scarce resource in that direct labour hours are limited to 5,000 hours for the period and it is company policy to produce a minimum of 1,000 units of Product A".

## Required:

(a) Assuming there is no limiting factor, calculate the maximum achievable contribution (4Marks)
(b) Indicate the production levels that should be adopted for the three products in order to maximise contribution, and state the maximum contribution achievable in the period.
(12 Marks)
(c) Advise Mattie Kenny as to any four ways that may help to overcome the direct labour constraint that exists within Kenny Ltd.
(4 Marks)

QUESTION FOUR
(a) Canning Ltd. budgets to sell 3 products and has provided you with the following selling prices and variable costs:

| Product | Sales Units | Selling Price per unit sh. | Variable Cost per unit <br> sh. |
| :--- | :--- | :--- | :--- |
| Alpha | 600,000 | 10 | 5 |
| Beta | 400,000 | 11 | 6 |
| Gamma | $1,000,000$ | 6 | $\mathbf{3}$ |

Annual fixed costs are budgeted at sh. 4,000,000

## Required:

i. Calculate the total budgeted profit.
( 3 Marks)
ii. Calculate the contribution / sales ratio for each product.
iii. Calculate the breakeven sales volume per product in total.
iv. How many units of each product and in total would Canning Ltd need to sell to earn a total profit of sh.6,000,000?
v.Management are deciding whether or not to spend an extra sh. 400,000 on advertising and sales promotion of Product Alpha. It is considering reducing its selling price to sh. 9 per unit, resulting in expected sales of 800,000 units. Advise whether or not it is financially worthwhile spending sh. 400,000 on the advertising and sales promotion.
(5 Marks)

## Question Five.

(a) Salabhi Arora, Sales Manager for Green Industries, has been asked by a potential Foreign customer to sell 10,000 units of a certain gear for sh. 100 per unit. Green normally sells this item for sh. 150 per unit, but they have had some excess Manufacturing capacity in recent months. It is anticipated that this would be a onetime order from this customer. The product unit cost report for this type gear is as follows:

|  | ksh. |
| :--- | :--- |
| Direct materials | 30 |
| Direct labour | 25 |
| Variable manufacturing overhead | 12.50 |
| Fixed manufacturing overhead | 25 |
| Variable selling and administrative expense | 17.50 |
| Fixed selling and administrative expense | 22.50 |
| Total per unit cost | 132.50 |

After looking at the product cost report, Salabhi advises the customer as follows:
"I may not be an accountant, but I am smart enough to know that I will lose ksh. 32.50 per unit if I make this sale. Therefore, I must refuse your offer."

## Required:

(a) Evaluate Salabhi's advice.
(b) Briefly explain why management needs to estimate cost of production.

