CHUKA


UNIVERSITY

UNIVERSITY EXAMINATIONS
RESIT/SPECIAL EXAMINATION
EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF EDUCATION (ARTS) AND BACHELOR OF AGRIBUSINESS MANAGEMENT

## BCOM 314: MANAGEMENT ACCOUNTING/ BUST 421: MANAGEMENT ACCOUNTING II/ AGBM 412: MANAGEMENT ACCOUNTING II

STREAMS: BCOM Y3S2 \& BED (ARTS) Y4S1, AGBM Y4S2
TIME: 2 HOURS
DAY/DATE: TUESDAY 24/07/2018
2.30 P.M. - 4.30 P.M.

## INSTRUCTIONS:

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


## QUESTION ONE

(a) Identify and describe the elements involved in decision-making, planning and control process. ( $10 \frac{1}{2}$ marks)
(b) Darwin uses decision tree analysis in order to evaluate potential projects. The company has been looking at the launch of a new product which it believes has a $70 \%$ probability of success. The company is however, considering undertaking an advertising campaign costing Sh. 50,000 which would increase the probability of success to $95 \%$. If successful the product would generate income of Sh. 200,000 otherwise Sh. 70,000 would be received. What is the maximum amount that the company would be prepared to pay for the advertising?
(6 marks)
(c) M Ltd manufactures three products which have the following revenue and costs (Sh. Per unit)

|  | Product |  |  |
| :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 |
| Selling price | 2.92 | 1.35 | 2.83 |
| Variable costs | 1.61 | 0.72 | 0.96 |
| Fixed cost | 0.49 | 0.35 | 0.62 |
| Product specific | 0.46 | 0.46 | 0.46 |
| General |  |  |  |

Unit fixed costs are based upon the following annual sales and production volumes (thousand units)

| Product | 1 | 2 | 3 |
| :--- | :--- | :--- | :--- |
| Unit | 98.2 | 42.1 | 111.8 |

Required:
(i) The break-even point sales (to the nearest hundred in shillings) of M Ltd based on the current product mix.
(ii) The number of units of product 2 (to the nearest hundred) at the break-even point determined in (i) above.
(iii) Comment on the viability of product 2

## QUESTION TWO

The following data pertains to process I for March 2013 of Beta Ltd.
Opening work in progress 1500 units at $\mathrm{Sh} .15,000$
Degree of completion: materials $100 \%$, labour and overhead $33 \frac{1}{3}$
Input materials
18500 units at Sh. 52,000
Direct labour
Sh. 14,000
Overheads Sh. 28,000

Closing work in progress 5000 units
Degree of completion: Material 90\%, labour and overheads 30\%
Normal process loss is $10 \%$ of total input
(Opening work-in-progress units + units put in)
Scrap value Sh. 2 per unit
Units transferred to the next process 15000 units
Assume FIFO method is used by the company.

Required:
(i) Compute equivalent units of production. (5 marks)
(ii) Compute cost per equivalent unit for each cost element. (3 marks)
(iii) Compute the cost of finished output and closing work in progress. (6 marks)
(iv) Prepare process account and other accounts (6 marks)

## QUESTION THREE

(a) XYZ Co Ltd has established the following standard mic of a product which has an output of a 9 litres of Product A

5 L of materials X@Sh. 735
3L of material Y @ Sh. 515
2 L of material Z@Sh. $2 \underset{54}{4}$
$=$
Standard loss of $10 \%$ is expected to occur
Actual results were as follows

|  | Sh |
| :--- | :--- |
| 53000 L of X @ Sh. 7 | 371000 |
| 28000 L of Y @ Sh. 5.3 | 148400 |
| 19000 L of Z @ Sh. 2.2 | $\underline{41800}$ |
| 100,000 | $=====$ |

Actual output was 92700 L of material A
Required
Calculate direct materials mix and yield variances.
(b) Differentiate between joint products and by-products, giving examples in each case.
(4 marks)
(c) Describe the following pricing approaches
(i) Cost-plus pricing
(3 marks)
(ii) Target costing approach to pricing
(3 marks)

## QUESTION FOUR

(a) XPLC, a manufacturing company, has two divisions:

Division A and Division B. Division A produces one type of product, product X, which it transferred to Division B and also sells externally. Division B has been approached by another company which has offered to supply 2500 units of product X for Sh .35 each.
The following details for division A are available
Sales revenue
Sh
Sales to division B @ Sh. 40 per unit
400,000
External sales @ Sh. 45 per unit 270,000
Less
Variable costs @ Sh. 22 per unit 352, 000
Fixed costs
100,000
Profit
218,000
$====$
If Division B decides to buy from the other company, the impact of the decision on the profits of Division A and XPLC, assuming external sales of product X cannot be increased will be?
(5 marks)
(b) Q Ltd used an incremental budgeting approach to setting its budgets for the year ending 30 June 2013. The budget for the company's power costs was determined by analysis of past relationship between costs and activity levels and then adjusting for inflation of $6 \%$

The relationship between monthly cost and activity levels, before adjusting for the $6 \%$ inflation was found to be:
$Y=1400+0.0025 x^{2}$
Where $\mathrm{y}=$ Total cost
$x=i$ Machine hours
In April 2013 the number of machine hours was 1,525 and the actual cost incurred was Sh. 16,423.

Required:
Determine the total power cost variance.
(4 marks)
(c) The following data relates to the half year ending 31 December 2013 for company XYZ Ltd.

| Month | Machine hours "000" | Fuel expense "000" |
| :--- | :--- | :--- |
| July | 34 | 640 |
| August | 30 | 620 |
| September | 34 | 620 |
| October | 39 | 590 |
| November | 42 | 500 |
| December | 32 | 530 |

## Required:

(i) Use least-square method to estimate the cost function. (7 marks)
(ii) Compute the coefficient of determination and interpret the results. (4 marks)

