## THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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SEPTEMBER - DECEMBER 2019 TRIMESTER
SCHOOL OF BUSINESS
DEPARTMENT OF ACCOUNTING AND FINANCE
REGULAR PROGRAMME

## CAC 413: PERFORMANCE MEASUREMENT AND CONTROL

| Date: DECEMBER 2019 |
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| INSTRUCTIONS: Answer Question ONE and any other TWO Questions 2 Hours |

Q1. a) A company produces and sells one product only, the Thing, the standard cost for one unit being as follows.
Direct material A - 10 kilograms at Ksh 20 per kg 200
Direct material B-5 litres at Ksh 6 per litre 30
Direct wages - 5 hours at Ksh 6 per hour 30
Fixed production overhead $\quad \frac{50}{310}$
Total standard cost $\overline{310}$
The fixed overhead included in the standard cost is based on an expected monthly output of
900 units.Fixed production overhead is absorbed on the basis of direct labour hours.
During April the actual results were as follows.
Production 800 units
Material A $\quad 7,800 \mathrm{~kg}$ used, costing Ksh 159,900
Material B $\quad 4,300$ litres used, costing Ksh 23,650
Direct wages
4,200 hours worked for Ksh 24,150
Fixed production overhead Ksh 47,000

## Required

Calculate price and usage variances for each material.
( 4 Marks)
Calculate labour rate and efficiency variances.
( 6 Marks)
Calculate fixed production overhead expenditure and volume variances
( 6 Marks)
b) The decision to investigate variances is dependent on a number factors, discuss two of these factors and two variance investigating models
( 4 Marks)
c) Discuss three primary aims of budgets and three key limitations of budgetary controlsin organizations
( 6 Marks)
d) In the context of transfer pricing and responsibility centres discuss the difference between
i) Market based and marginal cost transfer pricing
( 2 Marks)
ii) Revenue centre and cost centre
( 2 Marks)

Q2. Bench and Beads Company is in an industry sector which is recovering from the recent recession. The directors of the company hope next year to be operating at $85 \%$ of capacity, although currently the company is operating at only $65 \%$ of capacity. $65 \%$ of capacity represents output of 10,000 units of the single product which is produced and sold. One hundred direct workers are employed on production for 200,000 hours in the current year.

The flexed budgets for the current year are as follows.

| Capacity level | $55 \%$ | $65 \%$ | $75 \%$ |
| :--- | ---: | ---: | ---: |
|  | Ksh | Ksh | Ksh |
| Direct materials | 846,200 | $1,000,000$ | $1,153,800$ |
| Direct wages | $1,480,850$ | $1,750,000$ | $2,019,150$ |
| Production overhead | 596,170 | 650,000 | 703,830 |
| Selling and distribution overhead | 192,310 | 200,000 | 207,690 |


| Administration overhead | $\underline{120,000}$ | $\underline{120,000}$ | $\underline{120,000}$ |
| :--- | :--- | :--- | :--- |
| Total costs | $\underline{3,235,530}$ | $\underline{3,720,000}$ | $\underline{4,204,470}$ |

Profit in any year is budgeted to be $16 \frac{2}{3} \%$ of sales.
The following percentage increases in costs are expected for next year.
Direct materials ..... 6.0
Direct wages ..... 3.0
Variable production overhead ..... 7.0
Variable selling and distribution overhead ..... 7.0
Fixed production overhead ..... 10.0
Fixed selling and distribution overhead ..... 7.5
Administration overhead ..... 10.0

## Required

a) Prepare for next year a flexible budget statement on the assumption that the company operates at $85 \%$ of capacity, your statement should show both contribution and profit.
(12 Marks)
b) Discuss in detail the various budget preparation

Approaches giving advantages and disadvantages of each.
( 8 Marks)

Q3. A company makes a single product. At the beginning of the budget year, the standard labour cost was established as Ksh 8 per unit, and each unit should take 0.5 hours to make.

However, during the year, the standard labour cost was revised. A new quality control procedure was introduced to the production process, adding $20 \%$ to the expected time to complete a unit. In addition, due to severe financial difficulties facing the company, the workforce reluctantly agreed to reduce the rate of pay to Ksh 15 per hour.

In the first month after revision of the standard cost, budgeted production was 15,000 units but only 14,000 units were actually produced. These took 8,700 hours of labour time, which cost Ksh 130,500.

## Required

a) Calculate the labour planning and operational variances in as much detail as possible.
( 12 Marks)
b) Discuss three limitations of variance analysis as a performance measure
( 3 Marks)
c) Decentralization is a concept used in divisional performance measures, discuss the benefits and costs that accrue from decentralization
( 5Marks)

Q4. a) There are various performance evaluations and improvement measures embraced organizations for the purpose of strategic repositioning. In view this, discuss in detail the following concepts.
i) Business Process Re-engineering (BPR) ( 3 Marks)
ii) Value Chain Analysis
iii) Benchmarking
( 6 Marks)
( 4 Marks)
*END*

