## FORM TP 2014127

TEST CODE 02201020
MAY/JUNE 2014

## CARIBBEAN <br> EXAMINATIONS <br> COUNCIL <br> CARIBBEAN ADVANCED PROFICIENCY EXAMINATION ${ }^{\circledR}$ ACCOUNTING

UNIT 2 - Paper 02
2 hours 45 minutes


09 MAY 2014 (a.m.)
C.E.S.E.C.

## READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This paper comprises THREE questions. Answer ALL questions
2. EACH question is worth 35 marks.
3. Begin EACH answer on a new page.
4. You may use a silent, non-programmable calculator to answer questions.
5. ALL working must be clearly shown.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

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1. Lime Grove Electronic Store, a new Barbadian company, produced and sold tablets at a cost of $\$ 850$ each. Lime Grove Electronic Store's inventory carrying cost is $1.5 \%$ of the unit cost of each computer per annum. The order costs are estimated to be $\$ 468.75$ per order. Demand for the tablets is expected to be constant with a rate of 64 units per month. Assume 365 days per year and lead time of 18 days.
(a) (i) List THREE components of 'carrying cost'
(ii) State TWO components of 'ordering cost'.
(iii) What is the recommended order quantity for the tablets? (The formula below may be used for your calculations.)

$$
\left(\text { E. } O . Q=\sqrt{\frac{2 D C_{0}}{C_{c}}}\right)\left\{\begin{array}{l}
\text { where } \\
D=\text { Annual demand } \\
C_{c}=\text { Carrying cost per unit } \\
C_{0}=\text { Order cost per order }
\end{array}\right.
$$

(iv) How many times should orders be placed per year? [2 marks]
(v) What is the reorder point in units? (The formula below may be used for your calculations.)

Maximum usage $\times$ maximum lead time
(b) Roadside Ltd manufactures computers, using parts that it makes itself. Monitors are purchased from a supplier at a unit price of $\$ 17500$. The company currently produces 12500 computers per year. The company's managing director has suggested that Roadside Ltd could manufacture its own monitors. Estimates show that the company could manufacture its own brand for a total unit cost of $\$ 18750$ consisting of:

| Direct Material | $\$ 7500$ |
| :--- | ---: |
| Direct Labour | $\$ 5250$ |
| Variable Factory Overhead | $\$ 1500$ |
| Fixed Manufacturing Overhead (avoidable) | $\$ 1875$ |
| Fixed Manufacturing Overhead (unavoidable) | $\$ 2625$ |
| Total Unit Cost | $\$ 18750$ |

Roadside Ltd purchases 12500 monitors per year.
(i) Should the company continue to purchase the monitors? (Show all working) [5 marks]
(ii) The company has recently discovered that the factory space which would be used for the manufacturing of the monitors, could be rented out for $\$ 750000$ per month. Should the company make or buy the monitor? (Show all working) [6 marks]
(c) Roadside Ltd pays its daily rated employees as follows:

Basic rate: $\$ 6$ per hour
Overtime: - Time and a quarter for evenings

- Time and a half for weekends

The following are the hours required to complete two jobs.
Job X123 Job X687

| Normal Time | 240 | 110 |
| :--- | ---: | ---: |
| Evening Time | 51 | 30 |
| Weekend | 20 | 60 |

You are required to calculate the direct labour cost and production overhead chargeable to EACH job in the following scenarios:
(i) Where overtime is worked to meet production targets of the company itself
(ii) Where the overtime is worked at the customer's request

HINT: Be sure to show whether the overtime cost is included in production cost or direct labour cost in each case.
2. (a) Gayle Ltd produces two types of cell phones, a basic and a multi-feature. The basic cell phones are designed with calling and texting features. The multi-feature cell phones also contain these features and others such as mobile banking, internet, video and many more features. Since the introduction of the multi-feature cell phone, profits have steadily declined. Management believes that the accounting system might not be accurately allocating cost to the products.

Management has asked you to investigate the cost allocation problem. Manufacturing overheads are currently assigned to the products based on direct labour costs of the products. Last year's manufacturing overhead was $\$ 1500000$ based on the production of 1350000 basic units and 650000 multi-feature units. Direct labour and direct material cost were as follows.

|  | Basic | Multi-feature | Total |
| :--- | :---: | :---: | :---: |
| Direct Material Cost | $\$ 550000$ | $\$ 825000$ | $\$ 1375000$ |
| Direct Labour Cost | $\$ 1012500$ | $\$ 737500$ | $\$ 1750000$ |

Management believes that overheads are caused by three cost drivers.

| Cost Driver | Overhead Assigned | Basic | Multi-feature | Total |
| :--- | :---: | :---: | :---: | :---: |
| Number of set up | $\$ 750000$ | 300 | 450 | 750 |
| Quality control test | $\$ 300000$ | 125 | 250 | 375 |
| Number order processed | $\$ 450000$ | 100 | 200 | 300 |
| Total overhead | $\$ 1500000$ |  |  |  |

(i) Compute the activity application rate for EACH activity centre for Gayle Ltd.
[3 marks]
(ii) Compute the total overhead cost assigned to EACH product for Gayle Ltd using activity-based costing.
[4 marks]
(iii) Compute the total cost per unit to manufacture EACH product using activity-based costing.
[4 marks]
(iv) Compute the total overhead cost assigned to EACH product if direct labour cost had been used to allocate overhead (traditional costing approach). [2 marks]
(v) Compute the total cost per unit to manufacture EACH product using direct labour cost (traditional costing approach).
[4 marks]
(b) Taylor Ltd produces a product using two consecutive processes, that is, melting and moulding. The normal reject rate is $2 \%$ of the total input (inclusive of any opening work in progress).

The following data is available for moulding for the month of April 2011.

|  | Percentage Completed |  |  |
| :--- | :---: | :---: | :---: |
|  | Units | Material | Conversion |
| Work in progress, 01 April | 17500 | 30 | 40 |
| Started into production | 105000 |  |  |
| Completed and transferred out work | 104300 |  |  |
| Work in progress, 30 April | 15450 | 80 | 60 |

Costs for the month of April 2011 were as follows:

1. Work in Progress at 01 April 2011.

|  | $\$$ |
| :--- | :---: |
| Material cost | 132000 |
| Conversion cost | 24000 |

2. Cost added during the month of April for Taylor Ltd. Moulding process.

|  | $\$$ |
| :--- | :---: |
| Material cost | 812000 |
| Conversion cost | 240000 |

It is company policy to value the equivalent unit using the weighted average method.
Prepare a production report for the moulding department for June 2011. (Show all working).


[^0]3. (a) (i) List FIVE assumptions of breakeven analysis.
[5 marks]
(ii) State why EACH of the assumptions you have stated in (i) above may NOT always be true.
[5 marks]
(b) McIntosh Ltd makes one product and its factory has the capacity to produce 200000 units of that product for a year. The budgeted Income Statement for the next year is as follows:
\$ \$
Sales (150 $000 \times \$ 75$ )

$\begin{array}{cc}\text { Expenses: } \begin{array}{c}\text { Direct Material } \\ \text { Direct Wages }\end{array} & 2250000 \\ & 3000000\end{array}$
Production Overhead:
Variable
Fixed
300000
1250000
Distribution Overhead:
Variable
900000
Fixed
500000

Calculate the
(i) breakeven point in units
(ii) breakeven point in dollars
(iii) margin of safety in units
(iv) margin of safety in dollars.
(c) (i) State THREE objectives of budgeting. [3 marks]
(ii) Outline TWO features EACH of the imposed, participative and negotiated budget styles. [6 marks]
(iii) State the role of a budget committee.
(iv) Name TWO sections of a cash budget.
[2 marks]

Total 35 marks


[^0]:    C.E.S.E.C.

