

# KASNEB

## CPA PART I SECTION 2

### MANAGEMENT ACCOUNTING

WEDNESDAY: 24 May 2017.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

#### QUESTION ONE

- (a) Explain four challenges that could be encountered when installing a cost accounting system. (4 marks)
- (b) Evaluate three benefits of the balanced scorecard. (6 marks)
- (c) Baraka Ltd. manufactures a single product which is meant for the local market only. The monthly demand for the product varies from one month to the other.

During the month of April 2017, 500 units were produced incurring the following expenses:

	Sh.
Direct materials	70,000
Direct labour	60,000
Rent (Fixed)	35,000
Electricity (30% Fixed)	25,000
Property taxes and rates (70% variable)	60,000
Technical support (Fixed)	<u>35,000</u>
	<u>285,000</u>

#### Required:

- (i) Using the account analysis method, formulate a predictor equation in the form of  $Y = a + bx$ . (8 marks)
- (ii) Baraka Ltd. intends to produce 700 units during the month of June 2017. Estimate the costs to be incurred. (2 marks)

**(Total: 20 marks)**

#### QUESTION TWO

The following financial data relate to Chester Manufacturing Ltd. for the year ended 31 March 2017:

	Sh.
<b>Opening Stock:</b>	
Finished goods (875 units)	74,375
Work-in-progress	32,000
Direct labour	450,000
Raw materials consumed	780,000
Factory overheads	300,000
Goodwill	100,000
<b>Closing stock:</b>	
Finished goods (375 units)	41,250
Work-in-progress	38,667
Sales (14,500 units)	2,080,000
Rent received from godowns	18,000
Interest received (net)	45,000
Selling and distribution overheads	61,000
Bad debts	12,000
Dividends paid	85,000
Administration overheads	295,000

#### Additional information:

- Factory overheads are absorbed at 60% of direct wages.
- Administration overheads are recovered at 20% of factory cost.



3. Selling and distribution overheads are charged at Sh.4 per unit sold.
4. Opening stock of finished goods is valued at Sh.104 per unit.
5. The company values work-in-progress at factory cost for both financial and cost profit reporting.

**Required:**

- (a) Statements of income for the year ended 31 March 2017 showing profit as per financial records and as per costing records. (12 marks)
  - (b) A statement reconciling the profit as per costing records with the profit as per financial records. (8 marks)
- (Total: 20 marks)**

**QUESTION THREE**

- (a) Outline four causes of material usage variances. (4 marks)
- (b) ABC Ltd. plans to use activity-based costing to determine its product costs. Currently, it uses a single plantwide factory overhead rate for allocating factory overheads to products, based on direct labour hours.

The total factory overhead cost is as follows:

Department	Factory overheads Sh.
Production support	1,225,000
Production (factory overheads only)	<u>175,000</u>
Total cost	<u>1,400,000</u>

The company has determined that it performs four major activities in the production support department.

These activities along with their budgeted costs are as follows:

Production support activities	Budgeted cost Sh.
Set-up	428,750
Production control	245,000
Quality control	183,750
Materials management	<u>367,500</u>
Total	<u>1,225,000</u>

ABC Ltd. has estimated the following activity-based usage quantities and units produced for each of its three products:

Product	Number of units	Direct Labour hours	Set-ups	Production orders	Inspections	Material requisitions
Product K	10,000	25,000	80	80	35	320
Product L	2,000	10,000	40	40	40	400
Product M	<u>50,000</u>	<u>140,000</u>	<u>5</u>	<u>5</u>	<u>0</u>	<u>30</u>
Total	<u>62,000</u>	<u>175,000</u>	<u>125</u>	<u>125</u>	<u>75</u>	<u>750</u>

**Required:**

Determine the factory overhead cost per unit for each product using:

- (i) Single plantwide factory overhead rate method. (4 marks)
  - (ii) Activity-based costing. (8 marks)
  - (iii) Giving reasons, advise the management of ABC Ltd. on the most accurate method of product costing. (4 marks)
- (Total: 20 marks)**

**QUESTION FOUR**

- (a) A value chain is a set of activities that a firm operating in a specific industry performs in order to deliver a valuable product or service for the market.

**Required:**

In line with the above statement, summarise the six stages of value chain of a manufacturing firm. (6 marks)

- (b) Blacky Ltd. manufactures three products namely; A, B and C. The management is reviewing the profitability of the product line.

You are given the following budgeted data relating to the company for the coming year:

Product	A	B	C
Sales (units)	<u>100,000</u>	<u>120,000</u>	<u>80,000</u>
	Sh. "000"	Sh. "000"	Sh. "000"
Revenue	<u>1,500</u>	<u>1,440</u>	<u>880</u>
<b>Costs:</b>			
Material	500	480	240
Labour	400	320	160
Overhead	<u>650</u>	<u>600</u>	<u>360</u>
Total cost	<u>1550</u>	<u>1400</u>	<u>760</u>
Profit or (loss)	<u>(50)</u>	<u>40</u>	<u>120</u>

The management is concerned about the loss on Product A and it is considering ceasing its production and switching the spare capacity of 100,000 units to Product C.

**Additional information:**

- All units produced are sold.
- 25% of the labour cost for each product is fixed in nature.
- Fixed administration overheads of Sh.900,000 in total have been apportioned to each product on the basis of units sold and are included in the overheads above. All other overhead costs are variable in nature.
- Ceasing production of Product A would eliminate the fixed labour charge associated with it and one sixth ( $\frac{1}{6}$ ) of the fixed administration overheads apportioned to Product A.
- Increasing the production of Product C by 100,000 units would mean that the fixed labour cost associated with Product C would double, variable labour cost would rise by 20% and its selling price would decrease by Sh.1.50 in order to achieve the increased sales.

**Required:**

Advise the management of Blacky Ltd. on whether production of Product A should cease.

(14 marks)

**(Total: 20 marks)**

**QUESTION FIVE**

- (a) Examine four purposes of cost classification. (4 marks)

- (b) Maramat Ltd. manufactures a single product branded "PQ".  
The budgeted sales for the month of June 2017 amount to 10,000 units at a selling price of Sh.2,000 per unit.

**Additional information:**

1. One unit of "PQ" requires two components namely; X and Y as follows:

Component	Number	Unit cost of each component
		Sh.
X	5	20
Y	3	10

2. Stocks at the beginning of the month are budgeted as follows:

- 4,000 units of finished goods at a unit cost of Sh.1,050
- Component X: 16,000 units at a unit cost of Sh.20
- Component Y: 9,600 units at a unit cost of Sh.10

3. Production cost of each unit requires the following labour hours:

Department	Hours per unit	Labour rate per hour
		Sh.
Production	4	100
Finishing	2	140

4. Factory overhead is absorbed into unit cost on the basis of direct labour hours. The budgeted overhead for the month is Sh.1,920,000.
5. Administration, selling and distribution overheads for the month are budgeted at Sh.5,500,000.
6. The company plans a reduction of 50% in quantity of finished goods at the end of the month and an increase of 25% in the quantity of each input component.

**Required:**

For the month of June 2017:

- |       |                                   |                          |
|-------|-----------------------------------|--------------------------|
| (i)   | Sales budget.                     | (1 mark)                 |
| (ii)  | Production quantity budget.       | (2 marks)                |
| (iii) | Material usage budget.            | (2 marks)                |
| (iv)  | Material purchase budget.         | (3 marks)                |
| (v)   | Direct labour budget.             | (2 marks)                |
| (vi)  | Budgeted profit and loss account. | (6 marks)                |
|       |                                   | <b>(Total: 20 marks)</b> |
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