

# KASNEB

## CPA PART I SECTION 2

### MANAGEMENT ACCOUNTING

WEDNESDAY: 25 May 2016.

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) The following information has been made available from the records of Keni Automotives Ltd., a company dealing with the manufacture of spare parts:

Direct materials	Price per unit
	Sh.
X	800
Y	600
Direct wages	
X	12 hours at Sh.50 per hour
Y	8 hours at Sh.45 per hour
Variable overheads	150% of direct wages
Fixed overheads	Sh.750,000
Selling price	Sh.
X	2,500
Y	2,000

The directors of the company have sought your advice on the following alternative sales mix in the budget for the next period:

- I. 2,500 units of X and 2,500 units of Y.
- II. 4,000 units of Y only.
- III. 4,000 units of X and 1,000 units of Y.
- IV. 1,500 units of X and 4,000 units of Y.

#### Required:

Advise the management of the company on which of the alternative sales mix you would recommend. Justify your answer. (12 marks)

- (b) A company intends to start selling a new pair of hand held pliers in the upcoming financial year. The company wishes to establish how many hand held pliers should be sold in order to break even on this investment. The chief accountant has provided the following data:

Fixed costs	Sh.
Metal molding machine	1,000,000
Plastic grip molder	250,000
Sander	50,000
Variable cost (per unit)	Sh.
Packaging material	400
Raw materials	700
Grip metal	200
Shipping	75

#### Additional information:

1. The marketing department estimates that they could sell the new pair of hand held pliers for Sh.1,500 per unit and that projects' sales will average 16,000 units per month.
2. The company wishes to break even and start to earn profit within the first month.
3. The target profit level at the end of the first month is Sh.250,000.

**Required:**

- (i) The number of units required to break even. (2 marks)
- (ii) Based on the projected monthly sales, calculate the margin of safety. Comment on your answer. (3 marks)
- (iii) The number of units required to earn the target profit at the end of the first month. (3 marks)

**(Total: 20 marks)****QUESTION TWO**

- (a) Rivt Fries Enterprises Ltd. manufactures food products. The details of the manufacturing cost of one of its products branded "Tamu" is provided below:

**Standard cost per unit:**

Materials: 6 kilograms at Sh.480 per kilogramme

Labour: 4.8 hours at Sh.800 per hour.

**Additional information:**

- The actual cost for the month of April 2016 was as follows:  
Materials: 59,000 kilograms at Sh.500 per kilogramme  
Labour: 47,500 hours at Sh.900 per hour
- The actual production amounted to 10,000 units.
- The variable production overheads are absorbed at 50% of the direct labour cost.

**Required:**

- (i) The material cost variance. (4 marks)
- (ii) The labour cost variance. (4 marks)
- (iii) Reconciliation of standard and actual costs in (a)(i) and (a)(ii) above. (4 marks)

- (b) Talde Ltd., a manufacturing company, is concerned about the variation in its total manufacturing costs. The production manager has therefore requested you to estimate a predictable cost pattern to be used in future cost prediction.

Based on judgement, the plant manager has classified each manufacturing cost as fixed, variable, or part fixed and part variable. He has provided you with the following information for the month of April 2016 when 10,000 units were produced:

Details of cost	Cost Sh.	Cost behaviour
Direct materials	420,000	Variable
Direct labour	150,000	Variable
Depreciation	80,000	Fixed
Telephone	2,000	Fixed
Other utilities	40,000	20% fixed
Supervisors salary	200,000	80% fixed
Equipment repairs	60,000	10% fixed
Indirect materials	4,000	Variable
Factory maintenance	60,000	90% fixed

**Required:**

- (i) Using the accounts analysis method, estimate the fixed cost per month and the variable cost per unit. (7 marks)
- (ii) Based on your answer in part (b)(i) above, compute the incremental cost of producing 2,000 units. (1 mark)

**(Total: 20 marks)**

**QUESTION THREE**

- (a) Describe six cost accounting tasks that could be routinely undertaken by using computers. (6 marks)
- (b) QFX Ltd. uses batch costing in cost analysis. The following information is provided:

Batch	P	Q	R	S
Output in units	2,500	600	2,000	1,200
<b>Cost per batch</b>				
Direct labour (Sh.)	92,000	15,200	68,800	24,000
Direct materials (Sh.)	16,500	7,500	21,000	9,000
Labour hours per batch	11,500	1,900	8,600	3,000

The following data relates to the total production overheads for the period ended 31 March 2016:

Particulars	Cost (Sh.)	Cost driver
Stores	82,500	Number of requisitions
Inspection	58,500	Number of inspections
Set-up	62,000	Number of set-ups
Engineering support	83,000	Engineering hours
Machine related costs	146,000	Machine hours
Materials dispatch	<u>68,000</u>	Materials movements
	<u>500,000</u>	

Corresponding cost driver volumes for the batches were as follows:

	P	Q	R	S	Total
Requisitions	400	210	430	260	1,300
Inspections	180	80	130	80	470
Setups	120	70	160	80	430
Engineering hours	650	380	520	350	1,900
Machine hours	5,200	2,550	6,100	3,250	17,100
Materials movement	1,800	700	2,050	400	4,950

**Required:**

Compute the batch cost and unit cost using:

- (i) Traditional costing based on a labour hour overhead absorption rate. (6 marks)
- (ii) Activity based costing (ABC) system. (8 marks)
- (Total: 20 marks)**

**QUESTION FOUR**

Mark Ltd. operates a budgetary control system. The following is the company's income forecast for the four months period ending 31 August 2016:

	2016			
	May	June	July	August
	Sh. "000"	Sh. "000"	Sh. "000"	Sh. "000"
Sales	45,000	55,000	75,000	50,000
Cost of sales	<u>(21,000)</u>	<u>(28,000)</u>	<u>(42,000)</u>	<u>(22,000)</u>
Gross margin	<u>24,000</u>	<u>27,000</u>	<u>33,000</u>	<u>28,000</u>
Selling and administration expenses:				
Selling expenses	7,000	8,400	11,200	7,300
Administration expenses	<u>5,500</u>	<u>5,900</u>	<u>6,900</u>	<u>5,200</u>
Total selling and administration expenses	<u>12,500</u>	<u>14,300</u>	<u>18,100</u>	<u>12,500</u>
Net operating income	<u>11,500</u>	<u>12,700</u>	<u>14,900</u>	<u>15,500</u>

**Additional information:**

1. Administration expenses include depreciation of Sh.1,800,000 each month.
2. 20% of the sales are on cash basis.
3. Credit sales are collected over a 3-month period with 20% collected in the month of sale, 65% in the month following the month of sale, and 15% in the second month following sale.
4. Sales for the months of March 2016 and April 2016 totalled Sh.27 million and Sh.33 million respectively.
5. Inventory purchases are paid for within 15 days. Therefore, 50% of a month's inventory purchase are paid for in the month of purchase and the remaining 50% paid for in the following month. Accounts payable for inventory purchases as at 30 April 2016 totalled Sh.11.1 million.
6. The company maintains its ending inventory levels at 25% of the cost of the merchandise to be sold in the following month. The merchandise inventory as at 30 April 2016 amounted to Sh.5.25 million.
7. Land costing Sh.4.3 million will be purchased in May 2016.
8. Dividends of Sh.1.3 million will be declared and paid in July 2016.
9. The cash balance on 30 April 2016 amounted to Sh.8.4 million and the company must maintain a cash balance of at least this amount at the end of each month. In case of any deficit, a bank overdraft is obtained.

**Required:**

For the three months ending 31 July 2016, prepare:

- (a) Debtors collection schedule. (6 marks)
  - (b) Creditors payment schedule. (6 marks)
  - (c) Cash budget. (8 marks)
- (Total: 20 marks)**

**QUESTION FIVE**

- (a) Explain three benefits that could be derived by an organisation from operating an integrated cost accounting system. (6 marks)
  - (b) Describe three factors to be considered by an organisation when undertaking performance measurements. (6 marks)
  - (c) Discuss four requirements for the proper operation of Just-in-time (JIT) system in an organisation. (8 marks)
- (Total: 20 marks)**
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