# **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
	and the second s
Selling price	Sh.
X	2,500
Y	12 hours at Sh.50 per hour 8 hours at Sh.45 per hour 150% of direct wages Sh.750,000  Sh. 2,500 2,000
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The directors of the company have sought your advice on the following alternative sales mix in the budget for the next period:

- 1. 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 ...
- 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)

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

(3 marks) (3 marks)

(Total: 20 marks)

# **QUESTION TWO**

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

- 2. The actual production amounted to 10,000 units.
- 3. The variable production overheads are absorbed at 50% of the direct labourgost.

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 essmate a predictable cost pattern to be used in future cost

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

Details of cost	Cost	Cost behaviour
Direct materials	420,000	Variable
Direct labour	50,000	Variable
Depreciation	\$50,000 80,000 2,000	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:

Using the accounts analysis method, estimate the fixed cost per month and the variable cost per unit.

(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**

Describe six cost accounting tasks that could be routinely undertaken by using computers. (a)

(6 marks)

QFX Ltd. uses batch costing in cost analysis. The following information is provided: (b)

Batch Output in units	P 2,500	<b>Q</b> 600	<b>R</b> 2,000	S 1,200
Cost per batch				
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	COLL
Engineering support	83,000	Engineering hours	,cs.
Machine related costs	146,000	Machine hours	SON,
Materials dispatch	68,000	Materials movements	~0 <sub>05</sub>
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Corresponding cost driver volumes for the batches were as follows:

. •	P	Q	R	e 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	\$20	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

Compute the batch cost and unit cost using

Traditional costing based a labour hour overhead absorption rate. (i)

(6 marks)

Activity based costing (ABC) system. (ii)

(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:

2010				
May	June	July	August	
Sh. "000"	Sh. "000"	Sh. "000"	Sh. "000"	
45,000	55,000	75,000	50,000	
( <u>21,000</u> )	(28,000)	( <u>42,000</u> )	( <u>22,000</u> )	
<u>24,000</u>	<u>27,000</u>	<u>33,000</u>	<u>28,000</u>	
7,000	8,400	11,200	7,300	
_5,500	5,900	<u>6,900</u>	<u>5,200</u>	
12,500	<u>14,300</u>	<u>18,100</u>	<u>12,500</u>	
<u>11,500</u>	<u>12,700</u>	<u>14,900</u>	<u>15,500</u>	
	Sh. "000" 45,000 (21,000) 24,000 7,000 5,500 12,500	May       June         Sh. "000"       Sh. "000"         45,000       55,000         (21,000)       (28,000)         24,000       27,000         7,000       8,400         5,500       5,900         12,500       14,300	May         June         July           Sh. "000"         Sh. "000"         Sh. "000"           45,000         55,000         75,000           (21,000)         (28,000)         (42,000)           24,000         27,000         33,000           7,000         8,400         11,200           5,500         5,900         6,900           12,500         14,300         18,100	

#### 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 totaled 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.

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For the	three months ending 31 July 2016, pre	enare:				•	
(a)	Debtors collection schedule.					. (	6 marks)
(b)	Creditors payment schedule.		e e		ers.com	. (	6 marks)
(c)	Cash budget.			stPape		(Total: 20	8 marks) <b>) marks)</b>
QUEST	TION FIVE	,		2003			
(a)	Explain three benefits that could be d	lerived by an	organisation	from operating a	n integrated co		ystem. 6 marks)
(b)	Describe three factors to be considered	ed by an orga	nisation whe	n undertaking pe	rformance mea	surements. (	6 marks)
(c)	Discuss four requirements for the pro	oper operation	n oʻDust-in-ti	me (JIT) system	in an organisat	ion. ( ( <b>Total: 2</b> 0	8 marks) <b>) marks)</b>
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