

# KASNEB

ATD LEVEL III

## FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 21 November 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) Distinguish between the following types of costs as used in management accounting:

(i) "Avoidable costs" and "unavoidable costs". (4 marks)

(ii) "Product costs" and "conversion costs". (4 marks)

(b) Blade Ltd. manufactures and retails three products namely; A, B and C.

The company employs 60 direct workers who work under a group bonus scheme. The company engages three grades of workers who are paid a bonus on the excess of time allowed over time taken. The bonus is paid at 75% of the workers' base rate and is shared by the workers in proportion to the time spent on the work.

The following production data has been extracted from the company's records for the month of October 2016:

Product	Units produced	Time allowed per unit (minutes)
A	320	63
B	640	120
C	1,200	100

  

Grade of worker	Number of direct workers	Rate per hour (Sh.)	Hours worked per worker
1	20	300	30
2	8	270	64
3	32	240	50

**Required:**

(i) Percentage of hours saved to hours worked. (4 marks)

(ii) Bonus due to the group. (4 marks)

(iii) Gross earnings due to the group. (4 marks)

**(Total: 20 marks)**

### QUESTION TWO

(a) The choice of an appropriate basis of apportionment of overheads by an organisation is really a matter of judgement. A company may decide on any basis of apportioning overheads according to its own circumstances.

**Required:**

With reference to the above statement, outline four features of a suitable overhead apportionment basis. (4 marks)

(b) Redline Ltd. has three production departments and two service departments. For the year ended 30 June 2016, the overhead distribution summary is provided as follows:

		Sh.
Production departments:	A	800,000
	B	700,000
	C	500,000
Service departments:	1	250,000
	2	300,000

The overheads of the service departments are charged out to the production departments as follows:

Department	A	B	C	1	2
1	20%	35%	25%	-	20%
2	35%	20%	20%	25%	-

**Required:**

Apportion the overheads of the service departments to the production departments using direct allotment method.

(4 marks)

**AD32 Page 1  
Out of 4**

- (c) Kilima Ltd. manufactures three different products; X, Y and Z, each of which requires two key materials; M1 and M2.

The following information has been provided by the sales manager:

Product	Estimated sales volume		
	X	Y	Z
	Units	Units	Units
January 2017	4,000	3,100	2,400
February 2017	4,400	3,500	2,100
March 2017	4,600	3,900	2,700

Material requirements for each product are as follows:

Product:		X	Y	Z
Material:	M1 (Kg)	8	11	15
	M2 (Kg)	6	9	11

**Additional information:**

- The production manager recommends that stock of raw materials at the end of each month be maintained at a level sufficient to meet 20% of the production requirements for the next month.
- The sales manager recommends that finished goods stock should be held for each product as follows:

- |  | X           | Y         | Z           |
|--|-------------|-----------|-------------|
|  | 1,000 units | 500 units | 1,800 units |
| 3. Estimates of closing inventories for the month of December 2016 are as follows: |             |           |             |

		<b>Kg</b>
Raw materials:	M1	2,400
	M2	4,800
		<b>Units</b>
Finished goods:	X	400
	Y	2,900
	Z	800

**Required:**

For the month of January and February 2017, prepare:

- Production budget. (4 marks)
- Material usage budget. (4 marks)
- Material purchases budget. (4 marks)

**(Total: 20 marks)**

**QUESTION THREE**

- (a) In the context of cost estimation, explain the following methods:

- High-low method. (2 marks)
- Account analysis. (2 marks)
- Engineering method. (2 marks)

- (b) Millenium Baby Care Centre Ltd. manufactures two products namely; NN and CL.

The standard cost for the two products are given below:

	NN	CL
	Sh.	Sh.
Direct materials	40	30
Direct labour	30	80
Variable overheads	20	40
Fixed overheads	<u>40</u>	<u>20</u>
	<u>130</u>	<u>170</u>

**Additional information:**

- The fixed overheads are based on annual production of 50,000 units of NN and 100,000 units of CL.
- The selling prices per unit of NN and CL are Sh.200 and Sh.250 respectively.
- The selling expenses consist solely of sales commission at Sh.10 per unit of each product.
- The fixed selling and administration expenses amount to Sh.1,600,000 and are apportioned to the two products.
- All the fixed overheads are common to the two products and allocation between the two products are purely arbitrary.

**Required:**

- (i) Assuming budget efficiency is achieved, determine the profit realised if only 80% of the production and sales budget is achieved. (6 marks)
- (ii) Break-even point in units for the company as a whole. (2 marks)
- (iii) Break-even point in units by products at standard mix. (2 marks)
- (iv) If the raw material availability is limited to Sh.4,000,000, compute the maximum profit that could be achieved. (4 marks)

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

- (a) Discuss four ways in which a management accountant might utilise cost accounting information in the organisation. (8 marks)
- (b) Genesis Enterprise manufactures an industrial product that goes through four distinct processes before the final product can emerge.

The following information is available from the cost records:

	Process I	Process II	Process III	Process IV	Total
	Sh.	Sh.	Sh.	Sh.	Sh.
Materials	1,600	2,600	2,000	1,025	7,225
Direct labour	3,500	2,250	3,680	1,420	10,850
Production overheads					7,595

**Additional information:**

- 500 units at Sh.4 per unit were introduced in Process I.
- Production overheads are absorbed as a percentage of direct labour cost.
- The actual output and normal loss of the respective processes are given below:

	Output (units)	Normal loss as % of input	Value of scrap per unit (Sh.)
Process I	500	-	-
Process II	450	10%	2
Process III	360	20%	3
Process IV	270	25%	5

- The actual output was as expected.

**Required:**

- (i) Process I account. (3 marks)
- (ii) Process II account. (3 marks)
- (iii) Process III account. (3 marks)
- (iv) Process IV account. (3 marks)

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

The following information was obtained from the financial books of Tengeneza Ltd. for the year ended 30 June 2016:

	Sh.
Direct materials consumed	250,000
Direct wages	100,000
Factory overheads	380,000
Administrative overheads	250,000
Selling and distribution overheads	480,000
Bad debts written off	20,000
Preliminary expenses written off	10,000
Legal charges	5,000
Dividends received	50,000
Interest on deposit received	10,000
Sales (120,000 units)	700,000
Closing stock:	
Finished stock (40,000 units)	120,000
Work-in-progress	80,000

**Additional information:**

1. Direct material consumption as per the cost accounting records amounted to Sh.280,000.
2. Factory overheads are recovered at 20% on prime cost.
3. Administrative overheads are recovered at Sh.3 per unit of production.
4. Selling and distribution overheads are recovered at Sh.4 per unit sold.

**Required:**

For the year ended 30 June 2016, prepare:

- |  |                          |
|--|--------------------------|
| (a) Costing profit and loss account.                                 | (6 marks)                |
| (b) Financial profit and loss account.                               | (8 marks)                |
| (c) Statement reconciling the profits obtained in (a) and (b) above. | (6 marks)                |
|  | <b>(Total: 20 marks)</b> |

.....