

**TECHNICAL UNIVERSITY OF MOMBASA**

**SCHOOL OF BUSINESS**

**ACCOUNTING AND FINANCE DEPARTMENT**

**COURSE/CLASS: BACHELOR OF COMMERCE  
FOURTH YEAR**

**UNIT : BAC 4407**

**UNIT NAME : ISSUES IN MANAGEMENT ACCOUNTING**

**SERIES : MAY 2016**

**TIME : 2 HOURS**

**INSTRUCTIONS TO CANDIDATES:**

Answer Question One (Compulsory) and any other TWO questions.

### QUESTION 1 (COMPULSORY)

- (a) Jambo Ltd uses standard absorption costing and absorbs production overheads on the basis of standard machine hours. The following budgeted and actual information applied in its last accounting period:

	Budget	Actual
Production overhead	Sh.18 million	Sh.17,808,000
Machine hours	50,000 hours	48,260 hours
Units produced	40,000 units	38,760 units

**Required:**

Determine whether the production overheads will be over- or under- absorbed and by how much at the end of the period. (6 marks)

- (b) Daima Ltd has recently introduced an Activity based costing system. It manufactures 3 products, details of which are set out below:

Product	D	R	P
Budgeted annual production (units)	100,000	100,000	50,000
Batch size (units)	100	50	25
Machine set-ups per batch	3	4	6
Purchase orders per batch	2	1	1
Processing time per unit (minutes)	2	3	3

Three cost pools have been identified. Their budgeted costs for the year ending 30 June 20X3 are as follows:

	Budget
Machine set-up costs	Sh.15 million
Purchasing of materials	Sh.7 million
Processing	Sh.8 million

**Required:**

Determine the budgeted machine set-up cost per unit of product R. (6 marks)

- (c) Wote Ltd produces a single product. The management currently uses marginal costing but is considering using absorption costing in future.

The budgeted fixed production overheads for the period are sh.50 million. The budgeted output for the period is 2,000 units. There were 800 units of opening inventory at the beginning of the period and 500 units of closing inventory at the end of the period.

If absorption costing principles were applied, how would profit for the period compare to the marginal costing profit? (6 marks)

(d) Environmental Cost Management is becoming increasingly important in many organizations.

**Required:**

- (i) Give several reasons for this. (4 marks)  
(ii) Identify and explain four categories of environmental costs that can be reported by organizations. (8 marks)

**QUESTION 2**

Lamu Co. Ltd operates an activity-based costing system and has forecast the following information for next year.

Cost Pool	Cost	Cost driver	Number of Drivers
Production set-ups	Sh.10,500,000	Set-ups	300
Product testing	Sh.30,000,000	Tests	1500
Component supply and storage	Sh.2,500,000	Component orders	500
Customer orders and delivery	Sh.11,250,000	Customer orders	1000

General fixed overheads such as lighting and heating, which cannot be linked to any specific activity, are expected to be sh.90 million and these overheads are absorbed on a direct labour hour basis. Total direct labour hours for next year are expected to be 300,000 hours.

Lamu co. Ltd expects orders for Product ZT next year to be 100 orders of 60 units per order and 60 orders of 50 units per order. The company holds no stocks of product ZT and will need to produce the order requirement in production runs of 900 units.

One order for components is placed prior to each production run. Four tests are made during each production run to ensure that quality standards are maintained. The following additional cost and profit information relates to product ZT:

Component Cost	:	Sh.100 per unit
Direct Labour	:	10 minutes per unit at sh.780 per hour
Profit mark-up	:	40% of total unit cost

**Required:**

- (a) Calculate the activity-based recovery rates for each cost pool. (4 marks)  
(b) Calculate the total unit cost and selling price of product ZT. (6 marks)  
(c) Discuss the reasons why activity-based costing may be preferred to traditional absorption costing in the modern manufacturing environment. (10 marks)

**QUESTION 3**

Discuss the following terms within the cost management framework.

- (a) Target costing approach (4 marks)  
(b) Kaizen costing (4 marks)  
(c) Just-in-time philosophy (4 marks)  
(d) Business process re-engineering (4 marks)  
(e) Benchmarking (4 marks)

#### QUESTION 4

A company reapportions the costs incurred by two service cost centres, materials handling and inspection, to three production cost centres of machining, finishing and assembly.

The following are the overhead costs which have been allocated and apportioned to the five cost centres:

	Sh.000
Machining	40,000
Finishing	20,000
Assembly	10,000
Materials handling	10,000
Inspection	<u>5,000</u>
	<u>85,000</u>

Estimates of the benefits received of the costs of service departments by each cost centre are as follows:

	Production departments			Service departments	
	Machining	Finishing	Assembly	Material handling	Inspection
Materials handling	30%	25%	35%	-	10%
Inspection	20%	30%	45%	5%	-

#### Required:

- (a) Calculate the charge for overhead to each of the three production cost centres, including the amounts reapportioned from the two service centres, using:
- The continuous allotment (or repeated distribution) method;
  - An algebraic (or simultaneous equation) method; (15 marks)
- (b) Comment on whether reapportioning service cost centre overheads is generally worthwhile and suggest an alternative treatment for such costs. (5 marks)

#### QUESTION 5

- (a) Compare and contrast the use of residual income and return on investment in divisional performance measurement, stating the advantages and disadvantages of each. (9 marks)
- (b) Division Y of Changamwe Co. Ltd currently has capital employed of sh.100 million and earns an annual profit after depreciation of sh.18 million.

The divisional manager is considering an investment of sh.10 million in an asset which will have a ten-year life with no residual value and will earn a constant annual profit after depreciation of sh.1.6 million. The cost of capital is 15%.

Calculate the following and comment on the results.

- (i) The return on divisional investment, before and after the new investment.
- (ii) The divisional residual income before and after the new investment. (11 marks)