KCA UNIVERSITY

UNIVERSITY EXAMINATIONS: 2013/2014

EXAMINATION FOR THE MASTERS OF SCIENCE (MSC) IN COMMERCE (FINANCE AND ACCOUNTING)

MFA 603 ADVANCED MANAGERIAL ACCOUNTING (EVE)

DATE: APRIL, 2014 **TIME: 3 HOURS**

INSTRUCTIONS: Answer Question One and Any Other Three Questions

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QUESTION ONE (31 MARKS)

a) Explain the benefits of management accounting in business sector. (4 Marks)

b) Outline the limitations of management accounting (4 Marks)

c) Discuss any four ethical standards of management accountants (4 Marks)

d) A company operates two divisions, A and B. Division A manufactures two products X and Y. Product X is sold to the external market at Sh.420 per unit. The only market for product Y is Division B. Division B can obtain its input (product Y) from either Division A or from an external source. Division B currently has an offer for product Y from an external supplier at Sh.380 per unit. The capacity of Division A is measured in units of output, irrespective of whether product X, Y or a combination of both is produced. The associated product costs are as follows:

	Product	
	X	**Y**
	Sh.	**Sh.**
Variable cost per unit	320	350
Fixed overheads per unit	50	50
	370	400

Required:

Advise the management of Division A on the appropriate transfer price for product Y to Division B under the following conditions:

(i) Division A has spare capacity and a limited external demand for product X. (4 Marks)

(ii) Division A is operating at full capacity with unsatisfied external demand for product X. (4 Marks)

e) Amazon ltd produces three products; A, B, C and D using the same processing plant. The following information relates to the company:

Product	A	B	C	D
Units produced	2,000	20,000	2,400	28,000
Material cost per unit(sh)	20	20	64	68
Labour hours per unit	2	2	8	6
Machine hours per unit	1	1	4	6
Labour cost per unit (sh)	12	12	48	36

The cost accountant analysed the production overheads recorded under the following headings:

Overhead cost element	Amount (sh)
Setup costs	17,420,000
Factory costs (machine oriented activity)	149,696,000
Cost of ordering materials	7,680,000
Materials handling costs	30,320,000
Administration cost for spare parts	34,400,000

Investigations into the production overhead activities for the period reveal the following:

Product	A	B	C	D
Number of set-ups	4	24	8	32
Number of material orders	4	32	4	32
Number of times material Was handled	8	40	12	48
Number of spare parts used	8	20	4	16

Required:

i) Unit cost per product using the machine hour rate (4 Marks)

ii) Unit cost per product using the activity based costing (7 Marks)

QUESTION TWO (23 MARKS)

a) State and explain the four principle components of a time series (8 Marks)

b) Explain the difference between multiplicative and additive models as used in time series. (4 Marks)

c) The table below shows the sales of new cars by quarters during a period of three years:

Year	Quarter 1 ‘’sh millions’’	Quarter 2 ‘’sh millions’’	Quarter 3 ‘’sh millions’’	Quarter 4 ‘’sh millions’’
2011	55.0	76.5	61.2	77.8
2012	54.4	65.9	52.7	81.4
2013	59.3	83.2	78.5	93.0

Compute the average seasonal index for each quarter using the additive model (11 Marks)

QUESTION THREE (23 MARKS)

Kutwa Ltd. is a manufacturing company with two divisions: A and B. Division A manufactures a single standard product K, some of which is sold externally and the remainder used as an input in division B in the manufacture of product M.

The unit production costs of product K are given below:

	Sh.
Direct material	40
Direct labour	20
Direct expense	20
Variable manufacturing overheads	20
Fixed manufacturing overheads	40
Selling and packaging expenses (variable)	10
	150

Annually, 10,000 units of product K are sold externally at a price of Sh.300 per unit and 5,000 units are transferred to division B at an internal transfer price of Sh.290 arrived at by deducing the selling and packaging expense from the external price of Sh.300 which is not incurred for products transferred internally.

The unit production cost for product M which uses product K as an input is given below:

	Sh.
Cost of internally transferred products from division A to division B	290
Direct material	230
Direct labour	30
Variable overheads	120
Fixed overheads	120
Selling and packaging expenses (variable)	10
	800

The manager of division B has disagreed with the basis used in arriving at the transfer price. He argues that the transfer price should be arrived at by charging the variable cost plus an agreed mark-up. He also claims that division A would not be in a position to externally sell the extra units that are transferred to division B at the price of Sh.300.

A survey on the relationship between the selling price and demand for each division was carried out by the company's Sales Director. The results are shown in the table below:

Division A	Selling price (Sh.)	200	300	400
	Demand (units)	15,000	10,000	5,000
Division B	Selling price (Sh.)	800	900	1,000
	Demand (units)	7,200	5,000	2,800

The manager of division B suggests that based on the above results, a transfer price of Sh.120 would offer division A a reasonable contribution towards its fixed cost and earn division B a reasonable profit. This would lead to an increase in the output and overall profitability of the company.

Required:

(a) Calculate the effect of the existing transfer pricing system on the company's profits. (13 Marks)

(b) Calculate the effect of adopting the transfer price of Sh.120 on the company's profits. (10 Marks)

QUESTION FOUR (23 MARKS)

a) Explain the following primary elements of total quality management

i) Customer focus (4 Marks)

ii) Leadership (4 Marks)

iii) Total employee involvement (4 Marks)

iv) Integrated system (4 Marks)

b) Discuss how total quality management can be implemented in the banking sector. (7 Marks)

QUESTION FIVE (23 MARKS)

The Ministry of Higher Education is currently reviewing the performance of its state universities. This is after a report that was published by the Commission for Higher Education that pointed out that the standards in state universities have drastically fallen. The ministry decided to perform a benchmark analysis with the University of Michigan that is offering fairly similar courses with the University of Nairobi that the Ministry earmarked for this study.

The appraisal used the parameters detailed in the following table:

	UoN (Actual)	**UoN (Budget)**	**UoM (Actual)**
Total registered students	25,000	26,500	30,000
Number of students waiting for 2 weeks for admission after applying	4,500	4,100	3,000
Number of students waiting for 3 weeks for admission after applying	2,100	2,500	1,200
Number of days after opening date before lectures start	3	1	1
% of lectures that materialize within the first week of a semester	60%	100%	90%
Duration for processing exams and release of results (in weeks)	4	4	5
% of lecturers with PhD	40%	100%	70%
Number of staff training programmes undertaken in the year	2	4	2
The degree of utilization of e-learning platform among lecturers	60%	100%	80%
Number of papers published by the teaching staff the year	15	40	22
Number of complaints received from students	203	0	56
Number of complaints responded to within 5 days	50	All	40
Customer satisfaction index	70%	99%	93%
Number of staff shortages	8	5	7
Staff productivity measure (% of students graduating per cohort)	84%	100%	92%
Revenue from fees (ksh. millions)	154.2	255.2	260.2
Lecturing staff costs (ksh. Millions)	42.3	82.2	99.6
Other staff costs (ksh. Millions)	25.5	45.5	54.0
Income and expenditure surplus margin	(13%)	0.0	24%
Number of days cash in hand	37	30	35

UoN- The University of Nairobi

UoM- The University of Michigan

Additional information:

The Ministry of Higher Education also uses a “balanced scorecard” approach in order to assess the performance of the state universities. The balanced score card has 4 dimensions which are as follows:

i. Financial perspective

ii. Internal business processes

iii. Customer perspective

iv. Learning and growth

Required:

Using the balanced score card method, Prepare a report to the Ministry of Higher Education which critically assesses, on the basis of the above information, the performance of The University of Nairobi which is currently under review. (23 Marks)

QUESTION SIX (23 MARKS)

a) Explain how the following managerial Accounting techniques can be applied in Kenyan manufacturing firms:

i) Lifecycle costing (5 Marks)

ii) Uniform costing (5 Marks)

iii) Business process Engineering (5 Marks)

iv) Computer aid (5 Marks)

b) State and explain three factors that affect pricing decisions (3 Marks)