**CHUKA** 



UNIVERSITY

#### UNIVERSITY EXAMINATIONS

# FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION

**MBAD 812: MANAGEMENT ACCOUNTING** 

STREAMS: MBA Y1SII TIME: 3 HOURS

DAY/DATE: TUESDAY 02/08/2016 5.30 P.M. – 8.30 P.M.

#### **INSTRUCTIONS:**

- Answer QUESTION ONE and any other THREE QUESTIONS.
- Show all your workings.
- Do not write on the question paper.

## **QUESTION ONE**

- (a) Briefly explain the role of the Management Accounting in the Management Process. (3 marks)
- (b) Management Accounting is aimed at helping the management make informed decisions. Describe the decision making process giving examples in each of the decision making, planning and control process. (7 marks)
- (c) A university offers a range of degree courses. The university's organization structure consists of three faculties each with a number of teaching departments. In addition, there is a university administrative/ management function and a central services function.

The following cost information is available for the year ended 30 June 2002

1. Occupancy costs total Sh. 15,000,000. Such costs are appointed on the basis of area used which is:

	Faculties	Teaching Departments	Administrative/management	Central services
Area (Square feet)	7,500	20,000	7,000	3,000

2. Administration/ management costs:

Direct costs: Shs. 17,750,000

Indirect costs: an apportionment of occupancy costs.

Direct and indirect costs are charged to degree courses on a percentage basis.

3. Faculty costs:

Direct costs Shs. 7,000,000

Indirect costs: an apportionment of occupancy and central services costs.

Direct and indirect costs are charged to teaching departments.

4. Teaching departments:

Direct costs: Shs 55,250,000

Indirect cost: an apportionment of occupancy costs and central services cost plus all

faculty costs.

Direct and indirect costs are charged to degree courses on a percentage basis.

5. Central services:

Direct costs: an apportionment of occupancy costs.

6. Direct and indirect costs of central services have in previous years been charged to users on a percentage basis. A study has now been completed which has estimated what user areas would have paid external suppliers for the same services on an individual basis. For the year ended 30 June 2002, the apportionment of central services costs is to be recalculated in a manner which recognizes the cost/savings achieved by using the central services facilities instead of using external services companies. This is to be done by apportioning the overall savings to user areas in proportion to their share of the estimated external costs.

7. The estimated external costs of service provisions are as follows:

		Sh. '000'
Faculties		2,400
Teaching		8,000
Departments		
Degree courses:		
_	Business studies	320
	Mechanical	480
	Engineering	
	Catering studies	320
	All other degrees	<u>4,480</u>
	_	16,000

Additional data relating to the degree courses are as follows:

	Business Studies	Mechanical Engineering	Catering Studies
Number of graduates Apportioned costs (as a % of total)	80	50	120
Teaching departments	3%	2.5%	7%
Administrative/ management	2.5%	5%	4%

Central service are apportioned as detailed in (5) above.

The total number of graduates from the university in the year to 30 June 2002 was 2,500.

## Required:

- (a) Prepare a flow diagram which shows the apportionment of costs to user areas. (No value needs to be shown) (3 marks)
- (b) Calculate the average cost per graduate for the year ended 30 June 2002, for the university and for each of the degree courses in business studies, mechanical engineering and catering studies (around your values to the nearest Sh. 1,000) (13 marks)
- (c) Suggest reasons for any differences in the average cost per graduate from one degree course to another and discuss briefly the relevance of such information to the university's management. (4 marks)

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## **QUESTION TWO**

- (a) Identify and discuss briefly FOUR assumptions underlying the cost-volume-profit analysis. (4 marks)
- (b) High-Tex Engineering Company Limited wishes to set flexible budgets for each of its operating departments. A separate maintenance department performs all routine and major repair works on the company's equipment and facilities. The company has determined that maintenance department performs all routine and major repair works on the company's equipment and facilities. The company has determined that maintenance cost is primarily a function of machine hours worked in the various production departments. The maintenance cost incurred and the actual machine hours worked during the months of January. February, March and April 2003 were as follows:

Month	Machine hours in production departments	Maintenance department's costs Sh.
January	800	350
February	1,200	350
March	400	150
April	1,600	550

## Required:

Determine the cost estimated function using:

(1)	High-low method.	(5 marks)
(ii)	Regression analysis.	(5 marks)

Using the regression function estimate:

- (i) The maintenance costs that would have been incurred if the machine hours were expected to be 900 in the month of May 2003. (1 mark)
- (ii) The maximum machine hours that would have been worked if the maintenance cost incurred had been limited to Sh. 400,000 for the month of May 2003.

  (5 marks)

## **QUESTION THREE**

"It is now fairy and widely accepted that conventional cost accounting, distorts management's view of business through unrepresentative overhead allocation and inappropriate product costing. This is because the traditional approach usually absorbs overhead costs across products solely on the basis of the direct labour involved in their manufacture. As direct labour cost expressed as a proportion of the total manufacturing cost continues to fall, this leads to more and more distortion and misrepresentation of the impact of particular products on total overhead costs" (from Financial Times)

#### Required:

- (a) Briefly discuss the above statement and state what approaches are being adopted by management accountants to overcome such criticism. (8 marks)
- (b) Traditional budgeting systems are incremental in nature and tend to focus on cost centers. Activity based budgeting (ABB) links strategic planning to the overall performance measurement aimed at continuous improvement.

## Required:

- (i) Explain the weakness of traditional incremental budgeting systems. (4 marks)
- (ii) Describe the main feature of activity based budgeting system and comment on its advantages. (8 marks)

#### **QUESTION FOUR**

- (a) Briefly discuss three advantages and three disadvantages of marginal costing approach. (6 marks)
- (b) You have been appointed manager of Farmers hotel, which has 300 available bedrooms, let at a flat rate of Shs. 450 per night. After a month you find that occupation of the hotel bedrooms is rarely more than 50% capacity. Examination of last year's records discloses that sales revenue from rooms was 20,000,000. The daily rate has not been changed for 18 months. Fixed costs associated with the letting for the year amounted to Shs. 10,000,000 while variable cost for the year which varied in direct proportion to room, usage totaled to Shs. 4,000,000

## Required:

- (i) The break-even point in shillings (assuming no change since last year) (4 marks)
- (ii) Assuming that the hotel operated for 365 days last year, determine the break-even point in the number of rooms occupied. (4 marks)

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(iii)	You wish to increase the previous year's profit by Shs. 2,000,000 this year
	(assuming no changes in costs or rates changed). Calculate:

- (a) The sales revenue required to achieve the higher profit. (3 marks)
- (b) The additional number of rooms let per night beyond the average numbers occupied per night last year. (3 marks)

## **QUESTION FIVE**

Watt Lovell Ltd. (WLL) is trying to decide whether or not to drill for oil on a particular site in North Eastern Kenya. The Chief Engineer has assessed the probabilities that assessed the probabilities that there will be oil as follows, based on past experience.

Oil 0.2 No oil 0.8

It is possible for WLL to hire a firm of international consultants to carry out a complete survey of the site. WLL has used the firm many times before and has made the following estimates:

- (i) If there really is oil, then there is a 95% chance that the report will be favourable.
- (ii) If there is no oil then there is only a 10% chance that the report will indicate that there is oil.

The following additional information is also provided:

- (i) The cost of drilling is Sh. 10 million.
- (ii) The value of the benefits if oil if found is Shs. 70 million
- (iii) The cost of obtaining information is Sh. 3 million.

#### **Required:**

- (i) Advise the company on whether to acquire additional information from the consultants. (16 marks)
- (ii) Compute the value of imperfect information. (4 marks)