



MURANG'A UNIVERSITY COLLEGE (MRUC)
(A *Constituent* College of Jomo Kenyatta university of Agriculture & Technology)

SCHOOL OF BUSINESS AND ECONOMICS

UNIVERSITY EXAMINATION 2015

FIRST YEAR FIRST SEMESTER EXAMINATION

(SPECIAL/SUPPLEMENTARY EXAMS)

FOR THE DEGREE OF BCom/BBIT

HPS 2103: COST AND MANAGERIAL ACCOUNTING

DATE: 9TH MARCH 2015

TIME: 2 HOURS

INSTRUCTIONS

Answer Question *ONE* and any *OTHER TWO* Questions.

COMPULSORY QUESTION (30 MARKS)

QUESTION ONE

- a) Distinguish between the following cost accounting terminologies:
- | | |
|--|-----------|
| i) Direct and indirect costs | (2 marks) |
| ii) Cost centre and cost unit | (2 marks) |
| (iii) Period costs and product costs | (2 marks) |
| (iv) Discretionary cost and committed cost | (2 marks) |
| (v) Prime cost and overhead cost | (2 marks) |

The following information has been extracted from the books of Solar cross Ltd for the year to 31 March 2000:

	Units '000'
Production	30
Sales	24
Production cost incurred:	Sh '000'
Direct material	4,200
Direct labour	1,800
Variable overheads	1,500
Fixed overheads	2,700
Selling and administrations costs:	
Sales and salaries	450
Variable sales commission	300
Promotion and advertising	480
Other fixed costs	720

The company's unit selling price is Sh 550.

Required:

- a) Profit and loss statement under direct costing approach. (8 marks)
 - b) Profit and loss statement under indirect costing approach. (8 marks)
 - c) An explanation of the difference in profit or loss in (a) and (b) above. (4 marks)
- (Total: 30 marks)**

QUESTION TWO

Toy master ltd, has three production departments, P, Q and R and two service departments; X and Y. The overhead costs budget for the year ended 31 December 2012 was as follows;

	sh
Heating and lighting	32,000
Telephone charges	16,000
Rent and rates	64,000
Insurance of machinery	30,000
Depreciation	90,000
Production supervisors salary	<u>120,00</u>
	<u>352,000</u>

The following data is also available for each of the five departments;

Y	Departments			
	P	Q	R	X
Budgeted direct labour hrs	16,000	9,000	3,000	-
Labour rates per hour (sh)	19	17.5	17	15
Floor area occupied (m2)	15,000	5,400	3,000	3,000
Machine value (sh `000')	14	8.5	6	4

Apportionment of overheads (%);

Y	Departments			
	P	Q	R	X
Service Department X	20%	40%	30%	-
Service Department Y	40%	20%	20%	20%

Required;

- i. Overhead analysis sheet. (7 marks)
- ii. Reapportion the service costs to production department, using simultaneous equations method. (6 marks)
- iii. You have been informed that the overheads are absorbed on the basis of the direct labour hours and the budget direct labour hours for the departments is given below;

Department P	1,500,000
Q	900,000
R	835,000

Required;

Determine the overhead absorption rates per hour for the three departments. (3 marks)

- iv. Toy Master Ltd, uses Job order costing method.

The following information relates to Job J631

Direct materials	sh 34,000,000
Direct Labour	sh 62,200,000
Time spent in Department P	40 labour hours
" Q	35 Labour hours

“ R 10 Labour hours
Profit margin 25%

Calculate the total price to be charged for Job J631.

QUESTION THREE

Good health care hospital has prepared a schedule of estimated overhead costs for its blood test unit, on the assumption that production will be 80,000 tests. Overhead costs have been classified as fixed and variable costs.

Overheads	Cos (sh)
Supplies	375,000 (all variables)
Indirect labour	1,942,000 (1,710,000 fixed)
Rent	2,364,200(all fixed)
Utilities	272,100 (all variables)
Depreciation	810,000 (all fixed)
Maintenance	243,300 (85,000 fixed)
Data processing	253,200 (158,200 fixed)
Technical support	169,400 (all fixed)

Required;

1. A cost estimation equation using the accounts analysis taking the number of tests as the only cost driver.
2. A computer regression program produced the following equation. (2 marks)
Overhead costs = 6,265,000 + 15x (where 'X' is the number of tests).

Using this equation, estimate overhead costs when production is anticipated to be 120,000 tests.

(4 marks)

QUESTION FOUR

The following incomplete information was obtained from the books of Forward Manufacturers Limited.

The information relates to two products namely. Product 1 and product 2.

	Product 1 Sh '000'	Product 2 Sh '000'
Opening direct materials	5,000	3,000
Purchases of direct materials	17,000	45,000
Closing direct materials	?	7,000

Admin. Expenses	7,213
Production expenses	8,680
Selling and Distribution expenses	5,217
Stores issues;	
- Production	36,291
- Factory maintenance	2,958
- Office maintenance	1,307
Production overhead absorption	19,800
Administration overhead absorbed by finished goods	17,200
S & D overheads absorbed by the cost of sales	10,100
Factory cost of finished goods	78,280
Cost of finished goods sold	92,500
Sales	143,650

Required;

- i. To write up all the necessary accounts. (10 marks)
- ii. Prepare the costing profit and loss Account. (7 marks)
- iii. Prepare the closing trial balance. (3 marks)

(Total 20 marks)

QUESTION SIX

Kanga Ltd has three production departments and two service departments. The following is their budgeted factory overheads for the year ended 30 September 2000:

	Shs.	Shs.
Production departments		
A	240,000	
B	180,000	
C	<u>220,000</u>	640,000
Service departments X	86,000	
Y	<u>44,000</u>	<u>130,000</u>
		770,000

The service department costs are to be re-apportioned as per the following percentages:

	A	B	C	X	Y
X	20	30	35	-	15
Y	30	30	30	10	-

Required:

Re-apportion the service department costs to the production departments using the simultaneous equation method and repeated method.

Faidika Limited deals in the manufacture of product X. The variable cost of production per unit of product X is sh 2 whereas the fixed cost of sh 15,000. It has been estimated that if the unit selling price

of product X is set at sh 440, the sales volume will be 7,500 units where X is set at sh400, the sales volume will be 10,000 units.

Required

- i) The budgeted profit for each of the above set selling prices (4 marks)
- ii) The break-even point for each of the above set selling price (4 marks)
- iii) The margin of safety for each of the above set selling prices (4 marks)
- iv) The break even chart for the price of sh4.40 per unit for production levels of 0,5000 and 10,000 units of X (8 marks)