



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

SCHOOL OF BUSINESS AND ECONOMICS

UNIVERSITY EXAMINATION 2013

FIRST YEAR FIRST SEMESTER EXAMINATION

FOR THE DEGREE OF BCom/BBIT

HEH 2103: COST AND MANAGERIAL ACCOUNTING

DATE:

TIME: 2 HOURS

INSTRUCTIONS

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

COMPULSORY QUESTION (30 MARKS)

QUESTION ONE
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) Allocation and apportionment (2 marks)
 - (v) Prime cost and overhead cost (2 marks)
- b) (a) Tabibu general Hospital hires doctors from private hospital. The following data relate to the total labour hours and indirect labour costs for the year 31 October 2012.

Month	Labour cost Sh '000'	Labour hours
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November 2011	13,090	748
December 2011	13,321	968
January 2012	11,044	682
February 2012	10,087	792
March 2012	8,470	660
April 2012	16,060	1,056
May 2012	1,980	858
June 2012	7,810	506
July 2012	14,476	902
August 2012	11,352	1,034
September 2012	8,272	748
October 2012	10,593	528

Required;

- Equation in the form of $Y = a + bx$ Using high – low method. (5 marks)
- Using $\sum Y = 126,511,000$ $\sum X = 9,482$ $\sum XY = 102,936,636,000$ $\sum X^2 = 7,852,900$
Determine an equation in the form $Y = a + bx$. (5 marks)
- Total labour cost for out sourcing 1,078 labour hours using the equation (ii) above. (2 marks)

c) Rangi Ltd, a paint manufacturer, produces two types of paints namely “Gloss” and “shine”. The following information relates to the company’s projections for the year ending 31 december 2012.

Product “Gloss”

Sales (50000 litres)	150,000
Fixed cost	(30,000)
Variable cost	(90,000)
Operating profit	30,000

Product “shine”

Sales (50,000 litres)	150,000
Fixed cost	(84,000)
Variable cost	(45,000)
Operating profit	21,000

Required;

- Compute the break even point of “Gloss in units and break-even point of shine in shillings. (4Marks)
- Given that customers purchase composite units six for “Gloss” and four for “shine”, calculate the composite unit contribution margin. (4 Marks)

(TOTAL ,30MARKS)

ANSWER ANY TWO QUESTIONS

QUESTION TWO

Bidii Ltd is a medium-sized company which of sales three production departments namely machinery department D, machinery department E and assembly department. It has also got two service departments namely materials procurement and general support department.

The annual overhead costs are as follows:

<u>Indirect materials</u>	sh'000'	sh'000'
Machinery department 'D'	1,250	
Machinery department 'E'	2,013	
Assembly	262	
Materials procurement	0	
General support	<u>25</u>	3,550
Indirect salaries and wages		
Machinery department D	2,500	
Machinery department E	2,500	
Assembly	3,750	
Materials procurement	2,750	
General support	<u>3,700</u>	15,200
Others		
Electricity	1,250	
Taxes	2,500	
Insurance of machinery	375	
Depreciation of machinery	3,750	
Insurance of buildings	625	
Salaries of site workers	<u>2,000</u>	<u>10,500</u>
		<u>29,250</u>

The following additional is available from the books of Bidii Ltd;

1. Bk value	Areas occupied	No of	Direct	machine	
		(sq.mtrs)	Employees	labour	hours
Machinery Dept D	20,000	25,000	750	2,500,000	5,000,000
Machinery dept E	12,500,000	12,500	500	2,500,000	2,500,000
Assembly stores	2,500,000	37,500	750	5,000,000	-
Maintenance	1,500,000	37,500	250	-	-
	<u>1,250,000</u>	<u>12,500</u>	<u>250</u>		
	<u>37,500,000</u>	<u>125,000</u>	<u>2,500</u>		

2) The total direct and indirect materials issued to the production departments are as follows:

Machinery department	D	10,000,000
	E	7,500,000

Assembly	<u>2,500,000</u>
	<u>20,000,000</u>

Required;

- a) Overhead analysis sheet (14 marks)
- b) Reappointment 2 service costs to the production department (3 marks)
- c) Overhead rates for each production department (3 marks)

(TOTAL 20Marks)

QUESTION THREE

XYZ Ltd carries on its business in Nairobi. The company has been reporting its profit using assumption costing system. During the financial year ended 30 September 2012, the following summary statement was provided.

		sh
Sales (4,000 units)		5,000,000
Production cost of sales;		
Variable	3,000,000	
Fixed	<u>1,000,000</u>	(4,000,000)
Gross profit		<u>1,000,000</u>
Less		
Expenses;		
Variable	800,000	
Fixed	<u>800,000</u>	(1,600,000)
Net loss		(<u>600,000</u>)

Currently, the company is implementing strategic to improve its profitability, which are to be implemented in two phases, A and B. Each phase will cover a period six months. The expected production and sales in units for each of the phases are shows below;

Phases 'A'		Phase 'B'
Units		Units
Production	2,500	3,000
Sales	2,400	2,900

The fixed costs are expected to increase by 20% while the variable costs per unit will remain as they were in the previous period. The selling price unit will be sh 1,500.

Required;

- a) Profit and loss statements for phases A and B using
 - i) Marginal costing (7 marks)
 - ii) Absorption costing (7 marks)

b)) Reconcile the resulting difference in the reported profit under the methods(6 marks)
(TOTAL 20Marks)

QUESTION FOUR

Trade wind's Ltd. company makes a chemical that passes through three production process 1, 2 and 3. In the month of October 2012, 5000 litres of the basic raw material priced at sh 120,000 were introduced into process I subsequently, the following cost were incurred.

Process 1

Direct labour	sh 80,000
Direct expenses	sh 30,000

At the end of the process, 4,800 litres were passed onto process 2.

Process 2

Direct material (additional)	sh 66,300
Direct labour	sh 60,000
Direct expenses	sh 24,000

At the end of the process, 4,700 litres were passed onto process 3.

Process 3

Direct materials (additional)	sh 25,680
Direct labour	sh 20,000
Direct expenses	sh 4,800

At the end of the process, 4680 litres were passed onto the finished goods store.

Normal process losses for each of the three process are;

Process 1 – 3%; process 2 – 2.5% Process 3 – 2%

The loss per unit in each process represented scrap which could be sold off at the following values;

Process 1 – sh 10; process 2 – sh 15 Process 3 – sh 20

The loss in each process resulted from evaporation due to heating or due to spillage and hence nothing of value could be realized from these losses. There were no stocks of materials or work-in-progress at the beginning or end of month. The output of each process passes directly to the next process at cost without any provision for internal profit. Manufacturing overheads are absorbed by each process at 25% of direct labour cost.

Required;

- Prepare separate process accounts for each of the three processes. (14 marks)
- Prepare the abnormal loss and abnormal gain accounts. (6marks)

(TOTAL 20Marks)

QUESTION FIVE

PQR Petrochemical company keeps on intergrated accounting system. The following balances appear in the books as on January 1, 2012

	Dr	Cr
	Sh'000'	
Stores control account	18,000	
Work-in-progress A/c	17,000	
Finished goods A/c	13,000	
Bank A/c	10,000	
Creditors A/c		8,000
Fixed assets A/c	55,000	
Debtors A/c	12,000	
Share capital		80,000
Depreciation provision A/c		5,000
Profit and loss account A/c		<u>32,000</u>
	<u>125,000</u>	<u>125,000</u>

Transactions for the year ended 31December 2012 were as given below.

Wages paid – direct	87,000	
Wages paid – indirect	<u>5,000</u>	92,000
Credit purchase of materials	100,000	
Materials issued to production	110,000	
Finished goods during the year	215,000	
Sales – Credit	250,000	
Cash	<u>50,000</u>	300,000
Cost of goods sold	220,000	
Production overhead incurred	48,000	
Production overhead absorbed	40,000	
Administration overhead incurred	12,000	
Selling overhead incurred	14,000	
Payments to creditors	101,000	
Depreciation of machinery	1,300	
Prepaid rent (included in the Factory overhead)	300	

Required;

- i) Write up accounts in the integrated ledger (10 marks)
- ii) Prepare a balance sheet as at 31December 2012 (10 marks)

(TOTAL 20Marks)