MURANG'A UNIVERSITY COLLEGE

(A Constituent College of Jomo Kenyatta University of Agriculture & Technology)

SCHOOL OF COMMERCE AND ECONOMICS

FIRST YEAR/ SECOND SEMESTER EXAMINATION FOR THE DEGREE OF

HUMAN RESOURCE DEVELOPMENT

UNIT CODE: HEH – 2103 COST & MANAGERIAL ACCOUNTING

TIME: 3 HOURS DATE: AUGUST

Instructions:-

- Answer question ONE and any other TWO questions.

Compulsory question (30 marks)

Q1a. State FOUR differences between cost accounting and financial accounting (4 marks)

b. Explain any THREE classifications of costs. (3 marks)

c. Differentiate between normal and abnormal process losses and indicated how each is treated in the process costing. (3 marks)

d. 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 – Nil

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;

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

(Answer any TWO questions from the following questions.)

Q2a. Agnes and Peter decided to venture into the same business in the year 2012. They sold the same type of product in the same type of market. They have provided the following budget income statement for the year ending 30th June 2014.

	Agnes's Business Sh`000'	Peter's Business sh`000'
Sales	600,000	600,000
Variable cost	480,000	400,000
Fixed cost	60,000	140,000

	540,000	540,000
Budget net profit	60,000	60,000

Required;

i. Break-even point of each business. (4 marks)
ii. The sales volume at which each business will earn a profit of sh 20,000,000. (3 marks)
iii. Margin of safety. (1 mark)

c. Proget Ltd manufactures a single product, the standard cost per unit is as follows;

	sh
Direct materials	8
Direct labour	30
Variable selling cost	2

Additional information;

1. The budget fixed production overheads per annum amount to sh 7,200,000.
2. The normal production level per annum is 2,400,000 units.
3. In the month of April 2013, the number of units produced and sold were 240,000 units produced and sold were 240,000 units and 200,000 units respectively.
4. The fixed selling cost per month amounts to sh 1,500,000.
5. The selling price per unit is sh 50.
6. There are no opening inventories.

Required;

Income statement for the month of april 2013 using;

i. Absorption costing (5 marks)
ii. Marginal costing (6 marks)

(Total 20 marks)

Q3. XYZ Ltd operates both the interlocking financial and cost accounting book-keeping systems. The following balances and data relate to the cost ledger.

	Sh `000'	sh `000'
Opening balances;		
Financial ledger control A/C		24,283
W-I-P control A/C	10,652	
Raw materials control A/C	9,318	
Finished goods control A/C	4,313	
	24,283	24,283

The following data concerns the period's operations

	Sh`000’
Raw material purchases	41,286
Direct wages	20,444
Indirect wages	6,135
Selling & Distribution salaries	5,157
Admin. Salaries	9,106
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)

Q4. (a) Teta 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**	**Labour hours**
	Sh `000’	
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;

i. Equation in the form of Y = a + bx Using high – low method. (5 marks)

ii. Using ∑Y= 126,511,000 ∑X = 9,482 ∑XY = 102,936,636,000 $\sum X^2$ = 7,852,900
Determine an equation in the form Y = a + bx. (5 marks)

iii. Total labour cost for out sourcing 1,078 labour hours using the equation (ii) above. (2 marks)

b. Good health care hospital has prepared a schedule of estimated overhead costs for its blood test unity, 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 tents 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)

Q5. 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	120,00
	352,000

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

	Departments				
	P	Q	R	X	Y
Budgeted direct labour hrs	16,000	9,000	3,000	-	-
Labour rates per hour (sh)	19	17.5	17	15	15
Floor area occupied (m2)	15,000	5,400	3,000	3,000	2,000
Machine value (sh `000')	14	8.5	6	4	3

Apportionment of overheads (%);

	P	Q	R	X	Y
Service Department X	20%	40%	30%	-	10%
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. (4 marks)

(Total 20 marks)