

HBC 2203: COST AND MANAGERIAL ACCOUNTING



**MURANG'A UNIVERSITY COLLEGE**

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

**MAINCAMPUS**

**ORDINARY UNIVERSITY EXAMINATIONS**

**2015/2016 ACADEMIC YEAR**

**BComY2S1/Y2S2&BBIT Y2S1 SEMESTER EXAMINATIONS**

**FOR THE DEGREE**

**OF**

**BACHELOR OF COMMERCE**

**COURSE CODE: HBC 2203**

**COURSE TITLE: COST ACCOUNTING**

**DATE : 10<sup>TH</sup> DECEMBER, 2015**

**TIME: .....**

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**INSTRUCTIONS TO CANDIDATES**

Question ONE (1) is compulsory

Answer TWO (2) questions

MRUC observes ZERO tolerance to examination irregularities



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**QUESTION ONE**

- (a) Discuss the purpose of Cost Classification (4 Marks)
- (b) Agnes decided to venture into a business in the year 2014. She has provided the following budget income statement for the year ending 30<sup>th</sup> June 2014.

	<b>Sh.</b>	<b>Sh.</b>
Sales (Sh. 60 per unit)		<u>600,000</u>
Variable cost	480,000	
Fixed cost	<u>60,000</u>	<u>540,000</u>
Budget net profit		<u>60,000</u>

**Required;**

- (i) Break-even point in units (2 marks)
- (ii) Margin of safety in units (1 mark)
- (iii) The sales volume at which each business will earn a profit of sh 21,000. (2 marks)
- (iv) The profit to be earned if the sales were Sh. 720,000. (2 marks)
- (c) Ufundiltd, runs three production departments ;namely P,Q and R and Two Service Departments namely A and B. The company has presented the following factory budget for the year ending 31, December 2015

		<b>Sh. "000"</b>	<b>Sh. "000"</b>
Factory Maintenance	p	194	
	Q	156	
	R	<u>178</u>	528
Consumable stores	p	138	
	Q	156	
	R	<u>122</u>	416
Insurance cover	Machinery	1,200	
	Buildings	600	
	Employer's Liability	720	
	Stock in trade	1,440	3,960
Depreciation	Machinery	1,000	
	Buildings	800	1,800
	Machinery	480	
	Buildings	240	720
	Power		1,800
	Rent and Rates		1,080
	Meals and catering		<u>720</u>
			<u><b>11,024</b></u>

**Additional information:**

1.

	<b>Production Department</b>		
	<b>P</b>	<b>Q</b>	<b>R</b>
Power (Kilowatts in “000”)	225	150	125
Book value of machinery(Sh.)	15,000	20,000	15,000
Book value of Buildings(Sh.)	3,000	4,000	3,000
Average inventory value (Sh.)	5,000	10,000	5,000
Area occupied( square metres)	400	300	300
Number of employees	200	100	100
Machine hours( “000”)	100	96	75

2. The Actual overheads incurred for the two service departments include:

<b>Service Department</b>	<b>A</b>	<b>B</b>
	<b>Sh. “000”</b>	<b>Sh. “000”</b>
<b>Actual Overhead</b>	700	650

3. Service Department costs are apportioned as follows

	<b>Production Departments</b>			<b>Service Departments</b>	
	<b>P</b>	<b>Q</b>	<b>R</b>	<b>A</b>	<b>B</b>
A	20%	40 %	30%	-	10 %
B	40%	20%	20%	20%	-

4. The Actual results for production department were as follows

<b>Department</b>	<b>Labour hours</b>
P	1,450
Q	2,600
R	2,000

**Required**

- (i) Overheads Analysis for the five departments(6 Marks)
- (ii) A statement reapportioning the service department costs to the production department respectively for each production department using simultaneous equations method.(4 Marks)
- (iii) The total overhead cost(3 Marks)

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- (iv) The rate per labour hour for each production department.(3 marks)
- (v) The following relates to an item which a company intends to undertake;

Material cost(Sh.)	690,000
Direct Labour cost(Sh.)	430,000
Direct expenses (Sh.)	150,000
Production department “P”	900 labour hours
Production department “Q”	830 labour hours
Production department “R”	750 labour hours

### Required

The price to be quoted for this item , if the company wishes to earn 25% profit of its selling price. (3 marks)

**(TOTAL: 30 MARKS)**

### QUESTION TWO

- (a) Discuss the causes of the Abnormal process losses (6 marks)
- (b) Cost drivers and cost profits (2 Marks)
- (c) Pamoja Company Limited Manufactures a single product branded “Zed” .The standard cost per unit of Zed is given as follows:

ITEM	COST (sh.)
Direct Materials	600
Direct Labour	375
Variable Production Overheads	150
Fixed production Overheads	<u>375</u>
	<u>1,500</u>

Additional Information;

1. Production and sales for April 2015 and May 2015 were given as follows:

	April 2015	May 2015
	Units	Units
Production	2,000	3,200
Sales	1,500	3,000

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2. The selling price per unit of Zed is Sh. 2,625
3. The fixed production Overhead costs have been calculated on the basis of a budgeted normal activity of 36,000 units per annum.
4. The budgeted overheads per annum for administration and marketing were Sh.6,000,000 and Sh.3,000,000 respectively.
5. The variable administration and marketing costs were estimated at 15% of the sales.

**Required**

Profits statements for the months of April 2015 and May 2015 using:

- (i) Marginal costing (6 marks)
- (ii) Absorption costing (6 marks)

**(TOTAL: 20 MARKS)**

**QUESTION THREE**

- (a) Discuss the Key characteristics of process costing. (6 marks)
- (b) Best Ways Chemicals Ltd is a chemical manufacturing company .It’s chemical processing system produces a chemical branded ”EXE” which passes through three production processes.

The following information relates to the production of the chemical:

1. In the month of September 2014 ,8,000litres of basic raw materials costing Sh. 640,000 in total were introduced into process 1.
2. The following costs were incurred during the production period:

Item	Process		
	1	2	3
	Sh.	Sh.	Sh.
Materials(Added)	-	240,000	200,000
Direct labour	360,000	180,000	120,000
Direct expenses	120,000	80,000	24,000

3. The input ,Normal production and the scrap value for losses for each process were as follows:

Process	Inputs(Litres)	Normal production (%)	Scrap Values (Sh.)
1	8,000	92	5.00
2	7,000	95	10.00
3	6,900	97	12.00

4. The output for process 3 was 6,603 units
5. Manufacturing overheads are absorbed into each process at the rate of 30% of the the direct labour cost.

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6. The output of each process passes directly to the next process at a cost without any provision for internal profit.
7. There were no stocks of raw-materials or work-in-progress at the beginning or at the end of the production period.

**Required:**

- |       |                               |           |
|-------|-------------------------------|-----------|
| (i)   | Process 1 Account             | (3 Marks) |
| (ii)  | Process 2 Account             | (3 Marks) |
| (iii) | Process 3 Account             | (3 Marks) |
| (iv)  | Abnormal Process loss Account | (3 Marks) |
| (v)   | Abnormal Process gain Account | (2 Marks) |

**(TOTAL: 20 MARKS)**

**QUESTION FOUR**

(a) Using a well labeled diagram ,explain a Break-Even chart (4 marks)

(b)Kapendo Ltd is small manufacturing company which is in the process of preparing master budget and consequently is developing a policy on how to estimate future costs. As a cost accountant ,you have collected the following data at a level 8,000 units relating to the financial year 2014.

<b>Item</b>	<b>Sh.</b>
Direct materials	125,000
Direct wages	220,000
Indirect Materials	16,000(7,000 Fixed)
General manager’s salary	208,000
Production Overhead	415,000 (215,000 variable)
Depreciation	112,000
Administration expenses excluding managers salary	314,000(Sh.150,000 fixed)
Selling and distribution	75,000(15,000 variable)

**Required**

- (i) A cost estimation equation in the form of  $Y = a + bx$   
 Where Y= Total Cost  
 a= Fixed cost  
 b= variable cost per unit  
 x= units of activity (6 marks)
- (ii) Use the equation in (a)(i) above to estimate the total costs 10,000 units.(2marks)
- (c) The following information was obtained from the records of Kiwanda Ltd for the Ten months, from November 2014 up to 31 August 2015.

<b>Month</b>	<b>Units Produced (X) “000” Units</b>	<b>Overhead cost(Y) Sh “000”</b>
November 2014	9	116
December2014	16	211

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January 2015	14	152
February	38	410
March 2015	21	256
April 2015	25	298
May 2015	20	220
June 2015	15	180
July 2015	15	185
August 2015	11	129

Further information

$$\sum X = 184; \sum Y = 2,157; \sum XY = 47,667; \sum X^2 = 4,014; \sum Y^2 = 535,187$$

### Required

Formulate the overhead cost function in the form of  $Y = a + bX$  Using the least squares method.

(8 marks)

**(TOTAL: 20 MARKS)**