CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF MASTER OF BUSINESS ADMINISTRATION

MBAD 812: MANAGERIAL ACCOUNTING

STREAMS: MBAD (Y1S2)   **TIME: 3 HOURS**
DAY/DATE: FRIDAY 09/7/2021   **8.30 A.M. – 11.30 A.M.**

INSTRUCTIONS: Answer question ONE and any other TWO questions

QUESTION ONE

(a)   Explain the significance of CVP analysis to management and criticize four assumptions   of CVP analysis   [10 marks]

(b)   A multi-product company has the following costs and output data or the last year

		Product		
		X	Y	Z
Selling mix		40%	35%	25%
Selling price		Sh. 20	Sh. 25	Sh.30
Variable cost per unit		Sh.10	Sh. 15	Sh. 18
Total fixed cost	Sh. 150,000			
Total sales	Sh. 500,000			

The company proposes to replace product Z by product S. estimated cost and output data   are:

		Product		
		X	Y	S
Sales mix		50%	30%	20%
Selling price		Sh. 20	Sh 25	Sh. 28
Variable cost per unit		Sh. 20	Sh.1 5	Sh. 14
Total fixed cost	Sh. 150,000			
Total sales	Sh. 500,000			

Analyze the proposed change and suggest what decision the company should take. Consider BEP for whole company and Margin of safety for each proposal.   [14 marks]

(c)   Roasters limited is a coffee-blending firm. It produces a special blend of coffee known   as "Utopia Blend" by mixing two grades of coffee "AB" and "QP" as follows:

Material	Standard mix ratio	Standard price per kg
AB	40%	Sh 120
QP	60%	Sh 100

A standard loss of 15% is expected. During the month of March 2002, the company produced 2,500 kg of "Utopia Blend". The actual quantities blended were as follows:

	Quantity used	Cost (sh)
AB	1,400 kg	175,000
QP	1,600 kg	152,000

Required:
Calculate the following variances

(i)	Material price variance	[4 marks]
(ii)	Material mix variance	[5 marks]
(iii)	Material yield variance	[5 marks]
(iv)	Material cost variance	[2 marks]

QUESTION TWO
Gitoro manufacturing company, manufactures a single product that is processed sequentially in three departments I, II and III. The following information is obtained is respect of process in department II for the month of March 2015. Opening work in process was 2,600 units valued at ks 6,500. Degree of completion:

Materials	60%
Labour	50%
Overheads	40%

Transfer from department during the month was 13,000 units valued at ksh 19,500
Units transferred to department III were 10,600
Direct materials added in department II amounted to ksh 15,900
Direct labour amounted to ksh 13,100
Overheads amounted to ksh 17,500

Work in progress at 30th March 2015 was 1,500 units, which had the following degree completion:

Materials	70%
Labour	50%
Overheads	40%

Normal loss was 10% of production and the scrapped realized ksh 2 per unit

Required:

(a)   Equivalent units of production by element of cost   [5 marks]

(b)   Valuation of finished goods   [5 marks]
(c)   Valuation of closing work in progress   [5 marks]
(d)   Process II account   [5 marks]

QUESTION THREE

(a)   The following information relates to Unilever company ltd on their two popular   products
Alpha and Omega

Details	Booker	Royal	Company wide
Product mix in units	140,000	60,000	200,000
Selling price	72	60	13,680,000
Variable cost	48	14	7,560,000
Fixed cost			3,200,000

Assuming the above product/sales mix compute the break-even point for the whole
company and for each product.   [8 marks]

(b)   **KENBAR CYCLES LIMITED**
        PROFIT AND LOSS STATEMENT FOR YEAR ENDED 31.12.19

	Model A16	Model E35	Model N40	Total
	£'000'	£'000'	£'000'	£'000'
Sales Value	315	385	500	1,200
Direct materials	110	100	150	360
Direct labour	50	40	80	170
Variable overhead	65	60	100	225
Fixed overhead	45	120	220	385
Total Costs	270	320	550	1,140
Profit/(loss)	45	65	(50)	60

Model N40 is incurring losses of £50,000 per annum, which is ten per cent of its sales value

Required:
Should the management drop the model N40 if no fixed cost will be saved.   [6 marks]
(c)   Explain the need for a cost and management accounting system in an organization.
                                                                                 [6 marks]

QUESTION FOUR

(a)   The following data shows how overhead costs in a plant varied with output

Month	Output	Overhead cost (sh)
January	2500	55,000
February	2700	59,000
March	3000	60,000
April	4200	64,000
May	7500	77,000
June	5500	70,000

Required:
(i)   Estimate the cost estimation equation using regression analysis   [6 marks]
(ii)   Estimate the equation using High-low method of cost estimation?   [4 marks]

(b)   Kamau and Otieno both students taking MBAD 812 have been arguing on which method is preferred between regression analysis method and high low method. To end   this argument they have asked you as the best student to advise those giving solid   facts   and observations. Advise them on which method is preferred and why.   [2 marks]

(c)   Differentiate the following terms
(i)   Explicit and implicit costs   [2 marks]
(ii)   Cost allocation and cost absorption   [2 marks]
(iii)   Marginal cost and incremental cost   [2 marks]
(iv)   Product and period costs   [2 marks]

QUESTION FIVE
(a)   XYZ ltd manufactures product "M". The standard cost of producing one unit of   product M is given below
       Direct labour sh. 15
       Direct material sh. 24
       Variable production overhead sh. 6
       Fixed production overhead sh. 15
       Standard selling price per unit sh. 205

       Additional information:
       Fixed production overhead is based on activity level of 12000 units p.a
       All fixed costs accrued evenly throughout the year

Annual non-production costs consists of:

Fixed cost sh. 36,000

Variable cost 15% of annual sales

The units produced and sold in the two quarters ended 30th September 2017 and 31 December 2017 were as follows:

	Quarter Ended	
	30th September 2017	31 December 2017
Units produced	2000	3200
Units sold	1500	3000

Required:

(i)   Profit and loss statement for each quarter under both variable costing and full costing
[16 marks]

(ii)   Reconcile the profits for each quarter   [4 marks]