CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF COMMERCE

BCOM 312: MANAGEMENT ACCOUNTING II

STREAMS: BCOM Y3   **TIME: 2 HOURS**

DAY/DATE: TUESDAY 23/4/2013   **2.30 P.M. – 4.30 P.M.**

INSTRUCTIONS:

Answer question One and any other two questions.
Do not write on the question paper.

Q1.   (a)   The following data shows how overhead costs in a plant varied with labour hours.

Month	Labour hours	Overhead costs
January	2500	55000
February	1700	59000
March	3000	60000
April	4200	64000
May	7500	77000
June	5500	71000
	25400	386000

         (i)   Determine the cost function of the form Y = a + bx using least squares
                method.   [3 marks]
         (ii)   Determine the coefficient of determination.   [4 marks]

       (b)   Explain the following terms as used in management accounting
              (i)   Relevant range   [2 marks]
              (ii)   Marginal costs   [2 marks]
              (iii)   By-product   [2 marks]
              (iv)   Enumerate and explain two functions of a management accounting
                      system.   [4 marks]
              (v)   Non-financial performance measures of performance evaluation.   [3 marks]

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(c) Kapa Oil Refineries Ltd produces two joint products cooking oil and soap oil from a single vegetable oil refining process. Kapa reported the following production and selling price information.

		Cooking Oil KSh.	Soap Oil KSh	JOINT COSTS KSh
1	Joint cost (vegetable oil to split off point)			24,000,000
2	Separable costs beyond split off point	3,000,000	7,500,000	
3	Production (drums)	1,000,000	500,000	
4	Sales (drums)	1,000,000	500,000	
5	Selling price per drum	50	25	
6	No opening stock & closing stock of drums			

Required:

Allocate the KSh.24,000,000 joint costs using Net Realizable Value method.[5 marks]

(d) XYZ Ltd has two divisions A, and B. A makes a component, (K) which is transferred to B for further processing and selling to customers. Division A is required to transfer all the year output of 400,000 units of K to B at 110% of full manufacturing cost. Unlimited quantities of K can be purchased and sold on outside market price at 90/= per unit. The following table gives the manufacturing cost per unit in A and B divisions.

	A (Ksh.)	B (Ksh.)
Direct materials	12	6
Direct manufacturing labour cost	16	20
Manufacturing overhead cost	32	25
Total manufacturing cost per unit	60	51

Required:

Calculate the operating incomes for A and B divisions for the 400,000 units of K transferred under the following transfer pricing methods: (i) market price (ii) 110% of full manufacturing cost.   [5marks]

Q2. (a) Using FIFO apportion the costs on the following data relating to a certain company.

	Units	Materials	Labour overheads
Opening W.I.P	1000	540(USD)	355(USD)
Degree of completion of opening W.I.P		100%	50%
Completed production	3800		
Costs incurred in current process (USD)		2255	1748
Closing W.I.P	1300		
Degree of completion of closing W.I.P		100%	75%

There was no process losses.   [12 marks]

(b)   A department with no opening work in progress introduced 1000 units into the process. 600 are completed, 250 are 20% complete, and 150 units are lost consisting of 100 units of normal loss and 50 unit of abnormal loss. Losses are detected upon completion. Material costs are 8000/= (All introduced at the start of the process) and conversion cost are 4000/=.

Required: Compute the unit cost calculations and show the process account.
                                                                          [8 marks]

Q3.   XYZ Ltd manufactures and sells one product – An infant car seat – at a price of Ksh.50. Variable cost equal KSh.20 per car seat. Fixed costs are 495,000. XYZ manufactures the infant car seat upon receipt of order from its customers. In 2005, it sold 30,000 units of the seat. Dick one of the customers has approached XYZ Ltd and asked if in 2006, XYZ will manufacture a different style of car seat called Ridex. Dick will pay KSh.25 for each unit of Ridex. The variable cost of Ridex is estimated to be ksh.15 per seat. XYZ has enough capacity to produce both the infant car seats and the Ridex that Dick wants without incurring any additional fixed costs. XYZ estimates that n 2006 it will sell 30,000 units of infant car seats and 20,000 units of Ridex. The CEO of XYZ Ltd checks and is surprised that breakeven sales revenues seem to increase in 2006 and asks for your advice before he accepts or rejects the offer.

Required:

(i)   Calculate breakeven point in units and revenues for 2005.   [4 marks]
(ii)   Calculate the breakeven point in units and revenues for 2006 at the
        planned sales mix.   [5 marks]
(iii)   Explain why breakeven point in revenues calculated in requirements
        (i) and (ii) are different.   [5 marks]
(iv)   Should XYZ Ltd accept Dick's offer? Provide supporting calculations.

                                                                          [6 marks]

Q4.   (a)   Company A makes product B in a continuous process while standard quantities
                for the month were as follows:

Material Y	20,000 kg @ 4	80,000
Material X	40,000 kg @ 2.5	100,000
	60,000 kg	180,000
	=====	======

10% losses of materials input are expected. Actual quantities used were:-

Material X :	34,000 kg @ 2.50	85,000
Material Y :	22,000 kg @ 4.00	88,000
	56,000	173,000
	=====	======

Actual output during the month was 53,000 kg.

Calculate   (i)   Material Mix variance   [5 marks]
            (ii)   Material Yield variance   [7 marks]

(b)   Discuss the implication of material variances and state when investigations
       are required.   [8 marks]