



**The Co-operative University of Kenya**  
**END OF SEMESTER EXAMINATIONS AUGUST-2018**

**EXAMINATION FOR THE DIPLOMA IN BUSINESS ADMINISTRATION**  
**(YR I SEM II)**

**UNIT CODE: DMBA 1103**

**UNIT TITLE: COST ACCOUNTING**

**DATE: 22<sup>ND</sup> AUGUST, 2018**

**TIME: 9:00 AM – 11:00 AM**

**INSTRUCTIONS:**

- Answer question **ONE (compulsory)** and any other **TWO** questions

**QUESTION ONE**

a) Based on performance, you have been provided with the following information regarding XYZ Ltd for the year ended 31 December 2017:

**Labor hours**

<u>(Activity level)</u>	<u>Service costs (Shs)</u>
400	200,000
500	210,000
450	203,000
700	242,000
410	195,000
900	250,000

**Required**

Develop a total cost function based on the above data using the high-low method (8 Marks)

b) Explain the difference between the following terms

- i. Product cost and period cost
- ii. Sunk cost and relevant cost
- iii. Controllable cost and uncontrollable cost
- iv. Manufacturing cost and non-manufacturing costs
- v. Prime cost and conversion cost (10 Marks)

c) Differentiate Marginal costing from absorption/full costing (2 Marks)

d) Omwami Ltd produces and sells two products X and Y. The following information is the budget for the coming year

	X	Y	Total
Sales (Units)	120,000	40,000	160,000
Selling price per unit	sh.4	sh..7.50	
Sales	480,000	300,000	780,000
Variable rate per unit	sh.2	sh4	
Total variable cost	<u>240,000</u>	<u>160,000</u>	<u>400,000</u>
Contribution margin	240,000	140,000	380,000
Fixed Costs			<u>250,000</u>
Net income			130,000

Required:

- i. Compute the company's breakeven point (8 Marks)
- ii. Determine the constituents of the same mix i.e. quantities of X and Y (2 Marks)

### QUESTION TWO

- a) Mathew uses the Economic Order Model (EOQ) formula to establish its optimal reorder quantity for its single new material.

The following data relates to the stock costs

P = Shs 15 per item

Ch = Shs50 per order

Co= Shs5 per order

Storage costs = 10% of P + Shs0.20 per unit p.a.

D = 4,000 units

#### Required

- Calculate the Economic Order Quantity (5 Marks)
- b) Smatika Ltd makes a product, Swali, which has a variable production cost of Ksh.6 (production, administration, sales and distribution). There were no variable marketing costs. Fixed costs per annum amount to ksh 45000  
Assuming a 20,000 splashes production and a selling price of Sh10; calculate the contribution and profit using marginal costing principles, if sales were as follows: (10 Marks)
  - a)10000
  - b)15000
  - c) 20,000
- c) Costs can be classified according to their behavior clearly classify costs according to behavior using relevant diagrams (6 Marks)

### QUESTION THREE

- a) State six assumptions of Cost-Volume Profit (CVP) analysis (6 Marks)
- b) Mkulima Ltd has sales of ksh 750000 and the total variable costs of sh 450000, its contribution margin is sh.300000. Assuming the company sold 250000 units during theyear, per unit sale is sh3 and the total variable cost per unit is sh.1.80calculate;
  - i. the contribution margin (4 Marks)
  - ii. contribution margin ratio (4 Marks)
  - iii. Assuming that Jumado Inc. has a fixed cost of sh 300,000,calculate the net income (4 Marks)
- c) State any TWO (2) specific order costing categories (2 Marks)

### QUESTION FOUR

- a) XYZ Company manufactured one product, swafi. The following costs relate to a financial year when 50000 units of swafi are made.

Direct materials sh175000

Direct labour sh115000

Indirect labour sh155000

Investigations into the cost behavior of the costs have revealed that;

- Direct materials behave as variable costs

- Direct labour behaves as variable costs
- Of the Indirect costs, sh130000 behaves as fixed costs, and the remainder as variable costs

Required

- Calculate the cost of one unit of swafi using marginal costing (5 Marks)
- If each unit of swafi sells for sh10 and all production of 50000 units is sold, calculate the profit for the year using marginal costing statement. Show the contribution per unit and the total contribution (15 Marks)

#### QUESTION FIVE

The following data relates to ABC Company limited for the half year period just ended.

Month	Output (Units)	Total cost (shs)
January	50	6,100
February	55	6,450
March	60	7,050
April	50	6,400
May	70	7,850
June	60	7,250

#### Required:

Determine the business field and variable costs for its manufacturing overheads and thus writedown the cost equation in the form of  $Y=a+bX$ . (20 Marks)