



PIONEER INTERNATIONAL UNIVERSITY

Powered by Intellect, Driven by Values.

UNIVERSITY EXAMINATIONS

BACHELOR OF COMMERCE YEAR 2 SEMESTER 2

MAGT 2210: COST MANAGEMENT

DATE: APRIL 2022

TIME: 2 HOURS

INSTRUCTIONS: Answer Question ONE and Any other TWO

QUESTION ONE (30 MARKS)

- a) Clearly and in detail, explain the meaning of each of the following terms and give examples in each case:
- I. Variable costs (3 marks)
 - II. Fixed costs (3 marks)
 - III. Semi –variable costs (3 marks)
 - IV. Semi fixed costs (3 marks)
- b) Clearly, distinguish between relevant (avoidable) and irrelevant (unavoidable) costs and provide examples in each case (10 marks)
- c) Explain the differences among incremental costs, marginal costs and opportunity costs (3 marks)
- d) The following costs were incurred by XYZ limited company for a specified period.

	Shs.	
Direct material	100,000	(variable)
Direct labour	250,000	(variable)
Rent	50,000	(Fixed)
Electricity	300,000	(Variable is 150,000)

Required:

Develop a predictive equation using the account analysis method assuming an activity level of 450 units (5 Marks)

QUESTION TWO (20 MARKS)

a) Due to erratic sales of its sole product – a high capacity battery for laptop computers –PEM Ltd has been experiencing difficulty for some time. The company’s contribution format income statement for the month of January 2022 is given below:

	<u>Ksh</u>
Sales (19,500 units * Ksh 30 per unit)	585,000
Less: Variable expense	(409,500)
Contribution margin	175,000
Less: Fixed expenses	(180,000)
Net operating loss	(4,500)

Required:

- I. Determine the company’s contribution margin (CM), contribution margin ratio (CM ratio) and its break-even point (BEP) in both units and shillings (8 Marks)
 - II. The sales manager is convinced that a 10% reduction in the selling price, combined with an increase of Ksh. 60,000 in the monthly advertising budget, will cause unit sales to double. What will the new contribution format income statement look like if these changes are adopted? (6 marks)
- b) Clearly, state and explain the key assumptions of CVP analysis (6 marks)

QUESTION THREE (20 MARKS)

The production manager of EDOO Company, is concerned about the apparent fluctuation in efficiency and wants to determine how labour costs (in Sh.) are related to volume. The following data presents results of the 12 most recent weeks.

<u>Week No.</u>	<u>Units Produced(X)</u>	<u>Labour Costs(Y)</u>
1	34	340
2	44	346
3	24	287
4	36	262
5	30	220
6	49	416
7	39	337
8	21	180

9	41	376
10	47	295
11	34	215
12	24	275

Required:

- i. Estimate the cost function using:
 - a) The high low method (4Marks)
 - b) Regression analysis (10 Marks)
- ii. Estimate the labour cost to be incurred if the company intends to produce 45 and 34 units. (6 Marks)

QUESTION FOUR (20 MARKS)

- a) A company uses 100,000 widgets per annum, which are acquired at Shs200 each. The ordering and handling costs are Shs250 per order and carrying costs are 15% of the cost of inventory per annum. Required: Calculate the economic order quantity. (4 marks)
- b) Elaborate the assumptions of the model you have applied in the (a) above (6 marks)
- c) The following information was extracted from the books of EDOO Holdings regarding its stocks:

Reorder quantity	4,600
Reorder period	4 weeks
Maximum consumption	1000 units/week
Normal consumption	800 units/week
Minimum consumption	300 Units/week
Maximum reorder period	5 weeks
Minimum reorder period	3 weeks

Required: Determine the following stock levels for EDOO Holdings: i. Re-order level ii. Maximum stock level iii. Minimum stock level (6 Marks)

- d) Define the following terms as used in cost management:
 - i. Holding cost (2marks)
 - ii. Stock out costs (2marks)

