



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BUSINESS ADMINISTRATION

THIRD YEAR SECOND TERM EXAMINATION FOR

DIPLOMA IN ACCOUNTACY

2804/301 MA: MANAGERIAL ACCOUNTING

DATE: 7/6/2021

TIME: 2.30-5.30 PM

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## INSTRUCTIONS:

*The paper contains five questions answer question ONE and any other TWO*

### QUESTION ONE COMPULSORY

- a) Define Management accounting (2 marks)
- b) Explain 4 planning decisions made by a management accountant (8 marks)
- c) The production manager of XYZ 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. (10 marks)

Week No.	Units Produced(X)	Labour Costs(Y)
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:
  - I. The high low method
  - II. Regression analysis
- ii. Assume that the Company intends to produce 45 units Estimate the labour cost to be incurred

**QUESTION TWO**

- a) State 4 assumptions of Cost Volume Profit Analysis. (4 marks)
- b) Assume X Ltd purchases a raw material from an outside supplier at cost of Shs 70 per unit. Assume total annual demand for the product is 9,000 units. Assume the holding cost is Shs 40 per unit and the ordering cost is Shs 50 per order. Assume a quantity discount of 3% of the purchase price is available for orders in excess of 1,000 units. (12 marks)
  - I. Calculate the EOQ and the associated costs.
  - II. Calculate the total costs if the company purchased in batches of 1,000 units (N.B. It is not wise to buy in batches with more than 1,000 units because of the increase rate in carrying exceed the rate at which ordering costs decline).
  - III. Advise the management on the appropriate inventory policy.

**QUESTION THREE**

- a) Discuss four elements of a good discounting technique (8 marks)
- b) The following information relates a project to be undertaken by Elizabeth.

Activity	Preceding activity	Duration
A	-	4
B	A	7
C	A	10
D	C	8
E	D	6
F	B	3
G	B	5
H	F,G	2
I	E,H	12

- i. Draw a network for the project
  - ii. Determine the
    - I. critical path
    - II. Project duration
- (12 marks)

#### QUESTION FOUR

- a) Discuss 3 advantages and disadvantages of high low method (6 marks)
- b) Jamaa limited manufacturers a single product. The following is a summarized income statement for the year ended 2019.

sales		4,000,000
Less Variable cost		
	1,600,000	
Fixed cost	3,600,000	
		<u>(5,200,000)</u>
Net loss		<u><b>1,200,000</b></u>

Calculate

- i. Contribution sales ratio
  - ii. Breakeven point in shillings
  - iii. Sales value if firms profit target is 300,000 in the coming year
  - iv. Margin of safety in shillings at the target profit sales level (10 marks)
- c) Discuss two benefits of management accounting to an organization (4 marks)

#### QUESTION FIVE

- a) Tenda limited wants to invest in either project A or B whereby the cost of capital is 12%.

		PROJECT A	PROJECT B
CASH OUTLAY		2,000,000	3,000,000
CASH INFLOWS			
Year	1	300,000	800,000
	2	500,000	1900,000
	3	1,100,000	1,500,000
	4	700,000	600,000
	5	400,000	200,000

For each project determine

- i. Payback period
- ii. Net present value

- iii. Profitability index
  - iv. Advise the management on the project to invest in. (12 marks)
- b) Texus limited intends to either manufacturer a product or purchase the product from the market. The manufacturing probability is 0.7 when successful if unsuccessful the estimated loss will be 2000,000. If the manufacture is successful the outcome and corresponding probabilities will be as follows.

<b>Out come</b>	<b>Probability</b>	<b>Profit</b>
Good	0.3	8000,000
Moderate	0.5	4000,000
Poor	0.2	250,000

If the production is purchased, the expected profit will be 1,500,000

- i. Draw a decision tree to represent the information above
- ii. Advise the management on whether to manufacture or purchase the product (8 marks)