



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 17 May 2021.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) Describe four assumptions of cost-volume-profit (C-V-P) analysis. (4 marks)
- (b) Westwood Holdings Ltd. is a manufacturer of camping trailers. The factory is located near Kakamega town in Kenya and nearly 70% of the company's output is exported to Uganda, Rwanda and Burundi.

The fixed costs are Sh.200,000,000 per annum while the variable costs are Sh.600,000 per trailer. The trailers are sold at Sh.800,000 each.

Required:

- (i) Explain the term "contribution". (1 mark)
- (ii) The contribution made by each trailer. (2 marks)
- (iii) The number of trailers that Westwood Holdings Ltd. should sell in order to break-even. (3 marks)
- (iv) The profit to be made by Westwood Holdings Ltd. assuming 2,000 trailers are sold. (3 marks)
- (v) Due to a new entrant in the market, Westwood Holdings Ltd. is forced to lower its selling price to Sh.700,000 per trailer in the coming year.
- Evaluate the impact that this price cut will have on the company's annual profit. (4 marks)
- (vi) Summarise three limitations of the cost-volume-profit (C-V-P) analysis. (3 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Cost classification is the grouping of related costs for the purposes of cost control to facilitate cost prediction and to aid decision making. With regard to this statement, identify and explain the following bases of cost classification:

- (i) Relevance. (2 marks)
- (ii) Traceability. (2 marks)
- (iii) Controllability. (2 marks)
- (iv) Discretion. (2 marks)

- (b) Bondeni Ltd. is a manufacturing company which is divided into two production departments namely; A and B and two service cost centres X and Y.

The following is the summary of overhead costs for the month of September 2020:

	Sh.	Sh.
Works manager's salary		40,000
Power		210,000
Contribution to provident fund		90,000
Plant insurance		40,000
Depreciation of plant and machinery		200,000
Canteen expenses		120,000
Rent		60,000
Indirect wages:		
A	122,000	
B	96,000	
X	100,000	
Y	<u>50,000</u>	
		<u>368,000</u>
		<u>1,128,000</u>

The following information is also provided from the various departments:

	Department			
	Production			Service
	A	B	X	Y
Number of employees	16	8	4	4
Area occupied (in square feet)	2,000	3,000	500	500
Value of plant (Sh.)	750,000	1,000,000	250,000	-
Wages (Sh.)	40,000	20,000	10,000	5,000
Horse power ratio	3	3	1	-

Required:

Apportion the above overhead costs to the various departments using the most suitable bases. (12 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Explain two differences between "interlocking cost book keeping system" and "integrated cost book keeping system". (4 marks)
- (b) The Knickers Company manufactures rocking chairs. Budgeted sales for the first five months of the year 2021 are as follows:

	Budgeted sales (units)
January	200
February	240
March	180
April	160
May	240

Each rocking chair requires 10 square feet of Oak wood at a cost of Sh.2,000 per square foot. The company wants to maintain an inventory of chairs equal to 25% of the following month's sales. At the beginning of the year, 40 chairs were in stock.

Assume the company maintains an inventory of Oak wood equal to 10% of the next months' needs. At the beginning of the year, 240 square feet of Oak wood were in stock. Inventory of Oak wood as at 31 March 2021 is estimated to be 180 square feet.

Required:

- (i) Production budget, in units, for each of the first four months. (8 marks)

- (ii) Purchases budget, in shillings, for each of the first three months. (8 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Explain four applications of marginal costing in an organisation. (8 marks)

(b) Modern Computers Ltd. deals in new and refurbished computers. The old computers are repaired and then sold at a slightly lower price. Repair costs have been fluctuating greatly and the management wants to establish a predictable cost relationship for cost control purposes.

The following details have been obtained from the records of the company for the past eight weeks regarding the number of computers repaired and total cost incurred:

Week	Number of computers repaired	Total cost incurred Sh."000"
1	300	232
2	200	195
3	600	320
4	500	290
5	400	248
6	450	240
7	450	230
8	350	230

Required:

Formulate the cost function in the form of $y = a + bx$ using:

(i) The high-low method. (4 marks)

(ii) The regression analysis method. (6 marks)

(iii) In week 9, the company expects delivery of 550 computers to be repaired. Using the equation obtained in (b) (ii) above, estimate the total cost to be incurred. (2 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Explain three objectives of material control in an organisation. (6 marks)

(b) Ng'arisha Chemicals Limited produces a range of products including a detergent branded "Ng'ara" which passes through three processes before completion and transfer to finished goods stock.

During the month of April 2020, data relating to Ng'ara was as follows:

	Process			Total
	1 Sh.	2 Sh.	3 Sh.	Sh.
Basic raw material (10,000 units)	6,000	-	-	6,000
Materials added	8,500	9,500	5,500	23,500
Direct wages	4,000	6,000	12,000	22,000
Direct expenses	1,200	930	1,340	3,470
Production overheads	-	-	-	16,500
Output (units)	9,200	8,700	7,900	
Expected loss (%)	10	5	10	

Additional information:

1. There was no stock of work-in-progress at the beginning or at the end of any process.

2. Normal process loss was scrapped as follows:

Process	Price per unit (Sh.)
1	0.2
2	0.5
3	1.0

3. Production overheads are absorbed as a percentage of direct wages.

Required:

(i) Process 1 account. (4 marks)

(ii) Process 2 account. (4 marks)

(iii) Process 3 account. (4 marks)

(iv) Abnormal gain account. (2 marks)

(Total: 20 marks)