



20

*(Knowledge for Development)*

# KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS

2016/2017 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER

SPECIAL/SUPPLEMENTARY EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL  
ECONOMICS AND RESOURCES MANAGEMENT

COURSE CODE: IAE 286

COURSE TITLE: INTRODUCTION TO MANAGERIAL ACCOUNTING AND  
MANAGERIAL ECONOMICS

DATE: 22<sup>ND</sup> SEPT.2017

TIME: 3 PM – 5 PM

---

## INSTRUCTIONS TO CANDIDATES

Answer BOTH questions in section A and any TWO in section B.

TIME: 2 Hours

## SECTION A (30 MARKS)

Attempt **ALL** the questions from this section

1. (a) Distinguish “Managerial Accounting” from “Financial Accounting”. (8 marks)
- (b) “Managerial Accounting is not as important or useful in non-profit organizations such as schools, universities, hospitals and government as it is in private business firms, since these organizations do not strive to make profits”. Evaluate the above statement. (2 marks)
- (c) List the basis on which organizations can classify the costs they incur. (5 marks)
- (d) Distinguish “Variable Costs” from “Semi-Variable Costs” as used in managerial accounting. (2 marks)
- (e) List the **three** approaches to break-even analysis. (3 marks)
2. (a) Describe how can one choose between alternative-options (3 marks)
- (b) Identify the conditions under which the variable pricing model can be used.(3 marks)
- (c) Define the following terminologies as used in managerial accounting:
  - (i) Contribution Margin (2 marks)
  - (ii) Margin of Safety (2 marks)

## SECTION B (40 MARKS)

Answer any **TWO** questions from this section

3. Ideal Farm Inputs Company Ltd; a manufacturer of animal feeds has collected the following information after its first year of operation. Sales were Kes 1,800,000 on 100,000 units; selling expenses Kes 400,000 (30% variable and 70% fixed); direct materials Kes 456,000; direct labour Kes 250,000; administrative expenses Kes 484,000 (50% variable and 50% fixed); manufacturing overhead Kes 480,000 (40% variable and 60% fixed). Its top management has asked you to do a CVP analysis so that it can make plans for the coming year. It has projected that unit sales will increase by 20% next year.
  - (a) Compute:
    - (i) the contribution margin for the current year and the projected year, and (4 marks)
    - (ii) the fixed costs for the current year. (Assume that fixed costs will remain the same in the projected year.) (2 marks)

- (b) Compute the break-even sales volume in units and Kes. (2 marks)
- (c) The company has a target net income of Kes 213,000. What is the required sales in Kes for the company to meet its target? (2 marks)
- (d) If the company meets its target net income, by what percentage could its sales fall before it is operating at a loss? (That is, what is its margin of safety ratio?) (2 marks)
- (e) The company is considering a purchase of equipment that would reduce its direct labour costs by Kes 100,000 and would change its manufacturing overhead costs to 10% variable and 90% fixed (assume total manufacturing overhead cost is Kes 480,000, as above). It is also considering switching to a pure commission basis for its sales staff. This would change selling expenses to 80% variable and 20% fixed (assume total selling expense is Kes 400,000, as above).
- (i) Compute the contribution margin and (2 marks)
- (ii) Compute the contribution margin ratio, and; (2 marks)
- (iii) Recompute the break-even sales in Kes (2 marks)
- (f) Comment on the effect each of the management's proposed changes on the break-even point. (2 marks)
4. Given that the ABC Fertilizer Manufacturing Co. recorded the following factory overhead costs and of direct labour hours for the last four months of 2016:

Month	Direct Labour Hours (x)	Factory Overhead (y) Kes
July	2,500	714,000
August	1,500	510,000
September	2,000	612,000
October	3,000	816,000
<b>Total</b>	<b>9,000</b>	<b>2,652,000</b>

Determine the monthly fixed overhead and the variable overhead rate per direct labour (DLH) using

- (a) the high-low method. (8 marks); and
- (b) the least squares method (12 marks).

5. (a) Davies Omondi is considering replacing an old tractor, which he purchased for \$15,000 five years ago, with some labour-saving equipment. The old tractor is being depreciated at The following alternative equipment options are available *for consideration*.

*Tractor A.* The purchase price of tractor A is \$25,000, and yearly cash operating expenses are \$5,000.

*Tractor B.* The purchase price of tractor B is \$28,000, and yearly cash operating expenses are \$4,500.

- (i) Determine the incremental costs, if any, in this alternative-choice situation. (4 marks)
- (ii) Determine the sunk costs, if any, in this situation. (2 marks)

- (b) The following information has been assembled by Sucrose Lemons Ltd which manufactures and retails products A and B. The details given below relate to the year commencing 1 July 2015:

							Standard		Product		
							Price			A	B
							Per Kg			Kg	Kg
Direct material	-M1				Sh. 4			15	20		
		-M2					Sh. 5			14	12
							Standard		Product		
							Rate			A	B
							Per hour		hours	hours	
Direct Labour		-L1			Sh. 8				20	15	
		-L2					Sh. 10			22	24

Fixed production overhead is applied on direct labour basis. Administration, selling and distribution expenses are recovered at the rate of 20% of production cost and profit loaded at 25% of standard production cost.

	Product	
	A	B
	Sh. (000)	Sh. (000)

Projected sales for the year	12,033	10,053
------------------------------	--------	--------

Finished goods stock position valued at production cost is expected to be as follows:

	Product	
	A Sh. (000)	B Sh. (000)
1 July 2015	3,000	2,000
30 June 2016	5,000	4,000

Direct material stocks valued at standard prices are as follows:

	Material	
	M1	M2
	Sh. (000)	Sh. (000)
1 July 2015	200	250
30 June 2016	220	270

For the year to 30 June 2016, fixed production overhead has been estimated at Sh. 1,800,000 and direct labour at 1,200,000 hours.

**Required**

- (i) Production budget in units. (8 Marks)
- (ii) Purchases budget in value. (6 Marks)