



**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

MAIN /NAIROBI, /BUNGOMA, /WEBUYECAMPUS,

**UNIVERSITY EXAMINATIONS  
2016/2017 ACADEMIC YEAR**

**MAIN EXAM**

**SECONDYEARSEMESTER TWO EXAMINATIONS  
FOR THE DEGREE  
OF  
BACHELOR OF COMMERCE**

**COURSE CODE: BCA 208**

**COURSE TITLE: COST ACCOUNTING**

**DATE: Wednesday, 7<sup>th</sup> June 2017**

**TIME: 3.00-5.00pm**

**INSTRUCTIONS TO CANDIDATES**

Attempt QUESTION ONE and any other two questions

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over. ►

BCA 208



**QUESTION ONE (30 MARKS)**

- a) Differentiate between cost accounting and financial accounting. (4marks)
- b) James is being paid sh.12 per hour. The time allowed to complete a task is 10 hours. The actual timetaken to complete the job is only 8 hours. Determine his earnings using Halsey bonus scheme. (4 marks)
- c) ABC Ltd. which deals in products Cee and Dee wishes to prepare an operating budget for the forthcoming period. The information regarding the products, cost and sales level is as follows:

		DEPARTMENT	
		Cee	Dee
Materials Required	AYE Kgs	4	6
	BEE litres	2	8
Sales level		4000	3000
Opening stock		200	400

The following additional information is relevant:

- Material Aye costs Sh. 100 per kg and material Bee costs Sh.70 per litre. ✕
- Opening stocks were 600kg for material Aye and 2,000 litres for material Bee.
- Closing stock of both materials and finished goods will be enough to meet 10% of demand.

**Required**

- i. Material purchase budget. (4 marks)
- ii. Material usage budget. (4 marks)
- d) Explain the assumptions behind the determination of Economic Order Quantity (EOQ). (5 marks)
- e) The following information is given for material Y-20.

**Consumption:**

Annual	360,000 units
Maximum	1,200 units/day
Minimum	800 units/day
Normal	900 units/day
Re-order period	12 – 24 days
Re-order quantity	32,000 units

**Required:**

- i) Re-order level. (3 marks)
- ii) Minimum stock level. (3 marks)
- iii) Maximum stock level (3 marks)

**QUESTION TWO ( 20 MARKS)**

- a) High-tex Engineering Company Limited wishes to set flexible budgets for each of its operating departments. A separate maintenance department performs all routine and

major repair works on the company's equipment and facilities. The company has determined that maintenance department performs all routine and major repair works on the company's equipment and facilities. The company has determined that maintenance cost is primarily a function of machine hours worked in the various production departments. The maintenance costs incurred and the actual machine hours worked during the months of March, April, May and June 2017 were as follows:

Month	Machine hours in Production departments	Maintenance department's Costs
		Sh.
March	800	350
April	1,200	350
May	400	150
June	1,600	550

**Required:**

- i. Determine the cost estimation function using:
  - High-low method. (6 marks)
  - Regression analysis (7 marks)
- ii. Using the regression function estimate:
  - The maintenance costs that would have been incurred if the machine hours were expected to be 900 in the month of July 2016. (1 mark)
  - The maximum machine hours that would have been worked if the maintenance cost incurred had been limited to Sh.400, 000 for the month of July 2016. (6 marks)

**QUESTION THREE( 20 MARKS)**

- a) Explain the differences that exist between the following terms as used in cost accounting:
  - (i) Allocation of overheads (3 Marks)
  - (ii) Apportionment of overheads (3 Marks)
  - (iii) Absorption of overheads (3 Marks)
- (b) Explain FOUR reasons for overhead under absorbed and overhead over absorbed. (6 Marks)
- (c) Specify and explain the factors to be considered in determining whether to utilize a single factory wide recovery rate for all production overheads or a separate rate for each cost centre, production or service department. (5Marks)

**QUESTION FOUR (20 MARKS)**

- a) List and explain the advantages of standard costing. (4marks)
- b) A manufacturer of school bags prepares the following forecast for his factory for next Year:

Bags to be produced and sold	18,000 units
Average selling price per unit	Sh 45

Average variable cost per unit Sh.29  
Directly attributable fixed Production costs for the year Sh 90,000  
General office costs for the year Sh150,000

**Required**

- i Calculate the breakeven point in terms of number of bags to be sold. (4 marks)
  - ii Calculate the margin of safety expressed as a percentage of the forecast number of bags to be sold. (3 marks)
  - iii If the manufacturer wishes to make a profit of Sh 80,000 next year, how many bags must he sell next year in order to achieve this target profit? (3marks)
- c) A calculator manufacturing company finds that it costs Sh. 625 to make a calculator but the same is available in the market at Sh. 575 each with assurance of continued supply.

The cost breakdown is as follows:

	Sh. Per unit
Direct materials	275
Direct labor	175
Variable production overheads	50
Fixed production overhead	<u>125</u>
	625

Of the fixed production overhead, 40% are specifically incurred in making the calculator. The balance will be incurred irrespective of the decision made.

**Required:**

- i) Should the company make or buy the calculator? (3 marks)
- ii) If the supplier offered the calculator for Sh. 525 per calculator, would your decision change? Explain. (1 mark)
- iii) Explain two factors that will need to be considered before such a decision is made. (2 marks)