



# MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING BANKING AND FINANCE

SECOND YEAR SECOND SEMESTER EXAMINATION FOR

DIPLOMA IN PROCUREMENT & SUPPLY CHAIN MANAGEMENT

BAC 031: COST AND MANAGEMENT ACCOUNTING

DATE: 22/10/2020

TIME: 8:30 – 10:30 AM

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## INSTRUCTIONS:

*Answer question one and any other two questions.*

*Show your working where necessary.*

### QUESTION ONE (COMPULSORY) (30 MARKS)

- a) The following information relates to the activities in the production department for the month of February, 2020.

Direct wages	sh. 300,000
Direct materials	sh. 300,000
Labour hours worked	44,000
Machine hours used	12,000
Total overhead chargeable to the department	sh. 400,000.

On job number MMN11 produced in the department during the period, the relevant data was as follows;

Direct wages	sh. 8,000
Direct materials	sh. 16,000
Labour hours worked	1,200
Machine hours used	400

Calculate the total cost of job number MMN11 using the following methods of overhead absorption.

- i) Direct material
  - ii) Percentage of prime cost
  - iii) Direct machine hours. (9 marks)
- b) Explain the differences between cost accounting and management accounting (8 marks)
- c) Sayare company has three production departments, J, K and L and two service departments C1 and C2. The following overheads for the company for the month of March 2020 were as follows;

Production Departments	Shs.
J	14,500
K	10,000
L	14,500

Service Departments	
C1	5,000
C2	3,900

The service departments expenses are charged on a percentage basis as follows;

Service department	J	K	L	C1	C2
C1	30%	30%	20%	-	20%
C2	40%	40%	10%	10%	-

Prepare a statement showing the total overhead chargeable to the three production departments by using repeated distribution method (13 marks)

### QUESTION TWO (20 MARKS)

The trading results of Sema company Ltd for the first year of business which ended 31<sup>st</sup> December 2018 are expected as follows;

	Ksh	ksh
Sales at (ksh. 5 per unit)		400,000
Less;		
Materials	160,000	
Labour	64,000	
Variable overheads	40,000	
Fixed overheads	60,000	324,000
Profit		76,000

During the year 2019, the factory worked at 50% capacity and the marketing manager has estimated that the quantity sold could be doubled in 2020 if the selling price is reduced to ksh. 4 per unit. No change is anticipated in unit variable cost, but certain administrative changes to cope with the additional volume of work increases fixed overheads by ksh.10,000

- a) Evaluate the marketing manager`s proposal
- b) Assuming the marketing manager`s proposal is implemented, calculate what quantity would be sold in 2020 to yield a profit of ksh. 105,000

**QUESTION THREE (20 MARKS)**

The following information relates to Tembo cement manufacturing company;

Year	units of cement produced in millions	Manufacturing overheads in millions
2015	40	500
2016	65	600
2017	30	495
2018	90	700
2019	50	550

- i. Using High- Low method, determine the cost function that can be used in predicting the manufacturing cost of cement
- ii. Using the cost function in (i) above estimate the cost the company will incur in 2020 if it expects to manufacture 85,000,000 units of cement.

**QUESTION FOUR (20 MARKS)**

- a) Explain the following terms as used in cost accounting.
  - i. Cost unit (2 marks)
  - ii. Cost center (2 marks)
  - iii. Cost allocation (2 marks)
  - iv. Cost apportionment (2 marks)
  - v. Profit centre (2 marks)
- b) Explain FIVE objective of stock control (10 marks)

**QUESTION FIVE (20 MARKS)**

a) The following transactions relate to Material QWE for the month of December 2019

<b>Date</b>	<b>Purchases</b>	<b>Issues</b>	<b>Cost per unit</b>
October			
2	450	—	100
3	700	—	120
9	—	500	—
11	800	—	160
12	—	600	—
16	—	400	—
19	1,000	—	180
24	—	500	—
25	500	—	200
30	—	300	—
31	—	300	—

**Required:**

Prepare the stores ledger card using First in First Out (FIFO) method of stock valuation.

(11 marks)

b) The following information relates to work done by Jane and Joan in a manufacturing firm: Hours allocated for the work are 80 and the hourly rate is Sh. 400. Jane took 45 hours while Joan took 56 hours to complete the job.

**Required:**

Compute the total wages to be paid to each worker under Rowan bonus scheme. (9 marks)