# MACHAKOS UNIVERSITY

**University Examinations for 2018/2019 Academic Year**

**SCHOOL OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF BANKING, ACCOUNTING & FINANCE**

**SECOND YEAR SECOND SEMESTER EXAMINATION FOR**

**BACHELOR OF COMMERCE**

**BAC 202: COST ACCOUNTING 1**

**DATE: 6/5/2019**                                            **TIME: 11.00-1.00 PM**

**INSTRUCTIONS:** Attempt Question One and any other Two Questions

**QUESTION ONE (COMPULSORY) (30 MARKS)**

a)  Under a premium bonus scheme, workers received a guaranteed basic hourly minimum rate of pay plus a bonus of 50% of the time saved. No payment is paid beyond the time allowed but the bonus which is paid at the basic hourly rate is applicable to the accepted output only. No penalty is imposed on rejected output. The following details are available for the month of January 2003

| Worker | A | B | C |
|---|---|---|---|
| Time allowed per unit (hrs) | ¼ | 1/6 | ½ |
| Units produced | 474 | 684 | 175 |
| Units rejected | 54 | 84 | 25 |
| Time taken (hrs) | 78 | 72 | 80 |
| Basic Pay per hour (Kshs) | 6 | 6 | 3 |

**Required**

From the above information calculate for each employee

a)  i)    Bonus hours and amount of bonus paid

ii)   Gross wages earned

iii)  Labour cost for each good unit sold                                    (20 marks)

b)  Outline the procedure that may be followed in installing a cost accounting system.
                                                                                    (4 marks)

c)    State three main features of contract costing.                              (3 marks)

d)    State three advantages of regression analysis as a method of cost estimation.
                                                                                  (3 marks)

## QUESTION TWO (20 MARKS)

a)    GEMA limited has three production departments, X, Y and Z and two service departments S1 and S2. The following extract information relates to the allocation overhead for the month of December, 2018;

| Production Departments | Shs. |
|---|---|
| X | 1,000,000 |
| Y | 1,800,000 |
| Z | 1,600,000 |

**Service Departments**

| | |
|---|---|
| S1 | 800,000 |
| S2 | 620,000 |

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

| Service department | X | Y | Z | S1 | S2 |
|---|---|---|---|---|---|
| S1 | 30% | 30% | 20% | - | 20% |
| S2 | 40% | 20% | 30% | 10% | - |

Prepare a statement showing the total overhead to be absorbed by each production department.                                                        (12 marks)

b)  **E**xplain four disadvantages of piece rate method of computing wage.        (8 marks)

## QUESTION THREE (20 MARKS)

The following information relates to SEMA manufacturers that produces only one

product;

| Kshs. | |
|---|---|
| Fixed production cost | 20 |
| Variable production cost | 90 |
| Variable selling expenses | 50 |
| Selling price | 260 |
| Fixed selling cost | 25 |

The fixed costs are usually based on a production level of 100,000 units and are expected to increase by kshs. 80,000 for every year increase in production of 22,000 units.

The budget below relates to the year ended 31$^{st}$ December 2018;

**Units**
Production
Stocks (1.1.2018)            133,000
Stocks (31. 1. 2018)          27,000

a)  Prepare a profit statement using marginal costing method.            (10 marks)

b)  Explain five objectives of stock control.                           (10 marks)

## QUESTION FOUR (20 MARKS)

a)  In the manufacture of product QP, 3,000 kgs of material at shs. 10 per kg were
    supplied to process 1. Labour costs amounted to shs. 3,500 and production overheads
    of shs. 2,700 were incurred. The normal loss has been estimated at 15%, while the
    actual production was 1,800kg.
    Prepare the process account and calculate cost per unit.             (10 marks)

b)  With the help of graphs, explain the cost behavior of semi variable costs and semi
    fixed costs as the activity level increases.                        (10 marks)

## QUESTION FIVE (20 MARKS)

The following information relates to item P003 stocked by 2000 products Ltd for the
month of April 2017:

|  | **Receipts** | **Issues** |  |
| --- | --- | --- | --- |
| **Date** | **Units** | **Units** | **Unit cost (Sh)** |
| April3 | 2,400 |  | 18 |
| 4 |  | 3,200 |  |
| 6 | 2,600 |  | 20 |
| 12 |  | 2,700 |  |
| 14 | 3,000 |  | 22 |
| 18 | 2,800 |  | 21 |
| 20 |  | 2,200 |  |
| 22 | 2,600 |  | 23 |
| 25 |  | 3,800 |  |
| 26 | 3,100 |  | 24 |
| 27 | 2,500 |  | 25 |
| 28 | 3,200 |  | 26 |
| 29 |  | 6,900 |  |

The closing balance for March 2017 was a batch of 3,000 units received at a unit price of
Sh 19.

**Required:**
a)  Stores perpetual inventory record for item P003 for May 2017 under LIFO system of
    stores issues.                                                      (14 marks)
b)  Closing stock valuation.                                            (6 marks)

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