

# TECHNICAL UNIVERSITY OF MOMBASA School of Business <br> DEPARTMENT OF ACCOUNTING \& FINANCE 

UNIVERSITY EXAMINATIONS FOR
MASTERS OF BUSINESS ADMINISTRATION
MASTERS OF SCIENCE FINANCE OPTION

BAC 5102: MANAGEMENT ACCOUNTING

## SPECIAL/SUPPLEMENTARY EXAMINATIONS <br> SERIES: JUNE/JULY 2015 <br> TIME: 3 HOURS

## INSTRUCTIONS:

- Answer question ONE (Compulsory) and any other THREE questions
- Do not write on the question paper.

This paper consists of Four printed pages

## QUESTION 1 (Compulsory)

Management Accounting and Financial Accounting are alternatively used to provide information to stakeholders. Illustrate the usage of the two accounting terminologies in communicating economic information to permit decision making by the users of the information and provide the major differences between the two.

## QUESTION 2

TUM Enterprises Ltd has recently established a water processing plant and wants to know how the labour costs are related to the volume of production. The following data presents results for the last 12 weeks

| Week | Units produced <br> $(\mathbf{X})$ | Labour Cost <br> $(\mathbf{Y})$ |
| :--- | :--- | :--- |
| 1 | 34 | 340 |
| 2 | 44 | 346 |
| 3 | 24 | 287 |
| 4 | 36 | 262 |
| 5 | 49 | 416 |
| 6 | 30 | 220 |
| 7 | 21 | 180 |
| 8 | 39 | 337 |
| 9 | 47 | 376 |
| 10 | 41 | 295 |
| 11 | 34 | 215 |
| 12 | 24 | 275 |

## Required:

a) Estimate the cost function using:
i) The high-low method
ii) Regression analysis.
b) Assume that the company intends to produce 34 and 45 units respectively in the next period. Estimate the labour cost to be incurred.
(10 marks)

## QUESTION 3

a) The theory of the experience curve is that an organization may increase its profitability through obtaining greater familiarity with supplying its products or service to customers. Discuss the extent to which the application of experience curve theory can help organizations to prolong the life cycle of its products or service.
b) A customer has asked your company to prepare a bid on supplying 800 units of a new product. Production will be in batches of 100 units. You estimate that the cost for the first batch of 100 units will average KES 100 per unit. You also expect that a $90 \%$ learning curve will apply to the commulative labour cost on the contract

## Required:

i) Prepare all estimate of the labour costs of fulfilling the contract.
(5 marks)
ii) Estimate the incremental labour cost of extending the production run to produce an additional 800 units.
(5 marks)
iii) Estimate the incremental labour cost of extending the production run from 800 to 900 units.
(5 marks)

## QUESTION 4

Technical University of Mombasa (TUM) is planning to sell its fabricated products in the upcoming Commission for University Education in Mombasa at KES 9 each. The products costs KES 5 to produce and TUM shall incur KES 2,000 to hire a booth in the exhibition.

## Required:

a) Compute the break even point in units and KES.
b) Compute the margin of safety.
c) Compute the number of units that must be sold to earn a profit before tax of $20 \%$.
d) Compute the number of units that must be sold to earn an after tax profit of KES 1,640, assuming that the tax rate is $30 \%$.

## QUESTION 5

a) Pwani Oil makes four products with the following information:

| Product | W | $\mathbf{X}$ | $\mathbf{Y}$ | Z |
| :--- | :--- | :--- | :--- | :--- |
| Production (units) | 1,000 | 2,000 | 4,000 | 3,000 |
| Units marginal costs | 4 | 5 | 2 | 4 |
| Direct material | 8 | 9 | 4 | 6 |
| Direct labour | $\underline{2}$ | $\underline{3}$ | $\underline{1}$ | $\underline{2}$ |
| Variable overhead | $\underline{\mathbf{4}}$ | $\underline{\mathbf{1 7}}$ | $\underline{\mathbf{1 7}}$ | $\underline{\mathbf{1 2}}$ |
|  | 1,000 | 5,000 | $\underline{6,000}$ | 8,000 |
| Attributable fixed cost (shs.) | 16 | 21 | $\underline{\underline{0}}$ | 18 |
| Subcontractor price |  |  |  |  |

Assume that the fixed cost is Ksh. 30,000 and that the total machine hour available is 27,000 hours during the budget period while the machine hours per unit required to produce the products are:

|  | Machine hours |
| :--- | :--- |
| W | 4 |
| X | 5 |
| Y | 3 |
| Z | 6 |

## Required:

Advise the company on which products to make and the ones to buy externally.

