# TECHNICAL UNIVERSITY OF MOMBASA

***Faculty of Business & Social Studies***

DEPARTMENT OF BUSINESS STUDIES

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

**BAC 5102: MANAGEMENT ACCOUNTING**

END OF SEMESTER EXAMINATIONS
**SERIES:** APRIL 2015
**TIME:** 3 HOURS

**INSTRUCTIONS:**

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

***This paper consists of Three printed pages***

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**QUESTION 1 (Compulsory)**

Pwani Oil Company produces a toxic product, 'Coros' that must be sold in the month produced or else discarded. Pwani Oil can manufacture "coros" itseself at a variable cost of sh. 40 per unit or they can purchase it from an outside supplier at a cost of sh. 70 per unit. Pwani oil can sell 'coros' at sh. 80 per unit. Production levels must be set at the start of the period. The production process is such that at least 9000 units must be produced during the period. Pwani oil management must decide whether to produce 'Coros' or whether to purchase it from the outside supplier.

The possible sales of 'coros' and their probabilities are:

| Demand | Probability |
|---|---|
| 4,000 | 0.4 |
| 7,000 | 0.5 |
| 11,000 | 0.1 |

**Required: compute the:**

a) Expected demand. **(5 marks)**

b) Expected profit from purchasing 'coros' from an outside supplier and selling it. **(5 marks)**

c) Expected profit from manufacturing and selling. **(10 marks)**

d) Standard deviation of profits from purchasing and selling. **(5 marks)**

**QUESTION 2**

a) Explain briefly how the following methods are used in cost estimation
   i) Learning curve. **(4 marks)**
   ii) Engineering Analysis **(3 marks)**
   iii) High low method **(4 marks)**
   iv) Regression analysis. **(4 marks)**

b) Explain why managers may be reluctant to participate fully in setting budgets, indicating the negative side effects which may arise from the imposition of budgets by senior management. **(10 marks)**

**QUESTION 3**

a) The current thinking in Management Accounting contents that Activity Based Costing (ABC) provides better information concerning products costs and decision making than traditional management accounting techniques. Whereas ABC gives different impression of product costs, it is not necessarily a good idea and it may be advisable to continue the improving traditional cost accounting techniques before moving to ABC.

**Required:**

   i) Explain cost behaviour issues underlying the use of ABC. **(7 marks)**

   ii) Explain why ABC might be more suitable for modern manufacturing environment than traditional cost accounting technique. **(8 marks)**

b) Discuss the extent to which the application of the experience curve theory can help an organization to prolong the life cycle of its products or service. **(10 marks)**

## QUESTION 4

A company sells two products A and B with contribution margin ratios of 40 and 30 percent and selling prices of sh. 5 and sh. 2.50 a unit. Fixed costs amount to sh. 72,000 a month. Monthly sales average 30,00 units of product A and 40,000 units of product B.

**Required:**

a) i) Assuming that three units of product A are sold for every unit of product B, calculate the sales volume necessary to breakeven in shillings and in units. **(5 marks)**

ii) Calculate the margin of safety in shilling. **(5 marks)**

b) If the company spends an additional sh. 9,700 on advertising, sales of product A can be increased to 40,000 units a month. Sale of product B will fall to 32,000 units a month if this is done. Should this proposal be accepted? **(7 marks)**

c) Recalculate the breakeven point in shillings based on the figures in (b) **(6 marks)**

d) State the condition that would have to hold true for the company to earn a zero profit at the breakeven volume you calculated in (c ). **(2 marks)**

## QUESTION 5

a) Explain the nature of decision-making and the decision cycle. **(10 marks)**

b) Discuss the interaction between life cycle costing, target costing and Kaizen costing under different product production phases. **(15 marks)**