# TECHNICAL UNIVERSITY OF MOMBASA 

## Faculty of Business \& Social Studies

DEPARTMENT OF BUSINESS STUDIES

## DIBPLOMA IN PROCUREMENT AND MATERIAL MANAGEMENT DIPLOMA IN MANAGMENT

## BAC 2202: MANAGEMENT ACCOUNTING

## END OF SEMESTER EXAMINATIONS

SERIES: AUGUST 2013
TIME: 2 HOURS

## INSTRUCTIONS:

- This paper consists of FIVE questions.
- Answer question ONE (Compulsory) and any other TWO questions.

This paper consists of Four printed pages.

## QUESTION 1 (Compulsory)

a) Briefly discuss FIVE differences between management accounting and Financial Accounting.
(10marks)
b) The following data relates to a particular stock item In a manufacturing firm

Normal usage
Minimum usage
Maximum usage
Lead time
EOQ

1250 units/day
850 units /day
1500 units/day
30- 45 days
150,000 unit/day

Required, calculate
i) Re-order level
(2marks)
ii) Minimum level
(2marks)
iii) Maximu level
(2marks)
c) The top management of Mombasa County have thee following salary based on year of service.
Length ofMonthly salaryService (x) yearksh 000s.
160
2 ..... 62
3 ..... 64
4 ..... 68
5 ..... 70
6 ..... 72
7 ..... 78
8 ..... 80
9 ..... 84
10 ..... 88

Required
i) Calculate the co-efficients in the linear cost function $y=a+b x$.
ii) Estimate the salary of a manager who has worked with the County for 20years.

## QUESTION 2

A Business firm has to select one project from two with different cashs inflows and outflows as given below.

| Project A. |  |  |
| :---: | :---: | :---: |
| Year | Inflow(ksh) | Outflow (ksh) |
| 0 | 0 | $1,500,000$ |
| 1 | 950,000 | 300,000 |
| 2 | $1,200,000$ | 450,000 |
| 3 | $1,500,000$ | 550,000 |
| 4 | $1,100,000$ | 000,000 |
| 5 | $1,050,000$ | 650,000 |
| 6 | 800,000 | 850,000 |

## PROJECT B

| Year | Inflow (kshs) | Outflow (Kshs) |
| :---: | :---: | :---: |
| 0 | 0 | $2,000,000$ |
| 1 | $1,050,000$ | 200,000 |
| 2 | $1,250,000$ | 350,000 |
| 3 | $1,600,000$ | 550,000 |
| 4 | $1,400,000$ | 700,000 |
| 5 | $1,200,000$ | 800,000 |
| 6 | 800,000 | 850,000 |

## Required, calculate

i) Yearly cash flows for each project.
ii) Pay back period for each project (4marks)
iii) Net present value for each project at an interest rate of $12 \%$ p.a.
(8marks)
iv) Select project to be implemented using pay back period, give reasons for your answer. (2marks)
v) Select project to be implemented using net present value method, give reasons for your answer.

## QUESTION 3

a) State FIVE principles of marginall costing.
(5marks)
b) Coca-cola Kenya limited process three major soft drinks in the local market for which the following statement has been produced.

| Product | Fanta | Coke | Stone | Total |
| :--- | :---: | :---: | :---: | :---: |
| Sales Kshs | $1,850,000$ | $1,550,000$ | 750,000 | $4,150,000$ |
| Total cost Kshs | 900,000 | 800,000 | $1,050,000$ | $2,750,000$ |
| Profit/less kshs | 950,000 | 750,000 | 300,000 | $1,400,000$ |

The total costs comprise $3 / 4$ variable and $1 / 4$ fixed cost. Mr. Kajeshi, the managing director is considering dropping production of stoney soft drink because it is making losses. Based on the above data should stoney production be dropped? Support your answer.
(15marks)

## QUESTION 4

a) State any FOUR characteristics of linear programming model.
(4marks)
b) Four jobs are to be allocated to four machines in accordance to the information given below which relates to the time each machine would take to complete each job.

Machine (Time in minutes)

|  |  | A | B | Cobs | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 15 | 12 | 18 | 30 |
|  | 2 | 16 | 30 | 14 | 25 |
|  | 3 | 33 | 10 | 21 | 17 |
|  | 4 | 21 | 14 | 13 | 26 |
|  | Required. |  |  |  |  |

i) Allocates the machines to the jobs that minimizes running time.
(12marks)
ii) Calculate the actual minimum time.

## QUESTION 5

|  | a) Defi i) <br> ii) <br> iii) <br> iv) | the following <br> Critical path <br> Project crush <br> Dummy reso <br> Network | good | in relation | alysis. <br> (1mark) <br> (1mark) <br> (1marks) <br> (1marks) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| b) A project has the following schedule .Time (weeks) COST |  |  |  |  |  |
|  |  | Normal | crash | Normal | crash |
| 1-2 |  | 10 | 8 | 100 | 120 |
| 1-3 |  | 15 | 10 | 150 | 200 |
| 2-4 |  | 8 | 4 | 120 | 240 |
| 2-5 |  | 20 | 15 | 200 | 300 |
| 3-6 |  | 28 | 20 | 300 | 400 |
| 4-5 |  | 14 | 10 | 100 | 150 |
| 5-6 |  | 12 | 6 | 120 | 200 |
| 6-7 |  | 5 | 3 | 60 | 90 |

Required.


