# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY <br> FACULTY OF INDUSTRIAL TECHNOLOGY <br> DEPARTMENT OF INDUSTRIAL AND MANUFACTURING ENGINEERING <br> $1^{\text {ST }}$ SEMESTER EXAMINATIONS MAY 2009 <br> BUSINESS STUDIES 111 - TIE 5105 - (FINANCIAL ANALYSIS) 

## INSTRUCTION TO CANDIDATES:

## TIME ALLOWED: 3 HOURS

1. ANSWER ALL 4 QUESTIONS
2. START EACH ANSWER ON A NEW SHEET

## QUESTIONS

1. 

## TOPIC

## MARKS

Cost volume profit analysis25
2. Marginal Costing 30
3. Production Cost Budgets 20
4. Financial and business concepts 25

## Question 1

Johns Ltd presented the following budget for the year ending 30 June 2006-10-09
Estimated sales for the year 10000 units at $\quad \$ 500$ per unit

Variable cost
Fixed cost for the year
Minimum return of the enterprise
$\$ 100$ per unit
\$2 000000
\$1 200000

## Required:

(a) Calculate the following by means of algebraic formulas:
(i) The net profit
(b) (i) The total marginal income.
(ii) The break even quantity
(iii) The break even value
(c) Calculate the selling price per unit to achieve a marginal income ratio of $80 \%$ if the variable cost were to increase by $10 \%$ per unit.
(5 marks)

## Question 2

(i) Zenzo (Pvt) Ltd has the following information relating to their budget for the year ended 31 March 2003 for a product Ziggs.
Selling price per unit
\$15 000
Variable cost per unit
3000
Total fixed costs
\$4 800000
Expected sales
600 units

You are required to calculate the following for March 2003
(a) Break even volume
(b) Break even value
(c) Margin of safety
(d) Marginal income ratio
(ii) List the uses and advantages of direct costing in the industry.

## Question 3

The budget of Willies partnership for the coming year 2005 is as follows;
Sales 100000 units at $\$ 3000$ each.
Factory overheads:
Fixed
\$510 000,00
Variable
\$102 000,00
The cost of manufacturing the product is as follows:
Raw materials: 3kg at $\$ 3.50$ per kg
Labour (direct) 2 hours at $\$ 5.00$ per hour
Factory overheads are allocated on the basis of direct labour hours
Anticipated stock levels:

|  | January 2005 | December 2005 |
| :---: | :---: | :---: |
| Raw materials | 20000 kg | 23500 kg |
| Work in progress |  |  |
| Finished products | 10000 units | 12000 units |
| Value | \$26500 000 | ( $2650 \times 12000$ ) |

## Required:

Prepare the following budgets for the year 2005:
(a) Sales budget
(4 marks)
(b) Production budget
(4 marks)
(c) Raw materials usage
(d) Labour expenses budget
(e) List other budgets which are relevant in the manufacturing of the product.
(4 marks)

## Question 4

(a) What is a budget and what purpose does it serve in a business environment
(7 marks)
(b) Write short notes on the types of budgets.Clearly state the distinct differences of each type of budget.
(10 marks)
(c) List ten types of sources of finances available to finance a business venture.
(8 marks)

## END OF EXAMINATION

