# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

#### FACULTY OF INDUSTRIAL TECHNOLOGY

#### DEPARTMENT OF INDUSTRIAL AND MANUFACTURING ENGINEERING

# 1<sup>ST</sup> SEMESTER EXAMINATIONS MAY 2009

#### **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

<b>QUESTIONS</b>	TOPIC	MARKS
1.	Cost volume profit analysis	25
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 10 000units at	\$500 per unit
Variable cost	\$100 per unit
Fixed cost for the year	\$2 000 000
Minimum return of the enterprise	\$1 200 000

### Required:

(a) Calculate the following by means of algebraic formulas:

	(i) The net profit	(5 marks)
(b)	(i) The total marginal income.	(5 marks)
	(ii) The break even quantity	(5 marks)
	(iii) The break even value	(5 marks)

(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	3 000
Total fixed costs	\$4 800 000

Expected sales 600 units

You are required to calculate the following for March 2003

(a) Break even volume	(5 marks)
(b) Break even value	(5 marks)
(c) Margin of safety	(5 marks)
(d) Marginal income ratio	(5 marks)

(ii) List the uses and advantages of direct costing in the industry. (10 marks)

## **Question 3**

The budget of Willies partnership for the coming year 2005 is as follows; Sales 100 000 units at \$3 000 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 20 000kg 23 500kg

Work in progress

Finished products 10 000 units 12 000 units Value \$26 500 000 (2 650 x 12 000)

#### Required:

Prepare the following budgets for the year 2005:

(a) Sales budget	(4 marks)	
(b) Production budget	(4 marks)	
(c) Raw materials usage	(4 marks)	
(d) Labour expenses budget	(4 marks)	
(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**