

**Course Code: AC 402 /IDE AC 402 (S) 2013**

**UNIVERSITY OF SWAZILAND  
DEPARTMENT OF ACCOUNTING  
SUPPLEMENTARY EXAMINATION PAPER 2013**

**DEGREE/DIPLOMA AND YEAR OF STUDY : B.COM IV**

**TITLE OF PAPER : MANAGEMENT ACCOUNTING I**

**COURSE CODE : AC 402**

**TIME ALLOWED : THREE (3) HOURS**

**INSTRUCTIONS :**

- 1. TOTAL NUMBER OF QUESTIONS ON THIS PAPER: FIVE (5)**
- 2. ANSWER ANY FOUR (4) QUESTIONS**
- 3. THE MARKS AWARDED FOR A QUESTION/PART ARE INDICATED AT THE END OF EACH QUESTION / PART OF QUESTION.**
- 4. WHERE APPLICABLE, SUBMIT ALL WORKINGS AND CALCULATIONS.**

**NOTE: YOU ARE REMINDED THAT IN ASSESSING YOUR WORK, ACCOUNT WILL BE TAKEN OF ACCURACY OF THE LANGUAGE AND THE GENERAL QUALITY OF EXPRESSION, TOGETHER WITH THE LAYOUT AND PRESENTATION OF YOUR FINAL ANSWER.**

**SPECIAL REQUIREMENTS : GRAPH PAPER**

**THIS PAPER IS NOT BE TO OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.**

## QUESTION1

Sobeit Corporation produces a single product, which sells for E100 per unit. Standards have been set for the manufacturing costs and the company uses absorption costing. Variances from standard costs are closed to the income account at the end of each year.

Fixed costs and expenses were budgeted as follows in the profit plan for the year 2012. Manufacturing, E100,000; selling and administrative, E50,000. The fixed manufacturing costs are applied on a standard capacity of 10,000 units per year.

A cost –volume profit analysis prepared from the 2012 profit plan showed that the break-even point of the firm was 50 per cent of standard capacity.

### Required:

- a) Determine the variable cost per unit **(6 Marks)**
- b) According to the cost-volume profit analysis, what net income will be reported for 2012 if sales have been budgeted at 8,000 units? **(7 Marks)**
- c) Assuming that 8,000 units were sold in 2012 and that an unfavourable indirect manufacturing costs volume variance of E10,000 was reported on the income statement, determine:
  - i) the number of units manufactured in 2012.
  - ii) the net income reported for 2012 under absorption costing, assuming no variances other than volume and no change in the selling price of the product, given that selling and administrative expenses are all fixed. **(12 Marks)**

**Total (25 Marks)**

## QUESTION 2

The following information was taken from the records of a company for a period in which operations were at 80 per cent of normal capacity:

Sales revenue		E6,000,000
<b>Cost of expenses:</b>		
Fixed	E200,000	
Variables	<u>360,000</u>	<u>560,000</u>
Net income		E40,000

### Required:

a) Determine the break-even point **(6 Marks)**

b) During the coming period, the company expects to operate at normal capacity.

Prepare an estimate of the income expected assuming that there are no price changes.

**(7 Marks)**

c) What are the assumptions of CVP ?

**(12 Marks)**

**Total (25 Marks)**

### QUESTION 3

A. The following information on Musa Ltd is available to you:

	<u>Variable</u>	<u>Fixed</u>
	<u>Costs</u>	<u>Costs</u>
Plant capacity, 250 units per month		
Predicted sales and cost for next month;		
Sales, 200 units x E110 - E22,000		
Manufacturing cost of goods sold <u>E17,000</u>	E5,000	E12,000
Gross profit	E 5,000	
Selling and administrative costs	<u>E 3,000</u>	E2,500 500
Net profit	<u>E 2,000</u>	

Required: Compute:

- i) Contribution margin per unit of predicted sales (5 Marks)
- ii) Full (total) cost per unit of predicted sales (5 Marks)
- iii) Operating profit, if in addition to the regular sales of 200 units, 40 units are sold as a one-time-only special order at E83 each (5 Marks)

B. Bonie Ltd normally produces and sells 20,000 units of a product each year at total costs as follows:

Fixed costs E690,000  
Variable costs 880,000

A proposal for a one-time-only special order is received from a large main-order company. It is for 3000 units at a selling price of E55 per unit. Management of Bonie Ltd has determined that sufficient idle capacity exists for making these units and that their sale would not affect regular sale.

Required:

- i) Compute the full cost (total) cost per unit of total production of 23,000 units, if the special order were accepted (6 Marks)
- ii) Should the special order be accepted by Bonie Ltd? Why?. (4 Marks)

**Total (25 Marks)**

## QUESTION 4

### Question 1

At denominator activity, the standard cost per unit is as follows:

Direct materials, 3 kgs @ E5.00	E15.00
Direct labour, 2 hours @ E4.00	8.00
Variable indirect costs, 2 hours @ E1.20	2.40
Fixed indirect costs, 2 hours @ E0.80	<u>1.60</u>
Total	<u>E27.00</u>

For the month of October, 2011 the performance report included the following information in (Emalangeni):

	Incurred At actual Price	Standard costs applied	Total Variance	Variance Analysis		
				Price or rate	Usage or efficiency	Volume
Direct materials used	E134,400	E135,000	E600 F	E5,600 F	E5,000 U	-
Direct labour	77,900	72,000	5,900U	1,900 U	4,000 U	-
Variable indirect costs	21,500	21,600	100F	1,300 F	1,200 U	-
Fixed indirect costs	<u>15,800</u>	<u>14,400</u>	<u>1,400 U</u>	<u>200 F</u>	<u>-</u>	<u>E1,600 U</u>
	<u>E249,600</u>	<u>E243,000</u>	<u>E6,600 U</u>	<u>E5,200 F</u>	<u>E10,200 U</u>	<u>E1,600 U</u>

Direct material were quoted at E5.50 per pound throughout September and October by all suppliers. There was no purchase –price variance for materials in October. The price variance shown relates solely to the materials used during October. Wage standards were set in accordance with an annual union contract, but a shortage of workers in the local area has resulted in rates higher than standard. There were no beginning or ending inventories of work in process.

**Required:** For the month of October determine:

1. Number of units produced **(4 Marks)**
2. Actual number of direct labour hours **(3½ Marks)**
3. Actual wage rate **(3½ Marks)**
4. Budget for fixed indirect costs **(3½ Marks)**
5. Denominator activity expressed in direct – labour hours **(3½ Marks)**
6. Kilograms of direct materials purchased **(3½ Marks)**
7. Kilograms of direct materials used **(3½ Marks)**

**Total (25 Marks)**

### QUESTION 5

A. Standing Corporation manufactures two products, A and B, jointly in two departments (cutting and finishing). Production time of each product and the total hours available in the cutting and finishing departments are as follows:

Department	Hours requires		Total hours available per day
	A	B	
Cutting	20	30	600
Finishing	25	25	625

The selling price of Product A is E100 per unit, and the variable cost per unit is E60. For Product B, the selling price and the variable cost per unit are E150 and E80, respectively. No more than 27 units of Product A can be sold, while material shortages prohibit the production of more than 20 units of Product B per day. Subject to these constraints and the ones on time in the Cutting and Finishing departments, any combination of Products can be produced.

#### Required:

- i) Using a graphic approach, determine the product mix that will maximize daily profits.  
(8½ Marks)
- ii) Determine the maximum marginal contribution (profit) per day. (4 Marks)

B. A company manufactures two products, A and B, each product passing through two departments, Department I and Department II. Each unit of product A requires 2 hours in Department I and 1 hour in Department II. Each unit of Product B requires 1 hour in Department I and 2 hours in Department II. There are 30 hours available in Department I and 24 hours available in Department II. Marginal contributions per unit are as follows: Product A, E4; Product B E3. A maximum of 10 units of Product B can be sold; there is no marketing constraint on Product A.

#### Required:

- i) Using a graphic approach, determine the product mix that maximizes profits.  
(8½ Marks)
- ii) Determine the maximum marginal contribution (4 Marks)

(Total 25 Marks)