

**UNIVERSITY OF SWAZILAND**  
**DEPARTMENT OF ACCOUNTING**  
**MAIN EXAMINATION PAPER , 2013**

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

**TITLE OF PAPER : INTERMEDIATE  
MANAGEMENT  
ACCOUNTING**

**COURSE CODE : AC 414**

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

- INSTRUCTIONS:**
- 1. THE TOTAL NUMBER OF QUESTIONS ON THIS PAPER ARE FIVE (5)**
  - 2. ANSWER ANY FOUR QUESTIONS.**
  - 3. THE MARKS AWARDED FOR A QUESTION / PART ARE INDICATED AT THE END OF EACH QUESTION / PART OF QUESTION.**
  - 4. ALL WORKING NOTES AND CALCULATIONS MUST BE SHOWN ON THE ANSWER SHEET.**

**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 TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.**

## QUESTION 1

Makhonza Ltd has a maximum capacity of 210,000 units per year. Normal capacity is regarded as 180,000 units per year. Standard variable manufacturing costs are E11 per unit. Fixed factory overhead is E540,000 per year. Variable selling costs are E3 per unit, while fixed selling costs are E252,000 per year. Sales price is E20 per unit. (Assume no variances from standard variable manufacturing costs in parts 1 through 3)

### Required:

1. What is the break-even point expressed in Emalangeni? **(3 Marks)**
2. How many units must be sold to earn a target net profit of E60,000 per year? **(3 Marks)**
3. How many units must be sold to earn a net profit of 10 per cent of sales? **(3 Marks)**
4. Assume the following results for a given year:

Sales 150,000 units. Net variance for standard variable manufacturing costs E40,000 unfavourable. Production 160,000 units. Beginning inventory 10,000 units.

All variances are written off as additions to (or deductions from) standard cost of sales.

a) Prepare income statements for the year under

- (1) Absorption costing **(7 Marks)**
- (2) Direct costing **(7 Marks)**

b) Account for the difference in profits under the two concepts (methods) **(2 Marks)**

**Total (25 Marks)**

## QUESTION 2

**A.Required:** fill in the blanks

| <u>Sales</u> | <u>Variable Expenses</u> | <u>fixed Expenses</u> | <u>Total Costs</u> | <u>Net Profit</u> | <u>Contribution margin ratio</u> |
|--------------|--------------------------|-----------------------|--------------------|-------------------|----------------------------------|
| E1000        | E700                     | a                     | E1000              | b                 | c                                |
| E1500        | d                        | E300                  | e                  | f                 | 0.30                             |
| g            | 500                      | h                     | 800                | E1200             | i                                |
| 2000         | j                        | 300                   | k                  | 200               | l                                |

**B. Masiza Ltd makes and sells pens. Some pertinent facts follow:**

Present sales volume, 500,000 units per year at a selling price of E0.50 per unit. Fixed expenses are E80,000 per year. Variable costs are E0.30 per unit.

**Required:**

- what is the present total profit for a year? ( 4 Marks)
  - what is the present break-even point in money (Emalanengi)? ( 3 ½ Marks)

Compute the new profit for each of the following changes:

- A 4 cent per unit increase in variable expenses ( 3 ½ Marks)
- A 10 cent increase in fixed expenses and a 10 per cent increase in sales volume (3 ½ Marks)
- A 20 per cent decrease in fixed expenses, a 20 per cent decrease in selling price, a 10 per cent decrease in variable expenses per unit, and a 40 per cent increase in units sold. (3 ½ Marks)

Compute the new break –even point in units for each of the following changes:

- A 10 cent increase in fixed expenses (3 ½ Marks)
- A 10 cent increase in fixed expenses in selling price and a E20,000 increase in fixed expenses (3 ½ Marks)

**Total (25 Marks)**

### QUESTION 3

Delta Enterprises Ltd manufactures three products Alpha, Beta and Gamma the standard cost per unit of each product is as follows:

|                        | <b>Alpha</b> | <b>Beta</b> | <b>Gamma</b> |
|------------------------|--------------|-------------|--------------|
|                        | <b>E</b>     | <b>E</b>    | <b>E</b>     |
| Materials              | 40,250       | 2,100       | 48,125       |
| Direct labour: Grade A | 13,125       | 9,625       | 4,375        |
| Grade B                | 2,625        | 7,875       | 23,625       |

For the year ending 30 June 2012, budgeted fixed overheads are E1,050,000. Grade A labour is paid at E8,75 per hour and Grade B labour is paid at E5,25 per hour. The sales department has produced the following sales budget for the year ending 30 June 2012:

|       | <b>Units</b> | <b>Sales price per unit</b> |
|-------|--------------|-----------------------------|
| Alpha | 16 000       | E98,00                      |
| Beta  | 28 000       | E54,25                      |
| Gamma | 15 000       | E89,25                      |

Upon seeing the draft sales budget the works manager draws attention to the fact that a maximum of 50,000 hours of Grade A labour and 120,000 of Grade B labour will be available and overtime will not be possible.

#### **Required:**

- Calculate how many units of each product should be produced to enable Delta Enterprises Ltd to maximize profits. **(20 Marks)**
- Prepare a budgeted profit statement for the year ending 30 June 2012 based on your answer to (a) above. **(5 Marks)**

**Total (25 Marks)**

#### QUESTION 4

Buyani Ltd is considering dropping Product A on the basis of the following analysis, which was prepared under full cost /absorption costing approach:

|                            | Product A        | Product B        |
|----------------------------|------------------|------------------|
| Sales revenue              | E110,000         | E300,000         |
| Cost of sales:             |                  |                  |
| Direct material            | E10,000          | E20,000          |
| Direct labour              | E30,000          | E60,000          |
| Variable overhead          | E15,000          | E30,000          |
| Non-variable overhead      | <u>E45,000</u>   | <u>E90,000</u>   |
|                            | E100,000         | E200,000         |
| Selling and admin expenses | <u>E20,000</u>   | <u>E60,000</u>   |
|                            | <u>E120,000</u>  | <u>E260,000</u>  |
| Net profit (loss)          | <u>(E10,000)</u> | <u>(E40,000)</u> |

Overhead is applied on a direct labour cost basis. Included in the non-variable component is a depreciation of E2000 recorded on equipment used exclusively in manufacturing Product A. The equipment has no resale value and cannot be used for any purpose other than producing Product A. A loss of E6000 will be recorded when the equipment is scrapped. Insurance on this equipment amounts to E500 per period. Elimination of Product A will bring no other changes in the non variable overhead. Except for commissions of 5 per cent of sales, selling and administrative expenses are non- variable. The only non- variable expense traceable to Product A is advertising of E3000. Elimination of Product A will bring no other change in the non-variable component.

#### Required:

Prepare an analysis that will better present the data for making a decision whether to discontinue Product A.

**Total (25 Marks)**

## QUESTION 5

A. Zenzele Ltd manufactures an electronic device in two models: Super and Deluxe. Marginal contributions per unit are: Super E30; Deluxe E40. Sales forecasts indicate that no more than seven (7) of the Deluxe models can be sold in any one period; all of the Super models which can be produced can be sold. The manufacturing process involves three operations: basic unit, assembly and finishing. The hours required for each model and the total hours available for each operation are as follows:

| Operation  | Hours required |        | Total hours available |
|------------|----------------|--------|-----------------------|
|            | Super          | Deluxe |                       |
| Basic unit | 4              | 5      | 60                    |
| Assembly   | 1              | 2      | 16                    |
| Finishing  | 1              | 1      | 13                    |

### Required:

- Using the graphic approach, determine the product mix that maximizes profits. (7 Marks)
- Determine the maximum contribution (6 Marks)

B. Thabile and Deli Ltd manufactures two drills: Alpha and Omega. Each unit of Alpha takes 30 hours of production time and each unit of Omega takes 5 hours. All told, 120 hours of production time are available per day. All the units of Omega that are produced can be sold; but, because of limited demand, at most 3 units of Alpha can be sold a day. Alpha sells for E30 per unit and Omega sells for E15 per unit. The variable cost per unit, including the cost of production and selling, are E20 for Alpha and E9 for Omega.

### Required:

- Using the graphic approach, determine the production schedule that maximizes daily profit (6 Marks)
- What is the maximum profit? (6 Marks)

**Total (25 Marks)**