

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

**DEGREE/DIPLOMA AND YEAR OF STUDY : B.COM 1V (IDE)**

**TITLE OF PAPER : MANAGEMENT ACCOUNTNG 1**

**COURSE CODE : IDE AC 402**

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

**INSTRUCTIONS :**

- 1. TOTAL NUMBER OF QUESTIONS ON THIS PAPER: 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 CALCULATIONS ARE TO BE MADE TO THE NEAREST LILANGENI.**
- 5. 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.**

## QUESTION 1

A company that began operations in January, 2012, set up the following flexible budget for its single product:

|                                    | <u>150,000 units</u> | <u>200,000 units</u> |
|------------------------------------|----------------------|----------------------|
| Sales revenue                      | <u>E1,200,000</u>    | <u>E1,600,000</u>    |
| <b>Manufacturing costs:</b>        |                      |                      |
| Nonvariable                        | E200,000             | E200,000             |
| Variable                           | E450,000             | E600,000             |
|                                    | <u>150,000 units</u> | <u>200,000 units</u> |
| <b>Selling and other expenses:</b> |                      |                      |
| Nonvariable                        | E 160,000            | E 160,000            |
| Variable                           | <u>E 300,000</u>     | <u>E 400,000</u>     |
|                                    | <u>E1,110,000</u>    | <u>E 1,360,000</u>   |
| <b>Net Income</b>                  | <u>E 90,000</u>      | <u>E 240,000</u>     |

Standard capacity of 200,000 units is used in allocating nonvariable manufacturing costs. During the first year, it is expected that 180,000 units will be manufactured and the 160,000 units will be sold.

### Required:

- a) Determine the net income (loss) budgeted for the year under:
    - 1) Absorption Costing ( 10 Marks)
    - 2) Direct costing ( 10 Marks)
  
  - b) Determine the value of the inventory expected at the end of the year under:
    - 1) Absorption costing; and (2 ½ Marks)
    - 2) Direct costing (2 ½ Marks)
- Total (25 Marks)**

[Note: Variances from standard costs are closed to the income account at year-end].

## QUESTION 2

Total eclipse Ltd which is engaged in the manufacture of a single product, the Blackout, uses standard costs and flexible budgets for management control purposes.

The standard cost per unit for direct material is 8 kilograms at E2.40 per kilogram.

The budgeted direct labour for a 4 week period is 120,000 hours at a budgeted cost of E336,000.

The budgeted variable production overhead cost for the same number of hours is E108,000.

During the period, actual direct wages incurred were E306,912 and 42,000 units of Blackout were produced.

Reported variances were:

Direct labour rate : 20 cents per hour favourable

Direct material usage: E38,400 (A)

Direct materials price E38,000 (F)

Variable production overhead E2,200 (F)

Variable production overhead expenditure E1,500 (A)

The materials prices variance was calculated on quantities purchased, and amounted to 28,000 kilograms.

**Required: For the period; determine:**

- a) The quantity of direct materials purchased (4 Marks)
  - b) The quantity of direct materials used in excess of the standard allowed  
In kilograms, and the actual quantity used in total; (4 Marks)
  - c) The variable production of overhead efficiency variance; (4 Marks)
  - d) The actual hours worked; (4 Marks)
  - e) The standard hours allowed for the production achieved, and from this  
the standard hours per unit of Blackout. (4 Marks)
  - f) Actual variable overhead cost (2 ½ Marks)
  - g) Actual variable overhead cost per unit (2 ½ Marks)
- (Total 25 Marks)**

### QUESTION 3

A. Fulton Corporation wants to set up a flexible budget for its Marketing Department. The static budget, based on sales of E50,000, is:

#### Marketing Department

Variable costs:

|             |         |
|-------------|---------|
| Insurance   | 750     |
| Advertising | 2,500   |
| Salaries    | 10,000  |
| Supplies    | 500     |
| Total       | E13,750 |

Fixed

|               |        |
|---------------|--------|
| Depreciation  | 3,000  |
| Rent          | 1,500  |
| Miscellaneous | 800    |
| Total         | E5,300 |

**Required:**

Prepare a flexible budget of E25,000, E60,000 and E75,000 for the Marketing Department at the Fulton Corporation. **(15 Marks)**

- B. The X company has prepared a sales budget of 42,000 finished units for a three-month period. The company has an inventory of finished goods on hand at December, 31 and desires
- C. ending raw material inventory as follows:

|                  | UNITS  |          |
|------------------|--------|----------|
|                  | DEC 31 | MARCH 31 |
| Finished product | 22,000 | 24,000   |

It takes three units of direct materials to make one unit of finished product. The company has an inventory of units of raw material at December, 31 and desires a finished –goods inventory at the end of the succeeding quarter as follows:

|                  | UNITS   |          |
|------------------|---------|----------|
|                  | DEC 31  | MARCH 31 |
| Finished product | 100,000 | 110,000  |

How many units of direct materials should be purchased during the three month ending March 31? **(10 Marks)**

**Total (25 Marks)**

#### QUESTION 4

A. Always Ltd has met all production requirements for the current month and has an opportunity to produce additional units of product with its excess capacity. Unit selling prices and unit costs for three models of one of its product lines are as follows:

|                              | P<br><u>model</u> | R<br><u>model</u> | S<br><u>model</u> |
|------------------------------|-------------------|-------------------|-------------------|
| Selling price                | E60               | E65               | E80               |
| Direct materials             | 18                | 20                | 19                |
| Direct labour at E5 per hour | 10                | 15                | 20                |
| Variable overhead applied    | 8                 | 12                | 16                |
| Fixed overhead applied       | 16                | 5                 | 15                |

Variable overhead is applied on the basis of direct labour Emalangen (money), while fixed overhead is applied on the basis of machine hours. There is sufficient demand for additional production of any model of the product line.

**Required:**

i) If the company has excess machine capacity and can add more labour as needed (that is, neither resource is a constraint), which product model or models should be produced?

(7 Marks)

ii) If the company has enough excess machine capacity but available labour time is a constraint, which product model or models should be produced?

(6 Marks)

B. Hlomanini Ltd has three product lines: J, K, and H. The company furnished the following income statement for the most recent years (in thousands)

|   | J<br>E'000 | K<br>E'000 | H<br>E'000 | Total<br>E'000 |
|---|------------|------------|------------|----------------|
| Sales   | E120       | E150       | E180       | E450           |
| Variable costs  | 80         | 90         | 100        | 270            |
| Fixed assets  |            |            |            |                |
| Annual salaries of product line managers                          | 17         | 20         | 23         | 60             |
| Total company-wide fixed costs allocated equally to product lines | 30         | 30         | 30         | 90             |
| Total costs   | E127       | E140       | E153       | 420            |
| Operating profit (loss)   | (E7)       | E10        | E27        | E30            |

**Required:**

i) Using a format similar to the above, prepare a projected profit statement on the assumption that Product J operations are discontinued with no effects on sales of the other product lines for the total assets used by the company

(6 Marks)

ii) On the basis of the profit statement you have prepared in (1) would you advise the elimination of product line J operation? Why?

(6 Marks)

**Total (25 Marks)**

### QUESTION 5

Avon (Pty) Ltd manufactures two products Exe and Ouse. The relevant data per unit are:

|                            | <b>Exe</b> | <b>Ouse</b> |
|----------------------------|------------|-------------|
|                            | <b>E</b>   | <b>E</b>    |
| Selling price              | 10         | 10          |
| Material @  E0.50 per kg   | 2,00       | 3,00        |
| Process B @ E0.50 per hour | 2,00       | 1,50        |
| Other variable costs       | 2,50       | 2,75        |
| Fixed costs                | 3,28       | 2,00        |

The fixed costs per unit are based on current budgeted production of 825 units of Exe and 500 units of Ouse. The capacity of process B is 4 800 hours per month.

Owing to a shortage of supply, only 6,000 kg of material is available per month. No stock of raw materials or finished profit will be if it is possible to sell everything produced.

**Required:**

Calculate how the available capacity should be used to maximise profits and to calculate what the maximum profit will be if it is possible to sell everything produced.

**Total (25 Marks)**