

**UNIVERSITY OF SWAZILAND**  
**DEPARTMENT OF ACCOUNTING**  
**MAIN EXAMINATION PAPER , MAY 2010**

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

**TITLE OF PAPER : MANAGEMENT ACCOUNTING I**

**COURSE CODE : AC 402/IDE 402**

**TIME ALLOWED : THREE HOURS**

- INSTRUCTIONS:**
- 1. THE TOTAL NUMBER OF QUESTIONS ON THIS PAPER ARE FIVE(5)**
  - 2. ANSWER QUESTION ONE AND ANY OTHER THREE 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: NONE**

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

## QUESTION 1

Following are income statements prepared for a company over a three-month period:

	<b>First Month</b>	<b>Second Month</b>	<b>Third Month</b>
Production in units	100	104	98
Sales in units	100	100	100
Sales revenue	E100,000	E100,000	E100,000
Cost of sales (standard)	80,000	E 80,000	80,000
Cross margin (standard)	E 20,000	E 20,000	E 20,000
Selling & Admin exp.	11,000	11,000	11,000
Net income (standard)	E 9,000	E 9,000	E 9,000
Volume variance	0	1000	500
Net income	E 9,000	E 9,000	E 9,000

### REQUIRED:

- a) Revise the monthly statement applying the direct cost concept  
( 13 Marks)
- b) There was one unit in the inventory at the beginning of the first month, determine the inventory value at the end of each month under (1) absorption costing and (2) direct costing (12 Marks)

**Total (25 Marks)**

## QUESTION 2

Fair Winds Company manufactures portable hair dryers. The president, Red Murphy, is planning some changes and has enlisted your assistance to predict the potential effects. "Skinhead Red", as he is known around the plant, provides you with the following information:

Variable costs to produce each dryer:

Direct materials	E4.60
Direct labour	3.25
Variable production overhead	<u>2.15</u>
Total variable production cost	<u>E10.00</u>

Annual fixed production overhead	E300,000
Annual fixed selling costs	240,000
Annual fixed general and admin costs	120,000

Non production variable costs are as follows:

Average variable selling costs per unit	E1.15
Average variable general & admin cost per unit	E0.75

The selling price is E23.50 per hair dryer and sales volume for the current year is expected to be 150,000 units.

**Following are three independent charges that Red has been thinking of adopting:**

1. Engineers tell Red that if a radio headset were added to each unit at a cost of E3.60 the company's product would be superior to the competitor's that business would increase 20%.
2. the sales manager tells Red that a E130,000 increase in a advertising will increase sales by 15%
3. Red's sales force believes that lowering the price by 5% will increase demand (in units) by 10%

### REQUIRED:

- a) Compute the breakeven point in units and Emalangeni (5 Marks)
- b) Compute the margin of safety in (i) monetary values and (ii) units (8 Marks)
- c) Compute the effects on profit and Emalangeni breakeven point of each of the independent propositions (ignore tax implications). For each, advise the president about the effects of the proposal (12 Marks)

**Total (25 Marks)**

### QUESTION 3

A. The sales budget for Kusa Corp. shows the following sales projections (in units) for the calendar year of 2009.

January – March	540,000
April – June	680,000
July – September	490,000
October–December	<u>550,000</u>
Total	<u>2,260,000</u>

Sales for the first quarter of 2010 are expected to be 590,000 units. Finished Goods Inventory at the end of each production period is scheduled to equal 30% of the next quarter's budgeted sales in units. The company is expected to be in compliance with this policy as of December 31, 2008. Develop a quarterly production budget for 2009. (Include the column to show total expected production for 2009). **(12 Marks)**

B. ABC Ltd has budgeted sales of 200,000 metres of its concrete culvert product for May 2009. Each metre of product requires 12 kgs of concrete (E10 per kg) and 15 kgs of gravel (E0.3 per kg). Actual beginning inventory and projected ending inventories are shown below:

	May 1	May 31
Finished Goods Inventory (in metres)	25,000	10,500
Concrete (in kgs)	82,000	68,600
Gravel (in kgs)	65,300	92,500

#### REQUIRED

1. How many kgs of concrete does Indiana Culvert plan to purchase in May?

What will be the cost of those purchases? **( 7 Marks)**

2. How many kgs of gravel does Indiana Culvert plan to

purchase in May? What will be the cost of the purchases? **( 6 Marks)**

**Total ( 25 Marks)**

#### QUESTION 4

A Company is considering dropping Product A on the basis of the following analysis, which was prepared under the full-cost approach:

	Product A	Product B
Sales revenue	E110,000	E300,000
<b>Cost of sales:</b>		
Direct material	10,000	20,000
Variable direct labour	30,000	60,000
Variable overhead	15,000	30,000
Non-variable overhead	<u>45,000</u>	<u>90,000</u>
	<u>100,000</u>	<u>200,000</u>
Selling & admin expenses	<u>20,000</u>	<u>60,000</u>
	<u>120,000</u>	<u>120,000</u>
Net income (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 depreciation of E2,000 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 E6,000 will be recorded when the equipment is scrapped. Elimination of Product A will bring no other changes in the non-variable overhead. Except for commissions of 5% of sales, selling and administrative expenses are non-variable. The only non-variable expense traceable to Product A is advertising of E3,000. 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 on whether or not to discontinue Product A.

**Total (25 Marks)**

## QUESTION 5

Rabar Corp manufactures metal screen doors for commercial buildings. The company uses a standard system, its standards costs per screen door follow:

**Direct Materials:**

Aluminum 4 sheets @ E2each = E8

Copper 3 sheets @t E4 each =E12

Direct labour 5 hours @ E8 each = E40

Variable overhead 5 hours @ E3 each=E15

Fixed overhead 5 hours @ E2 each=10

Overhead rates were based on normal monthly capacity of 6,000 direct labour hours.

During November, 850 tools were produced. This was below normal levels due to the effects of a labour strike that occurred during union contract negotiations. Once the dispute was settled, the company scheduled overtime to try to catch up to regular production levels. The following costs were incurred in November:

**Material:**

Aluminum:4,000 sheets purchased at E2 each; used 3,500 sheets

Copper: 3,000 sheets purchased at E4.20 each ; used 2,600 sheets

**Direct Labour:**

Regular time:3,400 hours at E8,00/hr (precontract settlement)

900 hours at E8,50 /hr (postcontract settlement)

**Overtime:** 500 hours were worked during overtime, but the half –time overtime premium was included in the total variable overhead for November in accordance with company accounting policy.

**Variable overhead:** E11,700

**Fixed overhead:**E 9,300

**Determine the following:**

- |    |  |            |
|----|--|------------|
| a. | Total material price variance            | ( 4 Marks) |
| b. | Total material usage (quantity) variance | (3 Marks)  |
| c. | Labour rate variance                     | (3 Marks)  |
| d. | Labour efficiency variance               | (3 Marks)  |
| e. | Variable overhead spending variance      | (3 Marks)  |
| f. | Variable overhead efficiency variance    | (3 Marks)  |
| g. | Fixed overhead spending variance         | (3 Marks)  |
| h. | Fixed overhead denominator variance      | (3 Marks)  |

**Total (25 Marks)**