

UNIVERSITY OF SWAZILAND
DEPARTMENT OF ACCOUNTING
MAIN EXAMINATION PAPER MAY 2015

DEGREE/DIPLOMA AND YEAR OF STUDY: B.COM III

COURSE CODE : AC 324
TITLE : MANAGEMENT ACCOUNTING II
TIME : THREE (3) HOURS
TOTAL MARKS : 100 MARKS

INSTRUCTIONS:

- 1. THERE ARE FOUR (4) QUESTIONS ON THIS PAPER**
- 2. ANSWER ALL FOUR (4) QUESTIONS**
- 3. BEGIN THE SOLUTION TO EACH QUESTION ON A NEW PAGE**
- 4. THE MARKS AWARDED FOR A QUESTION ARE INDICATED AT THE END OF EACH QUESTION**
- 5. CALCULATIONS ARE TO BE MADE TO ZERO DECIMAL PLACES OF ACCURACY UNLESS OTHERWISE INSTRUCTED**

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

SPECIAL REQUIREMENTS: CALCULATOR

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

QUESTION 1

Naturally Co. prepared the following budget for the production and sale of sphagnum peat moss bales (1 bale contains 4 cubic metres of peat moss) for the year 2014.

Production and sales in units:	360,000	
Sales	E2,700,000	
Production costs: Materials	E50,000	
Labor	310,000	
Variable overhead	940,000	
Fixed overhead	300,000	
Operating costs: Variable selling	460,000	
Fixed administrative	<u>200,000</u>	
Total expenses		<u>2,260,000</u>
Income before taxes		<u>E440,000</u>

The 360,000- unit budget will be used to apply overhead costs to the products. Fixed overhead and administrative costs will be incurred evenly throughout the year and there will be no deviations from the estimated amounts. Under-or-over-applied overhead will be closed to Cost of Goods Sold at the end of the year. During the first half of 2014 the company produced 160,000 bales of peat moss and sold 150,000 bales.

- a. Assuming that Naturally uses absorption costing, determine the answers to each of the following.
 1. What is the unit cost of each bale? (2 marks)
 2. What amount of production overhead is applied to production during the first half of 2014? (2 marks)
 3. What amount of fixed overhead is applied to production during the first half of 2014 (2 marks)
 4. What is Cost of Goods Sold for the first half of 2014? (2 marks)
 5. What are total operating expenses for the first half of 2014? (2 marks)
- b. Assuming that Naturally uses variable costing, determine the answers to each of the following.
 1. What is the unit cost for each bale?(3 marks)
 2. What amount of manufacturing overhead is applied to production during the first half of 2014? (3 marks)
 3. What is product contribution margin for the first half of 2014? (3 marks)
 4. What is total contribution margin for the first half of 2014? (3 marks)
 5. What is income or loss for the first half of 2014? (3 marks)

Total (25 marks)

QUESTION 2

Jenny Lowe started a business in 2014 to produce portable, climate-controlled shelters. The shelters have many applications in special events and sporting activities. Jenny's accountant prepared the following variable costing income statement after the first year to help her in making decisions.

Jenny Lowe Enterprises Income Statement

For the year ended December 31, 2014

Sales(1,500 shelters @ E2,500)		E3,750,000
Variable cost of goods sold: Beginning inventory	E -0-	
Cost of goods manufactured(1,750 @ E1,300)	<u>2,275,000</u>	
Cost of goods available for sale	2,275,000	
Less ending inventory(250 @ E1,300)	<u>325,000</u>	<u>1,950,000</u>
Product contribution margin	E1,800,000	
Less variable selling and administrative expenses(1,500@E180)		<u>270,000</u>
Total contribution margin		E1,530,000
Less fixed expenses: Fixed factory overhead	E1,500,000	
Fixed selling and administrative expenses	<u>190,000</u>	<u>1,690,000</u>
Net loss		<u>E(160,000)</u>

During the year, the following variable production costs per unit were recorded: direct materials, E800; direct labor, E300; and overhead E200. Ms. Lowe was upset about the net loss because she wanted to borrow funds to expand capacity. Her friend who teaches accounting at a local university suggested that the use of absorption costing could change the picture.

- Prepare an absorption costing income statement (6marks)
- Explain the source of the difference between the net income (loss) figures under the two costing systems (6 marks)
- Would it be appropriate to present an absorption costing income statement to the local banker in light of Ms. Lowe's knowledge of the net loss determined under variable costing? Explain. (6 marks)
- Assume that during the second year of operations Ms. Lowe's company produced 1,750 shelters, sold 1,850, and experienced the same total costs.
 - Prepare a variable costing income statement
 - Prepare an absorption costing income statement
 - Explain the difference between the net incomes for the second year under the two systems. (7 marks)

Total(25 marks)

QUESTION 3

Appliance Company manufactures an electric toaster oven. The company's normal selling price is E40 per unit. Its costs per unit at full capacity of 200,000 units are as follows

Direct materials	E14 (includes self-manufactured heating element, which is E5 per Unit)
Direct labor	6
Overhead (2/3 is fixed)	<u>12</u>
Total	<u>E32</u>

One third of the overhead is avoidable relative to the ovens.

A key component in the production of toaster ovens is the heating element. Eastern Electric has offered to sell Appliance Company as many heating elements as the company needs for its toaster oven production. The offering price is E10 per unit. If Atlanta Appliance Company accepts the offer, the facilities that are currently used to produce heating elements could be used to produce an additional 25,000 units of the toaster oven. What alternative is more desirable and by what amount? (Assume the company has been operating at its current capacity of 200,000 units.)

Total (25 marks)

QUESTION 4

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

	<i>Exe</i>	<i>Ouse</i>
Selling price	E10,00	E10,00
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.

REQUIRED:

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

(25 marks)