



# AFRICA UNIVERSITY

*(A United Methodist-Related Institution)*

**“Investing In Africa’s Future”**

## **FACULTY OF MANAGEMENT AND ADMINISTRATION**

**COURSE TITLE: MAC 301 MANAGEMENT ACCOUNTING**

**SEMESTER 1: MAIN EXAMINATION-NOVEMBER 2014**

**LECTURER MR I. RARAMI**

**TIME: 3 HOURS**

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### ***INSTRUCTIONS***

Answer **ALL** questions

Start each question on a new page in your answer booklet.

The marks allocated to each question are shown at the end of the question

Show all your workings

Credit will be given for presentations that are neat, logical and grammatically well constructed.

## QUESTION 1

Good Day produces a product Passwell from materials A,B,C. The product specifications of 10kg of Passwell are as follows:

### Standard material cost of 10kg of product Passwell

Material	Kgs	Proportion	Rate per kg	Amount
			\$	\$
A	4	(25)	10,00	40,00
B	4	(25)	15,00	60,00
C	8	(50)	7,50	<u>60,00</u>
				<b><u>160,00</u></b>

### Actual material cost

Materials used to produce 1000 kg of product Passwell were as follows:

Material	Kgs	Rate per kg	Amount
		\$	\$
A	420	9,00	3 780,00
B	410	14,50	5 945,00
C	<u>790</u>	8,20	<u>6 478,00</u>
	<b><u>1620</u></b>		<b><u>16 203,00</u></b>

You are required to calculate the:

- Total material cost variance [3 marks]
- Material price variance [3 marks]
- Material usage variance [3 marks]
- Material mix variance [3 marks]
- Material yield variance [3 marks]
- Define standard costing [2 marks]
- State any two purposes of standard costing [2 marks]
- Standards may be classified into the following broad categories listed, explain them.
  - Basic standards [2 marks]
  - Ideal standards [2 marks]
  - Current attainable standards [2 marks]

## QUESTION 2

Fine Products, a manufacturing company, manufactures two products Eyi and Bee using the same type of raw material. Its data for the next period is as follows:

	<b>PRODUCTS</b>	
	<b>A</b>	<b>B</b>
Demand in units	27 000	18 000
	<b>\$</b>	<b>\$</b>
Selling price per unit	20	25
<b>Variable production costs /unit:</b>		
Direct material	6	10
Direct labour	5	4
Overheads	3	2
Allocated Fixed costs	50 000	35 000
Direct material required per unit	5kg	4kg
Direct labour hours required per unit	10 hours	8 hours

The company can obtain 180000 units of raw materials for the period, while its maximum production capacity is 420 000 direct labour hours.

**Required:**

- a). Determine if raw material and/ or labour is a limiting factor. [5 marks]
- a). Determine the optimal product plan [8 marks]
- b). Calculate the maximum contribution and profit. [5 marks]

**QUESTION 3**

a). The following is the revenue and cost data of Mafuta Oil ( Pvt) Ltd in respect of joint products Axe, Wai and Zet, which may be further processed into refined products Axe-Axe, Wai-Wai and Zet-Zet. Mafuta Oil incurred \$ 80000 joint costs to produce Axe, Wai and Zet up to the split off point.

The output from the joint production process for the period were:

Joint product Axe	4000kg
Joint product Wai	5000kg
Joint product Zet	7000kg

The market price of the joint products at the split off point were:

Joint product Axe	\$4.00 per kg
Joint product Wai	\$3.00 per kg
Joint product Zet	\$3.50 per kg

The further processing cost per product was as follows:

Joint product Axe	\$4200
Joint product Wai	\$7500

Joint product Zet \$6000

Which of the joint products should the firm process further into the more refined products. [10 marks]

b). A company that produces a single product has a normal production capacity of 50 000 units. The following is the company's cost data.

	\$
Direct material cost per unit	2.50
Direct labour cost per unit	6.00
Variable overhead per unit	1.50
Total fixed overheads	200000

The company expects to sell 40000 units at its generally accepted selling price of \$20 per unit. It has received cancellations, of orders for 10000 units. It does not expect to receive any more orders at the selling price of \$20. A customer who wishes to sell the product in an export market that will not affect the company's current market offers to purchase the 10000 units at a special price of \$13.00

Should the company accept this special order?

Show the net benefit/loss arising from accepting the special order.

[12 marks]

#### QUESTION 4

The following is a summary of the selling prices and cost data of Dzidzai Manufacturers Pvt Ltd that produces and sells three products, A, B, and C.

	A	B	C
Selling price	20	30	40
Variable cost	<u>12</u>	<u>20</u>	<u>24</u>
Contribution	8	10	16
Proportions	30%	50%	20%
Fixed costs			\$100 000
Target profit			\$ 40 000

#### Required:

1. Calculate

a). Weighted average

i ). Selling price per unit [3 mark]

ii). Variable cost per unit [3 marks]

iii). Contribution per unit [3 marks]

iv ). Contribution ratio [3 marks]

- b). Break-even volume and its composition [4 marks]
- c). Break-even value and its composition [4 marks]
- d). Sales volume required to make target profit, and sales composition [4 marks]
- e). Sales value require to make target profit, and sales composition [4 marks]

### **QUESTION 5**

State and explain briefly the stages in the decision, planning and control process. [7 marks]

END OF PAPER