# TECHNICAL UNIVERSITY OF MOMBASA

# School of business

## DEPARTMENT OF ACCOUNTING AND FINANCE

UNIVERSITY EXAMINATIONS FOR DEGREE IN BACHELOR OF / COMMERCE/ BUSINESS ADMINISTRATION.

**BAC 4203; MANAGEMENT ACCOUNTING** 

END OF SEMESTER EXAMINATIONS

**SERIES**; DECEMBER 2015

**TIME**; 2 HOURS

# **Instructions**;

Answer question one and any other two questions.

## Question One.

(a) Budgeted sales and cost of two companies are provided as follows::

Companies	Holes	Boxer
Sales (units)	10,000	10,000
Selling price (shs.	2	2
Variable cost / unit	1.25	1.00
Total fixed cost (shs)	5,500	8,000
Capacity	80%	80%

Required	i)	Budgeted profits	(4 marks)
	ii)	Budgeted Break-even point in shillings	(4 marks)
	iii)	Show the impact of increasing or decreasing	g sales by a 10%
		margin.	(6 marks)
	iv)	Margin of safety as a percentage of total car	pacity. (6 marks)

(b) Jamaica International Ltd. Manufacturing posho mills. One of the parts required during the manufacturing process is component Q. Currently component Q is manufacture in department X of the company. During the preceding twelve months, 150,000 units of component Q were manufactured at the following costs to the division

	Shs
Direct materials	200,000
Direct wages	150,000
Manufacturing overheads	400,000

The company has received an offer from Maneno Enterprises to purchase component Q at shs 4 per unit instead of manufacturing it internally.

#### **Additional Information**

1. Twenty five percent of the manufacturing overheads for component Q are variable.

 Of the fixed overheads, shs 150.000 represents an allocation of general overheads, which would be incurred by Jamaica International Ltd whether the company purchases component Q or manufactures it internally. The balance of fixed overheads represents apportionments of administrative costs.

# Required:

i) Advice Jamaica International Ltd on whether to manufacture component

Q internally or purchase it from Maneno Enterprises. [6 marks]

ii) Explain four factors, other than costs, that may influence the decision on whether Jamaica International Ltd should accept the offer from Maneno Enterprises. [4 marks]

### Question two.

The following data were taken from the cost and production records of a company for the months of June and July 2007.

Data per unit	Shs
Selling price	50
Direct material cost	18
Direct labour cost	4
Variable production overheads	3
Monthly costs	
Fixed production overheads	99,000
Fixed selling	15,000

### Variable selling costs are 10 percent of sales revenue

	Sales	Production
	(Units)	(Units)
June	10,000	12,000
July	12,000	10,000

Required

Prepare profit statements for the months of June and July using:

- i) Variable costing method [10 marks]
- ii) Full costing method [10 marks]

### Question three.

Super sales International is the exclusive distributor for a revolutionary book bag. The product sells for sh. 40 per unit. Variable costs are sh. 28 per book bag and fixed expenses associated with the book bag total sh. 150, 000 per month. The company is currently selling 15,000 book bags month. (Note: each question is independent of each other).

### **Required:**

- i) What is the monthly break-even point in units sold and in sales? [5 marks]
  - ii) What is the total contribution margin at the break-even point? [5 marks]
  - How many units would have to be sold each month to earn a minimum target profit of sh. 18, 0000? [4 marks]
  - iv) Compute the company's margin of safety in both dollar and percentage terms.

[3 marks]

v) If monthly sales increases by \$ 80,000 and there is no change in fixed expenses, by how much would you expect monthly net operating income to increase?

# [3 marks]

# **QUESTION Four.**

The standard mix of product M5 is as follows:

Weight Kgs	Material	Price per Kg (Shs)
50	A	5
20	В	4
30	С	10

The standard loss in production is 10% of input. There is no scrap value. Actual production for a month was 7240K of M5 from 80 mixes. Actual purchases and consumption of material during the month were:

Kgs	Material	Price per Kg (shs)
4160	A	5.50
1680	В	3.75
2560	C	9.50

## Calculate:

- (i) Material cost variance
- (ii) Material price variance (10 Marks)

Beta Co produces 3 products, E, F and G, details of which are shown below:

	E	F	G
	sh.	sh.	sh.
Selling price per unit	120	110	130
Direct material cost per unit	20	40	50
Direct labour	15	10	20
Variable overheads( machining cost)	25	20	15

Maximum demand (units)	30,000	25,000	40,000
Machine hours	5	4	3

resource (hours per unit)

There are 320,000 bottleneck hours available each month.

Required:

Calculate the optimum product mix each month (15 marks)

### QUESTION five.

Mercury Motor Parts Manufacturers Ltd produce various motor parts. The cost structure of a part whose annual production is 90,000 units is as follows:

	Shs
Materials	540 per unit
Labour (25% fixed)	360 per unit
Expenses:-	
Variable	180 per unit
Fixed	270 per unit Total
	1350

The purchasing manager explores that a supplier is ready to supply the part at shs.1080.

- (i) Should the part be purchased and production stopped? (5 marks)
- (iii) What will be your advice if the resources producing that part are used to produce a product for which the selling price is shs.965. In this case material price will be shs.190 per unit. (10 marks)
- (iv) Briefly explain the term Transfer pricing and describe its main objectives. (5 marks)