



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR
THE DEGREE OF BACHELOR OF BUSINESS
ADMINISTRATION WITH INFORMATION TECHNOLOGY

MAIN CAMPUS

ABA404: MANAGEMENT ACCOUNTING

Date: 21st February, 2018

Time: 8.30 - 11.30am

INSTRUCTIONS:

- Answer ANY FOUR Questions
- Workings must be shown where necessary

medium



QUESTION ONE

A Company intends to establish a Mango Processing plant in Kisumu. The Company has choice of building Very Large Plant, Large Plant, Medium Plant or Small Plant. The states of nature provide that the economy may be Very strong, Strong, Stable or Weak. The following payoff matrix show the budgeted outcomes of each alternative and state of nature.

| Alternative/ Choices | States of Nature and Cash payoffs in Shs '000,000' | | | |
|-------------------------|--|--------|--------|------|
| | Very Strong | Strong | Stable | Weak |
| Very Large Plant | -100 | 150 | 350 | 100 |
| Large Plant | 550 | 400 | 250 | 150 |
| Medium Plant | 250 | 350 | 200 | 100 |
| Small Plant | 130 | 100 | 70 | 50 |

0.2
0.3
0.3
0.2

Required:

- a) Using the following non-probability decision criteria, determine the appropriate choice of investment
 - i) Maximax Criterion (3 marks)
 - ii) Maximin Criterion (3 marks)
 - iii) Minimax Criterion (3 marks)
- b) Determine the Expected Value of Perfect Information (EVPI) (6 marks)
- c) Explain the role of Management Accounting in the decision lines of an organisation.

QUESTION TWO

A company manufacturers two products A and B. The budgeted number of units to be sold in the first seven months of 2017 is given below.

| Period | Product A | Product B |
|----------|-----------|-----------|
| January | 1000 | 2800 |
| February | 1200 | 2800 |
| March | 1600 | 2400 |
| April | 2000 | 2000 |
| May | 2400 | 1600 |
| June | 2400 | 1600 |
| July | 2000 | 1800 |

It is anticipated that:

1. There will be no work-in-progress at the end of any month;
2. Finished units equal to half the sales for the next month will be in stock at the end of each month (including December, or previous year)

Budgeted production and production cost for the year ending 31st December are as follows:

| | Product A | Product B |
|---|--------------------|--------------------|
| Production (units) | 22000 | 24000 |
| Direct materials per unit | Shs.12.50 | Shs.19.00 |
| Direct wages per unit | Shs.4.50 | Shs.7.00 |
| Total factory overhead apportioned to each type of product. | Shs. 66,000 | Shs. 96,000 |

Required

prepare for the 6-month period ending 30th June of the year;

- a) production budget for each month (10 marks)
- b) summarized production cost budget (5 marks)

QUESTION THREE

Raj Corporation Ltd has prepared the following budget estimates for the year 2016-2017:

| | |
|----------------|----------------|
| Sales units | 15000 |
| Fixed expenses | 34000 |
| Sales value | shs.1,50,000 |
| Variable costs | shs.6 per unit |

You are required to:

1. Find the P/V ratio, Break-Even point and margin of safety.
2. Calculate the revised P/V ratio, Break-Even point and margin of safety in each of the following cases:
 - a) Decrease of 10% in selling price
 - b) Increase of 10% in variable units
 - c) Increase of sales volume by 2000 units
 - d) Increase shs. 6000 in fixed costs

Handwritten calculation:

$$\frac{15}{3} = 5$$

$$\frac{15000}{3} = 5000$$

$$\frac{150000}{3} = 50000$$

$$\frac{34000}{3} = 11333.33$$

$$\frac{6000}{3} = 2000$$

QUESTION FOUR

ABC Ltd can produce 400,000 units of a product per annum at 100% capacity. The variable production costs are Kshs. 40 per unit and the variable selling expenses are Kshs. 12 per sold unit. The budgeted fixed production expenses were Kshs. 2,400,000 per annum and the fixed selling expenses were Kshs. 1,600,000. During the year ended 31st March, 2008 the company worked at 80% of its capacity. The operating data for the year are as follows:

| | |
|---------------------------------|---------------|
| Production | 320,000 units |
| Sales @ Kshs. 80 per unit | 310,000 units |
| Opening stock of finished goods | 40,000 units |

Fixed production expenses are absorbed on the basis of capacity and fixed selling expenses are recovered on the basis of period.

You are required to prepare Statements of Cost and Profit for the year ending 31st March, 2008:

- On the basis of marginal costing
- On the basis of absorption costing

QUESTION FIVE

XYZ Company has been manufacturing its own widgets that are used in producing its final product. The cost of manufacturing 10,000 widgets is summarized below.

| | | |
|---------------------------|-------------------|----------------|
| Direct materials | Shs 20,000 | |
| Direct labor | 16,000 | |
| Variable factory overhead | 9,000 | |
| Fixed factory overhead | 15,000 | 5,000 |
| Total manufacturing costs | <u>Shs 60,000</u> | <u>113,000</u> |

A supplier offers to produce the widgets that XYZ needs for Shs 5.30 plus freight costs of Shs 0.50 per widget. If the company decides to buy from the supplier, 60% of the fixed factory overhead which represents depreciation and insurance costs will still continue. 40% will be avoided.

Required

Using marginal cost analysis determine whether the company should continue to make the widget or purchase it from the outside supplier.

$$\begin{array}{l}
 15000 \times \frac{50}{100} \\
 \frac{15000}{100} \times 50 \\
 \hline
 7500
 \end{array}$$

$$\begin{array}{r}
 15000 \\
 40000 \\
 \hline
 60000
 \end{array}$$

$$\begin{array}{l}
 40 \times 15000 \\
 10000 \\
 \hline
 60000
 \end{array}$$

10,000 x 20.50

QUESTION SIX

A company has three products: Product A, Product B and Product C. Income statements of the three product lines for the latest month are given below:

| Product Line | A | B | C |
|-----------------------|------------|------------|------------|
| Sales | Shs467,000 | Shs314,000 | Shs598,000 |
| Variable Costs | 241,000 | 169,000 | 321,000 |
| Contribution Margin | Shs226,000 | Shs145,000 | Shs277,000 |
| Direct Fixed Costs | 91,000 | 86,000 | 112,000 |
| Allocated Fixed Costs | 93,000 | 62,000 | 120,000 |
| Net Income | Shs42,000 | - Shs3,000 | Shs45,000 |

Required:

Use the incremental approach to determine if Product B should be dropped.