## UNIVERSITY OF SWAZILAND

## DEPARTMENT OF ACCOUNTING

MAIN EXAMINATION PAPER DECEMBER, 2012
DEGREE/DIPLOMA AND YEAR STUDY:IDE D COM YEAR 2
TITLE OF PAPER :INTRODUCTION TO COST ACCOUNTING
COURSE CODE :IDE AC203(M)2012/2013
TIME ALLOWED :THREE (3) HOURS
INSTRUCTIONS 1. TOTAL NUMBER OF QUESTIONS ON THIS PAPER: FIVE (5)
2. ANSWER ALL
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: GRAPH PAPER

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

## QUESTION 1:ACCOUNTING FOR INVENTORIES

## A.Valuation of ending inventory

Mbhuleni Trading Company Ltd purchased and issued the following stock in trade.

| Date | Particulars | Units | Unit cost |
| :--- | :--- | ---: | ---: |
|  |  | $\mathbf{E}$ |  |
| $\mathbf{0 1 . 0 7 . 2 0 1 2}$ | Opening stock | $\mathbf{5 0 0}$ | $\mathbf{2 0 0}$ |
| $\mathbf{2 5 . 0 7 . 2 0 1 2}$ | Purchases | $\mathbf{1 0 0 0}$ | $\mathbf{2 2 0}$ |
| $\mathbf{2 8 . 0 7 . 2 0 1 2}$ | Issue | $\mathbf{1 , 2 0 0 )}$ |  |
| 15.08 .2012 | Purchase | $\mathbf{1 , 5 0 0}$ | $\mathbf{2 3 0}$ |
| $\mathbf{2 0 . 0 8 . 2 0 1 2}$ | Issue | $\mathbf{1 , 4 0 0}$ |  |
| $\mathbf{3 1 . 0 8 . 2 0 1 2}$ | Purchase | $\mathbf{( 1 , 3 0 0 )}$ | $\mathbf{2 4 0}$ |
| $\mathbf{3 0 . 0 9 . 2 0 1 2}$ | Issue |  |  |
|  |  |  |  |

## REQUIRED :

Calculate the value of ending inventories using:
a. FIFO method
( 3 marks)
b. LIFO method
( 4 marks)
c. (Weighted) average cost method.
(8 marks)
Total for Question 1. A
(15 marks)

## B.Economic Order Quantity (EOQ)

REQUIRED :
a.Calculate the Economic Order Quantity from the following information

|  | Represented as |  |
| :--- | :--- | ---: |
| Annual demand (periodic usage in units) | D | 13,000 units |
| Cost per order (cost of placing and handling one <br> order) | O | E200 |
|  |  | E5.2 |
|  | H | (5 marks) |

( 5 marks)

C:The reorder level,the maximum inventory levels, and the minimum inventory levels.
The following information relate to the inventory particulars of Luyengo Traders
Company Ltd.

| Average usage | 1,000 units per day |
| :--- | :--- |
| Minimum usage | 600 units per day |
| Maximum usage | 1,300 units per day |
| Average lead time | 7.5 days |
| Minimum lead time | 5 days |
| Maximum lead time | 10 days |
| Economic Order Quantity | 40,000 units |

Determine the following :

1. The order level is:

| A | 14,000 units |
| :--- | :--- |
| B | $\mathbf{7 , 5 0 0}$ units |
| C | 9,750 units |
| D | $\mathbf{1 3 , 0 0 0}$ units |

2. The maximum inventory level is :

| A | 24,000 units |
| :--- | :--- |
| B | 44,500 units |
| C | $\mathbf{4 6 , 7 5 0}$ units |
| D | $\mathbf{5 0 , 0 0 0}$ units |

3. The minimum inventory level is :

| A | $\mathbf{6 , 5 0 0}$ units |
| :--- | :--- |
| B | $\mathbf{3 , 0 0 0}$ units |
| C | 5,500 units |
| D | $\mathbf{8 , 0 0 0}$ units |

( 5 marks

Total for the question (30 marks)

## QUESTION 2:BREAK EVEN POINT:

Company $X$ had the following sales and cost structures:

|  | E |
| :--- | ---: |
| Selling price per unit (Unit selling price,USP) | $\mathbf{2 0 0}$ |
| Variable cost per unit (Unit variable cost,UVC) | $\mathbf{1 2 0}$ |
| Fixed cost (FC) | $\mathbf{2 0 0 0}$ |

## REQUIRED :

A. Calculate the break even point in units and revenue,by use of the break even formula.
B. Calculate the break even point using the contribution margin method.
C. Calculate the break even point by use of the contribution percentage method. (4 marks)
D. Determine the contribution point by use of the graphical method.Plot the variable costs, and the sales revenues from 0 units to 50 units. The fixed costs should remain at E2,000.
( 10 marks)
E. Targeting net profit by application of break even point:

How many units must be sold (and how much revenue must be earned) to earn a net profit of E1,200?
F. Targeting net profit after taxation;

How much sales in quantities and money must be made to make a net profit of E1,400 after a corporation tax rate of $\mathbf{3 0 \%}$ on profits.

Total for the question

## QUESTION 3: JOB ORDER COSTING

## REQUIRED :

A.

Which of the following industries would use job order costing?

| 1 | Construction |
| :--- | :--- |
| 2 | Petro chemical |
| 3 | Refinery |
| 4 | Shipbuilding |
| 5 | Custom built furniture |
| 6 | Coca cola soft drink |

(3 marks)

## B. JOB ORDER CARD/JOB COSTING REPORT

Manzini CD drive Company manufactures CD drives for the drives use in the reproduction of music sound.Manzini CD has a job cost system. On the 1st of July 2012,Manzini CD began production of $\mathbf{1 0 , 0 0 0}$ CDs, and assigned it Job Number 350.The company incurred the following costs in completing the job.

Materials for the job

| Date | Material <br> Requisition No | Quantities | Description | Total value <br> E |
| :--- | :--- | :--- | :--- | ---: |
| $\mathbf{1 . 7 . 2 0 1 2}$ | $\mathbf{0 1}$ | $\mathbf{2 5 ~ k g}$ | Polypropylene @ E80 | $\mathbf{2 , 0 0 0}$ |
| $\mathbf{3 . 7 . 2 0 1 2}$ | 07 | $\mathbf{3 5 ~ k g}$ | Magnetic filament @ E130 | $\mathbf{4 , 5 5 0}$ |
| $\mathbf{5 . 7 . 2 0 1 2}$ | $\mathbf{1 0}$ | $\mathbf{4 k g}$ | Bucylic acid @ E500 | $\mathbf{2 , 0 0 0}$ |

Labour for the job

| Date | Time ticket no | Hours on the <br> job | Rate per hour | Total value |
| :--- | ---: | :--- | ---: | ---: |
| 2.7 .2012 | 600 | $\mathbf{1 0}$ | @ E200 | E2,000 |
| 6.7 .2012 | 620 | $\mathbf{1 1}$ | @ E250 | E2,750 |

Manzini CD Drive Co charges overhead to jobs based on the relationship between estimated overhead $(\mathrm{E} 600,000)$ and the estimated direct labour ( $\mathrm{E} 400,000$ ).The rate of 1.5 (E600,000/E400,000) is applied to the direct labour costs to charge to the job orders. The job No 350 was completed on $7^{\text {th }}$ July and shipped to music stores in Swaziland.

REQUIRED:Prepare a job cost card for Job Number 350.

Total for the question
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## QUESTION 4. PROCESS COSTING

Matsapha Manufacturers uses the process costing system.It has two (2) departments: The mixing department; and the packaging department It is designed to produce 5,000 units.
The standard costing is as follows:

|  | Budgeted Expenditure | Unit cost |
| :---: | :---: | :---: |
|  | E | E |
| Direct material | 150,000 | 150,000/5,000=30 |
| Direct Labour | 150,000 | 150,000/5,000 $=30$ |
| Overhead | 100,000 | $100,000 / 5,000=20$ |
| Total | 400,000 | 80 |

The work in process account as at the end of the year ( $\mathbf{3 0}$ th June 2012) was as follows:The work started on the 01/06/2012

|  |  | Units |
| :--- | :--- | ---: |
| Started production |  | 5,000 |
| Transferred out June 30th |  | $\mathbf{4 , 5 0 0}$ |
| Work in process 30 ${ }^{\text {th }}$ June |  | $\mathbf{5 0 0}$ |
|  | Direct materials 45\% complete |  |
|  | Conversion costs (labour and <br> overhead) $10 \%$ complete |  |

## REQUIRED :

Compute the equivalent units of the products produced, and cost the equivalent units produced.

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## QUESTION 5:INTRODUCTION TO BUDGETING

A. Computing the cost of sales

Charles Dube had the following income particulars to his trading particulars for the year ended 31.3.2012:

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | E | E | E | E | E |
| Beginning inventory | 90,000 | ? | 124,000 | 44,000 | ? |
| Purchases | $?$ | 456,000 | $?$ | 226,500 | 389,500 |
| Available for sale | 365,000 | 594,000 | 485,500 | ? | $?$ |
| Ending inventory | 55,000 | $?$ | $?$ | 68,500 | 113,000 |
| Cost of goods sold | ? | 438,500 | 346,500 | ? | 347,000 |

REQUIRED :
Compute the missing amounts of each of the above independent situations.
B. Cash budgeting

Ms Phindile Magongo runs a furniture shop. She begun in January 2012 with a minimum cash balance of $\mathbf{E 4 2 , 0 0 0}$. She forecasted that collections from her credit customers would be E45,000 in January and E86,000 in February 2012.

The projected cash payments included inventory purchase of E51,000 in January and E60,500 in February 2012. Phindile's bank required E37,500 minimum cash balance in her bank current account.At the end of any month when the account goes below E37,500, the bank automatically extends credit to the shop in multiples of E5,000.Phindile borrows as little as possible and pays these loans in a monthly installments of $\mathbf{E 5 , 0 0 0}$ plus a $\mathbf{2 0 \%}$ monthly interest on the entire unpaid principal.The first payment occurred at the end of the month following the loan.

## REQUIRED :

Prepare the furniture's shop's cash budget for the months of January and February 2012.

$$
\begin{aligned}
& \text { ( } 5 \text { marks) } \\
& \text { (10 marks) } \\
& \text { (100 marks) }
\end{aligned}
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