Tutorial letter 103/1/2015

Principles of Management Accounting

MAC2601

Semester 1

Department of Management Accounting

IMPORTANT INFORMATION:

This tutorial letter contains very important information regarding your module.

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CONTENTS

NB: This tutorial letter must be read in conjunction with Tutorial letter 101/2015 and the study guides.

1. INTRODUCTION

Dear Student

This tutorial letter (103) contains assignments 2 and 3 of the first semester of 2015. You will find important general information about assignments 2 and 3 in your Tutorial Letter 101. It is very important that you refer to Tutorial Letter 101 for more information about Assignments 2 and 3 before you attempt these assignments.

Assignment 2 weighs 75% in the calculation of your semester mark. Your semester mark, in turn, weighs 20% in the calculation of your final mark. Assignment 2 thus effectively weighs 75% x 20% = 15% in the calculation of your final mark for this module. You should, therefore, realise the importance of:

- Submitting assignment 2 soon enough so that the University will receive it on/before the due date.
- Putting in sufficient study time and effort to achieve a good mark for the assignment.
- Submitting **your own work** as assignment 2 – refer section 6.4 (e) and section 6.8 in your Tutorial Letter 101 regarding plagiarism and for what we allow with regard to MAC2601 assignments. You can, for instance, not afford to copy someone else's work and be awarded 0% for the assignment (and even risk having further disciplinary action taken against you).

Assignment 3 does not contribute toward your semester mark and is not compulsory. Assignment 3 is a self-assessment assignment in the form of a "mock" exam and neither has to be submitted, nor does it count toward your semester mark. You are welcome to submit it if you prefer, but it will not be marked by the lecturers – we will simply put the suggested solution on myUnisa (and make it available as a Tutorial Letter).

We also include in this tutorial letter other important information that might help you to achieve better marks in assignment 2 and/or to gain more from attempting assignments 2 and 3.

Kind regards,

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Any changes in lecturers' details will be communicated via myUnisa.			

MAC2601 Lecturers

2. PLAGIARISM

We would like to draw your attention to sections 6.4 (e) and 6.8 in your Tutorial Letter 101 again.

Specifically regarding this module, we also specified the following:

"If you worked together in a study group, remember that you still have to submit your own work (and written in your own words if it is a written assignment). For purposes of MAC2601, this also involves that you do all the calculations yourself when it comes to any type of MAC2601 assignment, i.e. you can discuss how to approach a question, but you have to implement this approach by yourself. If the lecturers find any similar-looking/worded assignments, all parties involved will get zero for their assignment mark.

By submitting any MAC2601 assignment, you automatically declare that you have submitted your own work and that you are aware of the consequences of being guilty of plagiarism." (Unisa 2014:11).

3. ASSIGNMENT 2 (SEMESTER 1)

WRITTEN QUESTIONS (compulsory)

Instructions and further information:

- For this assignment you have to study **Topics 1 – 12**.
- Marks awarded to Assignment 2/2015 counts 75% toward your semester mark.
- The due date for this assignment is **30 March 2015** and **no extension of time will be given for the submission of the assignment**.
- Please remember to indicate the unique number of the assignment on the cover page of your answer.
- The unique number for this assignment is **576389**.
- Submission of this assignment implies that you make the plagiarism declaration in your Tutorial Letter 101. If you are deemed to be in contravention of this declaration, you will be awarded 0% for your assignment 2.
- It is our departmental policy to mark only pre-selected questions and/or sub-sections of questions to determine your mark for a written assignment. **This means that <u>not all</u> questions and sub-sections of questions will be marked.** We will not inform you which questions and/or sub-sections will be selected for marking, so it is in your best interest to do all eight questions.
- You will find some common mistakes to avoid in attempting and submitting this assignment, as well as some answers to frequently-asked questions in sections 5 and 6 of this tutorial letter.

- The assignment structure is as follows (remember that not everything will be marked):

Question	Topic	Study Unit	Marks
1	1-5	1-12	20
2	6	13	10
3	7	14-18	20
4	8	19-20	10
5	9	21-22	10
6	10	23-25	10
7	11	26-28	10
8	12	29-31	10
TOTAL			**100**

QUESTION 1 – VARIOUS TOPICS (10 marks)

Carrim Manufacturers produces a product called CD Pocket. In April 2014, the company started operating for the first time and manufactured 200 000 CD pockets, of which 170 000 were sold at a selling price of R150 per unit. The company uses the weighted average method of inventory valuation.

Costs incurred in April 2014 were as follows:

• Variable selling costs in total	R595 000
• Fixed production costs	R2 900 000
• Fixed administration costs	R1 700 000
• Variable manufacturing costs per unit	R70

The following information is available for May 2014:

- On 1 May 2014, Carrim Manufacturers decreased the selling price per unit (CD Pocket) by R5.
- 210 000 units were sold in May 2014.
- The variable selling cost per unit was the same as that of April 2014.
- Fixed production costs and fixed administration costs remained as in April 2014.
- Variable manufacturing costs increased to R72 per unit manufactured.

Further information for use in June 2014 budget:

- Opening inventory on 1 June 2014 will be 40 000 units.
- The May 2014 selling price will still be applicable.
- Sales units for June 2014 are expected to increase by 12% from May 2014 figures.
- Budgeted production is 280 000 units.
- The variable selling cost per unit will be the same as that of May 2014.
- Both fixed production costs and fixed administration costs are expected to increase by 4%.
- Variable manufacturing costs per unit are expected to increase by R3 from the May 2014 amount.

REQUIRED:

a) Prepare the budgeted income statement (statement of profit or loss and other comprehensive income) for June 2014 using the direct costing method. (10)

b) Prepare the budgeted income statement (statement of profit or loss and other comprehensive income) for June 2014 using the absorption costing method. (7)

c) Reconcile the budgeted net profit in (a) above with the budgeted net profit in (b) above. You may omit the reconciliation in **units**. (3)

QUESTION 2 – JOB COSTING SYSTEM (10 marks)

Big Bang Lifts (Pty) Ltd. manufactures and supplies lifts to government departments. The Department of Health awarded Big Bang Lifts a contract to supply two lifts each for two hospitals in Johannesburg.

As a Senior Management Accountant you have been tasked by the CEO to implement the job costing system for the jobs awarded. Each lift manufactured and supplied by the company has a unique code.

The following balances were obtained from Big Bang Lifts' records on 1 February 2014:

	R
Direct materials	100 000
Bank	5 000
Work-in-progress	0

February 2014 materials issued to jobs and wage cost incurred on jobs were as follows:

Job	**Material**	**Wages (direct, in total)**
	R	**R**
GPG1	15 000	10 000
FRS2	19 500	7 500
LIMP3	10 000	3 500
WSC4	5 000	4 000

The actual wage rate was R100 per labour hour.

<u>Additional information:</u>

1. Actual manufacturing overhead costs incurred in February 2014 amounted to R80 000.
2. Mark-up of 45% is added to the total cost of each job to arrive at the selling price of the job.
3. Overhead costs are applied to production using a predetermined rate of R280 per labour hour.
4. Job LIMP3 was completed and transferred to the finished goods account.
5. Job GPG1 and FRS2 were completed and transferred to the Department of Health on 28 February 2014. Sales are accounted for on the date of transfer.
6. Direct materials of R25 000 were purchased in February 2014.

<u>REQUIRED:</u>

a) Prepare the following ledger accounts. All the accounts should be properly closed off:

- Direct material control (2)
- Manufacturing overhead control (2)
- Work-in-progress control (3)
- Finished goods (1)

b) Calculate the total profit or loss on Job GPG1. (2)

QUESTION 3 – PROCESS COSTING (20 marks)

Phambili (Pty) Ltd. produces a liquid fertiliser in a single production process. The company uses a process costing system. Materials are added at the beginning of the process and conversion takes place evenly throughout the process.

The following information relates to March 2015:

Opening WIP (25% complete) - 70 000 litres; Material R300 000; Conversion Costs R120 000

Put into production - 120 000 litres; Material R520 000; Conversion Costs R1 190 000

Completed and transferred - 150 000 litres

Closing WIP - 25 000 litres

Normal wastage amounts to 6% of the inputs that reach the wastage point.

Additional information:

- Wastage occurs when the process is 30% complete.
- Phambili (Pty) Ltd. uses the weighted average method of inventory valuation.
- Closing WIP was 95% complete on 31 March 2015.

REQUIRED:

a)	Prepare a quantity statement for Phambili (Pty) Ltd for March 2015.	(6)
b)	Prepare a production cost statement for Phambili (Pty) Ltd. for March 2015.	(3)
c)	Prepare a cost allocation statement for Phambili (Pty) Ltd. for March 2015.	(11)

QUESTION 4 – JOINT AND BY-PRODUCTS (10 marks)

Oudtshoorn Butchery (Pty) Ltd. manufactures two joint products, Ostrich Mince and Ostrich Steak. The joint process also results in a by-product used for dog treats, Ostrich Bones, for which a regular market exists. Market research predicted that all the by-products will be sold after further processing. Joint costs (before any adjustments) for the period amounted to R500 000.

Per kilogram selling price of the final product	
Ostrich mince	R120
Ostrich steak	R150
Ostrich bones	R5
Selling and distribution costs per kilogram of the final product	
Ostrich mince	R10
Ostrich steak	R12
Ostrich bones	R2
Kilogram at the split-off point and also of the final product	
Ostrich mince	3 000
Ostrich steak	5 000
Ostrich bones	1 000
Cost of further processing after the split-off point (per kilogram)	
Ostrich mince	R20
Ostrich steak	R30
Ostrich bones	R1

No inventory is kept.

REQUIRED:

(a) Calculate the joint costs that will be allocated to Ostrich Steak in total according to each of the following methods:

i) Physical standard method. (4)
ii) Net realisable value at split-off point method. (4)

(b) Which one of the above methods will be more suitable for allocating the joint costs in the above scenario and why? (2)

QUESTION 5 – BUDGETING (10 marks)

Moreleta Dried Fruit (Pty) Ltd. sells packets of dried fruit and has prepared the following **fixed budget** for April 2015 (no inventory is kept):

		R
Sales (R25 per packet)		22 500
Less:	Variable cost	16 200
	Direct materials (0,1kg per packet)	2 430
	Direct labour (R60 per hour)	7 182
	Manufacturing overheads (varying with hours worked)	4 788
	Selling cost	1 800
Contribution		6 300
Less:	Fixed cost	4 500
	Rent	3 500
	Insurance	1 000
Budgeted net profit		1 800

Actual information for April 2015:

- The selling price per packet amounted to R23 and 1 000 packets were produced and sold.
- Material usage was 0,12kg per packet at a price of R26 per kilogram.
- Direct labour cost amounted to R7 006 for the 113 hours worked.
- The actual manufacturing overhead rate was R42 per direct labour hour.
- Rent amounted R3 500 for the month and insurance R1 100.

REQUIRED:

(a) Prepare the flexible budget for April 2015. (5)
(b) Calculate all the variances between the actual and flexible budget figures. (5)

QUESTION 6 – STANDARD COSTING (10 marks)

Voorwaarts Mars Ltd. manufactures hiking boots. The company allocates manufacturing overheads on the basis of labour hours.

You have the following information available regarding February 2015:

Budgeted manufacturing overheads	R2 392 000
Actual manufacturing overheads	R2 550 400
Standard labour cost per pair of boots (R90 per hour)	R207
Labour rate variance	R105 000
Actual labour rate per hour	R86

The company budgeted to manufacture 10 000 pairs of boots in February 2015, but eventually produced 10 500 pairs.

REQUIRED:

a) Calculate the following for February 2015:

i.	Actual labour rate per hour	(2,5)
ii.	Labour efficiency variance	(2,5)
iii.	Variable manufacturing overhead expenditure variance	(2,5)
iv.	Variable manufacturing overhead efficiency variance	(2,5)

QUESTION 7 – RELEVANT COSTING (10 marks)

Young Ones (Pty) Ltd. manufactures childrens' toys. The company uses specialised machinery imported from Japan to manufacture toys. Young Ones manufactures three types of toys, PS1, PV3 and PT1. The current machine can only be used for 522 hours in a month. Young Ones' management has been mulling over a decision about the optimal allocation of machine hours to the three products manufactured.

Cost and Price information for May 2015:

	PS1	**PV3**	**PT1**
Expected monthly demand (units)	2 500	3 000	3 500
Selling price per unit	R100	R150	R110
Production costs			
Variable cost (per unit)	R30	R35	R40
Fixed cost per unit	R10	R10	R10
(per unit based on production capacity)			
Variable selling costs (per unit)	R5	R5	R5

Additional information:
The machine used by Young Ones can only produce 15 PS1 toys per machine hour, 10 PV3 toys per machine hour or 30 PT1 per machine hour (in any combination of toys).

REQUIRED:

(a) Calculate the optimal allocation of machine hours to the three products. (10)

QUESTION 8 – SENSITIVITY ANALYSIS (10 marks)

Martinez Yacht Equipment (Pty) Ltd. manufactures and sells small items of equipment used on boats and yachts. Currently, the company sells its products to local buyers only and this renders a contribution of R2 000 000 per year.The company is in the process of deciding which one of the following three options to choose:

- Start exporting to Mozambique
- Start exporting to Namibia
- Keep on selling to local clients only.

The following estimates were made:

- If the company decides to start exporting to Mozambique, there will be a 45% chance that the yearly contribution will increase by 30%, a 20% chance that the contribution will remain as before and a 35% chance that contribution will decrease by R100 000.
- If the company decides to start exporting to Namibia, there is a 70% chance that a potential contract with a large yacht club will render additional contribution of R500 000 per year. If no contract realises, contribution will either increase by R200 000 (60% chance), or decrease by 10%.

REQUIRED:

(a) Draw a decision tree based on the above information and clearly indicate which one of the three options is the most appropriate from a quantitative perspective. (10)

4. ASSIGNMENT 3 (SEMESTER 1)

WRITTEN QUESTIONS (not compulsory)

Instructions and further information:

- For this assignment, you have to study **Topics 1 – 12**.
- Marks awarded to Assignment 3/2015 counts 0% of your semester mark.
- The due date for this assignment is **20 April 2015.** However, you do not have to submit this assignment as it does not contribute anything towards your semester mark. You can use it for additional exam preparation.
- The lecturers will not mark the assignment – the assignment is for self-assessment purposes.
- The unique number for this assignment is **576399**.
- This "mock" exam is NOT an indication of which topics will be asked in the real exam, it is simply an example of a past exam paper that you can use to practice your exam technique, etc.

QUESTION 1 (20 marks)(24 minutes)

Question 1 contains 10 multiple-choice questions of 2 marks each. Simply write down the number of each multiple-choice question (1.1 up to 1.10) with the letter of the correct option (A, B, C or D) next to each respective question number.

Question 1.1 is based on the following information:

Shanduka Ltd., based in Sandton, recorded the following purchase and issue of materials ("Gold") for the month of December 2012:

Date		**Transaction detail**
December		
1	Opening inventory	300 units @ R6,50 each
3	Purchased	350 units @ R6,90 each
7	Issued	400 units to production

Industry information:

Total costs for the industry pertaining to freight charges amount to R294 for orders placed in December. Due to Shanduka's massive market share, its share of the total freight charges is 50% of the industry total for December.

1.1

The value of inventory at 7 December, after issue to production of 400 units of Gold and using the **FIFO** method of valuation is: (2)

A. R1 725
B. R2 562
C. R1 830
D. R 732

1.2

While sitting in the Library studying for your MAC2601 exam, a fellow student asked you to verify the following statements regarding inventory valuation:

(i) The issuing of materials at **weighted average** cost assumes that each batch taken from the storeroom is made up of the same quantities from each consignment in inventory at the date of issue
(ii) The flow of materials dictates the flow of costs when the **FIFO** method is used
(iii) During times of inflation, the use of the **FIFO** method will result in issues to production being made at "cheaper" prices
(iv) The **weighted average** method divides the total cost of all materials of a particular class by the number of units on hand for that class in order to find the average price

Indicate which of the above statements are true: (2)

A. Statements (ii) and (iii)
B. Statements (i), (iii), and (iv)
C. Statements (i) and (iv)
D. Statements (i) and (ii)

1.3

Product costs using the absorption costing method equals: (2)

A. Direct materials
B. Direct labour
C. Fixed costs
D. Variable and fixed manufacturing costs

1.4

The following information is available for the month ended 30 April 2013:

Opening inventory	10 000 units
Closing inventory	8 000 units
Net profit before tax (using absorption costing)	R280 000,00
Fixed cost per unit in opening inventory	R7,50
Fixed cost per unit in closing inventory	R9,00

If **direct costing** is used the net profit before tax for the month ended 30 April 2013 will: (2)

A. Increase by R3 000
B. Decrease by R3 000
C. Increase by R75 000
D. Decrease by R72 000

1.5

Manguaung Ltd. is a Chinese conglomerate which recently established an office in Johannesburg. The CEO of the company, Frelimo Mudau, has recently confided in you that he struggles to understand activity-based costing. The CEO has requested you as a management accounting student to list the advantages and disadvantages of ABC for him.

(i) Performance measurement can be carried out in more detail owing to the extensive research required to implement ABC.
(ii) ABC is less expensive than the traditional costing method.
(iii) It may result in more accurate price decisions if costs are used to set prices.
(iv) If overhead cost is a low percentage of total cost, ABC will differ significantly from traditional costing.

Indicate which of the above statements are true (2)

A. Statements (i) and (iii)
B. Statements (i) and (iv)
C. Statements (ii) and (iii)
D. Statements (i), (ii) and (iv)

1.6

You have been provided with the following statements regarding ABC:

(i) ABC is more suitable for companies with larger amounts of indirect costs.
(ii) The overhead rate will be the same irrespective of whether ABC or the traditional costing method is used.
(iii) In ABC, only manufacturing cost can be assigned to products.
(iv) The business process can be redesigned if inadequacies are identified in ABC research.

Indicate which of the above statements are true: (2)

A. Statements (ii) and (iii)
B. Statements (i) and (iii)
C. Statements (i) and (iv)
D. Statements (iii) and (iv)

Questions 1.7 and 1.8 are based on the following information:

Chachingo Ltd. manufactures three joint products and one by-product (Dee) in a single process. The following are the actual results for March 2013:

	Aye Units	**Bee Units**	**Cee Units**	**Dee Units**
Production at 100% capacity	20 000	25 000	10 000	2 000

All joint products can be processed further into a superior product namely: Super Aye, Super Bee and Super Cee. Due to strict quality control at the end of the production process, a rejection of 10% of the final product will occur if further processing is done after split-off point.

The following is applicable if products are processed further:

	Super Aye	Super Bee	Super Cee
	R	**R**	**R**
Selling price per unit	20	15	25
Additional processing costs per unit	4	4	5

Additional information:

1. Costs incurred in the joint process were

	R
• Direct material	238 500
• Direct labour	143 100
• Manufacturing overheads	95 400

2. By-products are sold for R3 per unit.

1.7

Assuming that a regular market exists for the by-product, the total joint costs to be allocated is: (2)

A. R477 000
B. R471 000
C. R386 600
D. R375 600

1.8

The profit attributed to product Super Bee if the total production is sold and the company uses the **physical standard method** to allocate joint cost is (round off to the nearest rand) is: (2)

A. R23 409
B. R60 909
C. R123 409
D. R160 909

1.9

You have been appointed as trainee management accountant at one of the investment banks is Sandton. The head of finance requested you to present a document about budgeting and, in particular, to list its advantages and disadvantages.

You are considering the following statements:

(i) Budget variances can expose weak points in an organisation.
(ii) Forecasts are always 100% accurate.
(iii) Budgets do not help with cost control.
(iv) Budgets serve as a roadmap in terms of whether the organisation is achieving its goals.

Indicate which of the above statements are true: (2)

A. Statements (i) and (ii)
B. Statements (i), (ii) and (iii)
C. Statements (ii) and (iii)
D. Statements (i) and (iv)

1.10

Whilst preparing for your MAC2601 exam, you overhear fellow students having a discussion about flexible (flexed) budgets.

They mentioned the following:

(i) A flexible budget is the approved plan of action for achieving a predetermined goal.
(ii) A flexible budget is the budget that calculates budgeted income and budgeted costs according to actual production volume.
(iii) For the preparation of a flexible budget, we need to calculate the fixed cost per unit based on actual production volume.
(iv) A flexible budget is the budget that restates the position if a variation from expected sales and production volume occurs on which the fixed budget is based.

Indicate which of the above statements are true: (2)

A. Statements (i) and (ii)
B. Statements (iii) and (iv)
C. Statements (i), (ii) and (iii)
D. Statements (ii) and (iv)

<u>QUESTION 2</u> (10 marks)(12 minutes)

Zanral Ltd., a company based in Midrand, was recently awarded a contract by the National Department of transport to supply etags. The company manufactures these etags to be fitted in cars. The company uses a standard costing system.

The standard cost per Zanral etag is as follows:

		R
Direct material: plastic	(10kg @ R10 per kg)	100
Direct material: steel	(15kg @ R16 per kg)	240
Direct labour	(20 hours @ R8 per hour)	160
Variable manufacturing overhead varying with hours worked	(20 hours @ R4 per hour)	80
Variable selling costs		22 000
Budgeted selling price per etag		1 200

Zanral Ltd. financial information for the year ended 31 December 2012 includes:

		R
Cost of direct material: plastic	(12kg @ R13 per kg)	78 000
Cost of direct material: steel	(10kg @ R12 per kg)	60 000
Cost of direct labour	(25 hours @ R12 per hour)	150 000
Variable selling costs		25 000
Selling price per etag		1 350

Etags manufactured and sold 500 etags

Round off all variances to the nearest rand.

REQUIRED:

a) Calculate the labour rate variance. (2)
b) Calculate the labour efficiency variance. (2)
c) Calculate the variable manufacturing overhead efficiency variance for overheads that vary with hours worked (2)
d) Calculate the purchase price variance for direct material steel. (2)
e) Evaluate whether the following statement about standard costing is **true** or **false**:

- Organisations use standard costing because actual performance can be controlled by measuring it against the standard, any variances can then be investigated, and corrective action taken. (2)

QUESTION 3 (10 marks)(12 minutes)

Greyton Glass (Pty) Ltd. manufactures and sells two different glass products: vases and cutting boards.

The management accountant has started to prepare the budget for the 2014 financial year and identified the following as the only limiting factor in the production process:

	Vases	**Cutting boards**	**Total**
Labour hours **required** to meet full regular demand for the product	1 500	1 000	2 500
Total labour hours **available**			1 600
Shortfall/Limitation in **labour hours**			900

The company will not be able to acquire any additional labour, but the labour hours available can be reassigned between products as required.

Additional information:

1. Budgeted fixed costs for the year are R480 000.
2. Vases are expected to sell for R30 per unit and cutting boards for R25 per unit.
3. Expected regular demand for 2014: 3 000 vases and 4 000 cutting boards.
4. Variable costs per unit are budgeted as follows:

	Vase **R**	**Cutting board** **R**
Variable manufacturing costs	8	12
Variable selling costs	3	1
Total variable costs	11	13

REQUIRED:

(a) Determine the number of sales units per product (sales mix) that should be budgeted for the coming financial year in order to maximise the budgeted profit of Greyton Glass (Pty) Ltd. (8)

(b) If a potential once-off customer requested Greyton Glass (Pty) Ltd. to quote a total price for 200 vases, which one of the following statements will be **incorrect** with regard to setting a selling price for the 200 vases (simply write down the **number** of the **incorrect** statement):

(i) The budgeted fixed costs for the year (R480 000) are irrelevant to the pricing decision.
(ii) Greyton Glass (Pty) Ltd. will also have to take into account the net opportunity costs associated with giving up its regular sales.
(iii) Greyton Glass (Pty) Ltd. should also consider qualitative factors before they make a final decision about the price to be quoted.

(iv) If Greyton Glass (Pty) Ltd. sets the special order selling price at an amount lower than the minimum price that can be charged for the special order, this will put the company in a better over all cash position.
(2)

QUESTION 4 (10 marks)(12 minutes)

You are a business advisor. You have prepared the following probability distribution table for a client regarding all the possible effects of adding a specific new product line to the client's existing business (where "-R200 000" means a R200 000 decrease in profit, "+R200 000" means a R200 000 increase in profit, etc.):

Outcome value (effect on profit)	Probability (%)
-R200 000	10%
-R100 000	20%
0	20%
+R100 000	35%
+R200 000	15%

The overall profit of the client would be R2 000 000 if the new product line is **not** added.

REQUIRED:

(a) Calculate the expected value of the effect on the client's profit if the new product line is added. (3)

(b) Determine the individual outcome (effect on profit) that is most likely to occur. (1)

(c) Calculate what the relative decrease in the overall profit of the client will be should the new product line be added and the "-R100 000" outcome (a R100 000 decrease in profit) realises. (2)

(d) State whether the above probabilities will be classified as "biased" or "unbiased" if the client's management had to make a lot of assumptions in determining these probabilities. Simply write down either "Biased" or "Unbiased", depending on the correct answer. (1)

(e) Write down the correct term for each of the following definitions/descriptions within the context of decision trees:

(i) Something that takes place independent of management's actions, i.e. management cannot control what happens under the specific circumstances. (1)

(ii) A component of a decision tree, which connects one node to the following and which is represented by a solid line. (1)

(iii) The final result or outcome of all the events and decisions that lead to a specific point, before weighting with probabilities – also called a "possible outcome". (1)

QUESTION 5

THIS QUESTION CONSISTS OF TWO INDEPENDENT PARTS:

PART A (5 marks) (6 minutes)

Ebhayi Transport Services operates a fleet of delivery trucks in Port Elizabeth metropolitan area. A careful study by the company's cost accountant has determined that if a truck is driven 145 000 km during a year, the average semi-variable operating cost is R15,50 per km. If a truck is driven only 98 000 km during a year, the average semi-variable operating cost increases to R19,50 per km.

REQUIRED:

(a) Use the high-low method to determine the variable cost per km (round off to two decimal places) and the total fixed costs (round off to the nearest hundred Rand). (3)
(b) Formulate a linear equation that explains and predicts cost behaviour. (1)
(c) Forecast the total costs if an estimated 115 000 km is driven during a year. (1)

PART B (10 marks) (12 minutes)

MUSIKA (Pty) Ltd. is a small entertainment company operating from downtown Johannesburg. MUSIKA sells one product called a BIN10 music player. The following information is available for the year ended 31 March 2013 in which 16 000 units were manufactured and sold:

	Total	**Per unit**
	R	**R**
Sales	560 000	35,00
Direct material	148 000	9,25
Direct labour	120 000	7,50
Conversion costs	215 000	
Fixed manufacturing overheads	55 000	

There was no inventory on hand at the beginning and end of the month. Variable manufacturing overheads are based on production.

REQUIRED:

(a) Calculate variable manufacturing overheads in total. (2)
(b) Calculate total contribution and contribution ratio. Round off to two decimals in your calculations. (2)
(c) Prepare a contribution statement of comprehensive income if 20 000 BIN10 are manufactured and sold. (3)
(d) Use the same information as in (c) above to calculate net profit if the selling price increases by R5, total fixed costs increases by R5 000 and sales volume decreases by 10%. (3)

QUESTION 6 (10 marks)(12 minutes)

Gidima Ltd., a company in Centurion, was recently awarded a contract by the national Department of Home Affairs to supply ID cards to replace the current version of identity books used in South Africa.

The company is excited about the prospects of making excellent profits from this contract as evident from recent South African census population numbers. Gidima Ltd. has requested you to assist them with the computation of the budgeted cost of each smart ID card as well as the budgeted profit. The company uses the absorption costing method of inventory valuation.

The budgeted cost of a smart ID card is made up as follows:

Direct materials: Specialised plastic	2,5 m @ R3,50 per metre
Direct labour	2 hours
Variable manufacturing overhead recovery rate	R1,50 per hour
Selling price per smart ID card	R125
Variable selling costs	

(Variable selling cost is 5% of selling price per smart ID card and varies with units sold)

Additional information:

- Variable manufacturing overheads vary with labour hours worked.
- The total budgeted fixed manufacturing overheads for the period amount to R550 000. Fixed manufacturing overheads are recovered based on direct labour hours. The average long run capacity of the plant is 20 000 ID cards per annum.
- Direct labour is budgeted at R8 per hour.
- There was no budgeted opening or closing inventory for the period.

REQUIRED:

a) Calculate the budgeted **manufacturing cost** of one smart ID card (rounded to two decimal places). (5)

b) Calculate the total budgeted profit if Gidima Ltd. manufactures and supplies 9 000 smart ID cards to the Department of Home Affairs. (5)

QUESTION 7 (10 marks)(12 minutes)

Mboni Tshivhasa manufactures clay pots that she sells mostly to foreign tourists at the Punda Maria Gate of the Kruger National Park. Her clay pots are painted with enamel paint after being burnt in an open straw fire. Each job is given a unique African name that identifies it.

Mboni wants you, as a management accountant, to help her determine the cost of each job using job costing.

The following balances were extracted from the books of Mboni Tshivhasa on 1 April 2013:

	R
Direct material	90 000
Bank	3 200
Sales expenses	3 600

April 2013 costs have been allocated to jobs as follows:

Job	**Material**	**Wages**
	R	**R**
Khali	25 200	16 800
Mvuvhelo	32 400	20 160
Lusiko	18 700	9 360
Mutondo	2 900	-

Additional information:

1. Actual manufacturing overhead costs incurred during the month are R72 600.
2. Mark-up of 50% is added to the total of each job's cost to arrive at the selling price for the job.
3. Overheads are applied to production using the rate of 90% of direct material costs.
4. Job Khali, Mvuvhelo and Lusiko were completed and transferred to the finished goods account.
5. Jobs Khali and Lusiko were sold on 30 April 2013.

REQUIRED:

(a) Prepare the following general ledger accounts, properly balanced:

- Direct material control (2)
- Manuafacturing overhead control (2)
- Work-in-progress control (3)
- Finished Goods (1)

(b) Calculate the profit or loss of Mboni Tshivhasa for the month of April 2013. (2)

QUESTION 8 (15 marks)(18 minutes)

Bontebo (Pty) Ltd. manufactures one product in a single process and uses a process costing system. The following information is available for March 2013:

	Units
Work-in-progress (1 March 2013) – 60% completed	12 000
Started in the current month	38 000
Completed in the current month	35 000
Work-in-progress (31 March 2013) – 20% completed	10 000

Additional information:

1. Bontebo (Pty) Ltd. applies the FIFO method of inventory valuation.
2. Wastage takes place when the process is 30% complete.
3. Raw materials are added at the beginning of the process and conversion takes place evenly throughout the process.
4. Normal losses are estimated as 10% of the units that reach the wastage point.
5. The following cost data is available for March 2013:

	R
Work-in-progress (1 March 2013)	
Material	64 800
Conversion	18 720
Current production cost	
Material	209 000
Conversion	118 940

REQUIRED:

(a) Prepare the quantity statement for March 2013. (7)
(b) Prepare the production cost statement for March 2013. (3)
(c) Calculate the Rand value of the normal loss in terms of material only. Round off amounts to the nearest Rand. (1)
(d) Calculate the total value of closing WIP that will be included in the cost allocation statement.(4)

5. WRITTEN ASSIGNMENTS: COMMON MISTAKES TO AVOID

The following are a few examples of mistakes that students often make regarding their written MAC2601 assignments – please try to avoid these mistakes, as they may cost you a lot of marks:

1. Submitting the assignment online as an MS Excel or MS Word file instead of in the required PDF format.
2. Submitting the wrong module's assignment as MAC2601.
3. Not showing and referencing all your calculations.
4. Not reading the "required" carefully.
5. Looking for a question of the same format to use as a "recipe" for answering the assignment question instead of referring back to basic principles to answer the question.
6. Omitting opening and closing inventory in a direct and absorption costing question even if these exist.
7. Using the FIFO method when a question requires the weighted average method to be used, and vice versa (various topics).
8. Using the direct costing method when use of the absorption costing method is required, and vice versa.
9. Omitting the formulae used in a CVP question.
10. Omitting the actual production in standard costing variance calculations.
11. Treating variable selling costs as part of variable production cost.
12. Calculating variable selling costs based on production units instead of sales units.
13. Preparing incomplete general ledger accounts for a job costing system and/or omitting applied overheads.
14. Calculating only the difference between direct and absorption costing profits and presenting this as a "reconciliation" (the difference needs to be explained by further calculations e.g. like in study guide 1, activity 10.2).
15. Not knowing how to calculate the normal loss in a process costing system.
16. Doing only calculations when asked to draw a decision tree.

6. FREQUENTLY-ASKED QUESTIONS

The following are examples of questions that the lecturers frequently get with regard to written assignments:

Q: *Why have I not received my assignment 2 marks yet?*
A: Assignment 1 is a multiple-choice (MCQ) assignment. It is marked automatically by the computer system. However, assignment 2 takes longer to process and mark as it is a written assignment that is marked by a (human) internal or external marker. Marks are captured as individual assignments are marked and therefore not released all at once for all the students registered for the module as with an MCQ assignment. It can take more than a month for your marks for assignment 2 to become available. If you, however, suspect that your assignment was not received by the University, etc., please contact the lecturers urgently and before the exam date.

Q: *What do I do if I do not agree with my assignment 2 mark?*
A: Please e-mail a copy of your marked and returned assignment to MAC2601-15-S2@unisa.ac.za **before the exam date**, clearly indicating with what and why you do not agree. The lecturers will investigate whether your marks need to be adjusted or not. No assignment marks will be adjusted after the exam date, so make sure that you follow up with us in time.

Q: *How do I **re**submit my assignment online?*
A: Submitting a written assignment online is like dropping a paper-based assignment into a post box/assignment box. Unfortunately you cannot replace it, so please ensure that you submit the correct document on your first attempt.

Q: *Can I submit my assignment through the post?*

A: Yes, we do allow it, although submitting your assignment online may provide an easier trail to follow should there be any doubt about whether the University received it or not. However, if you submit by post, please ensure that you keep a copy of your assignment for in case we never received it and require a resubmission.

7. SOURCES CONSULTED

Unisa. 2014. *Tutorial letter 101/3/2015: Principles of Management Accounting.* Pretoria: University of South Africa.