



MAC2601

October/November 2014

PRINCIPLES OF MANAGEMENT ACCOUNTING

Duration 2 Hours

100 Marks

EXAMINATION PANEL AS APPOINTED BY THE DEPARTMENT.

Use of a non-programmable pocket calculator is permissible

Closed book examination.

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This examination question paper consists of eight (8) pages

PLEASE NOTE.

- (a) This examination question paper is available in both English and Afrikaans
- (b) This examination question paper consists of FIVE (5) questions
- (c) Ensure you are handed a correct blue answer book by the invigilator
- (d) Start each question on a new page
- (e) Answer all the questions
- (f) Show all your calculations
- (g) Please write legibly in black or blue ink (The use of a pencil or red pen is not permissible)

QUESTION 1**(24 minutes / 20 Marks)**

Blue Sky Industries Limited is a large diversified listed company. It operates in many diversified industries. Sam Smith is in charge of the freight and logistics division. They only send out standard recorded orders that are ordered online. Below is a breakdown of the expenditure for the past few months.

Units posted	Total cost
35 000	R 10 005 000
40 000	R 11 380 000
45 000	R 12 755 000
48 000	R 13 580 000
55 000	R 15 575 000
57 000	R 16 125 000

1) At the level of 40 000 units, the fixed cost is

- a R 11 380 000
- b R 252 727
- c R 380 000
- d R 450 000
- e None of the above

2) At the level of 57 000 units, the fixed cost is

- a R16 125 000
- b R 268 636
- c R 380 000
- d R 450 000
- e None of the above

Sam Sales is the marketing executive of the FOX Sat FXS1 decoders. The landed cost of FOX Sat decoders imported from PRC is R 300. Sam is pushing to make a gross profit on sales of 37,5%.

3) What is the mark up on cost in Rand

- a R 300,00
- b R 180,00
- c R 150,00
- d R 112,50
- e None of the above

The fixed cost in the marketing section that sells the FOX Sat FXS1 decoders amounts to R3 486 000 per month. The section must deliver a contribution of 10% on sales. The board of directors has authorised the section to sell the FOX Sat FXS1 decoders at R 450,00 per unit.

4) How many units must be sold in order to break even?

- a 7 747
- b 17 877
- c 23 240
- d 33 200
- e None of the above

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The Sports Entertainment division imports the Blue Ray 3D TV. The following transactions took place during September 2014:

Date	Description	Units	Amount per unit R	Total R
31 Aug 2014	Closing stock	351	3 845,00	
3 Sep 2014	Purchases	450		1 755 000
4 Sep 2014	Import freight on 450 TVs		390,00	
11 Sep 2014	Sales	500	9 000,00	
18 Sep 2014	Purchases	300		1 185 000
19 Sep 2014	Import freight on 300 TVs		350,00	
23 Sep 2014	Sales	100	8 750,00	
23 Sep 2014	Freight cost on delivery of 100 TVs		420,00	

- 5) What is the value of the closing stock on 30 September 2014 based on the First in First out basis of accounting?
- R 1 926 345
 - R 2 102 862
 - R 2 116 290
 - R 2 149 290
 - R 2 154 300
- 6) What is the value of the closing stock on 30 September 2014 based on the average cost basis of accounting?
- R 1 926 345
 - R 2 102 862
 - R 2 116 290
 - R 2 149 290
 - R 2 154 300
- 7) Assume that all stock of Blue Ray 3D TV were sold out on 11 September 2014 and that there were no stock on 12 September 2014. What was the gross profit % on the items that were sold on 23 September 2014?
- 50,86%
 - 53,11%
 - 54,86%
 - 56,92%
 - None of the above

The High Volt Division manufactures large and heavy duty transformers that are mainly used by local councils. At best and combined by past experience the capacity of the division was never more than 10 units per month. September 2014 was the first month that a performance bonus structure was implemented. The original budget for September 2014 is given below:

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HIGH VOLT Division**Budget for September 2014**

	Units	Price R	Total R
Sales	10	485 000	4 850 000
Cost of production			
Material	10	125 000	1 250 000
Labour	700	950	665 000
Variable overheads	10	110 140	<u>1 101 400</u>
Gross profit			1 833 600
Less expenses			
Fixed cost (including management and admin)			650 800
Sales commission (10% of sales)			485 000
Head office charges (fixed)			<u>200 000</u>
Net profit			<u><u>497 800</u></u>

Points to be considered for the budget to be flexed

- 1 11 Units were manufactured and sold The selling price remained as originally budgeted
- 2 70 Units of labour was used per transformer produced but an incentive policy was adopted by management whereby a production bonus could be earned for every unit more than 10 transformers manufactured The bonus would be 10% of 70 units of labour
- 3 The fixed cost remained constant
- 4 Head office charges remain the same

8) Flex the budget and determine what the new budgeted net profit is

- a R 497 800
- b R 626 010
- c R 632 660
- d R 674 510
- e None of the above

Blue Steel Limited manufactures BS Trailers

The following information is available from the accounts department and it is correct

	2013	2014
Units sold	14 250	17 040
Selling price per unit	R 24 750	R 23 830
Completed units at beginning of year	0	?
Production Units started in beginning of year	0	?
Units produced	15 000	17 250
Production cost per unit		
Material	R 2 850,00	R 3 140,00
Wages	R 2 650,00	R 3 150,00
Variable production cost	R 950,00	R 1 040,00
Selling cost per unit	R 1 425,00	R 1 875,40
Fixed production cost (total)	R 4 875 000	R 6 296 250
Administrative overheads	R 1 000 850	R 1 240 560
Head office costs	R 1 830 000	R 2 104 250

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The company implements the first in first out stock system

REQUIRED:

- 9) If absorption costing was used by the company, what was the cost of units sold during the 2014 financial year?
- a R130 432 800
 - b R131 122 800
 - c R124 903 200
 - d R125 351 550
 - e None of the above
- 10) If a direct costing system was in use, what was the value of the opening stock at the beginning of the 2014 financial year?
- a R 4 125 000
 - b R 4 837 500
 - c R 5 081 250
 - d R 6 150 000
 - e None of the above

QUESTION 2

(24 minutes / 20 marks)

Beta Limited recorded the following purchases for material Alpha for the month of July 2014

Date	Transaction	Details
July 2014		
01	Opening inventory	200 units @ R5 each
04	Purchases	1 500 units with a 10% discount on the opening inventory price
08	Purchases	1 000 units @ R5,50 each
	freight costs paid R500	
09	Issues	2 000 units to production
12	Returned to the supplier	500 units bought on 8 July
15	Production returned	300 units issued on 9 July to the store

REQUIRED

- (a) Calculate the closing inventory as at 31 July 2014 using FIFO method of inventory valuation (15)
- (b) Show the journal entry for recording the transaction that took place on 12th of July 2014 (3)
- (c) Prepare the journal entry of the returns on 15 July 2014. (2)

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QUESTION 3**(24 minutes / 20 marks)**

XYZ Limited manufactures different products for their clients according to their specifications. The following information was obtained for the month of July

- Opening inventory amounted at R45 000 at the beginning of the month. Additional material amounting at R165 000 was purchased during the month.
- There was no opening work in process (WIP) at the beginning of the month.
- Material was requested as follows:

	R
Job 1	55 000
Job 2	83 000
Job 3	41 500
Total	179 500

- The wages paid were as follows:

	R
Job 1 (500 hours)	60 000
Job 2 (800 hours)	95 000
Job 3 (350 hours)	55 000
Indirect labour	35 000
Total	245 000

- Other manufacturing overheads for July were as follows:

	R
Factory Rental	12 000
Electricity and water	18 000
Depreciation	25 000
Total	55 000

- Overheads are allocated to jobs on the basis of direct labour hours. The budgeted manufacturing overheads amounted to R100 000 per annum and the estimated average normal capacity is 2 000 direct labour hours per annum.
- Jobs 1 and 2 were completed during the month and invoiced to the clients at R150 000 and R250 000 respectively.

REQUIRED

- (a) Calculate profit/(loss) for July for each job and for XYZ Limited as a whole (15)
 (b) Give the value of the closing inventory and WIP at the end of the month (2)
 (c) Calculate the over or under recovery of production overheads for the month (3)

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QUESTION 4**(24 minutes / 20 marks)**

Mathembu Daniels (Pty) Ltd manufactures whisky and uses a process costing system. Materials are added at the beginning of the process and conversion takes place evenly throughout the process.

May 2014

Opening WIP (20% complete)	70 000 units	Material R325 000	CC	R128 000
Put into production	150 000 units	Material R560 000	CC	R1 800 000
Completed and transferred	190 000 units			
Closing WIP	25 000 units			

Normal wastage amounts to 4% of the inputs that reach the wastage point.

"CC" refers to conversion costs in this question.

Additional information

- Wastage occurs at the end of the process.
- The company uses the FIFO method of inventory valuation.
- Closing WIP is 90% complete.

REQUIRED

- Prepare the quantity statement for scenario (6)
- Prepare the production cost statement for scenario (2)
- Calculate and allocate the Rand value of the normal loss for purposes of the cost allocation statement of scenario (6)
- Prepare the cost allocation statement for scenario (6)

QUESTION 5**(24 minutes / 20 Marks)**

This question consists of two independent parts and **both** must be answered.

PART A**(14 Marks)**

Poli Limited has a budgeted material cost of R160 000 for the production of 20 000 units per month. Each unit is budgeted to use 4kg of material. The standard cost of material is R2 per kg.

The actual cost of material used during the month was R200 000 for 24 000 units and 90 000 kg were used.

REQUIRED

- Calculate the following variances:
 - Material purchase price variance (4)
 - Material quantity variance (4)
 - Total material variance (2)
- Give 2 ways in which standard costing system can improve cost control (2)
- Give 2 reasons why organisations use standard costing system (2)

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PART B**(6 Marks)**

ABC Limited's results for February 2014 are as follows

Budgeted	
Selling price per unit	R 500
Variable manufacturing overheads that vary with hours worked	R 75 000
Labour hours	1 500
Units produced	2 000
Actual results	
Sales (2 300 units)	R 1 104 000
Variable manufacturing overheads that vary with hours worked	R 73 000
Labour hours	1 520

Additional information:

All units produced during the month were sold. There was no opening and closing inventory for the month.

REQUIRED

(d) Calculate the following variance

- (i) Selling price variance (3)
(ii) Variable manufacturing overhead rate variance (3)

EXAMINATION PANEL AS APPOINTED BY DEPARTMENT**EXAMINERS:**

FIRST: MRS S BUCHNER MR L CRAFFORD
MRS N DUMALISILE MR M RAMALEBA

SECOND: MR FJC BENADÉ