



**PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF ACCOUNTING, ECONOMICS AND FINANCE

QUALIFICATION: BACHELOR OF ACCOUNTING	
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SESSION: NOVEMBER 2019	PAPER: THEORY AND CALCULATIONS
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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<p style="text-align: center;">INSTRUCTIONS</p> <ol style="list-style-type: none">1. This question paper is made up of four (4) questions.2. Answer ALL the questions and in blue or black ink. NO pencil3. Start each question on a new page in your answer booklet and show all workings.4. Questions relating to this examination may be raised in the initial 30 minutes after the start of the paper. Thereafter, candidates must use their initiative to deal with any perceived error or ambiguities & any assumption made by the candidate should be clearly stated.

THIS QUESTION PAPER CONSISTS OF 11 PAGES (Excluding this front page)

QUESTION 1**[25 MARKS]**

For questions 1.1 – 1.25, write the answer only (the correct letter chosen) in your answer sheet/answer book and not on the question paper.

1.1 Which of the following words DOES NOT describe main focus of Management Accounting?

- a) Planning
- b) Control
- c) External
- d) Decision-making

1.2 Which of the following statements are true?

1. The main role of the management accountant is to produce financial accounts
 2. Management accountants always work within the finance function
 3. Management accountants always work in partnership with business managers
- a) 1 and 2 only
 - b) 2 and 3 only
 - c) 1 and 3 only
 - d) None of the above

1.3 The audit fee paid by a manufacturing company would be classified by that company as:

- a) Production overhead cost
- b) Selling and distribution cost
- c) Research and development cost
- d) Administration cost

1.4 A hospital's records show that the cost of carrying out health checks in the last five accounting periods have been as follows:

Period	Number of patients	Total cost (N\$)
1	650	17 125
2	940	17 800
3	1 260	18 650
4	990	17 980
5	1 150	18 360

Using the high-low method, the estimated cost of carrying out health checks on 850 patients in period 6 is:

- a) N\$17,515
- b) N\$17,570
- c) N\$17,625
- d) N\$17,680

1.5 For decision-making purposes, which of the following are relevant costs?

- (i) Avoidable cost
- (ii) Future cost
- (iii) Opportunity cost
- (iv) Differential cost

- a) (i), (ii), (iii) and (iv)
- b) (i) and (ii) only
- c) (ii) and (iii) only
- d) (i) and (iv) only

1.6 Cost centres are

- a) Units of output or service for which costs are ascertained.
- b) Functions or locations for which costs are ascertained.
- c) A segment of the organization for which budgets are prepared
- d) Amounts of expenditure attributable to various activities

1.7 Which ONE of the following costs would NOT be classified as a production overhead cost in a food processing company?

- a) The cost of renting the factory building
- b) The salary of the factory manager
- c) The depreciation of equipment located in the materials store
- d) The cost of ingredients

1.8 In the Formula $Y = a + bx$ refers to

- a) Slope
- b) Intercept
- c) Dependent variable
- d) Total variable costs

1.9 Advantages of the method of simple regress (least squares) over the high-low method include all of the following EXCEPT

- a) A statistical method is used to mathematically derive the cost function.
- b) Only two points are used to develop the cost function.
- c) The squared differences between actual observations and the line (cost function) are minimized.
- d) All the observations have an effect on the cost function.

1.10 Which of the following is the best definition of a step-fixed cost?

- a) It is a cost that is constant in total over the relevant range.
- b) It is a cost that varies in total in direct proportion to changes in activity.
- c) It is a cost that follows a step-cost behavior with narrow steps.
- d) It is a cost that follows a step-cost behavior with wide steps.

1.11 Which of the following best describes the difference between the high-low method and the scatterplot method?

- a) The high-low method uses all of the activity points; the scatterplot method uses only two points.
- b) The high-low method uses the high activity point and the low activity point; the scatterplot method allows the user to select two points that better represent the relationship between activity and costs.
- c) The high-low method uses the coefficient of correlation; the scatterplot method uses the coefficient of determination.
- d) The high-low method uses costs from the accounting records; the scatterplot method uses costs from the operating records.

1.12 Which of the following costs remain constant in total when the level of the activity driver varies?

- a) Conversion costs
- b) Direct costs
- c) Fixed costs
- d) Mixed costs

1.13 Managerial Accounting and Financial Accounting differ in the following way:

- a) Financial Accounting emphasizes forecasts of future performance.
- b) Financial Accounting summarizes information for the company as a whole.
- c) Financial Accounting is private information for company managers
- d) Financial Accounting emphasizes timeliness over precision.

1.14 The management function of controlling is carried out through the use of

- a) A performance report that compares budgeted to actual results.
- b) A reconciliation of the beginning and ending retained earnings balances.
- c) A schedule of cash collections and cash payments
- d) A forecast of next period's production.

1.15 Conversion costs include:

- a) Manufacturing overhead costs
- b) Direct material costs
- c) Sales commission costs
- d) Advertising costs

1.16 The following costs were incurred in September 2019:

Direct materials	\$39 000
Direct labour	\$23 000
Manufacturing overhead	\$17 000
Selling expenses	\$14 000
Administrative expenses	\$27 000

Prime costs during the month totalled

- a) \$79,000
- b) \$120,000
- c) \$62,000
- d) \$40,000

1.17 Last month 10 000 units of a product were manufactured, and the total cost per unit was \$60. At this level of production, the variable cost is \$30 per unit and the fixed cost is \$30 per unit. If 10 500 units are manufactured the next month, and the costs remain within the same relevant range:

- a) Total variable cost will remain unchanged.
- b) Fixed costs will increase in total
- c) Variable cost per unit will increase
- d) Total cost per unit will decrease

1.18 Which of the below methods is NOT used to estimate and separate mixed costs?

- a) High Low method
- b) Scatter Graph method
- c) Least squares method
- d) Contribution method

1.19 Which of the following costs is an example of a period rather than a product cost?

- a) Depreciation on production equipment
- b) Salaries of salespersons
- c) Wages of production machine operators
- d) Insurance on production equipment

1.20 Cost can be classified by EXCEPT

- a) Element
- b) Behaviour
- c) Importance to the business
- d) Timing

1.21 Fixed costs that management can decide not to incur at any time are

- a) Always variable costs
- b) Unavoidable costs
- c) Controllable costs
- d) Discretionary costs

1.22 As volume changes, which of these costs could be considered a mixed cost?

- a) Sales commission expense
- b) Assembly line labour
- c) Salaries of the accountant
- d) Utilities at the manufacturing plant

1.23 Within the relevant range

- a) Total variable costs decrease as production cost increases
- b) Fixed costs per unit decreases as production decreases
- c) Total fixed costs remain the same when production increases or decreases

d) Total variable costs remain the same when production increases or decreases

1.24 The potential benefit of one alternative that is lost by choosing another alternative is known as

- a) Sunk cost
- b) Differential cost
- c) Opportunity cost
- d) Out-of-pocket cost

1.25 Manufacturing costs typically consist of

- a) Direct materials, direct labour, and manufacturing overhead.
- b) Production and shipping costs.
- c) Production and marketing costs.
- d) Direct materials, direct labour, and administrative costs. e. direct materials, direct labour, marketing and administrative costs.

QUESTION 2**[25 MARKS]**

Brothers Pine and Mattress Factory Stores was established in 1992 and is the largest manufacturing-retailer of its kind in South Africa. It is also the fastest growing mattress retailing group. Its origins and Head Office are located at its 6 000 square meter facility at the Strand, Cape Town. Brothers is a major manufacturer of mattresses, with its own chain of franchises and stores, exporting its products as well as supplying to retail operators, hotels, numerous guest houses and lodges. They also supply medical institutions, state institutions, and international corporations, such as Anglo American and De Beers. Brothers manufacture over 600 varieties of mattresses and base sets, from plush to firm, small to big, and anything in-between. Brothers Pine and Mattress Factory Stores has two manufacturing departments and two service departments. The manufacturing department 1 is labour intensive while department 2 is machine intensive.

The following information relates to Brothers Pine and Mattress Factory Stores:

	TOTAL	Manufacturing Departments		Service Departments	
		Dept 1	Dept 2	Dept 1	Dept 2
		N\$	N\$	N\$	N\$
Allocated Overheads	86 850	32 400	29 200	12 400	12 850
General Overheads					
Indirect Labour	32 000				
Heat and Light	48 600				
Repairs and Maintenance	34 700				
Canteen Subsidy	5 100				
Machine Depreciation	10 400				
Machine Insurance	6 250				
TOTAL	223 900				

The following additional was extracted from the company's management accounting records

	Manufacturing Departments		Service Departments	
	Dept 1	Dept 2	Dept 1	Dept 2
	N\$	N\$	N\$	N\$
Floor are m ²	2 500	4 000	1 000	500
Direct labour hours	30 000	5 000	-	-
Indirect labour hours	30 000	5 000	-	-
Direct labour rate per hour (N\$)	12	8	-	-
Number of staff	30	5	-	-
Machine hours	2 500	25 000		
Machine value (N\$)	40 000	200 000	10 000	

Service department overheads are to be re-apportioned as follows:

	Manufacturing Departments	
	Dept 1	Dept 2
Service dept 1 overheads	20%	80%
Service dept 2 overheads	50%	50%

Data on two jobs being undertaken by the company is as follows:

	Job 230	Job 240
Direct material cost	N\$240	N\$420
Machine hours	5	20
Direct labour hours		
Manufacturing dept 1	40	25
Manufacturing dept 2	4	5

	REQUIREMENT	MARKS
a)	Prepare a statement showing the overhead cost for each department (clearly indicate the basis of apportionment, where appropriate). Work to the nearest N\$.	16
b)	Determine a suitable overhead absorption rate for each department, using a basis that you deem suitable	4
c)	Show the total cost of Job 230 and the total cost of Job 240	5
TOTAL		25

QUESTION 3**[25 MARKS]**

Concrete Cement Manufacturer (Pty) Ltd has been operating for the last two years. They manufacture a single product, sandy cement which are of the same size and capacity. Due to the declining economic situation, the company is facing cash flow problems. The company urgently needs bank finance in order to continue with their operations. They hired a temporary inexperienced bookkeeper and prepared the company's financial statement for the year ended 30 September 2019. The production manager is concerned with the Net Loss appearing on the Statement of Profit or Loss and has approached you for guidance.

You are presented with the following information which enables you to advise management accordingly:

Concrete Cement Manufacturer (Pty) Ltd**Statement of Profit or Loss and other Comprehensive Income for the year ended 30 September 2019**

	N\$	N\$
Sales (18 000 sandy cement)		960 000
LESS OPERATING EXPENSES		
Fixed selling & distribution costs	110 000	
Promotion	90 000	
Factory maintenance costs	43 000	
Cleaning supplies (production)	7 000	
Indirect labour	120 000	
Purchases	360 000	
Rental costs (facilities)	75 000	
Plant insurance	8 000	
Depreciation (office equipment)	27 000	
Depreciation (plant)	100 000	
Power and lighting	80 000	
Production labour	70 000	
Sales commission	40 000	
TOTAL OPERATION EXPENSES		(1 130 000)
NET LOSS		(170 000)

Additional information

- 80 % of the rental costs relate to non- production facilities while 20% of the power and lighting also relates to non- production activities.
- Inventory at 30 September 2019: unused materials N\$10 000, unfinished production N\$50 000 and unsold 6 000 sandy cement

	REQUIREMENT	MARKS
a)	Reconstruct Concrete Cement Manufacturer (Pty) Ltd's Statement of Profit or Loss and other Comprehensive Income for the year ended 30 September 2019	17
b)	Prepare the "T" ledger account for the WIP control account	3
c)	Determine the value of closing inventory for the finished goods.	5
TOTAL		25

QUESTION 4**[25 MARKS]**

Shilongo & Shikongo company Ltd has just opened a bookshop. They buy management accounting textbooks from Van Schaik publishers and sell them to the students who are studying towards accounting qualifications at institutions of higher learning in Namibia. You have been appointed as inventory accountant at the bookshop, where inventory is a major problem because of high storage costs. The company also experiences a serious problem because it does not have a record about when the books are bought or sold. Now, Shilongo and Shikongo company Ltd wants to install an efficient inventory control and pricing system within the company and seeks your advice on a number of issues. Shilongo & Shikongo company Ltd uses First-In- First Out (FIFO) method for inventory valuation.

The textbook price has fluctuated over the period since June 2019. You are given the following information:

1 July:	Textbooks on hand: 500 @ total of N\$225 000.
2 July:	Cash purchases from Van Schaik Publishers: 150 textbooks @ N\$500 per textbook.
10 July:	Credit purchases from Van Schaik Publishers: 50 textbooks @ total of N\$27 500.
12 July:	Returns to Van Schaik Publishers 50 textbooks that was purchased on the 2 July because the box was damaged when bought.
13 July:	550 textbooks were sold @ N\$800 per textbook.
20 July:	Textbooks returned to Van Schaik Publishers on the 12 July were replaced.
25 July:	Administrative and selling expenses of N\$90 000 was paid with credit card.

Additional information:

- The costs to place an order consist of telephone and stationery which amounts to N\$250 and N\$300, respectively.
- It takes Van Schaik Publishers 15 days to effect delivery from the date the order is placed online.
- Annual storage cost per unit is N\$75.
- The company's annual average demand for the textbooks is 49 680 books.
- The company operates for 345 days a year.
- The company has decided not to keep minimum inventory of textbooks because the supplier always delivers on time.

- The company has also changed its policy of applying FIFO in measuring inventory and it has opted for the Weighted Average method of measuring inventory.

	REQUIREMENT	MARKS
a)	Calculate the level at which Shilongo & Shikongo company Ltd needs to procure additional textbooks from Van Schaik Publishers to avoid stockouts.	3
b)	Calculate the size of order that will result in minimisation of ordering and holding costs for the company.	4
c)	Determine annual ordering costs.	3
d)	Calculate average inventory.	3
e)	Compile an inventory ledger card to determine the value of the textbooks in closing inventory for July 2019.	7
f)	Determine how much profit or loss was made during the month of July.	5
TOTAL		25

END OF EXAM QUESTION PAPER