NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF ACCOUNTING, ECONOMICS AND FINANCE

QUALIFICATION : BACHELOR OF ACCOUNTING	
QUALIFICATION CODE: 07BOAC	**LEVEL:** 6
COURSE CODE: CMA611S	**COURSE NAME:** COST AND MANAGEMENT ACCOUNTING 201
SESSION: JUNE 2019	**PAPER:** THEORY AND CALCULATIONS
DURATION: 3 HOURS	**MARKS:** 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER

EXAMINER(S)	Mr. Kuhepa Tjondu, Ms. E. Kangootui, and Mr. G. Sheehama.
MODERATOR:	Mr K. Boamah

INSTRUCTIONS

1. Answer ALL questions in blue or black ink only
2. Write clearly and neatly.
3. Start each question on a new page and number the answers clearly.
4. No programmable calculators are allowed.
5. Questions relating to the paper 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 5 PAGES (Excluding the front page)

Question 1 **(25 marks)**

On 1 April 2018, Equators Limited formed a wholly owned subsidiary company, Corner (Proprietary) Limited for the sole purpose of manufacturing and selling a product called "Best". The board of directors of Equators Limited approved the following budget at normal capacity at that date:

Corner (Proprietary) Limited: Budget forecast for the Year ended 31 March 2019

	TOTAL N$	**PER UNIT** N$
Sales	1 010 000	10,10
Total costs	985 000	9,85
Direct materials	350 000	3,50
Variable production overheads	50 000	0,50
Direct labour	200 000	2,00
Fixed production overheads	180 000	1,80
Variable selling and administration costs	80 000	0,80
Fixed selling and administration cost	125 000	1,25
Profit	**25 000**	**0,25**

The following information relates to the actual results for the year ended 31 March 2019:

Sales	90 000 units @ N$10,10
Opening inventory	Nil
Closing inventory	8 000 units

The management accountant of Corner (Proprietary) Limited had prepared a profit statement on 31 March 2019 on a variable costing basis, which showed a loss. However, the profit statement prepared on an absorption-costing basis at the same date, showed that Corner (Proprietary) Limited had earned a profit.

The operations director of the company is reviewing both statements and is somewhat confused. "You can never rely on the Accountants to give you the right figures", he mutters angrily under his breath as he reaches for his telephone.

Required:

1.1 Prepare income statements for Corner (Proprietary) Limited for the year ended 31 March 2019 using Absorption Costing method. (15)

1.2 Show the value of closing inventory under marginal costing and reconcile the profit/ loss obtained from the income statements prepared in 1.1 above with the profit /loss under marginal costing. (5)

1.3 Highlight any five points which will help the operation's director understand why marginal costing approach is used in the preparation of the income statement. (5)

Question 2 **(25 marks)**

Rahapuka Ltd is a manufacturing company which manufactures and assembles car components. The following budgeted information relates to Rahapuka Ltd for the forthcoming period.

	Products		
	A1	**B2**	**C3**
	'000	'000	'000
Sales and production (units)	50	40	30
	N$	**N$**	**N$**
Selling price (per unit)	45	95	73
Prime cost (per unit)	32	84	65
	Hours	**Hours**	**Hours**
Machine department (machine hours per unit)	2	5	4
Assembly department (direct labour hours per unit)	7	3	2

Overheads can be re-analysed into 'cost pools' as follows:

Cost pool	**N$000**	**Cost driver**	**Quantity for the period**
Machining services	357	Machine hours	420,000
Assembly services	318	Direct labour hours	530,000
Set up costs	26	Set ups	520
Order processing	156	Customer orders	32,000
Purchasing	84	Suppliers' orders	11,200

You have also been provided with the following estimates for the period.

	A1	**B2**	**C3**
Number Of set-ups	120	200	200
Customer orders	8,000	8,000	16,000
Suppliers' Orders	3,000	4,000	4,200

2.1 Prepare and present a profit statement showing the TOTAL profit or loss for each of the THREE products using activity-based costing. (20)

2.2 Explain the potential benefits of adopting an activity-based costing system for a company like Rahapuka Ltd. (5)

Question 3 **(25 marks)**

Kie Co manufactures three types of fitness equipment: treadmills (T), cross trainers (C) and rowing machines (R).

The budgeted sales prices and volumes for the next year are as follows:

	T	C	R
Selling price	N$1,600	N$1,800	N$1,400
Units	420	400	380

The standard cost card for each product is shown below.

	T	C	R
	N$	N$	N$
Material	430	500	360
Labour	220	240	190
Variable overheads	110	120	95

Labour costs are 60% fixed and 40% variable. General fixed overheads excluding any fixed labour costs are expected to be N$55,000 for the next year.

Required:

3.1 Calculate the weighted average contribution to sales ratio for Kie Co. (4)

3.2 Calculate the total fixed cost, the breakeven point in sales revenue and the margin of safety in terms of revenue (N$) for Kie Co. (5)

3.3 Using the graph paper provided and assuming that the products are sold in a CONSTANT MIX, draw a multi-product breakeven chart for Kie Co. Label fully both axes, any lines drawn on the graph and the breakeven point. (6)

3.4 Rank the three products in the order of the most profitable product first and Explain what would happen to the breakeven point if the products were sold in order of the most profitable products first. (5)

3.4 Discuss five assumptions or limitations of Cost-Volume-Profit analysis. (5)

Question 4 **(25 marks)**

PART A **(6 Marks)**

The following information relates to questions (i) to (iii) below.

X Ltd makes one product, which passes through a single process. Details of the process are as follows:

Materials: 5 000 kg at 50c per kg
Labour: N$800
Production overheads: 200% of labour

Normal losses are 20 per cent of input in the process, and without further processing any losses can be sold as scrap for 30c per kg.

The output for the period was 3 800kg from the process.

There was no work in progress at the beginning or end of the period. The inspection point for losses is at the end of the process.

REQUIRED:

(i) What value will be credited to the process account for the scrap value of the normal loss?

A. N$300
B. N$530
C. N$980
D. N$1 021

(ii) What is the size of the abnormal loss?

A. N$60
B. N$196
C. N$230
D. N$245

(iii) What is the value of the output?

A. N$3 724
B. N$4 370
C. N$4 655
D. N$4 900

Question 4 (CONTINUED)

PART B **(19 marks)**

Asterisk Steel Limited manufactures steel bumpers for motor vehicles. The manufacture of the steel bumpers requires three separate processes. In Process 1 the sheet metal is cut according to specifications. The cut metal pieces are then transferred to Process 2, where special equipment is used to bend and form the metal pieces into mudguard shapes. The shaped mudguards are then transferred to Process 3, where they are completed and polished, and then transferred to the finished goods storage area.

The following information was identified for Asterisk Manufacturers:

1. Transfers from Process 2: 140 000 units at a cost of N$394 000.

2. Process 3 work-in-progress at the beginning of the month was 20 000 units at a cost of N$55 000.

3. Process 3 costs added in the current period to produce 40 000 units:
   - Material N$110 500
   - Direct Expenses N$45 500
   - Labour Costs N$20 000
   - Overheads 200% of labour costs

4. There was no work-in-progress at the end of the month.
5. It is expected that 5% of units will be lost during of the process. The units lost do not have a scrap value. Actual losses amounted to 12 000 units for the month.

REQUIRED:

Prepare the following general ledger accounts of Asterisk Steel Limited:

4.1 Process 3 account (12)

4.2 Abnormal loss (2)

4.3 Give two examples of industries that often use process-costing systems. (2)

4.4 Describe the distinctive characteristic of FIFO computations in assigning costs to units completed and closing work in progress. (3)

END OF EXAM PAPER!