



**PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

OFFICE OF THE REGISTRAR

Student Admissions

SUBJECT:	Mature Age Entry Test: Numeracy
DATE:	August 2019
DURATION:	2 Hours
TOTAL MARKS	60 marks

INSTRUCTIONS/INFORMATION

1. DO NOT OPEN this booklet until you are told to do so.
2. This question booklet consists of six (6) pages, including this cover page.
3. Answer all the questions in the spaces provided in this booklet.
4. Where necessary, do your rough work in the space underneath each question.
5. Hand in your booklet at the end of the examination.
6. **On no account may this booklet or part of it be taken out of the examination venue.**

CANDIDATE'S PARTICULARS

Surname	
First Names	
ID / Passport Number	
Signature / Date	

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TOTAL MARK	%	MARKER'S SIGNATURE	
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Section 1: Quantitative aptitude

1. Anne is a caring daughter. She visits her old parents after every 5 days. Tony her brother visits their parents after every 4 days. Each time the two siblings meet at their parents' house, they share a cake. On the 1st of January they shared a cake at their parents' house. On what day and month will Anne and Tony be sharing their next cake at their parents' house?

Answer: _____ (2 marks)

2. Shilongo has a sum of money. He gave half of this money to his wife and then N\$800, which is a third of the remainder, to his son Andrew.

2.1 How much did Shilongo's wife get from her husband?

Answer: N\$ _____ (2 marks)

2.2 How much did Mr Shilongo have at the beginning?

Answer: N\$ _____ (1 marks)

3. Andrew, Mariam and Piet are friends. Andrew is three years older than Mariam. Mariam is seven years younger than Piet. If Piet is 27 years old, then how old is Andrew?

Answer: _____ years (2 marks)

4. This year, Antonia is half the age of her 64-year old mother. How old will Antonia be when her mother is 79 years old?

Answer: _____ years (2 marks)

5. Write down the next three terms in each of the following sequences:

5.1 2, 5, 7, 10,,,

Answer:,, (3 marks)

5.2 2, -6, 18, -54,,,

Answer:,, (3 marks)

Section 2: Everyday arithmetic

6. One litre of petrol costs N\$13.25.

6.1 How much will it take to fill a 60-litre tank with petrol?

Answer: N\$_____ (2 marks)

6.2 How much will it take to fill a 50-litre tank with petrol if the tank was already half full?

Answer: N\$_____ (1 mark)

7. The cost of making a telephone call is a fixed 30 cents for each call plus 12 cents for each minute. Agnes made a call that lasted for 8 minutes to Bianca. Twenty minutes later, Agnes made a call that lasted for 15 minutes to Carol. What is the total cost for the two calls that Agnes made? (Give your answer first in cents and then in N\$.)

Answer: _____ cents N\$_____ (4 marks)

8. A Fridge sells for N\$5000. The seller offers you a 10% discount on this price and then adds 10% VAT to the discounted price. Use this information to complete the part of an invoice appearing below:

10% of original price:	N\$ _____	(1 mark)
Discounted price:	N\$ _____	(1 mark)
VAT on discounted price:	N\$ _____	(1 mark)
Final price:	N\$ _____	(1 mark)

9. The following is part of a quotation. Fill-in the six missing amounts. (6 marks)

	N\$
20kg chicken @ N\$45 per kg	_____
Canopy: 4 hrs @ N\$75 per hour	_____
80 chairs @ N\$5 per chair	_____
Miscellaneous logistics	3500.00
Subtotal	_____
15% VAT of subtotal	_____
Total payable	_____

10. A faulty water tap is wasting water at the rate of 2 litres per hour.
- 10.1 If this tap continues to waste water at this rate, then how many litres of water will this tap waste in 72 hours?

Answer: _____ litres (2 marks)

- 10.2 Water costs N\$6.20 per litre. How much will the owner of the faulty tap pay for wasted water if the tap was only repaired after 72 hours?

Answer: N\$ _____ (2 marks)

11. The price of a loaf of bread was N\$9.80. The price has increased by 6%. How much does a loaf of bread now cost?

Answer: N\$ _____ (2 marks)

12. Penny is planning a birthday party for her one-year old sister. She intends to give six lollypops to each little child attending the party. A packet of lollypops contains sixteen. Penny expects twenty-four little children to attend the party. How many packets of lollypops should Penny buy for the little children?

Answer: _____ packets (2 marks)

13. Taxi fare to Johannes' village is N\$85 per adult and half that price for each minor. How much will a family of three adults and five minors pay as fare to Johannes' village?

Answer: N\$ _____ (3 marks)

14. The 750ml bottle of special cooking oil sells for N\$32.50 while the 500ml bottle of the same oil sells for N\$28.25. Which of these two bottle sizes is cheaper?

Answer: ml bottle (2 marks)

Section 3: Arithmetic

15. Simplify: $15(43 - 34)$

Answer: _____ (1mark)

16. Simplify: $(8 - 5)(3 + 15)$

Answer: _____ (2 marks)

17. Simplify $4 \times 3 \times 5 \div 2 \times 5$

Answer: _____ (2 marks)

18. Simplify $4 \times 3 \times 5 \div (2 \times 5)$

Answer: _____ (2 marks)

Section 4: Instructional

19. An operation $*$ is defined by $a * b = (3 \times a) - (2 \times b)$. For example,

$$\begin{aligned} 4 * 5 &= (3 \times 4) - (2 \times 5) \\ &= 12 - 10 \\ &= 2 \end{aligned}$$

The answer is 2

Use this instruction and example to evaluate each of the following:

19.1 $2 * 3$

Answer: _____ (2 marks)

19.2 $(1 * 1) * 3$

Answer: _____ (3 marks)

19.3 $1 * (1 * 3)$

Answer: _____ (3 marks)

END OF TEST