KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 10

MATHEMATICAL LITERACY

COMMON TEST

SEPTEMBER 2023

Stanmorephysics.com

MARKS: 75

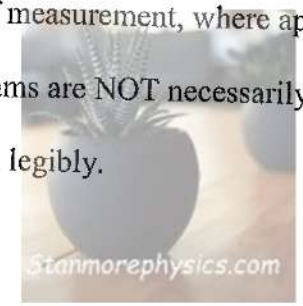
TIME: 1 ½ hours

This question paper consists of 7 pages and an addendum with 1 annexure.

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INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions. Answer ALL the questions.
2. Use ANNEXURE A in the addendum for QUESTION 3.
3. Number the answers correctly according to the numbering system used in this question paper.
4. Start EACH question on a NEW page.
5. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
6. Show ALL calculations clearly.
7. Round off ALL final answers to two decimal places.
8. Indicate units of measurement, where applicable.
9. Maps and diagrams are NOT necessarily drawn to scale, unless stated otherwise.
10. Write neatly and legibly.



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1.1 In TABLE 1 below is a list of explanations and definitions of concepts used in Mathematical Literacy.

TABLE 1: List of definitions and explanations used in Mathematical Literacy

A	An estimate of income and expenditure for a set period of time.
B	The total distance around the object.
C	The method of collecting data through a face-to-face engagement.
D	Interest calculated on the initial amount.

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Use the information above to write the letter of the explanation or definition (A to D) of each of the following concepts:

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1.1.1 Perimeter (2)

1.1.2 Budget (2)

1.1.3 Simple interest (2)

1.2

Peter works for a private school in Gauteng as a Mathematical Literacy educator. He is the examiner for other private schools around his area. He states that he is paid R2650 for a one hour paper. The most recent paper he set was a 2 ½ hours paper.

Use the information above to answer the questions that follow.

1.2.1 Convert 2 ½ hours to minutes. (2)

1.2.2 Determine the amount the examiner will receive for setting a 2 ½ hours paper. (2)

1.2.3 Write the amount of setting a 2 ½ hour paper in words. (2)

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1.3 Miss Nzunza of Moses Zikhali Secondary school bought a cooler box at Makro. The advertisement shown below is with VAT inclusive prices.





Prices valid 11 – 24 April 2022

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[Source:makro.co.za]

Use the information above to answer the questions that follow.

1.3.1 Write down the acronym *"VAT"* in full. (2)

1.3.2 Determine the capacity of the cooler box. (2)

1.3.3 Determine the total number of days this advertisement is valid for. (2)

1.3.4 Calculate the amount to be saved on this cooler box.
You may use the following formula:

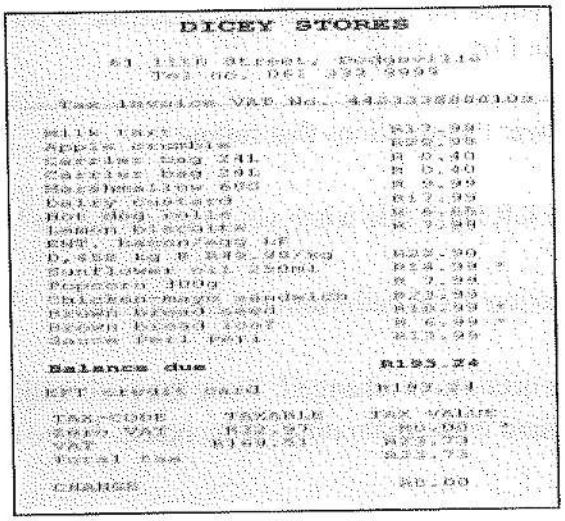
Savings = Old Price – New Price (2)

[20]

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QUESTION 2

Samkelo visited Dicey Stores to buy groceries. The till slip below shows the items he bought.



DICEY STORES

Balance due R193.24

[Source:siyavula.com

Use the information above to answer the questions that follow.

2.1 Determine the cost of milk tart. (2)

2.2 Write down the probability of having the VAT free items to all items bought by Samkelo. (2)

2.3 Determine the price per kilogram of popcorn. (2)

2.4 Give one reason why do shops round off the amount due. (2)

2.5 Show how the amount R22, 90 of ENT bacon/egg LF was calculated. (2)

2.6 Samkelo paid R193, 24 using EFT. Determine the bank charges fee for this transaction. You may use the formula:

Bank transaction fee = R3,00 + R1,20 per R100 (or part thereof) (3)

2.7 Name ONE banking method Samkelo could use to carry out the EFT transaction. (2)

2.8 Give one reason why Samkelo prefers to use EFT for payment other than paying cash. (2)

[17]

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QUESTION 3

Thulani wants to build a house for his mother. ANNEXURE A shows the floor plan of the house he wants to build in Emvunyane.

Use ANNEXURE A to answer the questions that follow.

3.1 Which room is on the left hand side when you enter the house? (2)

3.2 In which general direction is the bath from the living room? (2)

3.3 One of the door locks needs to be changed. Write the probability that the door lock is NOT the door lock found in the main door of the house. Write the probability as a fraction. (2)

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3.4 Thulani claims that the kitchen gets a lot of sunlight in the morning. Critically comment on his remarks. (3)

3.5 Thulani looks at the features of the external walls of his house and is not happy. Mention ONE feature that he is not happy with and give a reason for it. (3)

3.6 The scale used on the plan is 1cm representing 1 000 mm in reality.

3.6.1 Convert 1cm to mm. (2)

3.6.2 Write the given scale in number format. (2)

3.6.3 Measure the eastern wall of the house and use the given scale to calculate its actual length (in m). (5)

[21]

QUESTION 4

Mr Khumalo recently bought a second hand diesel tank with a volume of 6300 litres. Due to loadshedding, he uses a generator to provide dependable power to his farm.

PICTURE OF A DIESEL TANK



[Source:www.s3.amazonaws.com]

Use the information above to answer the questions that follow.

4.1 Write the volume of the tank in words. (2)

4.2 How many dozens of litres is the volume of the tank? (2)

4.3 Mr Khumalo fills his tank to 80% of its capacity. Calculate the number of litres that will be in the tank (2)

4.4 It takes 5 hours to consume 1000 litres of diesel.

4.4.1 How many litres of diesel can be consumed in an hour? (2)

4.4.2 How much diesel will be used in 2 days? (4)

4.4.3 Mr Khumalo states that diesel tank will be empty in 2 ½ days. Verify through calculations if his statement is true. (5)

[17]

TOTAL: 75

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