Province of the
EASTERN CAPE
EDUCATION

O.R. TAMBO INLAND

GRADE 11

MARCH 2023

MATHEMATICAL LITERACY
CONTROLLED TEST 1

MARKS: 50

TIME: 1 hour

This question paper consists of 6 pages including cover page and answer sheet.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of THREE questions. Answer ALL the questions.
2. Number the answers correctly according to the numbering system used in this question paper.
3. An approved calculator (non-programmable and non-graphical) may be used, unless stated otherwise.
4. ALL the calculations and steps must be shown clearly.
5. Round off ALL final answers appropriately according to the given context, unless stated otherwise.
6. Write neatly and legibly.

QUESTION 1

1.1 The learners at Wilo High school want to raise funds to buy equipment for cricket. They decided to bake cakes and have a cake sale at school. Study the recipe below, which was taken from internet, and answer the following questions that follow.

ROSE- WATER MERINGUE CAKE

- 12 Large eggs
- 800g Castor sugar
- $1\frac{1}{2}$ Teaspoons Corn flour
- $1\frac{1}{2}$ Teaspoons white spirit vinegar
- 2 teaspoons rose- water
- 250ml whipped cream

Preheat the oven to 150℃
Bake for $1\frac{1}{2}$ hours
Some useful conversions: **teaspoon = 5ml**

1 cup = 250 ml

℃**= (°F- 32°)÷ 1,8**

1.1.1 A large egg weighs an average of 51,5 gram. How much will 12 eggs weigh in kgs? (3)

1.1.2 How many ml is $2\frac{1}{2}$ teaspoons? (2)

1.1.3 Convert 625ml to cups. (2)

1.1.4 Convert the given oven temperature to degrees Fahrenheit(°F) (3)

1.1.5 The pupils started baking at 11:35 am. At what time will the cake be ready? (3)

1.1.6 Calculate how much of whipped cream in litres, will be required to make fifteen such cakes. (2)

1.2 Aunt Thandi agreed to bake the cake. She will be using a recipe from a recipe book published in England.
Note: **1 kg = 2,25pounds**
1 ml flour = 0,7 g flour

1.2.1 Aunt Thandi needs 3 and half pound of butter. Determine the amount of butter in kilograms. (2)

1.2.2 If aunt Thandi needs 625ml of flour. Determine how many cakes she can bake with 2kg flour. (4)

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QUESTION 2

Telkom has just increased their tariffs for rental and call charges of landline.
Rental will be R90,00 per month and call charges 50c per minute

2.1 Determine the independent and dependent variables. (2)

2.2 Write the formula in terms of *A*- the amount due for the month and *t*- the total duration of calls, made during the month. (3)

2.3 Calculate the amount owed if the duration of all the calls was 36 minutes in total. (3)

2.4 Complete the table below.

Time (in minutes)	5	10	15	20	25	30
Call charge	R2,50					
Amount (in rands)	R92,50					

Use the answer sheet provided to complete the table. (4)

2.5 Determine, which option is cheaper for a one-hour call with the given scenario.
A. no monthly rental and R2,50 per minute
B. R100 monthly rental and 30 cents per minute. (4)

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QUESTION 3

Megan uses a recipe that recipe that requires a can of pineapple to make a pie. Blow is a picture of the can with the measurements of the can.



You can use the following formulas:

- Volume of a cylindrical prism = $\pi r^2 h$
- Area of a circle = πr^2
- Outside surface of a cylindrical object = $2 \times \pi \times$ radius $\times$ height
- $\pi = 3.142$

3.1 Explain the term perimeter. (2)

3.2 Calculate the radius of the can in cm (2)

3.3 Convert the height of the can to cm (centimeters) (2)

3.4 Calculate the volume of the can in cm^3. (3)

3.5 The manufacturer's logo and information on the contents of the can are printed on the can. There is no printing work on the top and bottom of the can.

Determine the total surface area (in cm^2) of the label of the can on which the print appears.
Round off your answer to the nearest square centimeter. (4)
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ANSWER SHEET
NAME OF THE LEARNER…….

Time in minutes	5	10	15	20	25
Call charges					
Amount (in rand)					