



ST. MARTIN ZONE MOCK EXAMINATIONS BOARD

2022 PRIMARY SCHOOL LEAVING CERTIFICATE EXAMINATIONS

MATHEMATICS

(100 marks)

Thursday, 20th April, 2022

Subject Number: PO17

Time Allowed: 2hrs

08:00am-10:00am

Candidate name: _____
(Surname First)

School Name: _____

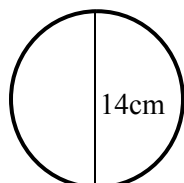
Instructions

1. This paper consists of 6 printed pages. Please check.
2. Write your **Examination Number** at the top of this paper.
3. This paper consists of two sections: A and B.
4. Answer all questions in section A and B. In section A encircle the letter A, B, C or D representing the correct answer. In section B write your answers in the space provided after each question.
5. In the table provided on the left side of this page, tick against the question you have answered.
6. Follow the instruction of each question carefully.
7. **IMPORTANT.**
 - Please make sure that you have written your name, school name and examination number on each question paper.
 - Please hand in your filled question paper to the **Invigilator** at the end of examination.

| Question Number | Tick if answered | Do not write in these columns | |
|-----------------|------------------|-------------------------------|--|
| 1-20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | | | |
| 26 | | | |
| 27 | | | |
| 28 | | | |
| 29 | | | |
| 30 | | | |
| | | | |

SECTION A (40 MARKS)

1. Express 276.206 to the nearest whole number
 A. 276.200 C. 276.000
 B. 277.000 D. 276.21
2. Eight hundred and forty one million and thirty eight.
 A. 841 000 038 C. 80 041 038
 B. 84 100 038 D. 800 410 038
3. Simplify $6m - 3m - 2m - m$.
 A. $3m$ C. $6m - m$
 B. 0 D. $6m-3m-2m-m$
4. Which of the following are not numeric patterns?
 I. 11 14 17 20 23
 II. 1 4 9 16 25
 III. 1 1 2 3 5 8 13 21
 A. 11 14 17 20 23
 B. 1 4 9 16 25
 C. None
 D. 1 1 2 3 5 8 13 21
5. Which of the following is LCM of 40, 30, 48 and 54.
 A. 2160 C. 2190
 B. 2170 D. 2180
6. Which of the following values of angles represents acute angle?
 A. 90° C. 150°
 B. 70° D. 275°
7. Change 8kilograms to grams.
 A. 800g C. 8000g
 B. 7000g D. 1000g
8. What term is given when a cost price is more than a selling price?
 A. Discount C. Marked price
 B. Loss D. Profit
9. Which of the following is a circumference of the circle below:




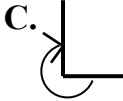
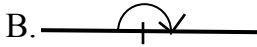

- A. 902cm C. 77cm
 B. 44cm D. 66cm
10. Add 84.04, 22, 0.55 and 8.
 A. 84.89 C. 92.81
 B. 85.61 D. 114.59
11. Express 45% as a ratio in its simplest form.
 A. 9:20 C. 45:100
 B. 20:9 D. 100:45
12. How many fortnights are there in 56 days
 A. 2 C. 8
 B. 4 D. 14
13. Which of the following is the greatest mass?
 A. 75 milligrams C. 75 hectograms
 B. 75 decigrams D. 75 decagrams
14. Which of the following angles is a half turn?
 A.  C. 
 B.  D. 
15. What is DXLIX in Hindu Arabic numeral?
 A. 549 C. 649
 B. 559 D. 655
16. Decrease 80 by 20%
 A. 16 C. 64
 B. 60 D. 96

Table 1. shows marks and number of learners represented in a tally form.

Table 1

| Marks (%) | Tally |
|-----------|-------|
| 10 | |
| 20 | |
| 30 | |
| 40 | |

Use the table to answer questions 17 and 18

17. What was the modal mark?
A. 10 C. 30
B. 20 D. 40
18. What was the median mark?
A. 20 C. 30

B. 25 D. 35

19. What is a period of 5 years called?
A. Century C. Generation
B. Decade D. Instrum
20. Find the simple interest to be paid on a loan of K24 000 for 3 years at 10% per annum.
A. K720 C. K24 720
B. K7200 D. K31 200

SECTION B (60 MARKS)

Answer all questions in this section. Write your answer in the space provided under each question. Show your working.

21. A. Simplify $2\frac{2}{9} \times (3\frac{3}{4} - 1\frac{5}{8}) \div 1\frac{1}{3}$
(4 marks)

22. A. A child had $2a + b$ guavas. If she received $10 + a$ other guavas, find the total number of guavas she had.
(3 marks)

- B. A circular ground has a diameter of $28.7m$. calculate the length of wire that could be used to fence the ground. (Take $\pi = \frac{22}{7}$) (3 marks)

- B A doctor recorded temperatures of a patient at different intervals as follows 36.0°C , 36.2°C , 37.7°C and 38.1°C . Calculate the mean temperature of the patient (3 marks)

23. Figure 2, is a rectangle ABCD with triangle CDE inside it.

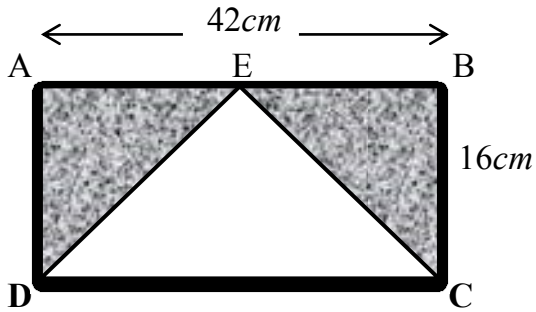


Figure 2

If $AB = 42\text{cm}$ and $BC = 16\text{cm}$, calculate the area of the shaded part. (4 marks)

24. A. The value of a sofa set went down by 12% to K132 000 after one year. Find the original value of the sofa set. (4 marks)

- B Figure 3, shows a drawing of a garden in the form of a trapezium WXYZ. In which $WX = 50\text{m}$, $WZ = 40\text{m}$, $YZ = 70\text{m}$, angle $WZY = 60^\circ$ and angle $XWZ = 120^\circ$

Figure 3

- Using a scale of 1cm to represent 10m , draw the figure accurately. (3 marks)
- Measure and state the length of XY (3 marks)

25. A. In a number pattern, the first number is 540, the second is 180 and the third is 60. Calculate the fourth number.
(3 marks)

- B. A tank measuring $5m$ long, $4m$ wide and $3m$ deep is half full of water. Calculate the volume of water in the tank.
(4 marks)

26. A. A person bought 20 units of fruits for K2000 and sold them at a profit of K50 each. Calculate the selling price of each fruit.
(3 marks)

- C. Table 2 shows Mama's budget for the month of February 2018

| Items | Quantity | Cost for one item (K) | Amount (K) |
|-------------|-----------|-----------------------|------------|
| Sugar | 5 Packets | 850.00 | 4250.00 |
| Cooking oil | 3 bottles | 1200.00 | |
| Soap | 2 Units | | 1600.00 |

- Complete the table.
 - Find the total cost for Mama's budget
(3 marks)
27. A. The average mass of 13 bags of maize is 52.2kg. If 3 bags are sold, the average mass of the remaining bags is 52.7kg. Calculate the total mass of the three bags.
(4 marks)

- B Using a ruler and a protractor, construct an equilateral triangle RST with a side 4cm . (3 marks)

28. Table 3, shows an average rainfall recorded at a weather station for four weeks.

| Week | Rainfall |
|------|----------|
| 1 | 35 |
| 2 | 47 |
| 3 | 18 |
| 4 | 20 |

- Using a scale of 2cm to represent 10mm on the vertical axis, draw a bar graph to represent the information. (use a paper graph as given)(4 marks)
29. A person paid K420 000 as a custom duty fee for goods bought. If the rate of the custom duty was $52\frac{1}{2}\%$, find the value of the goods. (4 marks)

30. Table 4, shows the results of a science test for 60 learners.

| Marks | Percentage of learners |
|-------------------|------------------------|
| From 60 and above | 10% |
| From 50 to 59 | 20% |
| From 40 to 49 | 40% |
| From 20 to 39 | 20% |
| From 19 and below | 10% |

- A. Find the number of learners who had marks from 40 to 49. (2 marks)

- B. Find the total number of learners who had marks greater than 49. (3 marks)