P1 MATHEMATICS
PAPER 2
PTE MOCK EXAMINATION
MARCH/APRIL 2019
TIME: 2 ¼ HRS
INSTRUCTION TO CANDIDATES

1. *This question paper consist of **TWO** sections **A** and **B***
2. *Answer **ALL** the questions in section **A***
3. *Answer any **FOUR** questions from section **B***
4. *Candidates should also answer all questions in English*

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SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1 -20	60	
B	21	10	
	22	10	
	23	10	
	24	10	
	25	10	
TOTAL SCORES			

SECTION A(60 MARKS)

1. You are to teach your class the place value of the digits in the number 43
   a) State any two teaching aids you can use to explain the concept (2mks)
   b) Explain how you are going to teach the learners using one of the teaching aids (2mks)

2. You intend to teach your class square roots of decimals using the number 6.76
   a) State the objective of the lesson (1mk)

   b) Describe how you would show your learners how to find the square root of the number in 2 above (3mks)

3. Describe how you would teach 65-27 using place value tins and bundles of sticks (4mks)
4. Using number 7 describe a practical activity you would do in class to show conservation of numbers (3mks)
5. A pupil worked out 4532 ÷ 22 as follows

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    26
22 |4532
   -44
   132
   132
     0
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   a) What error did he make (1mk)

   b) Explain how you are going to correct the error (2mks)
6. IN the topic scale drawing, you encountered the following question "The distance from Kamau's home to school is 15km the distance is represented by 10cm on the book. What is the scale used in ratio form?

   (a) Explain to the learners how they will work out the question (2mks)

   (b) State the error the learners are likely to make when they are solving the problem (1mk)

7. The question below appeared in a test

   What is the next two numbers in the sequence?

   1,7,13,19 ____, _____

   A 20, 26

   B 25, 31

   C 26, 32

   D 21, 28

   a) State the key (2mks)

   b) How was the distractor A obtained (2mks)
8. Explain using illustrations how you are going to lead learners to find the surface area of a triangular prism (3mks)

9. Using the concept of fractions as part of a group. Describe how you are going to teach the learners that 2/3 is greater than ½ (3mks)

10. A teacher set the following question for a class. "A cyclist started a 50km journey at 7:10am. He cycle for 30 minutes at 40Km/h then rested for 20 minutes before proceeding with the journey. At what speed must he cycle to reach the destination at 9.00 am.
    (a) Determine the key questions (1mk)

    (b) Write the steps you would follow to guide the learners get the correct answer (2mks)

11. Using the practical activity describe how you are going to teach learners on conservation of capacity (2mks)

12. A teacher set the question below. "A picture measuring 8.5cm by 5cm was enlarge so that the shorter side was 20cm. what is the length of the longer side?
    If the question above is to be marked out of 3 marks. Indicate what stage each of the 3 marks is to be awarded (3mks)

13. Using a practical activity explain to the learners how you are going to convert 3 ½ to improper fraction (2mks)

14. Describe practically the arbitrary stage in the introduction of recognizing and measuring angles (3mks)

15. In preparation of a bill, the teacher gave the following extract to the class
    2 bars of soap @ sh. 120
    3 kilograms of salt @ sh. 50
    5 Kilograms of sugar for 400 shillings
    3 kilograms of rice @ sh. 100
    4 exercise books @ sh. 120 per dozen
    a) State a learning aid which can be used in the lesson (1mk)

    b) Prepare how you are going to display the chalkboard layout of the preparation of the bill (2mks)

16. A teacher gave his pupils the following equation $5x + 5 = 10$
    A pupil got the answer as 5
    (a) What error did the pupil make (1mk)

    (b) What should the teacher emphasize in his remedial work to correct the pupil (1mk)

17. Explain a practical activity to show
    $15 \div 3 = 5$ (3mks)

18. Using averaging method show a chalkboard layout on how you are going to work out square root of 7,921 (3mks)

19. State any three learner centred methods of teaching mathematics (3mks)

20. Describe a practical activity in which you can lead learners to find the constant pie (π) (3mks)

SECTION B – 40 MARKS

Answer any FOUR questions in this section in the spaces provided.

21. You are going to introduce compound interest to your class
    a) What previous knowledge should the pupils have (1mk)

b) List the terms to be used and explain their meaning (4mks)

c) What key point would you stress in your introduction of compound interest (1mk)

d) Write down a word problem on compound interest and explain how to solve it. (4mks)

22. You intend to teach your class multiplication of a fraction by a fraction

a) What relevant prior knowledge should your class have? (3mks)

b) Using the example $^{2}/_{3}$ x ¾ and appropriate illustration I describe the steps you would follow to teach this (5mks)

c) What conclusion would you expect your class to make? (2mks)

23. Statistics involve the collection and reporting of data

a) Describe four practical activities you would involve your class in the stage of collecting data (4mks)

b) Select one practical activity from (a) above and describe activities you would involve your class in at presentation and interpretation of data stages (4mks)

c) State two everyday situations where knowledge of mode is applied (2mks)

24. Below are developmental stages in the introduction of angles. For each stage describe the activities pupils should be involved in.

a) Recognition and identification of angles (4mks)

b) Comparison of angles (2mks)

c) Measuring angles (4mks)

25. You intend to introduce “total value of numbers”, to your standard 4 class.

a) Write down the specific objectives for this lesson (2mks)

b) Using an example describe the relevant previous knowledge about numbers that pupils should have (2mks)

c) With the help of an illustration, describe the total value of the digit 8 in the number 82073. (4mks)

d) Describe how you would the pupils to identify the total value of digit “o” in the number 82073 (2mks)