Name_____ Index No._____
Class_____
Candidate's Signature_____
2011/2 Date _____
PI MATHEMATICS
PAPER 2
PTE MOCK EXAMINATION
MARCH / APRIL 2018
TIME: 2 ¼ HOURS

PRIMARY TEACHER MOCK EXAMINATION
MATHEMATICS
2 ¼ HOURS

INSTRUCTIONS TO CANDIDATES

a) *Write your name, class and Index number in the spaces provided above.*
b) *Sign and write the date of the examination in the spaces provided above.*
c) *The question paper consists of **TWO** sections**: A** and **B.***
d) *Answer **ALL** the questions in section **A** and any FOUR questions from section **B**.*
e) *Answers and workings in both sections **MUST** be written in the spaces provided below each question.*
f) *Do **NOT** remove any pages from this question paper.*
g) ***Candidates should answer the questions in English**.*

FOR EXAMINER´S USE ONLY

SECTION	Question	Maximum score	Candidates' Score
A	1 – 20	60	
B	21	10	
	22	10	
	23	10	
	24	10	
	25	10	
TOTAL SCORE			

This paper consists of 14 printed pages
Candidates should check the paper to ascertain that all the pages are printed as indicated and that no questions are missing

Methodology described in answering questions in this paper need not necessarily be of any textbook in current use in schools. Any effective method may be described to answer the questions.

SECTION A (60 MARKS)

Answer all the questions in this section in the spaces provided.

1. You intend to teach reading and telling time hours, half hours and quarter hours. Name a teaching aid and describe how you would use it. (4 marks)

2. List the steps you would follow to lead your class to collect and organize data using four common kitchen utensils used at home. (3 marks)

3. Learners have already done activities involving comparison and the use of arbitrary units in measuring length. Describe an activity you would involve your learners in to introduce a metre as the standard unit. (3 marks)

4. Pupils were asked to solve the equation ¾ x – 4 = ½ x + 16. One of the pupils worked out as follows:

¾ x – 4 = ½ x + 16
¾ x + ½ x = 16 + 4
1 ¼ x = 20
x = 20 x $^{5}/_{4}$
x = 25

a) What errors did the pupil make? (2 marks)

b) What would the teacher emphasize in remedial teaching? (2 marks)

5. Using the example below, explain how you would lead your class to work percentage profit.
"Omondi bought a motor cycle for shs. 50,000. He then sold it for sh. 55,000. What percentage profit did he make?" (3 marks)

6. A teacher has already taught a class how to form inequalities involving one unknown.
   a) Write down a word problem the teacher would give the class to test formation of inequalities involving one unknown. (1 mark)

   b) Write down the inequality the pupils would form from the word problem in part (a) above. (1 mark)

7. Explain how a teacher would lead pupils workout problems involving ratio using an example such as;
   "Nekesa and Wambua shared money in the ratio 2:3. If Wambua got sh 90 more than Nekesa, how much money did Nekesa get?" (4 marks)

8. A teacher intends to teach volume to the class. Describe a practical activity the teacher would carry out to teach the volume of a cuboid as the product of length, width and height. (4 marks)

9. Explain how you would work out the following questions with the class.
"If I sell my radio for sh 3330, I shall lose 64 percent of the cost price. How much did I pay for it?". (2 marks)

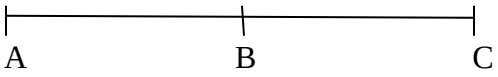
10. a) Name a teaching aid you would use to teach "hundredths". (1 mark)

b) Illustrate 0.29 on the teaching aid. (1 mark)

11. You have already taught a class basic subtraction facts.
a) Identify a teaching – learning aid you would use for mastery of basic subtraction facts. (1 mark)

b) Explain using a specific example, how the teaching aid mentioned above would be used. (1 mark)

12. Three learners, purity, Quresh and Reynold measured angle ABC below and got 90^0, 0^0 and 180^0 respectively.



a) State the correct size of the angle. (1 mark)

b) What error did each of the other learners make? (2 marks)

13. A teacher demonstrated how to work out the question below:
Work out $^5/_7 \div {}^{15}/_{84} + {}^9/_{11} - ({}^{32}/_{66} + {}^2/_3)$. Show the correct chalkboard layout. (2 marks)

14. Explain how a teacher would guide a class to construct a rhombus PQRS in which angle Q = 45^0 and PQ = 4cm using a ruler and a pair of compasses only. (4 marks)

15. The table below shows the acreage occupied by different crops in a farm.

CROP	**MAIZE**	**WHEAT**	**POTATOES**	**BEANS**
Number of acres	36	24	24	12

Outline the steps a teacher would follow to guide learners represent this information in a pie chart. (3 marks)

16. A teacher plans to teach a class how to prepare a bill. Using the question below, explain how the teacher would lead the class.
"Rono bought the following items:
2 packets of maize flour at sh 270; 1 packet of wheat flour at sh 180; 4 loaves of bread @ sh 50 and 1 ½ kg of potatoes at sh 120."
Explain how the teacher would lead the class to prepare Rono's bill. (2 marks)

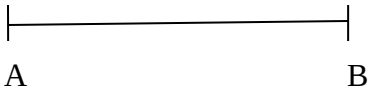
17. Using 16, 12, 8, outline the steps a teacher would follow to introduce GCD to a class. (3 marks)

18. A leaner worked out 7208 ÷ 8 and got 91.
    a) What error did the leaner make? (1 mark)

    b) How would the teacher help the leaner get the correct answer? (1 mark)

19. A teacher intends to guide learners on how to construct a perpendicular to line AB from point R given below.

R



Outline the steps the teacher would follow. (4 marks)

20. Learners were asked to answer the question below:
"Issa and his brother Said deposited sh 6,000 and sh 5,100 respectively, in a bank that gives 14% simple interest per year. After 2 ½ years, they withdrew everything from the bank. What is the combined amount they withdrew?

a) Write two key questions the teacher would ask to guide learners work out the question correctly. (2 marks)

b) For each question in (a) above show the response. (2 marks)

SECTION B (40 MARKS)

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

21. A teacher gave the question below to teach subtraction of fractions.
"Mr. Musyoka shared out his land between his children Makau and Mwikali. Makau got $^{4}/_{9}$ of the land while Mwikali got $^{13}/_{36}$. How much bigger was Makau's fraction than Mwikali's?

a) State the stage of development in subtraction of fractions the question addresses. (1 mark)

b) Give two aspects on fractions learners should have known before the introduction of this lesson, giving a suitable example for each. (4 marks)

c) Explain the steps the teacher would follow to guide learners in working out.
¾ - $^{4}/_{7}$ (5 marks)

22. You intend to teach the topic scale drawing to your class.

a) Write down the sub – topics you would consider in your planning. (4 marks)

b) Write down the key points you will consider in three of the sub – topics. For each give an example. (6 marks)

23. In a test pupils were required to solve the following problem:
"According to a survey three antelopes die every five minutes whereas four are born every minute. What is the difference between the number of antelopes that are born and those that die in a day?"

a) Determine the key for the item. (1 mark)

b) Provide three distracters and explain how each of them is obtained. (9 marks)

24. A teacher intends to teach the multiplication of a 2 – digit number by a 2 – digit number involving carrying.

a) Name two stages of multiplication the learners should have learnt before this, giving a suitable example for each stage. (4 marks)

b) Using the example 28 x 34, outline the steps you would follow to guide the learners achieve the lesson's objective. (3 marks)

c) State the next stage of multiplication the learners would be guided through, and write a suitable word problem on everyday life experiences (3 marks)

25. A teacher chose the example 0.108 ÷ 0.4 to teach a certain stage in division of decimals.

a) i) Identify the stage the teacher intended to teach through the example. (1 mark)

ii) State the objective of the lesson. (1 mark)

b) State the prior stages that learners should have learnt before.
Give a suitable example for each stage. (5 marks)

c) Using the example 0.108 ÷ 0.4 above, explain how the teacher would lead learners to achieve the lesson's objectives. (3 marks)