PTE MOCK EXAMINATION

2011/2

P2 MATHEMATICS **NAME: _____**

MARCH EXAMINATION **INDEX NO: _____**

MARCH, 2019 **CLASS: _____**

TIME: $2^{1}/_{4}$ HRS

Instructions to Candidates

1. Write your name and index number in the spaces provided above
2. Sign and write the date of the examination in the spaces provided above
3. This question paper consists of TWO sections: A and B. Answer ALL the questions in section A
4. Answer any **FOUR** questions from **Section B**
5. Answer and working in both sections **MUST** be written on the question paper in the spaces provided.
6. Do not remove any pages from this booklet.
7. Candidates should also answer all the questions in English.

For official use only

SECTION	QUESTION	MAXIMUM SCORE	Candidate's Score
A	1 -20	60	
B	21	10	
	21	10	
	23	10	
	24	10	
	25	10	

This paper consists of 10 printed page. Candidates should check the question paper to ensure that all the pages are printed as indicated and that no question is missing.

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

SECTION A

Answer all the questions in this section in the spaces provided

1. A teacher gave the following questions to her class:
   Three biros and a pencil cost sh. 30. If the price of the pencil was Sh. 6, find the price of the biro.
   Some pupils solved the question as follows

$$3b + 6 = 30$$
$$3b = 36$$
$$b = 12$$

   a) State the error the pupil made (2mks)

   b) Explain the remedial teaching you would undertake to assist such pupils (2mks)

2. You have already taught your class the basic addition fact.
   a) Name the teaching/ learning aid that you would use for mastery of basic addition fact (1mk)

   b) Describe how you would prepare the teaching learning aid (2mks)

3. Explain how a teacher would lead the class to construct a triangle MNP in which line MN= 5cm, angle PMN = 40^0, and angle NPM = 75^0 (4mks)

4. Explain how you would introduce the concept of decimals to the class (4mks)

5. Show the steps a teacher would follow to guide the learners to determine the least common multiple (LCM) of 12 and 18 (3mks)

6. A teacher intends to teach about ratio using the example below:
   A group of 12 people used 450 L of water. How many people using water at the same rate would need 975 L?
   Explain how the teacher would lead the pupil to work out the example (2mks)

7. A pupil worked out $\frac{2}{5} + \frac{1}{5}$ and obtained $\frac{3}{10}$
   Using a teaching aid, describe how a teacher would lead the pupil to work out this addition correctly (3mks)

8. Pupils should be encouraged to check the answers of their work. How would you help the pupil to check the answer to the division (2mks)

$$9\overline{)\,918}\quad 12$$

9. You have prepared the following question for a test
   The diagonal of a rectangular piece of cloth is 25 cm. If the width of the cloth is 7 cm, what is the size of the cloth in square metres?
   determine
   a) the key (2mks)

   b) One distractor and show how it is obtained (2mks)

10. Explain how a teacher would use counters to show 17 – 8 = 9 to his class (3mks)

11. You have already taught your class how to calculate the surface area of a cylinder.
    a) Write down a word problem that you would use to test mastery of the calculating the surface area of a cylinder (2mks)

    b) Show the solution to the problem (2mks)

12. Explain how you would develop the concept of one eighth $\left(\frac{1}{8}\right)$ to your class (3mks)
13. List the steps you would use to lead learners work out the square root of 1764 using average method. Take 40 as the estimate square root (4mks)

14. A pupil worked out 48 X 7 and obtained 636 as the answer.
    a) State the error that the pupil made (1mk)

    b) What would a teacher emphasize to enable the pupil avoid making such error? (1mk)

15. Describe a practical activity you would involve your class in to conserve the meter length (3mks)

16. List the steps one would use to lead a class to solve the inequality
    $\frac{6+3x}{3} < 5$ (2mks)
17. Using an example, show how you would lead your class in working out percentage loss (3mks)

18. Describe how you would introduce a quarter a part of a group (3mks)

19. A pupil in a class collected data on the number of shoes sold in one week and the made the record as shown below

Shoe size	3	5	7	9
Number of shoes sold	8	15	12	10

    Describe the steps you would follow to lead the class to draw a pie chart representing the information (4mks)

20. You Plan teach your class about giving change in money transaction. What teaching/ learning resources would you use? (2mks)

SECTION B(40 marks)

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

21. A teacher plans to take a class for a visit to a nearby farm.

a) What discussion will the teacher have with the pupils before the visit to the farm (2mks)

b) State the mathematics activities the class will carry out during the visit (5mks)

c) State the activities the class will carry out after the visit (3mks)

22. You intend to teach your class how to convert improper fractions into mixed numbers

a) Write down the specific objective for the lesson (1mk)

b) Write down a teaching/ learning aid that you would use in this lesson (1mk)

c) State the previous knowledge on fractions you would expect the pupils to have (2mks)

d) Explain the steps you would follow to lead the pupils to convert $\frac{11}{3}$ into a mixed number (6mks)

23. A teacher intends to introduce to the class subtraction of numbers involving one borrowing from tens to ones

a) Name two stages of subtraction the pupil should have learnt before and write an example for each stage (4mks)

b) Write down an example on subtraction involving borrowing from tens and describe a practical activity the teacher would carry out with the pupil in order to arrive at the correct solution (4mks)

c) After the pupil have mastered subtraction involving one borrowing

i) State the next stage on subtraction (1mk)

ii) Write down a word problem as everyday life situation that the teacher would work out with the pupils (1mk)

24. A teacher planned to teach construction of an angle of 120^0 to the class

a) State the objective of the lesson (1mk)

b) Name two teaching/ learning aids for the lesson (1mk)

c) State the previous knowledge the learner should have prior to the lesson (3mks)

d) Through construction of an angle of 120^0, explain how the teacher would lead the class to construct the angle (5mks)

25. You intend to teach how to convert decimals into percentages and vice versa
    a) State the objective of the lesson (1mk)

    b) By giving an example, state the prior knowledge the learner should have(3mks)

a) By giving two different examples, explain how you would lead the learner to achieve the objective (6mks)