HILLSIDE PRIMARY SCHOOL EXAMINATIONS BOARD
PRIMARY SEVEN TERM TWO 2020 MOCK EXAMINATION SET 2
MATHEMATICS
Time Allowed: 2 Hours 30 Minutes

	EMIS No.					Personal No.		
INDEX NUMBER								

Candidate's Name………………………………………………………………………Stream………………………………

Candidate's Signature……..

EMIS No. ………

District Name…….

FOR EXAMINERS' USE ONLY		
Qn. No.	**MARKS**	**EXR'S NO**
- 5		
- 10		
- 15		
- 20		

Read the following instructions carefully

1. This paper has **two** sections: **A** and **B**. Section **A** has **20** questions and Section B has 12 questions.

2. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.

3. **All** working must be done using a **blue** or **black** ball- point pen or fountain pen. Any work done in pencil other than graphs and diagrams will not be marked.

4. No calculators are allowed in the examination room.

5. Unnecessary changes in your work may lead to loss of marks.

6. Any handwriting that cannot easily be read may lead to loss of marks.

7. Do not fill anything in the table indicated:
   "For Examiners' Use Only" and boxes inside the question paper.

SECTION A: (40 MARKS)

*Answer **all** questions in this section.*

*Questions **1** to **20** carry **two** marks each.*

1. Subtract: 1 2 9 – 1 9

2. Simplify: 8m – (2 + m).

3. Express CXCIV in Hindu Arabic numerals.

4. Given that set A = {2 , 4 , 5 , 6 , 9} and B = {8 , 7 , 6 , 4 , 3}. Find n (A U B).

5. Work out: $2^3 + 3^0$

6. Using a ruler, pencil and a pair of compasses only, construct an angle of 30^0.

7. The probability that Wandera will pass this examination is $\frac{4}{7}$. What is the probability that he will fail this examination?

8. Subtract: $\dfrac{1}{2}$ $\dfrac{1}{4}$ $-$

9. A science lesson started at 10: 30 a.m and lasted for 40 minutes. At what time did it end?

10. Work out: $^-7 - {}^-6$

11. Use distributive property to work out: $(20 \div 4) + (16 \div 4)$

12. Work out: $1\,1\,0\,1_{two}$

$$+ \ 1 \ 1 \ 1_{\text{two}}$$

13. Work out the circumference of the circle whose radius is 35 cm.
    (Take $\pi = {}^{22}/_7$)

14. In a class of 60 pupils, 12 are girls. Express the number of girls as a percentage of the whole class.

15. The LCM, of two numbers is 50 and their G.C.F is 5. If one of the numbers is 25. Find the second number?

16. Convert 0.1212… into common fraction in its simplest form.

17. If set P has 31 proper subsets. Find n (P).

18. Ninsiima had five thousand shilling notes numbered PR940804 to PR940903 and twelve five hundred shilling coins. How much money did she have altogether?

19. The area of a **t**riangular garden is 60m². If the base of the garden is 12 metres, find the height.

20. A trader borrowed sh. 800,000 from a bank for 6 months at a rate of 4% per month. Find the interest she paid after the sixth month.
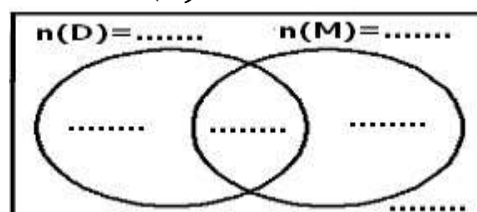
SECTION B: (60 MARKS)

*Answer **all** questions in this section.*
Marks for each question are indicated in the brackets.

21. In a class of 85 pupils, 40 like music (M), 50 like drama (D), and 10 like both while k like neither music nor drama.

    (a)   Complete the Venn diagram below using the above information.

              $(\mathcal{E}) = 85$

(b)   Find the value of k.

(c)   What is the probability of electing a pupil who likes one activity only?

22. Agnes went to a grocery store and bought the following items: $2\frac{1}{2}$ kg of sugar for sh. 4,600 per kilogram

500g salt for sh. 1,200 per kilogram
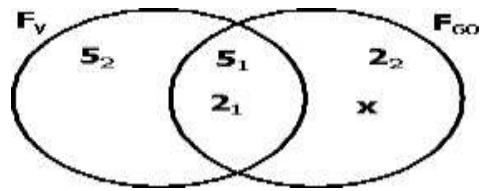
2 loaves of bread for sh. 4,300 per loaf

1½ litres of edible oil for sh. 9,000

(a)   Find the money she spent altogether.

(b)   If she went back home with sh. 55,000, how much money did she have at the beginning?

23.   Use the Venn diagram below to answer the questions that follow.

(a) Find the value of y

(b) Find the value of x

(c) Find the L.C.M of y and 60.

24. (a) Solve $2(x - 1) = x + 5$

(b) Mrs. Mandela bought two geometry books each at $(x + 500)$ and one counter book at $3(x - 100)$. If she spend Sh. 5,700 altogether, what was the cost of each item?

25. The table below shows marks scored by pupils in a Mathematics test. Use it to answer the questions that follow:

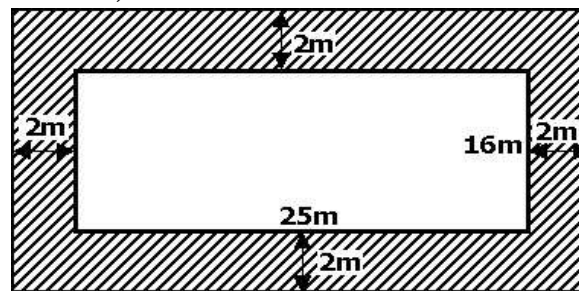| Number of pupils	3	4	2	1
Marks scored	70	40	30	50

(a) How many pupils did the test?
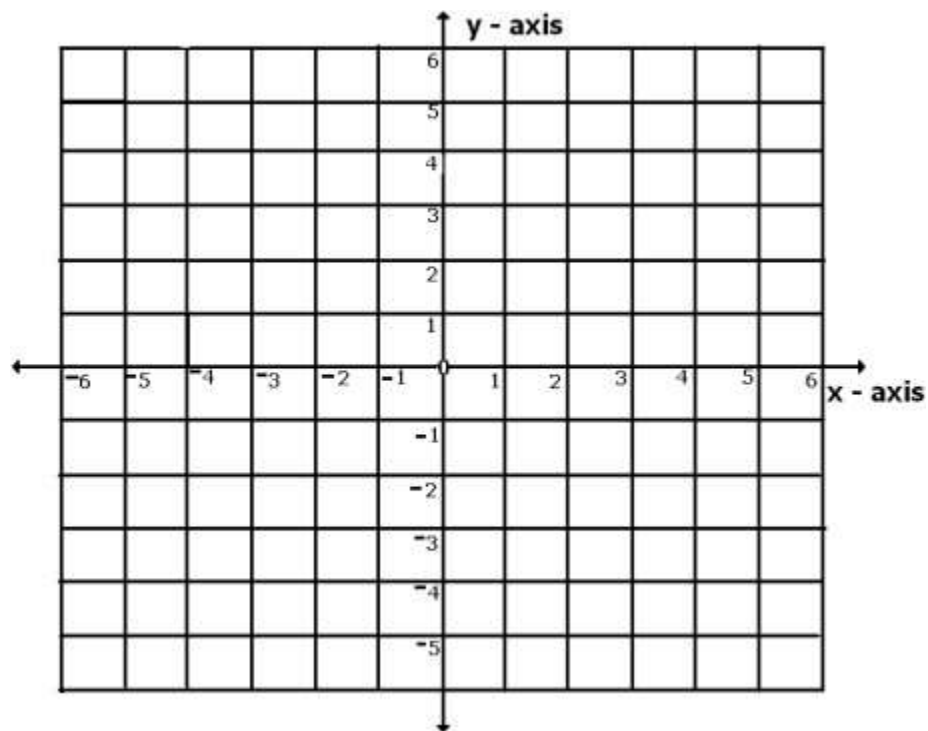
(b) Find the median mark.
(c) Find the mean mark.

26. A taxi driver drove at a speed of 90 km/hrs for 3 hours to cover part of the journey and the remaining journey was covered in 2 hours at a speed of 80 km/hr. Calculate the average speed of the taxi over the whole journey.

27. In the figure below, workout the area shaded.

28. Use the grid to plot the following ordered coordinates: P(2,2) , Q($^-$2,2), R($^-$2,$^-$3) , S(2,$^-$3)

b. Join P to Q, Q to R, R to S and S to P. Name the figure formed.

29. A car uses 60 litres of diesel to cover a distance of 320km.

(a) How many litres of diesel will be required to cover a distance of 240km?

(b) If the cost of 1 litre of diesel us sh. 3, 100, how much money will be used to enable a cover a distance 240km?

30. The bells ring at intervals of 20minutes, 30 minutes and 40 minutes for infant section, Middle section and Upper section respectively.

   a. After how long will they ring together?

   b. If they last rung at 8:00 a.m., at what time will they ring together again?

31. A parent distributed a certain amount of money to his three children, Jane, Jennet and Jackeline in the ratio of 3:5:4 respectively. If Jennet got sh. 50, 000. Work out their total share.

32. Using a pair of compasses, a ruler and a pencil, construct a triangle ABC in which AB = 8cm, BC = AC =7cm

    a. Measure angle A.

    b. Measure angle C.

END