

# STANDARD HIGH SCHOOL – ZZANA LINKED SCHOOLS EXAMINATION PROGRAMME

### PRE-PRIMARY LEAVING EXAMINATION MATHEMATICS – PRIMARY 7, 2019 TIME:

| Index No. |  |  |  |  |  |
|-----------|--|--|--|--|--|

| Candidate's Name:      |
|------------------------|
| Candidate's Signature: |
| School Name:           |
| District ·             |

## **Read the following instructions carefully:**

- 1. This paper has two Section A and B.
- 2. Answer all questions. All answers to both Sections A and B must be written in the spaces provided.
- 3. All answers must be written using a blue or black ball-point pen or ink. Diagrams should be drawn in pencil.
- 4. **No** calculators are allowed in the examination room.
- 5. Unnecessary changes of 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 boxes indicated **"For Examiners' Use Only"** and those inside the question paper.



| Qn. No. | Marks | Examiner's<br>No. |
|---------|-------|-------------------|
| 1-6     |       |                   |
| 7 – 11  |       |                   |
| 12 – 17 |       |                   |
| 18 - 21 |       |                   |
| 22 - 23 |       |                   |
| 24 - 26 |       |                   |
| 27 – 29 |       |                   |
| 30 - 31 |       |                   |
| 32      |       |                   |
|         |       |                   |
| TOTAL   |       |                   |

### **SECTION A (40 MARKS**

1. Work out: 123 X 2

2. Express XLIX in Hindu – Arabic numerals

3. Given that  $D = \{1,3,4,5,7,9\}$  and  $E = \{2, 3, 5, 6, 7, 8\}$ Find n(DnE)

4. Simplify: 
$$\frac{3}{8} \div 2\frac{1}{4}$$

5. Subtract 9 – 2n from 4 – 3n

6. Find the next number in the sequence below. 3, 7, 13, 21, 30, \_\_\_\_\_

7. Find the cost of 750g of soap powder at sh.4,000 per kg

8. Using a ruler, a pencil and a pair of compasses only, bisect the line segment PQ below.



9. Change 50cm to metres

10. Expand 201<sub>five</sub> using indices.

11. Solve for n: 4n - 3 = 7

12. The heights of six women in cm are 162, 156, 165, 153, 150 and 156. What is the mean height?

13. If today is 20<sup>th</sup> September, 2019, what day of the week will it be on 12<sup>th</sup> November, 2019?

14. Express 180 as a product prime factors.

15. A car travelling at 90km/hr takes 2 hours 40 minutes to travel a certain distance. Calculate the distance travelled.

16. Fifteen trees are planted in a straight line along a road, each one 5 metres from the next. How far is it from the first to the last tree?

17. Round off 69714 to the nearest thousands.

18. In the diagram below, find the bearing of A from B.



19. Express 00 12 h in 12 hour clock system.

20. A car travels 228 km on 24 litres of petrol. How far will it go on 40 litres?

## SECTION B (60 MARKS)

21. Magere bought the items shown in the table below from a shop.

| ITEM              | PRICE               | AMOUNT     |
|-------------------|---------------------|------------|
| 3 1/2 kg of sugar | Shs. 2,800 per kg   | Shs        |
| 2 loaves of bread | Shs per loaf        | Shs. 7,000 |
| litres of cooking | Sh. 6,000 per litre | Shs. 1,500 |
| oil               |                     |            |
|                   | TOTAL EXPENDITURE   | Shs        |

a) Complete the table above

b) Find the value of K.

b) If Magere had shs. 20,000, what was his change? (2marks)

n(T)

- 22. In a class of 70 pupils, 50 play Volleyball (V). K play Tennis (T), 8 play both Volleyball and Tennis while 18 do not play any of the two games.
  - a) Use the information above to complete the Venn Diagram below. (3marks)

n (**£**) = 70

8

c) Find the number of pupils who play only Tennis. (1mark)

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(2marks)

(4marks)

n(v

23. a) Using a ruler, a pencil a pair of compasses only, construct a triangle ABC in which BC = 6.5cm, angle ABC =  $60^{\circ}$  angle BCA =  $45^{\circ}$ . Drop a perpendicular from A to meet BC at E. (5marks)

b) Measure AE.

(1mark)

24. In the diagram below, find the area of triangle PRS. (4marks)



- 25. A nurse spends 40% of her salary on rent, 25% of the remainder on transport and the rest on food.
  - a) What percentage of her salary does she spend on food? (3marks)

b) If she spends sh. 90,000 on transport, what is her salary? (2marks)

26. a) Change 24 to base two.

2marks)

b) How many groups of 100 are there in the value of digit 3 in the number 83764? (2marks)

27. a) The interior angle of a regular polygon is 162<sup>0</sup>. How many sides does the polygon have? (2marks)

b) Study the diagram below and use it to find the size of angle marked d. (2marks)



28. a) Solve for g  $\frac{8}{9} + 9 = 15$ 

b) Find the two consecutive multiples of six whose sum is 138. (3marks)

29. The table below shows the performance of P.4 pupils in a test. Study it carefully and answer the questions that follow.

| Marks         | 50 | 20 | 40 | 30 | 60 |
|---------------|----|----|----|----|----|
| No. of pupils | 6  | 12 | 10 | 8  | 4  |

a) Find the total marks of the pupils who got below 40 marks. (2marks)

b) What is the probability of getting a pupil who got above the average mark? (4marks)

- 30. A rectangular garden measuring 65m by 35m is to be fenced using poles fixed at intervals of 5m with a pole at each corner.
  - a) How many poles are required to fence the garden? (3marks)

b) If fencing contains five strands of barbed wire. What length of wire is needed? (2marks)

31. a) A car travels at a speed of 54km per hour. Express this speed in metres per Second. (2marks)

b) A motorist left town P at 8:30 a.m and reached town Q 231km away at 11:15a.m. Calculate the average speed of the motorist for the whole journey.

(3marks)

32. The Pie-chart below shows the types of vehicles, which delivered people to a rally. Use it to answer the questions that follows.If there were 36 lorries, find the total number of vehicles that were used altogether.

(4marks)

