# **SPECIAL SET PRIMARY SEVEN EXAMINATION**

#### 2020

### MATHEMATICS

#### Time allowed: 2 Hours 30 Minutes

	EMIS	S NO.	PERS	ONAL	NO.			
Index N	lo.							
Candid	ate's Name:							
Candid	ate's Signature:							
EMIS Number:								
District								
<u>Read</u>	ead the following instructions carefully: FOR EXAMINERS' USE ONLY				SE ONLY			
1.	This paper has two S	Sections: <b>A</b> ai	nd <b>B</b> .			QN. NO	MARKS	SIGN
2.	2. All the working for both sections A and B must be							
	shown in the spaces	provided.				6-10		
3.	All working must be a point pen or fountain	done using a pen. Any wo	blue or bla rk done in	ck ball pencil	other	11-15		
	than graphs, pictures	and diagram	ns will not b	be mar	ked.	16-20		
4.	4 No calculators are allowed in the examination room		۱.					
						21-22		
5.	Unnecessary change marks	es of work ma	y lead to lo	oss of		23-24		

- Any hand writing that cannot easily be read may lead to 6. loss of marks.
- 7. Do not fill anything in the boxes indicated

SECTION	EXAMINER'S MARKS	T/L MARKS
Α		
В		
TOTAL		

" ForExaminers' Use Only".

MARKS	SIGN
	MARKS

## SECTION: A(40 Marks)

1. Work out:  $13 \times 3$ .

2. In the Venn diagram below. Describe the un shaded region .



3. Work out the next two numbers in the sequence using composite numbers.

0 , 4 , 10 , 18 , 27 , ...... , ......

4. Given that K = 9 and Z = -6Find the value of (K-Z) + (Z+K). 5. Use a number line below to work out 6 - 3.



6. Express  $\frac{3}{8}$  as a decimal number.

7. Work out: 
$$13 \div 5 + 17 \div 5$$

8. Mr. Denis collects 4000g of shoe polish from students daily. Find how many tins of 250g of shoe polish he collects daily? 9. Simplify (9k-4) - (3k+2).

10. In the diagram below PQ is parallel to DC. Find the value of angle q .



11. Given that the cost 6 apples is sh. 3000. Find how many apples one can buy with sh. 5000?

12. A man is XCIX years old. Find his age in Hindu Arabic numerals.

13. Complete the table below using base five.

+	3	4	
2	••••	$11_{\mathrm{five}}$	
4	$12_{\rm five}$		

14. At a certain clinic, the weight of newly born babies are recorded using the following expressions (3p-1)kg, (2p+2)kg and (p+5)kg.

Find the mean weight of the babies.

15. A taxi driver driving at 75km/h took 4 hours to reach his destination. How long did his return journey take at a speed of 50km/h?

16. A school boy walked from point A to point B on a road as shown below.



Calculate the distance the boy covered from A to B. (Use  $\pi = \frac{22}{7}$ )

17. Given that the prime factors of 60 are  $2_1$  ,  $2_2$  ,  $3_1$  and y. Find the value of  $\,y$  .

18. Anitah bought a necklace at sh. 4,000 and got a loss of sh. 1000 after selling it. Calculate her percentage loss made.

19. Give that represent 14 balls. Draw picture balls to represent 35 balls.

20. Use a pair of compasses, a ruler and a pencil only. Bisect the acute angle AOC in the diagram below.



## **SECTION B**

- 21. In a club of 9k members, 25 members like to travel with Uganda airlines (A), 30 like to travel with Rwanda airline (R), 5K members like none of the two airlines where as K members like to travel with both airlines.
  - (a) Use the information above to fill the missing gaps in the diagram below.



(b) Find the number of members who like to travel with both airlines.

22. In a school of 600 pupils ,  $\frac{2}{5}$  of the pupils are boys ,  $\frac{1}{6}$  of the boys put on school uniform ,  $\frac{1}{3}$  of the girls do not put on school uniform.

Calculate the total number of pupils who put on school uniform.

23(a) Using a pair of compasses , a ruler and a pencil only construct a parallelogram KLMW in which KL = 8 , /KLM = 135° and LM = 5cm .

- (b) Measure the length of diagonal KM.
- 24. The time table below shows the arrival and departure time of a bus at various stations.

Station	Arrival time	Departure time
Rakai		8 : 15 a.m.
Masaka	9 : 30 a.m.	9 : 45 a.m.
Lukaya	10 : 10 a.m.	10 : 55 a.m.
Mpigi	11 : 15 a.m.	11 : 40 a.m.
Kampala	12 : 45 p.m.	

(a) At what time did the bus depart from Masaka?

- (b) For how long did the bus rest at Lukaya?
- (c) Given that the bus covered a total distance of 270 km. Find the average speed of the bus for the whole journey.

25(a) Work out: 
$$\frac{0.44}{0.11} + \frac{0.45}{0.09}$$

- (b) The product of  $\frac{1}{5}$  and  $\frac{2}{3}$  of a number is 4. Find the number.
- 26. The diagram NBRZ below is of an isosceles trapezium in which RZ = 8cm and NB = 20cm.



(a) Find the value of W.

(b) Calculate the area of the figure NBRZ.

- 27. Anna , Rose , and Nambi have ages  $1101_{two}$  ,  $1110_{two}$  and  $1011_{two}$  respectively.
  - (a) Find the difference of the age of the eldest and that of the youngest.

(b) If Nambi's uncle is four times as old as Nambi. How old is Nambi's uncle?

28. In the diagram below ABC is an isosceles triangle and KP is parallel to MT.



- (a) Find the value of x in degrees.
- (b) Calculate the size of angle y.

29. Harriet is 8 years older than Eddie. Four years ago the ratio of their ages was 4:3 respectively.(a) How old is Eddie now ?

- (b) Find their total age four years ago.
- 30. At a school chalk company, small pieces of chalk of size A are packed into a box of size B as shown below.



(a) Find the total number of pieces of chalk A that can be packed into B horizontally.

(b) Calculate the space left after packing all the pieces of chalk A into box B. (Take  $\pi = \frac{22}{7}$ )

- 31. A trader bought 6 bags of sugar each weighing 25kg at sh. 480,000 from a shop.
  - (a) Find how many kilograms of sugar altogether that were bought by the trader.

(b) If the trader sold the first 2 bags of sugar at sh. 160,000 and the remaining bags of sugar were sold in packets of 5kg at sh. 20,000 per packet.

Calculate the amount of money the trader got from selling the remaining bags of sugar.

32. The pie chart below shows how Mr. Robert spends his monthly allowances.



(a) Find the value of X.

(b) If he spends sh. 90,000 on fees, Find his monthly allowance.

(c) How much of his allowance does he spend monthly?