

# KAMSSA LOWER SECONDARY LEVEL EXAMINATIONS MATHMATICS SENIOR ONE END OF YEAR 2022

### 2 Hours

Do not write in the boxes on this page. The examiner will use them to keep a record of your marks.

#### **SECTION A**

QN	1	2	3	4	5	6	7	8	9	10	Total
Marks											
Scored											

#### **SECTION B**

QN	11	12	13	14	Total
Marks scored					

#### **INSTRUCTIONS**

- 1. Answer all the questions in Section A and **only two** questions in section B.
- 2. Each question in Section A carries **4 marks** and each question in Section B carries **20 marks**.
- 3. Show all the working and explanation on the answer sheets provided.

# **SECTION A (40 marks)**

- 1. A man spends  $\frac{1}{3}$  of his income on rent,  $\frac{2}{5}$  on food and the rest which amounts to shs. 21000 on school fees. Calculate his income.
- 2. Maria and Livingstone take 30 and 40 minutes respectively to run round a circular track. If they started their race at 9:00am from the starting point,
  - (i) What is the earliest time they will be at the starting point together?
  - (ii) After how many hours will they be at the starting point together?

3. (a) Copy and complete the sequence in the table below.

Position of term	1 <sup>st</sup>	2 <sup>nd</sup>	3rd	4 <sup>th</sup>	10 <sup>th</sup>
Term	1	3	5		

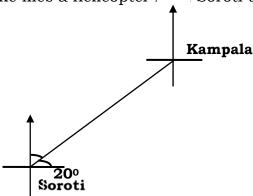
- (b) Find an expression for the **n**<sup>th</sup> **term** of the above sequence.
- 4. A regular polygon has an exterior angle of 240. Determine the
  - (i) Number of sides of the polygon
  - (ii) Angle sum of the polygon
- 5. The highest common factor (**H.C.F**) of 182 and X is 26 and the L.C.M of 182 and X is 1092. Determine the value of X.
- 6. The diagram shows five number cards

1 6 7 8

Put two cards side by side to show

- (i) A two-digit prime number
- (ii) A two-digit number that is a multiple of 7
- 7. An educational tour at the ZOO ended at 2:05 pm. If it took 2 hours and 57 minutes, at what time did it start?
- 8. A certain amount of money was shared between **Tom**, **James** and **John** in the ratio **2:3:6** respectively. If John got shs. 28,000 more than Tom, how much did James get?
- 9. Given that  $31_v = 25_{ten}$  find the value of y

10. Captain Mike flies a helicopter | Soroti to Kampala on a bearing of **y**<sup>0</sup> as shown.



## **SECTION B (60 marks)**

11. The table below shows the Ebola active cases discovered in some districts of Uganda in the year 2022.

District	MUBENDE	KASANDA	MASAKA	KAMPALA	MBARARA
Active cases	120	350	56	150	24

The Ministry of Health was asked to represent the information on a pie-chart. As a senior one learner, help the ministry to solve the challenge. (20 marks)

- 12. On 5<sup>th</sup> December, 2000, Livingstone was born and he is going to make 22yrs this year. He is planning to make a birthday party on 5<sup>th</sup> December, 2022. Living stone loves his friends and relatives so much and is planning to invite them for the party. He wants to give his quests some snacks on arrival for the party. He buys 72 trail mix, 144 peanut Butter cups and 288 potato chips packets.
  - (a) If each plate must have exactly the same number of trail mix packs, peanut butter cup and a potato chips packet, what is the greatest number of guests he must invite for the party in order not to have any left-overs?
  - (b) Write the number of guests in words.

(20 marks)

- 13. (a) Given an equilateral triangle PQR with PQ = 7cm, construct a triangle PQR and hence draw a circle touching all the sides.
  - (b) Measure the radius of the circle and find its area.

(20 marks)

**END**