Fill in the required information below;

LEARNER'S NAME:			STREAM:	
LEARNER'S NO.		STUDY G	ROUP'S	

S.1 MATHEMATICS b.o.† .11

 $1^1/_2$ hours

THE MATHEMATICS DEPARTIMENT 2023

Uganda Certificate of Lower Secondary Education

S.1 MATHEMATICS

Beginning of term .11 Assessment

Time: 1 hour 30 minutes

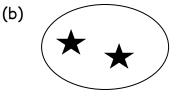
Instructions:

- Use the blue or black ink pen only
- Attempt ALL questions in Part I and ANY ONE question in Part II
- Show all the necessary working

PART. I

1. To which base does each of the set belong, and state the base value.





(04marks)

Mike used the repeated multiplication method to convert tt5_{eleven} to base decimal base, which he later converted to base six. Guide Sarah on the steps Mike went through.
 (04 marks)

3. Given that 102_n = 27, find n

(04 marks)

4. Workout, (a) $6 \div (2 + (2 \times 6 - 2))$

(b)
$$\frac{240f13(18 \div 6 + 3)}{(9 \times 3 - 25)}$$
 (04 marks)

5. Maroni scored a total mark of 32 from a mathematics test in which 4 marks were awarded to any correct answer and a penalty of 2 marks deducted for any incorrect answer. If he did all numbers and got 12 correct, how many numbers were incorrect?

(04 marks)

PART. II

(Functional Mathematics)

- 6. In Busoga Sub County, Monday and Thursday are market days. Kansiime a fruit seller harvested 7 packets each of 8 and 2 remained unpacked. When she reached in the market, she found out that she could park them in sixes, she repacked.
 - (a) How many packets of six did she have?
 - (b) On Tuesday, Kansiime harvested 4 packets of six and 2 remained unpacked. On Wednesday she collected 3 of 6 and 5 remained. How many packets did she have for sale if she packed in sixes? (15 marks)
- 7. Aisha and Moses do exercise together. Aisha exercises after 5 days and Moses exercises after 6 day. They started their exercises together on 1st Jan. They agreed to bring ropes the next time they could meet.
 - (a) Which date did both of them meet?
 - (b) Aisha took 12 meters. Moses took 8m. They realized that ropes needed to be cut into equal pieces. How best can they divide the ropes? (15 marks)
- 8. At Allhim S.S is a teacher's SACCO group. Two Teachers, Mr. Kamada and Mr. Muyingo had a balance of 100,000/= and 200,000/= in the SACCO respectively. Mr. Kamada borrowed 2,000, 000/= and invested in goat keeping and got 3,000,000. Mr. Muyingo borrowed 5,000, 000/= and invested in Second hand Clothes and she got 4,500,000. After Mr. Kamada and Mr. Muyingo had deposited back, they want to borrow again.
 - (a) Which of the two made a better business choice and why?
 - (b) Advice the Chairperson of this SACCO on how to decide when borrowing and lending money. (15 marks)