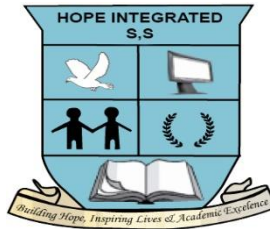**456/1**

**MATHEMATICS**

**PAPER ONE**

**AUGUST 2024**

2 HOURS



## HOPE INTEGRATED SECONDARY SCHOOL
## UGANDA CERTIFICATE OF LOWER EDUCATION

MATHEMATICS

END OF TERM II ASSESSMENT
**SENIOR TWO**

**INSTRUCTIONS**

**ATTEMPT ALL ITEMS**

**ITEM ONE**

Mr. Jimson senior ict technician asked for tables to use in the computer laboratory. At the show room in Masaka, he was shown a table of area of $324m^2$ and the one whose area is $36m^2$. The engineer claims that they are similar. Length of a small table is 9m.

He finally bought two tables at 750000 at discount at 10%. This was 40% of his monthly income. The balance of his monthly income was paid as school fees to her daughter at Shepherd high school Katovu and was 2/5 of his remaining income.

**TASK**

  i.    Explain to Ict technician why tables are similar with evidence
  ii.   Determine the length and width of big table

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iii.    What was original price of the tables before the discount and Jimsons Income?
iv.    How much portion of income was paid as school fees?

## ITEM TWO

Mr. Ronald is young entrepreneur in Jinja.He attended harvest money by new vision group and got interested in rearing goats. His total capital is 8000000 shillings .From his consultation, he found that the cost of rearing goats is $(15500+y)$ where y is the number of goats

In same locality, Sedrack has 81 goats under free range grazing whereas Geoffrey has 49 goats under paddock system of grazing. Ronald wants the difference of Sedrack and Geoffrey goats in zero grazing to minimize expenses

**Task**

(i)  Assist Ronald to determine the total cost and number of goats that the school should rear to minimize the costs.
(ii) Without using a calculator, evaluate the number of goats he would rear on zero grazing and how much would be spent on them according to the cost.

## ITEM THREE

From the previous performance in UCE exams in Mathematics, the table below shows the number of students and how they performed.

| SCORE | D1 | D2 | C3 | C4 | C5 | C6 |
|-------|----|----|-----|----|----|----|
| NUMBER OF STUDENTS | 30 | 25 | 120 | 45 | 15 | 05 |

The school administration promised the mathematics department token after students had performed as follows D1-20000, D2-10000,C3-5000,C4-2500

**Task**

(i)  As senior two students, present this information on circle graph to DOS office
(ii) Help the bursar to determine the amount of money to be given to the teacher of Math's for above performance
(iii)      The head teacher believes that D1-C4 passed. Express this in percentage

BEST WISHES