GATITU DAY MIXED SECONDARY SCHOOL

MATHEMATICS FORM 3 CAT 2

TERM 2 2012 MIDTERM EXAM

1. Evaluate (2mks)

(+ 1/17) + (- 3/5) – (+ 1/3)

2. Simplify (3mks)

3x2 – 48

3x2 – 24x +48

3. Given that x -1 x +1 is a singular matrix, find the value of x (2mks)

3 2

4. Make n the subject of the formula (3mks)

M = ax2n

W –n

5. Simplify (3mks)

10 - 10

2 2

6. B is the matrix 3 2 and C is the matrix 9 -3 if A is a matrix of order 2 \* 2

2 2 2 1

And A \* B =C determine the matrix A (2mks)

7. a) Solve for X in log 3x +4 - log 3 – x =1. (2mks)

b) 2 log x + ½ log 81 = log 6x (2mks)

8. Solve for x in (2mks)

92x

9. Line O1 O2 is divided such that O 1 T: TO2 is 3:2. Find the length of the line O1O2. (2mks)

10. Find the amount after 5 years when sh. 30,000 is invested at

a) 11% p.a simple interest. (2mks)

b) 11% p.a compound interest. (3mks)