**GATITU MIXED SECONDARY SCHOOL**

**MATHEMATICS FORM 3 OPENER TERM 2 2015**

**ATTEMPT ALL QUESTIONS**

1. Solve for X in the following equation using the quadratic formula. 3mks

2 = 3 - 6

X + 1 x – 2

1. Solve 3mks

Log (x+3) = log (x -6 ) + log 3

1. Find the rate of which sh. 15,000 can be invested for 2 years to earn sh. 3000. 3mks
2. Find the percentage error in 3mks

35.3+15.2

1. Given that two physical quantities n and S in are related by the law 2s/n = (n+1). Find the value of n if s= 105. 3mks
2. Use the compound interest formula to calculate the interest earned when sh. 60,000 is invested for 3 years at the rate of 12% p.a compound interest. 3mks
3. Without using tables, evaluate 3mks

5 log22 + 2 log24 - log24

1. The dimensions of a rectangle are measured and given as 6.0cm by 3.06cm. Calculate the relative error in its area. 3mks
2. Find the compound interest earned on sh. 18,000 invested for 2 years at 20% p.a compounded quarterly. 3mks
3. Given that p=3y express the equation 32y-1 + 2(3y-1) =1 in terms of p. hence or otherwise find the value of y in the equation.

32y-1 + 2 × 3y-1 = 1 4mks

1. Given that x,y and 2 are integers such that 8≤ 6, find the percentage error in

 x +y

 2 4mks

1. Draw the graph of the function y = x2 - 2x + 1 hence use it to solve
2. X2 - 3x + 2 = 0 3mks
3. Simultaneous equations 2mks

 Y = x2 – 3x + 2

 Y = 3 -2x