GATITU DAY MIXED SECONDARY SCHOOL

TERM 2 2012 C.A.T. 1

MATHEMATICS FORM THREE

1 HOUR

1.Solve for q if q+1/3 -q-3/2 =1/4 (2mks

2. Express 64800 in terms of its prime factors (1mk)

3. Three tanks are capable of holding 36, 84 and 90 litres of milk. Determine the capacity of the greatest vessel which can be used to fill each one of them an exact number of times (2mks

4. Find the length of the shortest piece of pipe that can be cut into equal lengths each 25cm or 36cm or 42cm (2mks

5. The length of a rectangle is (3x +1). Its width is 3cm shorter than its length. Given that the area of the rectangle is 28cm3, find its length (3mk

6. Simplify 2/4-√5 (2mks )

7.8 men working 7hrs a day take 12 days to dig a shamba. How long will it take 6 men working 14hrs a day to dig the same shamba. (2mks )

8. Use matrix method to solve the following simultaneous equation (3mks )

2x – y=3

2x +2y

9. Determine the inverse of the matrix (6 4) (2mks)

(10 8)

10. Express in logarithmic notation (1mk)

72 =49

11.Express in index notation (1mk)

Logxy =2

12. Solve for (2mks)

Log 12 +3log x =log 96

13. Chords AB and CD intersect externally at Q. If AB =5cm BQ =6cm and DQ =4cm, calculate the length of chord CD. (2mks)

14. What must be added to 25 x2 +------ +9 to make it a perfect square? (2mks)

15. In the DCF =500 and ACB 400. Find BCE and ABC (2mks)