**NAME..................................................................................ADM NO..................... STRM...................**

**ELERAI MCK GIRLS’ SECONDARY SCHOOL**

**P. O. BOX 435**

**SULTAN HAMUD**

***Motto “Discipline and Hard Work for Excellence”***

**FORM II**

**MATHEMATICS**

**CAT 1**

**TERM II 2013**

**INSTRUCTION**

* *Answer* ***ALL*** *the questions in the spaces provided below each question*
* *Marks may be given for correct working even if the answer is wrong.*

1. Use mathematical table to find:
2. (6.312)3 (1mk)
3. A cubic building block measures 21cm. Find its volume (1mk)
4. Evaluate

3√27x6 (1mk)

1. The volume of water in a measuring cylinder reads 200cm3. When a cube is immersed into the water, the cylinder reads 543cm3. Find;
2. The volume of the cube (`1mks)
3. The length of the side of the cube (2mks)
4. Find the reciprocal of:
5. 0.0236 (1mk)
6. 56.2 (1mk)
7. Use reciprocal table to work out each of the following
8. 5 – 7

0.375 37.5 (2mks)

1. evaluate the following
2. 5122/3 (2mks)
3. (3-3)3 (1mk)
4. Simplify
5. x2y2  **x** x4y2

x3y4 (1mk)

1. Solve the following equation (32x)3 = 34 x 38 (2mks)
2. use mathematical tables to evaluate
3. 3612 ÷ 452 (2mks)

d) 0.9063 x 3.387 (2mks)

1. Using logarithms evaluate;

41.56 x 52.3

√42.88 (4mks)

1. Find the gradient of each of the following lines
2. 3y – 4x = 5 (1mk)
3. y + 2x -3 = 0 (1mk)
4. find the equation of the line passing through the given points
5. (11, 1) and (14, 4) (2mks)
6. (-1, 7) and (3,3) (2mks)
7. Find the co-ordinates of the point where each of the following lines cuts the x-axis
8. y = 7x – 3 (1mk)
9. y = 0.5 – 0.8x (1mk)
10. A triangle has vertices A(2, 5), B(1, -2) and C(-5, 1). Determine;
11. the equation of the line BC (2mks)
12. the equation of the perpendicular line from A to BC (2mks)
13. determine the equation of a line perpendicular to the given line and passing through the given points
14. y – 5x + 3 = 0; (3, 2) (2mks)
15. y = 8 – 7x; (-3, -4) (2mks)