

**GATITU MIXED SECONDARY SCHOOL**

**MATHEMATICS FORM 1 MID EXAM TERM 2 2014**

**ANSWER ALL THE QUESTION IN THE SPACES PROVIDED**

1. Test whether 712008 is divisible by 11. 2mks

2. A vegetable vendor had 1348 cabbages. He sold 750 on the first day and 240 on the second day. He added 462 to the remaining stock on the third day.

a) How many cabbages did he have at the end? 2mks

b) If he sold all the cabbages at an average cost of sh.12 how much money did he collect? 2mks

3. If  $A = (R^2 - r^2)$  find A when  $R = 19$  and  $r = 11$  2mks

4. Simplify by use of the common factor. 4mks

a) 
$$\frac{3bx - 3by + 4ax - 4ay}{4a + 3b}$$

$$\text{b) } \frac{pa + pb}{Ka + kb}$$

5. Use tables of squares to evaluate  
a.  $6250^2 - 0.1750^2$

4mks

$$\text{b. } \frac{(0.706 \times 20.5)^2}{32.2}$$

6. Juma spent  $\frac{1}{2}$  of his salary on school fees,  $\frac{1}{8}$  on farming and  $\frac{2}{3}$  of the remainder on food. Calculate his July salary if he spent sh. 3200 on food.

3mks

7. Find the ratio a:c if a:b = 3:5 and b:c = 6:5

2mks

8. A furniture which was costing sh. 1800 now costs sh. 1450. What is the percentage decrease? 2mks

9. Express the following measurements into 3 significant figures 3mks

i. 351.0032

ii. 0.10720

iii. 4.095

10. Find the perimeter of a triangle whose sides are  $x$ ,  $2x$  and  $x-5$  cm. 3mks

11. Express the following recurring decimals as fractions 3mks

i.  $0.\overline{7}$

ii.  $0.\overline{67}$

12. Evaluate

3mks

$$3/5 \div 2/3 - 1/2 \times 1/13 \text{ of } (1/2 + 4/5)$$

13. Find the least amount of cement that can be put into bags which all contain 20kg or 25 kg or 40 kg or 50kg.

3mks

14. Evaluate

2mk

i.  $55.31 + 100.184 - 140.912$

ii. 
$$\frac{15.2 \times 0.051 \times 6.5}{120 \times 2.5 \times 60}$$