NAME: ADM. NO: $\qquad$
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121-ALT A
MATHEMATICS
FORM 2 END OF TERM EXAMINATIONS
MARCH-2018 TERM 1
TIME: 60 MIN


## FooCUS A365 <br> 

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Kenya certificate of secondary education (K.C.S.E) Assessment Test
Answer All Question Provided in this Question Paper (30 MARKS)
1 Two neon lights are turned on at the same time. One blinks every 4 seconds $\mathbf{3} \mathbf{~ m k s}$ and the other blinks every 6 seconds. In 60 seconds, how many times will they blink at the same time?

2
Evaluate:
2 mks
$\sqrt[3]{27 x^{3} y^{9}}$

4 Use logarithm tables to evaluate:
$\sqrt{\frac{13.28 \times 27^{\frac{1}{3}}}{2 \div 0.012}}$
4 mks

5 a The sum of four consecutive even numbers is 60. Find the numbers.
2 mks
b Simplify the expression
$5 a-4 b-2[a-(2 b+c)]$
c Calculate the size of $\angle x$ and state an angle property that satisfies your answer


6
A line $y=\frac{1}{3} x+1$ is perpendicular to line XY passing through coordinate

3 mks $(4,3)$. What is the equation on line XY? (give your answer in the form $y=m x+c)$
$7 \quad$ A shopkeeper made a loss of $30 \%$ by selling an electric iron at sh. 700. What $\mathbf{3} \mathbf{~ m k s}$ profit would he have made had he sold it at sh. 1150 ?

8 The figure below represents below represents a prism of length $7 \mathrm{~cm} \mathrm{AB}=\mathbf{3} \mathbf{~ m k s}$ $\mathrm{AE}=\mathrm{CD}=2 \mathrm{~cm}$ and $\mathrm{BC}-\mathrm{ED}=1 \mathrm{~cm}$


Draw the net of the prism

It takes 30 workers 6 days working 8 hours a day to harvest maize in a farm. How many days would 50 workers working 6 hours a day take to harvest the maize?

10 All prime numbers less than ten are arranged in descending order to form a number.
a. Write down the number formed.

1 mk
b. State the total value of the second digit in the number formed in (a) above. $\mathbf{1} \mathbf{~ m k}$

