

CANDIDATE'S SIGNATURE:

DATE:

121 - ALT A MATHEMATICS FORM 3 END OF TERM EXAMINATIONS MARCH-2018 TERM 1 TIME: 60 MIN

CANDID	ATE ⁹	s seo	DF

FOOCUS A365

ST. CLARE GIRLS HIGH SCHOOL - GATUNDU

P.O BOX 327 - 01030 GATUNDU

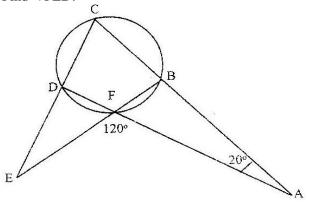
0735 447279 gatitusecondary@gmail.com

Kenya certificate of secondary education (K.C.S.E) Assessment Test Answer All Question Provided In This Question Paper (30 MARKS)

1 Omondi has 6 cans of regular soda and 15 cans of diet soda. He wants to create some 2 mks identical refreshment tables that will operate during the Gor Mahia football game. He also doesn't want to have any sodas left over. What is the greatest number of refreshment tables that Omondi can stock?



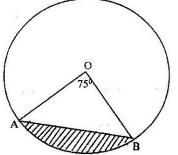
In the diagram below < CAD, = 200, < AFE = 1200 and BCDF is a cyclic quadrilateral. 2 3 mks Find < FED.



3 By correcting each number to one significant figure, approximate the value of 3 mks 788 \times 0.006. Hence calculate the percentage error arising from this approximation.



4 The figure below represents a circle a diameter 28 cm with a sector subtending an angle 4 mks of 75° at the centre.



Find the area of the shaded segment to 4 significant figures (take π =3.142)

5 The length of a rectangular mat is $1^{1/2}$ m longer than its width. Find the length of the mat if 2 mks its area is $4^{1/2}\text{m}^2$



3 mks

6 Two sides of a triangular field are 21 m and 32 m long. Its area is 240m². The angle between two sides is obtuse. Determine this angle.

7

Evaluate; $log5^5 - log5^4$ $log4^{\frac{1}{5}} - log5^{\frac{1}{4}}$ Giving the answer to 4 significant figures.

2 mks

8 Solve for x in the equation $2 \log_{10} x + \log_{10} 5 = 1 + 2\log_{10} 4$ 4 mks



4 mks

9 Sato withdrew some money from a bank. He spent ³/₈ of the money to pay for Njeri's school fees and ²/₅ to pay for Kigen's fees. If he remained with Ksh 12, 330, calculate the amount of money he paid for Kigen's school fees.

10 A minibus covered a distance of 180km at an average speed of 90km/hr. It travelled at a speed of 80km/hr for ²/₃ of its journey. At what speed did it travel the remaining part of the journey?

