**END OF TERM 1MATHEMATICS EXAMINATION FOR S.1**

**Duration : 2 hrs**

**Instructions: Attempt all questions.**

**-All necessary workings should be clearly shown**

**SECTION A**

1. Evaluate

(3 - 1 +) /

2. Prime factorize the following

i) 36

ii)96

3. Find the L.C.M and H.C.F of the following numbers 48,30,90.

4. Solve for x and y in the following

i) 2 =

ii) =

5. 0f a class are boys if the class contains 35 students. Find

i) the number of boys in class

ii) the number of girls in class.

6.find the next number in the sequence

a) 1,3,6,10, \_ , \_ , \_ , \_ .

b) = == = .

7. Given that set A is a set of all prime numbers between 0 and 20 and B is a set of odd numbers between 0 and 15.find

i) n(AnB)

ii)n(AuB)

8. Convert 127eight to base two.

9. Solve for p

2p + 1 = 4 – p.

10. Find the value of P and W.

55 w

p 75

**SECTION B**

11a) In Enwaku’s herd of 100 mixed black and white cattle, 65 have black(B) markings on them and 45 have white markings on them. Represent the Information on avenn diagram and use it to find the cattle with

1. Both white and black markings
2. white markings only
3. black markings only

b) given points A,B,C and D as A (0,3),B(4,3),C(4,1) and D (0,1).Plot them on the graph paper and name the figure obtained.

12)evaluate the following

a) 7 8 e 8 4 nine

+ 1 2 4 7 8nine

b) 5.63nine - 2.84 nine

c) 3 2 4nine

- 1 2 5 nine

d) Solve for n from

24eight + 32five = 52n

13a) Arrange , , , in ascending order.

b) State whether the signs or is appropriate in the following fractions

i)

ii)

c)I think of a number, add 3 to it and divide the result by 2, I get 6 as the result. What is the number?

14. Given the following data below.

1,2,3,1,2,4,5,3,6,3.

Find the

1. mean.
2. Mode.
3. Median.
4. Range.

***GOOD LUCK***