**S.1 MATH EXAM**

***DO ALL NUMBERS***

1. a. What is a set?

b. State and describe four symbols used in sells.

1. Describe the following sets

A = {Uganda, Tanzania, Kenya}

B = (10, 20, 30 40)

1. Given that A = {6, 8, 5}

B = {5, 6, 3, 2}

Draw a Venn diagram to show the above sets ad find

1. A∩B
2. N(AUB)
3. Give that n(A) = 8, n(B) =5 and n(A∩B) = 3. Find n(AUB).
4. Given that = E = {P,Q,R,S}

How many subsets are in set E and list them.

1. Support E = {1,3, 5, 7, 9}, F = {1,5,9}

andG = {1, 2, 3}

Which of the following statements are true

1. F CE ii. GCE iii. ECF iv. GCF
2. Add the following

i. 3 2four  ii. 1 9 9ten

+1 2four  +1 2 6ten

iii. 10010two + 1111two

1. Change 124sixto base ten
2. If 25ten = 31n. find n.
3. Write 1009 in words

SECTION B.

1. A survey of 30 students reveals that 12 students play foot ball 15 students play tennis and p play both Tennis and foot ball 4 students play neither of the two games.
2. Draw a Venn diagram to show the above information
3. How many students don’t play foot ball
4. How many students play only one game?
5. Convert the following
6. 231four to binary ii. 325six to octal

**…END…**