SENIOR ONE MATHEMATICS

MIDTERM ONE EXAM 2019

TIME: 1HR: 30MINS

INSTRUCTIONS

Attempt all questions

1. List between curly brackets the members of each of the sets .
    (i)   The first six letters of the English alphabet.
    (ii)   Days of the week.
    (iii)   Positive numbers less than 16 which can be divided exactly by 3.
    (iv)   Math teachers at my school.
2. Describe accurately the sets below.
    (i)   {10,20,30,40}
    (ii)   {s, e, t}
    (iii)   {oxygen , hydrogen}
    (iv)   {p, o, r, u, g}
3. It is given that X= {11, 15, 17} and Y= {15, 17, 11}. Which of the statements below are true.
    (a) X=Y
    (b) n(X)=n(Y)
    (c) X∩Y≠Y
    (d) X∩Y=∅
4. Draw Venn diagrams to illustrate the relationship between the pairs of statements of sets below.
    a)   G= {a, b, c, d, e} and H= {b, g, h, e, m, n)
    b)   A=Countries in Africa and B= Countries in Europe
5. Find the sum of 12, 18 and23?
6. For 140 and 126, find the LCM and GCF
7. Express 96 as a product of its prime factors.
8. Which of these numbers are divisible by 12?
    a)   635436
    b)   816712
    c)   3490524
9. What is wrong with numbers 25four?
10. The following numbers are in base ten. Write them in the given base
    (a) 12(write in base four)
    (b) 31(write in base five)
    (c) 17(write in base three)
    (d) 187(write in base eight)