Virtusa Sample Paper 4

Analytical Reasoning

1. x1 peach + y1 plum = z1 apple, x2 peach + y2 plum = z2 apple ,(x1,y1 .... z2 are integer values) How many peaches make one apple?

2. 100,100,102,106,112,120,____

3. Which is greater ?Product of all Bradman's first class scores or Sum of all test scores of Sachin.

4. U r provided with 500ml and 300ml jar(it has no markings).
   a) u have to measure exactly 100ml.
   b) u have to measure exactly 200ml.

5. Using four 4's u have to make 1 ... 10. (for eg. 1 = (4/4)*(4/4) 2 = ? 10 = ?)

6. Student,canopy,thirst,... are the words given.u have to group the words using the following words
   1) Master
   2) Teacher
   3) Deft
   etc.

7. U have to cut a Pizza using 7 st. lines(wit out rearranging) and u have to obtain maximum number of pieces.(Give generalised solution..)

8. U have to cut a Cylindrical cake of diameter 32 cm and height 20 cm in to 12 equal pieces.

9. In a village there r 2 groups.
   1 Knight -> always tell true
   2 Knave -> always tell false
   Mr.X met a man of that village(u don't which grp he belongs) and questioned "Tell me whether u r knight or knave ?"
   Reply: "i cannot tell u and left that place" Find which grp that man belongs to?

10. Obtain 277 from 3,25,50,65,100.use 4 arithmetic operations only.

11. 1#2=x ,2#3=y, 4#4=z, 4@14=a, 5@15=b, d@e=f, find (2#4)@5= ?

12. CODE is encoded as DGBF, READ is encoded as JHNV ,Fins "KOVAI"

13. Essay(General). (Topic given: India should spend money on Atom bomb and Rocket OR for the welfare of poor.)

14. Programming.(4 Qns) : (we can use any Programming Language for coding)

    - They had given one function ,we have to find it what it does and also problem in

the fn. and how to overcome it.

```
double what( double z, int y)
 {
 double answer;
  while( y > 0 )
    {
     if( y%2 == 1)
       answer = answer * z;
       y=y/2;
       z=z*z;
     }
 return answer;
 }
```

- They had given one Pseudocode.We have to find bug in the pseudocode.I don't remeber the pseudocode fully.But the function of pseudocode is "To make a Robot to fetch a tumbler of water"

- Write a program to print all Armstrong numbers, (abc=a^3+b^3+c^3) (for eg. 153=1^3+5^3+3^3)

- Write a function witj the following conditions,
    1) It should have one integer parameter.
    2) If the value passed is -ve, return -1.
    3) If the value passed is a perfect square, return root of that number.
    4) If the value passed is a not a perfect square, return that number itself.