

## Virtusa Sample Papers 3

### SECTION 1 (Analytical and Logical)

1. 1 2 3 2 5 6 7 8 3 find the next term in the series
2. How can u place 4 coins in 2 lines so that each line should contain 3 coins Ans:I wrote, i it maynot be possible
3. Find the odd word  
ALPHA  
DELTA  
SIGMA  
BETA
4. There was an addition given as follows SATURN + URANUS = PLANETS the solution is not encoding the entire problem but to find coding for 3 alphabets Ans:Key Steps:
5. There was a set of words given as follows SUN,MER,VEN,---,.....,SAT,---,NEP,PL (I don't remember exactly but, all are the names of planets in solar system with notation of each planet using 3 letters)
6. How can u get 81 using the digits 2,3,25,50,75,100 only once using any of the arithmetic operator Key Steps:  $50+(100/75*3)+25+2$
7. (This is a real sitter, takes a long time) A man have some three types boxes viz Huge, Large, Small He took 11 of huge boxes and put on a table. And at random he has taken some of them and placed 8 large boxes in each of the boxes. And after that he has placed 8 small boxes in some large boxes at random. By the end if he found 102 boxes empty, how many boxes are there on the table?
8. If u have a large number of Knights and a chess board. The problem is to find the way of arranging the Knights on the board so that no Knight attacks the other.
9. You are given a bunch of threads each having differing length. No two threads have same thickness and no thread has same thickness all its length. But it is certified that any thread when lit burns itself in exactly 12 mins. The question is you are asked to find an elapsed time of 9 minutes. How can u find it out and how many threads do u want for this?

### SECTION 2 (Writing)

10. The topic to Write was on "Connecting the rivers in India".

### SECTION

You can write the programs in this section using any programming language

11. There was a pyramid given as follows

```
1
2 3
4 5 6
7 8 9 10
11 12 13 ...
```

The three dots are given as a part of the specification. The above pyramid is to be printed when input number 13 is given. Write a program to print the above pyramid.

12. Write a function which returns a substring in the string 'Sigma' (character given) which starts with 'Alpha' and ends with 'Theta'

13. You have a job in which you have to take time stamps and store them. So Write a datastructure that can minimize the storage requirements of Year, Month, Date, Hour, Minute.

14. Write a program to find the four digit numbers, which are perfect squares, and all the digits in that number are even.