PnC Workshop

Basics handout - Cetking.com/PnC Yellow book – Advance level / Green book – Super advance

Words

1. In how many ways can the letters of the word 'LEADER' be arranged?
(a) 360 (b) 160 (c) 80 (d) 200

2. In how many different ways can the letters of the word 'DETAIL' be arranged in such a way that the vowels occupy only the odd positions?
(a) 36 (b) 16 (c) 80 (d) 20

3. How many 4-letter words with or without meaning, can be formed out of the letters of the word, 'LOGARITHMS', if repetition of letters is not allowed?
(a) 360 (b) 160 (c) 80 (d) 5040

4. In how many rearrangements of the word AMAZED, is the letter E is always positioned in between the 2 As
(a) 80 (b) 60 (c) 100 (d) 120

5. In how many different ways can the letters of the word 'MATHEMATICS' be arranged so that the vowels always come together?
(a) 132600 (b) 112600 (c) 180200 (d) 120960

6. In how many different ways can the letters of the word 'OPTICAL' be arranged so that the vowels Never come together?
(a) 360 (b) 160 (c) 80 (d) 720

7. In how many different ways can the letters of the word 'LEADING' be arranged in such a way that the vowels always come together?
(a) 580 (b) 660 (c) 720 (d) 576

DIGITS

8. How many 3-digit numbers can be formed from the digits 2, 3, 5, 6, 7 and 9, which are divisible by 5 and none of the digits is repeated?
(a) 36 (b) 16 (c) 80 (d) 20

9. A five-digit number is formed using digits 1, 3, 5, 7 and 9 without repeating any one of them. What is the sum of all such possible numbers?
(a) 6666600 (b) 6666660 (c) 6666666 (d) None of these

10.How many numbers can be formed from 1, 2, 3, 4, 5 (without repetition), when the digit at the unit's place must be greater than that in the ten's place?
(a) 54 (b) 60 (c) 17 (d) 2 × 4!

11.How many numbers can be made with digits 0, 7, 8 which are greater than 0 and less than a million?
(a) 496 (b) 486 (c) 1084 (d) 728

Circular Arrangement

12.In how many ways can the letters of 'REPEAT' be arranged on circle table? (a) 360 (b) 160 (c) 80 (d) None

13.How many ways 5Boys and 3Girls can sit on a circular table such that no two girls sit together?
(a) 580 (b) 660 (c) 600 (d) 576

Selection of a Team

14.Out of 7 consonants and 4 vowels, how many words of 3 consonants and 2 vowels can be formed?
(a) 11C3 x 4C2 (b) 7C3 x 4C2 (b) 6C3 x 4C2 (d) 5C3 x 3C2

15.How many Triangles can be formed from 11 points out of which 5 are collinear?
(a) 80 (b) 60 (c) 60 (d) 155

16.A man has 9 friends, 4 boys and 5 girls. In how many ways can he invite them, if there have to be exactly 3 girls in the invitees?
(a) 320 (b) 160 (c) 80 (d) 200

Misc

17.How many ways a person can go from one diagonal end to other end? (a) 36 (b) 16 (c) 80 (d) None of these

A						
						B

18.When four fair dice are rolled simultaneously, in how many outcomes will at least one of the dice show 3?
(a) 1296 (b) 625 (c) 671 (d) 120

19.All the rearrangements of the word "PEARS" are written without including any word that has two D's appearing together. If these are arranged alphabetically, what would be the rank of "PEARS"
(a) 80 (b) 60 (c) 60 (d) None of these

20.In how many ways can a person post 5 different letters in 4 letter boxes ?
(a) 1296 (b) 625 (c) 5^4 (d) 4^5

21.In how many ways can 6 chocolates be distributed among 3 children? A child may get any number of chocolates from 1 to 6 and all the chocolates are identical. (a) 36 (b) 16 (c) 80 (d) 20