# ONLINE COACHING DAY - 9г ( $\mathrm{Io}-\mathrm{o7}-\mathrm{I} 9)$ PERMUTATION AND COMBINATION 

## KERALA PSC SPECIAL



Name of the Candidate *
M-2

Place *
Thrissur

Contact Number *

XXXX

Questions

Please Watch The Online Videos (I-4)
https://youtu.be/ARZp_eXejMg
https://youtu.be/vKPpHL-wAFk
https://youtu.be/pnAZpA8wXgw
https://youtu.be/qwPWPB-6Lck
i. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done? *564645735

○ 756
2. In how many different ways can the letters of the word 'LEADING' be arranged in such a way that the vowels always come together? *3607205040
3. In how many different ways can the letters of the word 'CORPORATION' be arranged so that the vowels always come together? *81014402880
() 50400
4. Out of 7 consonants and 4 vowels, how many words of 3 consonants and 2 vowels can 1 point be formed? *2101050
() 2520021400
5. In how many ways can the letters of the word 'LEADER' be arranged? *72144360720
6. In a group of 6 boys and 4 girls, four children are to be selected. In how many different ways can they be selected such that at least one boy should be there? **159194205209
7. In how many ways a committee, consisting of 5 men and 6 women can be formed 1 point from 8 men and io women? *2665040
8. A box contains 2 white balls, 3 black balls and 4 red balls. In how many ways can 3 balls be drawn from the box, if at least one black ball is to be included in the draw? *32486496
9. In how many different ways can the letters of the word 'DETAIL' be arranged in such 1 point a way that the vowels occupy only the odd positions?*32483660
10. In how many ways can a group of 5 men and 2 women be made out of a total of 7 1 point men and 3 women? *

- 639012645
iI. How many 4-letter words with or without meaning, can be formed out of the letters 1 point of the word, 'LOGARITHMS', if repetition of letters is not allowed? *40 arranged so that the vowels always come together? *100804989600120960None of these

13. In how many different ways can the letters of the word 'OPTICAL' be arranged so that the vowels always come together? *120 ..... 72043202160
14. What is the number of possible words that can be made using the word "EASYQUIZ" such that the vowels always come together? *120720
() 28804320
15. What is the number of possible words that can be made using the word "QUIZ" such 1 point that the vowels never come together? *816
16. How many words can be made from the word "APPLE" using all the alphabets with repetition and without repetition respectively? *
() 1024,6060, 10241024, 1024240,1024
17. How many ways a 6 member team can be formed having 3 men and 3 ladies from a group of 6 men and 7 ladies? *
( 700720120500
18. In how many ways can an interview panel of 3 members be formed from 3 engineers, 1 point 2 psychologists and 3 managers if at least I engineer must be included? *3015

O 4645
19. How many 4 -digit numbers can be formed from the digits $\mathrm{I}, 2,3,4,5,6$ and 7 which 1 point are divisible by 5 when none of the digits are repeated? *
( 1203524
20. In how many ways can 20 boys and 18 girls make a queue such that no two girls are together? *20!* 20C1820!* 20P1820!* 21C18
( 20 !* 21P18
21. There are 5 floating stones on a river. A man wants to cross the river. He can move either I or 2 steps at a time. Find the number of ways in which he can cross the river?*11121314
22. Out of 7 boys and 4 girls, how many queues of 3 boys and 2 girls can be formed? *12025200248001440
23. Out of 6 engineers and 4 doctors, how many groups of 4 professionals can be formed 1 point such that at least i engineer is always there? *129109229 so that the vowels always come together? **120720240
() 1440

25 . The value of 75 C 2 is: *1215231527751675

Thank You!!!

## Google Forms

