Permutations & Combination

1. The vaiue of 75P2 is :
(a) 2775 (b) 150 (c) 5550 (d) None of these

2. How many 4.letter words with or without meaning, can be formed out of the letters of the word, ' LOGARITHM'S' if repetition of letters is not allowed?
(a) 40 (b) 400 (c) 5040 (d) 2520

3. How many words with or without meaning, can be formed by using all the letters of the word ' DELHI' using each letter exactly once?
(a) 10 (b) 25 (c) 60 (d) 120 (e) None of these

4. In how many ways can the letters of the word ' APPLE' be arranged?
(a) 720 (b) 120 (c) 60 (d) 180

5. In how many ways can the letter of the word 'LEADER' be arranged?
(a)72 (b) 144 (c) 360 (d) 720 (e) None of these

6.In how many different ways can the letters of the word 'RUMOUR' be arranged?
(a)180 (b) 90 (c) 30 (d) 720 (e) None of these

7. How many words can be formed by using all the letters of the word,ALLAHABAD?
(a)3780 (b) 1890 (c) 7560 (d) 2520 (e) None of these

8. How many arrangements can be made out of the letters of the word ENGINEERING?
(a)277200 (b) 92400 (c) 69300 (d) 23100 (e) None of these

9. How many words can be formed form the letters of the word SIGNATUREso that the vowels always come together?
(a)720 (b) 1440 (c) 2880 (d) 3600 (e) 17280

10. In how many different ways can the letters of the word 'OPTICAL' be arranged so that the vowels always come together?
(a)120 (b) 720 (c) 4320 (d) 2160 (e) None of these

11. In how many different ways can letters of the word 'SOFTWARE' be arranged in such a way that vowels always come together?
(a)120 (b) 360 (c) 1440 (d) 13440 (e) 720

12. 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)360 (b) 480 (c) 720 (d) 5040 (e) None of these

13. In how many different ways can the letters of the word 'JUDGE' be a arranged in such a way that the vowels always come together?
(a)48 (b) 120 (c) 124 (d) 160 (e) None of these

14. In how many different ways can the letters of the word 'AUCTION' be arranged in such a way that the vowels always come together?
(a) 30 (b) 48 (c) 144 (d) 576 (e) None of these

15. In how many different ways can the letters of the word 'BANKING' be a arranged so that the vowels always come together?
(a) 120 (b) 240 (c) 360 (d) 540 (e) 720

16. In how many different ways can the letters of the word 'CORPORATION' be arranged so that the vowels always come together?
(a) 810 (b) 1440 (c) 2880 (d) 50400 (e) 5760

17. In how many different ways can the letters of the word 'MATHEMATICS' be arranged so that the vowels always come together?

(a) 10080 (b) 4989600 (c) 120960 (d) None of these

18. 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) 32 (b) 48 (c) 36 (d) 60 (e) 120

19. In how many different ways can the letters of the word 'MACHINE' be arranged so that the vowels may occupy only the odd positions?

(a) 210 (b) 576 (c) 144 (d) 1728 (e) 3456

20. In how many ways can a group of 5 men and 2 women be made out of a total of 7 men and 3 women?

(a) 63 (b) 90 (c) 126 (d) 45 (e) 135

21. In how many ways a committee, consisting of 5 men and 6 women can be formed from 8 men and 10 women?

(a) 266 (b) 5040 (c) 11760 (d) 86400 (e) None of these

22. 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?

(a) 564 (b) 645 (c) 735 (d) 756 (e) None of these

23. 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?

(a) 159 (b) 194 (c) 205 (d) 209 (e) None of these

24. A box contain 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 to be included in the draw?

(a) 32 (b) 48 (c) 64 (d) 96 (e) None of these

25. How many 3-digit numbers can be formed from the digits2,3,5,6,7 and 9, which are divisible by 5 and none of the digits is repeated?

(a) 5 (b) 10 (c) 15 (d) 20

26. In how many ways can 21 books on English and 19 books on Hindi be placed in a row on a shelf so that two books on Hindi may not be together?

(a) 3990 (b) 1540 (c) 1995 (d) 3672 (e) None of these

27. Out of 7 consonants and 4 vowels, how many words of 3 consonants and 2 vowels can be formed?

(a) 210 (b) 1050 (c) 25200 (d) 21400 (e) None of these