

Factorials, Permutation & combinations test

Q1. $(n+2)! = 2550 \times n!$, then n is:

- (a) 49 (b) 50 (c) 52 (d) None of these

Q2. Solve for $(9! \times 8!) / (7! \times 6!)$

- (a) 4032 (b) 4230 (c) 4312 (d) None of these

Q3. Solve for $x^2 - 4x + 4 = 0$, and provide the answer in factorial.

- (a) 2! (b) 3! (c) 4! (d) 5!

Q4. 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

Q5. 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

Q6. In how many ways can the letters of the word 'LEADER' be arranged?

- (a) 72 (b) 144 (c) 360 (d) 720 (e) None of these

Q7. 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) 45 (b) 63 (c) 90 (d) 126 (e) None of these

Q8. 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) 40 (b) 400 (c) 2520 (d) 5040

Q9. 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?

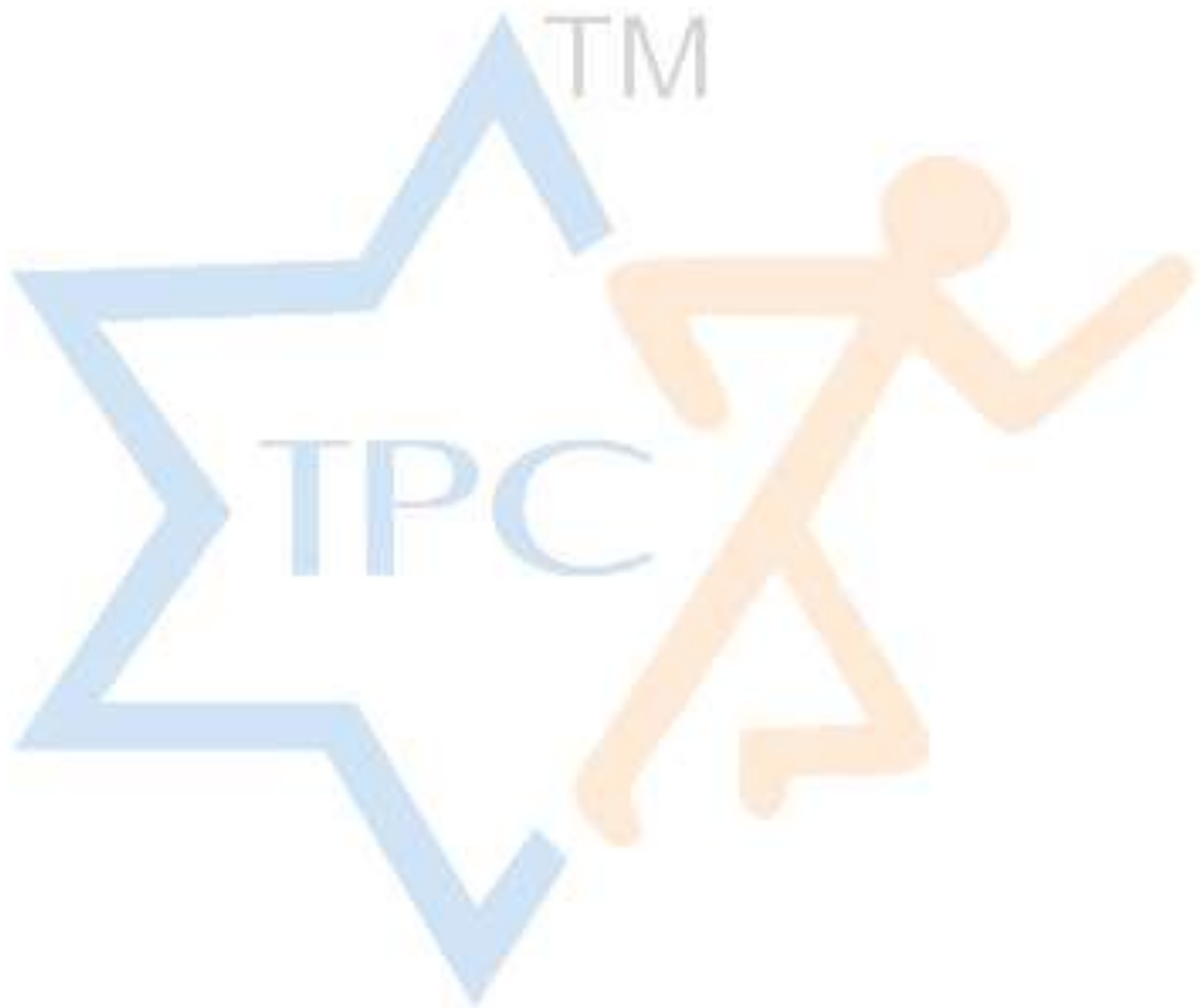
- (a) 159 (b) 194 (c) 205 (d) 209

Q10. 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) 5 (b) 10 (c) 15 (d) 20

Answer key

1	A	3	A	5	C	7	B	9	D
2	A	4	C	6	C	8	D	10	D



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