## PERMUTATION AND COMBINATION

1.	How many words can be together?	formed from the letters	s of the word "SIGNATUI	RE" so that vowels always come			
	A. 17280	B. 4320	C. 720	D. 80			
2.	In how many ways car come together?	the letters of the word "CORPORATION" be arranged so that vowels always					
	A. 5760	B. 50400	C. 2880	D. None of above			
3.	In a group of 6 boys and selected such that at le	many different ways can they be					
	A. 109	B. 128	C. 138	D. 209			
4.	4. If the letters of the word CHASM are rearranged to form 5 letter words such that none of the repeat and the results arranged in ascending order as in a dictionary what is the rank of the CHASM?						
	A. 24	B. 31	C. 32	D. 30			
5.	In how many ways can 5 different toys be packed in 3 identical boxes such that no box is empty, if any of the boxes may hold all of the toys?						
	A. 20	B.30	C. 25	D. 600			
6. '	What is the value of 1×1	!+2×2!+3!×3!+ n	xn!: where n! means n fa	actorial or n(n-1)(n-2)1			
	A.n(n-1)(n-1)!	B.(n+1)!/n(n-1)		D. (n+1)!-1!			
7.	When six fair coins are tossed simultaneously, in how many of the outcomes will at most three the coins turn up as heads?						
	A. 25	B. 41	C. 22	D. 42			
8.	A college has 10 basketball players. A 5-member team and a captain will be selected out of these 10 players. How many different selections can be made?						
	A. 1260	B. 210	C. 10C6×6!	D. 10C5×6			
9. A 6x6 grid is cut from an 8x8 chessboard. In how many ways can we put two identical coins, one on the square and one on a white square on the grid, such that they are not placed in the same row or in the same column?							
	A. 216	B. 324	C. 144	D. 108			
10.	D. How many four letter distinct initials can be formed using the alphabets of English language such that the last of the four words is always a consonant?						
	A.263×21	B. 26×25×24×21	C. 25×24×23×21	D. None of these			
11.	11. What is the total number of ways in which Dishu can distribute 9 distinct gifts among his distinct girlfriends such that each of them gets at least one gift?						
	A. 72 × 8!	B. 144 × 8!	C. 36 × 8!	D. 9			
12.	How many number of times will the digit '7' be written when listing the integers from 1 to 1000?						
	A.271	B. 300	C. 252	D. 304			

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11-C	12-B	13-C	14-D	15-D				
				10-A				
1-A	2-B	3-D	4-C	5-C				
ANSWER KEY								
7 to f	5. 5	<b>C</b> . <b>O</b>	<b>5.</b> /					
and c. How many	such triplets are poss	ible (unordered triple	ts) .	innetic mean or a, b				
20. a, b, c are three distinct integers from 2 to 10 (both inclusive). Exactly one of ab, bc and ca is odd. abc								
A. 24	B. 72	C. 120	D. 240					
19. In how many rearrangements of the word AMAZED, is the letter 'E' positioned in between the 2 'A's								
A. 20	B. 24	C.30	D. 36					
unnumbered, the	n P : Q equals			anu				
7. There are 10 seats around a circular table. If 8 men and 2 women have to seated around a circular table, such that no two women have to be separated by at least one man. If P and Q denote the respective								
A.15	B. 96	C. 216	D. 120					
1.6. How many five digit positive integers that are divisible by 3 can be formed using the digits 0, 1, 2, 3, 4 and 5, without any of the digits getting repeating								
A. 499	B. 500	C. 375	D. 376					
5. How many integers, greater than 999 but not greater than 4000, can be formed with the digits 0, 1, 2, 3								
-			D. 10	or arranging as				
. The number of ways of arranging n students in a row such that no two boys sit together and no two girls sit together is $m(m > 100)$ . If one more student is added, then number of ways of arranging as								
8 people? A.15!/8!	B. 7!×8!		_	•				
	8 people? A.15!/8!  The number of wagirls sit together is above increases be A. 12  How many integer and 4, if repetition A. 499  How many five dig 4 and 5, without a A.15  There are 10 seats such that no two wonumber of ways of unnumbered, the A. 9:1  How many factors A. 20  In how many read (Not necessarily flow A. 24  a, b, c are three do is a multiple of 4. and c. How many A. 4  1-A 6-D	8 people? A.15!/8! B. 7!×8!  The number of ways of arranging n studgirls sit together is m(m > 100). If one mabove increases by 200%. The value of A. 12 B. 8  How many integers, greater than 999 by and 4, if repetition of digits is allowed? A. 499 B. 500  How many five digit positive integers the 4 and 5, without any of the digits gettine A.15 B. 96  There are 10 seats around a circular tab such that no two women have to be sepanumber of ways of seating these people unnumbered, then P: Q equals A. 9:1 B. 72:1  How many factors of 25×36×52 are perfection A. 20 B. 24  In how many rearrangements of the weak (Not necessarily flanked)? A. 24 B. 72  a, b, c are three distinct integers from 2 is a multiple of 4. The arithmetic mean and c. How many such triplets are possible A. 4 B. 5	8 people? A.15!/8! B. 7!×8! C. 15C8×6!×  The number of ways of arranging n students in a row such the girls sit together is m(m > 100). If one more student is added above increases by 200%. The value of n is A. 12 B. 8 C. 9  How many integers, greater than 999 but not greater than 40 and 4, if repetition of digits is allowed? A. 499 B. 500 C. 375  How many five digit positive integers that are divisible by 3 cdd and 5, without any of the digits getting repeating A.15 B. 96 C. 216  There are 10 seats around a circular table. If 8 men and 2 wor such that no two women have to be separated by at least one number of ways of seating these people around a table where unnumbered, then P: Q equals A. 9:1 B. 72:1 C. 10:1  How many factors of 25×36×52 are perfect squares? A. 20 B. 24 C.30  In how many rearrangements of the word AMAZED, is the (Not necessarily flanked)? A. 24 B. 72 C. 120  a, b, c are three distinct integers from 2 to 10 (both inclusive is a multiple of 4. The arithmetic mean of a and b is an integent and c. How many such triplets are possible (unordered triplet A. 4 B. 5 C. 6  ANSWER KEY	8 people? A.151/8! B. 7!×8! C. 15C8×6!×7! D. 2×15C7 The number of ways of arranging n students in a row such that no two boys sit tog girls sit together is m(m > 100). If one more student is added, then number of way above increases by 200%. The value of n is A. 12 B. 8 C. 9 D. 10  How many integers, greater than 999 but not greater than 4000, can be formed wi and 4, if repetition of digits is allowed? A. 499 B. 500 C. 375 D. 376  How many five digit positive integers that are divisible by 3 can be formed using the dand 5, without any of the digits getting repeating A.15 B. 96 C. 216 D. 120  There are 10 seats around a circular table. If 8 men and 2 women have to seated at such that no two women have to be separated by at least one man. If P and Q denote number of ways of seating these people around a table when seats are numbered unnumbered, then P: Q equals A. 9:1 B. 72:1 C. 10:1 D. 8:1  How many factors of 25×36×52 are perfect squares? A. 20 B. 24 C.30 D. 36  In how many rearrangements of the word AMAZED, is the letter 'E' positioned in (Not necessarily flanked)? A. 24 B. 72 C. 120 D. 240  a, b, c are three distinct integers from 2 to 10 (both inclusive). Exactly one of ab, b is a multiple of 4. The arithmetic mean of a and b is an integer and so is the arithmetic mean of a and b is an integer and so is the arithmetic mean of a and b is an integer and so is the arithmetic mean of a by the day and the part of				

18-B

19-C

20-A

16-C

17-C