

Permutation & Combination

Practice Exercise I

	a) 96	b) 168	c) 196	d) 120			
2)	Find the 4-digite	ed numbers can be forr	ned by using digits 0	to 9 such that are nun	nbers are		
-	ending with odd digit (repetition of digits is allowed).						
	a) 5000	b) 10000	c) 4500	d) 4 ¹⁰			
3)	How many 4 – c	ligit numbers can be f	ormed using the digi	ts 1, 2, 3, 4, 5 and 6 s	such that		
	the numbers are greater than 4000 (repetition of digits is allowed)?						
	a) 648	b) 360	c) 120	d) 864			
4)	Find the 10 - digit numbers can be formed using the digits 1, 2, 3 and 4 such that the						
	numbers are divisible by 4 (repetition of digits is allowed)?						
	a) 4 x 4 ⁸	b) 3 x 4 ⁸	c) 5 x 4 ¹⁰	d) 4 ¹⁰			
5)	How many secu	red passwords can be	formed having one	letter of English alph	abet and		
	followed by a th	ree-digit number, if re	petition and case sen	sitive is not allowed?			
	a) 26000	b) 18720	c) 18620	d) 21060			
6)	How many secured One-time passwords (OTP) can be formed containing numeral from 0						
	to 9?						
	a) 1000	b) 8900	c) 9000	d) 10000			
7)	a) 1000	b) 8900 word must contain the	,	pass			

8) How many vehicle registration plate numbers can be formed with digits 1, 2, 3, 4, 5 (no digits being repeated) if it is given that registration number can have 1 to 5 digited number plates?

[TCS]

a) 205

a) 26,000

b) 100

alphabet. How many distinct passwords are possible?

b) 13,520

c) 325

c) 40,560

d) 120

d) 1,05,456

[GATE 2018/EE]

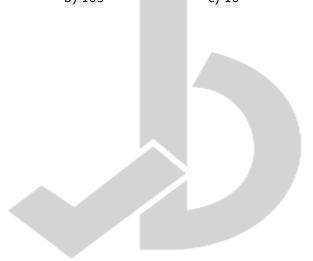


9) How many three digit numbers can be formed using the digits 2, 3, 4, 6 repetition of digits are allowed?						
	a) 125	b) 72	c) 36	d) 60		
10)	How many three digit i	numbers can be form	ed using the digits 1,	2, 3, 4, 5, 6 and 8 such		
	that the numbers are di	ivisible by 2? (Repetit	tion of digits is not all	owed)		
	a) 150	b) 100	c) 120	d) 60		
11)	How many 3 digit num	bers can be formed	from the digits 2, 3,	5, 6, 7 and 9, which are		
	greater than 300 but no	ot greater than 600 [N	None of the digits is re	epeated]?		
	a) 5	b) 10	c) 40	d) 20		
12)	Find the 4-digited numl	bers can be formed by	y using digits 1, 2, 4,	6 and 7 that are divisible		
	by 4 (repetition of digit	s is allowed).				
	a) 150	b) 175	c) 125	d) None		
13)	How many 4-digit num	bers can be formed	using the digits 1, 2,	3, 5, 6, 8 such that the		
	numbers are divisible b	y 5 (repetition of digi	its is not allowed)?			
	a) 24	b) 48	c) 120	d) 60		
14)	Find the number of 9 d	igit numbers formed	1, 2, 4, 5 and 8 which	are divisible by 4, when		
	repetition is allowed)?			[TCS]		
	a) 8 x 5 ¹⁰	b) 5 ¹⁰	c) 8 x 5 ⁷	d) 7 x 5 ⁹		
15)	How many numbers ca	n be formed using th	e digits 2, 3, 5, 6, 7 a	and 8 that are more than		
	500 but less than 5000	(repetition of digits is	s allowed)?			
	a) 648	b) 540	c) 432	d) 576		
16)	How many 4-digit num	nbers can be formed	using the digits 0, 1	, 2, 4, 5 and 6 that are		
	divisible by 5 (repetitio	n of digits is not allov	ved)?			
	a) 118	b) 120	c) 108	d) None		
17)	How many integers, gr	eater than 999 but n	ot greater than 4000,	can be formed with the		
	digits, 0, 1, 2, 3, and 4,	if repetition of digits	is allowed?	[CAT]		
	a) 499	b) 500	c) 375	d) 376		



- 18) How many number plates can be formed having two letters of English alphabet and followed by a two digit number, if repetition of digits is not allowed? [TCS 2017]
 - a) 58500
- b) 14625
- c) 26! x 10!
- d) 60840
- 19) A company decides a new identity code for all its employees. The identity code comprise of five letter initials that can be formed using the alphabets of English language such that the fifth letter is always a consonant. How many such combinations are possible?
 - a) $26^3 \times 21^2$
- b) 26⁴ x 21²
- c) $25^3 \times 5^2$
- d) $26^4 \times 21^2$
- 20) A number lock consists of 4 rings each marked with 10 different numbers. In how many cases the locks cannot be opened? [SNAP 2008]
 - a) 4¹⁰

- b) 103
- c) 10⁴
- d) 9999



Check the Answers

1	В	6	D	11	С	16	С
2	С	7	С	12	В	17	D
3	A	8	С	13	D	18	D
4	A	9	A	14	С	19	В
5	В	10	С	15	D	20	D