ALPHANUMERIC SERIES
SHORT TRICKS & QUESTIONS WITH SOLUTIONS

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**Alphanumeric** (sometimes shortened to *alphameric*) is a combination of alphabetic and numeric characters. In some cases, it may include upper and lower case letters, punctuation marks, and symbols (such as @, &, and *).

This type of reasoning is a mixed bag of coding-decoding, series-based reasoning and finding positions based reasoning questions.

**Type of question**
1. Immediately Preceded By
2. Immediately Followed By.
3. Based on word/Number/symbol.

1. **Position number of letters in English**

```
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10| 11| 12| 13| 14| 15| 16| 17| 18| 19| 20| 21| 22| 23| 24| 25| 26|
```

2. **Position number of letters in English alphabets in reverse**

```
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 26| 25| 24| 23| 22| 21| 20| 19| 18| 17| 16| 15| 14| 13| 12| 11| 10| 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
```

3. We know A, E, I, O and U are vowels of English alphabet and remaining letters are consonants of English.

4. **A → 4 M (A to M) letters are called first half of English**

5. **N → 4 Z (N to Z) letters are called second half of English**

6. **To the left means Z → A (Z to A)**

7. **To the right means A → Z (A to Z)**

8. **From A → Z (A to Z) letters are called left to right of English**

9. **From Z → A (Z to A) letters are called right to left of English alphabets.**
Types of Series

**Number series**
- A series that is made by only number or digit
  - 1. Ascending series
  - 2. Descending series
  - 3. Oscillating series

**Alphabet series**
- A series that is made by only alphabetic letters
  - Increasing by a definite number
    - For Example: IJKL? (each letter increases by 1)
  - Decreasing by a definite number
    - For Example: ZXVTRP? (each letter decreases by 2 places to its left)

**Alpha-numeric series**
- A series in which both alphabets and numbers are used
  - Increasing successively
    - For Example: DEGJNS? (+1, +2, +3, +4, +5)
  - Decreasing successively
    - For Example: ZYWTP ( -1, -2, -3, -4 ..)
  - Decreasing and Increasing by a constant value.
    - For Example: DFCEBDACZ (+2, -3, +2, -3, ...) (This is a Type-II Alpha-numeric series)

**Mixed series**
- A series which is created by the combination of two or more than two series
  - First letter: Z XVTRP? ( -2, -2, -2, ..)

**Letter series**
- A series of letters, which follow a certain pattern, is given with four or five times blank spaces in between. The order of missing letters is correct answer.

**Correspondence series**
- A series consists of three sequence with three different elements (for ex: capital letters, numbers and small letters). An element of each sequence is corresponding to the element of other sequence on the basis of the similarity in position.

**Various types of Alphabetical series**

**Type – I: ALPHABET SERIES**

**Increasing by a definite number**
- For Example: IJKL? (each letter increases by 1)
- AGMSY? (each letter increases by 6 places to its right position)

**Decreasing by a definite number**
- For Example: ZXVTRP? (each letter decreases by 2 places to its left)

**Decreasing successively**
- For Example: ZYWTP (-1, -2, -3, -4 ..)

**Decreasing and Increasing by a constant value.**
- For Example: DFCEBDACZ (+2, -3, +2, -3, ..)

**TYPE-II : ALPHANUMERIC SERIES**

**EX-1:** Z1A, X2D, V6G, T21J, R88M, P445P,?
Second letter: ADGJMP (+3, +3, +3, ...) 

Series of numerals: 1, 2, 6, 21, 88, 445 (x1+1, x2+2, x3+3, ...)

So next term is N2676S.

**EX-2:** 2Z5, 7Y7, 14X9, 23W11, 34V13, ?

First numeral - 2, 7, 14, 23, 34 (+5, +7, +9, +11, ..) 

Second letter - ZYXWV (decreases by 1 each time) 

Third numeral - 5, 7, 9, 11, 13 (increases by 2 each time) 

**EX-3:** W-144, U-121, S-100, Q-81, ?

First letter - decreases by 2 each time 

Second numeral - square of 12, 11, 10, 9, 8, .. 

**TYPE-III:** CONTINUOUS PATTERNS SERIES

**Ex-1:** ab_ _ baa_ _ ab_ 

**Options:** i) aaaaa ii) aabaa iii) caabab iv) baabb 

Solution: our answer is ii). Here series aba is repeated 

Ex-2: ab_ _ bbb_aaa_bbba 

**Options:** i) abba ii) baab iii) aabb iv) abab 

Solution: our answer is ii). The series is abb/aaabbb/aaaabbb/a. Thus the letter are repeated twice, then thrice, then four times and so on. 

Ex.3 – _bc_ca_aba_c_ca 

**Options** i) abcbb ii) bbbcc iii) bacba iv) abbcc 

Solution: our answer is i). The series is abc/bca/cab/abc/bca. Thus the letter change in cyclic order. 

Ex.4 - _c_bd_cbcda_a_db_a 

**Options** i) adabcd ii) bdcbca iii) cdbbca iv) daabbc 

Solutions: our answer is i). The series is acdb/dacb/cdab/acdb/da. Each group of four letters contains the letters of the previous group in the order - third, first, second and fourth. 

Ex.5: - a_bb_baa_bbb_aa_
**Options:**
i) aabba  
ii) bbaab  
iii) abaaa  
iv) baabb

**Solutions:**
Our answer is iii). The series is aabbbb/aaabbb/aaaa. At each step, the number of a’s increases by one while the number of b’s decrease by one.

**TYPE-IV:** These questions are based on the following letter/number/symbol arrangement. Study it carefully and answer the questions that follow:

$L F 3 \# R N 8 A @ Y 4 M \circ W P 6 H U 9 I K 2 E$

Q. If all numbers are dropped from the above arrangement, which of the following will be the fourteenth from the left end?

- a) I
- b) P
- c) W
- d) U
- e) None of these

**Solution:**
If all number are dropped, the arrangement will look like:

$L F R N A @ Y M \circ W P H U I K E$

ATQ, 14th From Left end -

$L F R N A @ Y M \circ W P H U I K E$

Q. How many such numbers are there in the above arrangement each of which is immediately preceded by a vowel?

- a) None
- b) One
- c) Two
- d) Three
- e) None of these

**Solution:**
STEP 1) 1st we have to identify all the vowel in the arrangement.

Vowel in Above arrangement -  I , U , E

STEP 2) ATQ, numbers in the above arrangement each of which is immediately preceded by a vowel

Since we can see there is no such number which is preceded by vowel, so e) None of these

**Example 3:**

C2E, E5H, G12K, 127N, ?

(a) I58P
(b) J58Q
(c) K58Q
(d) I57Q

**Solution:**
For Numbers :-

\[
\begin{array}{cccccc}
2 & 5 & 12 & 27 & 58 \\
3 & 7 & 15 & (15 \times 2 + 1) = 31 \\
\end{array}
\]

For Alphabet :

\[
\text{C D E F G H I J K L M N O P Q R} \]

So option (c) K58Q.
Directions (1-5): In each question below is given a group of letters followed by four combinations of digits/symbols given in (A), (B), (C) and (D). You have to find out which of the combinations correctly represents the group of digits based on the rules and mark the answer accordingly. If none of the combinations correctly represents the group of letters, mark (E) as your answer.

(i) If the first two letters are vowels, the codes for first and last letters are to be interchanged.
(ii) If the first letter is a consonant, the codes for the second and third letters are to be interchanged.
(iii) If the last letter is a vowel then the second letter is to be coded as the code for the vowel.

1. **U**EPMOQ
   A) 3^70@#
   B) 4^70!#
   C) 4^70@#
   D) 4^70©#
   E) None of these

   **Option C**
   **Explanation:**
   The given number satisfies rule (i)

2. **O**PHDLU
   A) #@286#
   B) @#286#
   C) @#246
   D) @#286
   E) None of these

   **Option B**
   **Explanation:**
   The given number satisfies rule (iii)

3. **M**IRKNQ
   A) O©#9*4
   B) 9©%9*4
   C) O©%9*4
   D) O©%9@4
   E) None of these

   **Option C**
   **Explanation:**
   The given number satisfies rule (ii)

4. **H**OLUIB
   A) 26@!%3
   B) 26^#%3
   C) 26@#%7
   D) 24@#%3
   E) None of these

   **Option E**
   **Explanation:**
   The given number satisfies rule (ii)

5. **O**INRBK
   A) 9@*©3@
   B) 9%6©3@
   C) 7%*©3@
   D) 9%*©3@
   E) None of these

   **Option D**
   **Explanation:**
   The given number satisfies rule (i)

Directions (6-10): Study the following arrangement and answer questions given:
6. Which of the following is the 9th letter to the left of the 16th letter from the right end?
   A) E  
   B) B  
   C) D  
   D) *  
   E) @  
   Option C  
   Left to right = 16 + 9 = 25th from right

7. How many such letters are there in the above arrangement each of which is immediately preceded by a symbol and immediately followed by a consonant?
   A) Four  
   B) Three  
   C) None  
   D) One  
   E) Five  
   Option B  
   Solution: B, K, and M

8. Complete the series: 4$V (BD !©^ 27* ?
   A) K#5  
   B) W95  
   C) W#5  
   D) W9#  
   E) K9#  
   Option C  
   Solution: K9#

9. How many such numbers are there each of which is immediately preceded by a symbol?
   A) None  
   B) One  
   C) Two  
   D) Three  
   E) More than three  
   Option C  
   Solution: 9, and 3

10. Four of the five are alike in a certain way based on arrangement, which does not belong to the group?
    A) KW*  
    B) BD@  
    C) MV(  
    D) VS(  
    E) ©3^  
    Option D

Directions (1-5): Study the following arrangement and answer questions given:

F N $ 3 2 * W E % ! B M P ( A V ~ 9
F + S U # L T 6

1. If the first fifteen elements in the above passage sequence are written in reverse order then which of the following will be fifteenth from the right end?
   A) $  
   B) 3  
   C) P
2. If the above sequence is written in reverse order then which of the following will be seventh to the right of sixteenth element from the right end?

A) !
B) A
C) E
D) %
E) ~

Option B

3. What should come in place of question mark in the following on the basis of the above sequence?

32$ : WE* P(M : V~A %!E : ?

A) P(M
B) AV(

Option E

4. How many such numbers are there in the above sequence, each of which is immediately preceded by a consonant and immediately followed by a symbol?

A) None
B) One
C) Two
D) Three
E) More than three

Option A

5. Which of the following is fourth to the left of sixteenth element from the left?

A) ~
B) P
C) (
D) %
E) M

Option E

Directions (6-10): Study the following arrangement and answer questions given:

7 4 Y * # D E 9 L 0 1 & ~ M B ) 6 S A X 3 I + < = G J

6. Which of the following is the 5th letter to the right of the 16th letter from the right end?

A) &
B) #
C) 6
D) S
E) )

Option C

Solution:
Right to right = 16-5 = 11th from right

7. How many such symbols are there in the above arrangement each of which is immediately preceded by a consonant and immediately followed by a number?

A) Four
B) Three
C) None
D) One
E) Five

Option D

Only one – )

8. Which of the following is the 9th letter to the left of the 18th letter from the left?
9. How many such numbers are there each of which is immediately preceded by a consonant?
A) None
B) One
C) Two
D) Three
E) More than three

Option B
Solution:
Left to left = 18 - 9 = 9th from left

10. Four of the five are alike in a certain way based on arrangement, which does not belong to the group?
A) 1&9
B) 6SM
C) 3I6
D) GJ+
E) 9L#

Option C

Directions (1-5): Study the following arrangement and answer questions given:

2 0 4 5 3 6 8 4 2 5 1 7 4 8 5 6 9 3 2 0 4 7 4 5

1. Which of the following is the 9th letter to the left of the 21st letter from the right end?
A) 4
B) 8
C) 6
D) 2
E) 5

Option B
Solution:
Left from Right = 21 + 9 = 30th from right

2. How many such 4’s are there in the above arrangement, each of which is immediately preceded by an odd digit and immediately followed by an even digit? (0 is neither odd nor even)
A) Four
B) Three
C) Two
D) One
E) Five

Option C
Solution:
7 4 8 7 4 2

3. How many such 7’s are there in the above arrangement, each of which is immediately preceded by a perfect square?
A) Four  
B) Three  
C) Two  
D) One  
E) Five  

**Option B**  
**Solution:**  
1 7, 4 7, 1 7

4. How many such 5’s are there in the above arrangement, each of which is immediately followed by a digit which has a numerical value greater than 6?  
A) None  
B) One  
C) Two  
D) Three  
E) More than three  

**Option C**  
**Solution:**  
5 8, 5 7

5. If all the odd numbers are deleted from the above arrangement, then which of the following will be 9th from the right end?  
A) 2  
B) 6  
C) 4  
D) 0  
E) 8  

**Option A**

**Directions (6-10): Study the following arrangement and answer questions given:**  

\[
R \ % \ \# \ D \ E \ W \ 3 \ @ \ 0 \ M \ ! \ L \ 6 \ * \ A \ G \ U \ 8 \ ^ \ V \ & \ S \ 7 \ O \ H \ 1 \ 2 \ $ \ B \ I \ )
\]

6. Which of the following is the 5th letter to the right of the 16th letter from the right end?  
A) S  
B) ^  
C) V  
D) &  
E) *  

**Option D**  
**Solution:**  
Right to right = 16-5 = 11th from right
7. How many such symbols are there in the above arrangement each of which is immediately preceded by a consonant and immediately followed by a number?
   A) Four
   B) Three
   C) None
   D) One
   E) Five

   Option C

8. Which of the following is the 9th letter to the left of the 18th letter from the left end?
   A) @
   B) 0
   C) M
   D) 8
   E) &

   Option B

   Solution:
   Left to left = 18 - 9 = 9th from left

9. How many such numbers are there each of which is immediately preceded by a consonant?
   A) None
   B) One
   C) Two
   D) Three
   E) More than three

   Option E

   Solution:
   3, 6, 7, 1

10. Four of the five are alike in a certain way based on arrangement, which does not belong to the group?
    A) @3!
    B) GA^*
    C) OS2
    D) D#3
    E) 8U&

    Option C
the combinations correctly represents the group of digits based on the rules and mark the answer accordingly. If none of the combinations correctly represents the group of letters, mark (E) as your answer.

(i) If the first letter is a vowel and the last letter is a consonant both are to be coded as *.
(ii) If the first letter is a consonant and the last letter is a vowel their codes are to be interchanged.
(iii) If both the first and the last letters are vowels both are to be coded as the first letter.

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<th>Letter</th>
<th>P</th>
<th>M</th>
<th>K</th>
<th>E</th>
<th>A</th>
<th>I</th>
<th>Z</th>
<th>T</th>
<th>R</th>
<th>U</th>
<th>B</th>
<th>F</th>
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<th>V</th>
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<td>5</td>
<td>©</td>
<td>8</td>
<td>7</td>
<td>!</td>
<td>6</td>
<td>%</td>
<td>#</td>
<td>9</td>
</tr>
</tbody>
</table>

1. IFNVDE
   A) 26%#92
   B) 46%#92
   C) 46%#94
   D) *%#9*
   E) None of these

   **Option A**
   **Solution:**
   From rule (iii)

2. Keimpd
   A) 9423$1
   B) 1423$9
   C) 9423$9
   D) 1423$1
   E) None of these

   **Option B**
   **Solution:**
   No rule is implied here. So all codes written as it is

3. UBTIZN
   A) 7!©25%
   B) %!©257
   C) *!©25*
   D) 7!©257
E) None of these

Option C
Solution:
From rule (i)

4. BAEFNP
A) !@46%!
B) $!46%!
C) *@46%*
D) $@46%$
E) None of these

Option E
Solution:
No rule is implied here. So all codes written as it is
BAEFNP becomes — !@46%$

5. RKPZFI
A) 81$562
B) 81$568
C) 21$562
D) 21$568
E) None of these

Option D
Solution:
From rule (ii)

Directions (6-10): Study the following arrangement and answer questions given:

P 7 @ I R W 3 9 T E $ 4 H D 5 © M A 2 % B * 8 ! U Q N 1 F 6 # K V

6. How many such consonants are there in the above arrangement, each of which is immediately preceded by a consonant and immediately followed by a symbol?
A) None
B) One
C) Two
D) Three
E) More than three

Option A

7. If all the symbols are dropped from the above arrangement, which of the following will be the 15th from the left end?
A) A
B) 5
C) D
D) 2
E) None of these

Option A

8. How many such numbers are there in the above arrangement, each of which is immediately preceded by a symbol and immediately followed by a consonant?
A) None
B) One
C) Two
D) Three
E) More than three

Option B

9. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?
A) B^2
B) QN!
C) 39R
D) 6FK
E) %BA

Option D
10. Which of the following is the 9th to the right of the 22nd from the right end of the above arrangement?
A) H  
B) #  
C) B  
D) @  
E) None of these

**Option C**

Directions (1-5): Study the following arrangement and answer questions given:

(F E ~ 6 2 % S A 8 B) * 1 L O 9 @ W U
$ 3 ^ P 4 C V #

1. How many such vowels are there in the above arrangement, each of which is immediately followed by a symbol and not preceded by a letter?
A) Four  
B) Three  
C) Two  
D) One  
E) None

**Option E**

2. What is the sum of all numbers which are immediately preceded by a symbol?
A) There are no such numbers  
B) 10  
C) 12  
D) 9  
E) 11

**Option B**

Explanation:
6+1+3 = 10

3. What will come in place of question mark (?) based on the above arrangement?
3U^ $W3 U@$ W9U ?
A) 9OW
1. Which of the following is the 9th to the left of the 17th from the left end of the above arrangement?
   A) @
   B) S
   C) 9
   D) %
   E) O
   Option E
   Explanation: Left of left – 17-9 = 8th from left = S

Directions (6-10): Study the following arrangement and answer questions given:

K J 2 ^ U ! A S 3 C 7 $ 9 L # D O 8 X I
% N P 4 E * M + W

2. How many such numbers are there in the above arrangement, each of which is immediately preceded by a consonant and immediately followed by a vowel?
   A) One
   B) Three
   Option B

3. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?
   A) (#V
   B) EC4
   C) 2^P
   D) S$U
   E) *OL
   Option D

4. Which of the following is the 9th to the left of the 17th from the left end of the above arrangement?
   A) @
   B) S
   C) 9
   D) %
   E) O
   Option E
   Explanation: Left of left – 17-9 = 8th from left = S

5. Which of the following is the 9th to the left of the 17th from the left end of the above arrangement?
   A) @
   B) S
   C) 9
   D) %
   E) O
   Option B
   Explanation: Left of left – 17-9 = 8th from left = S

6. How many such numbers are there in the above arrangement, each of which is immediately preceded by a consonant and immediately followed by a vowel?
   A) One
   B) Three
   Option B

Option C

7. Which of the following is the 9th to the left of the 17th from the left end of the above arrangement?
   A) @
   B) S
   C) 9
   D) %
   E) O
   Option E
   Explanation: Left of left – 17-9 = 8th from left = S

8. How many such numbers are there in the above arrangement, each of which is immediately preceded by a consonant and immediately followed by a vowel?
   A) One
   B) Three
   Option B
   Explanation: Left of left – 17-9 = 8th from left = S

9. Which of the following is the 9th to the left of the 17th from the left end of the above arrangement?
   A) @
   B) S
   C) 9
   D) %
   E) O
   Option E
   Explanation: Left of left – 17-9 = 8th from left = S
7. How many such consonants are there in the above arrangement, each of which is immediately preceded by a symbol and immediately followed by a letter?
   A) Four
   B) Three
   C) Two
   D) Five
   E) None

Option A
Only 4 — P  4  E

8. Which of the following is the 8th to the right of the 19th from the right end of the above arrangement?
   A) %
   B) #
   C) 8
   D) X
   E) None of these

Option D
Explanation:
Right to right = 19-8=11th from right = X

9. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?
   A) $97
   B) U!^+
   C) XI8
   D) +WM
   E) C7S
Option E

10. Which of the following is the 5th to the left of the 13th from the right end of the above arrangement?
   A) 7
   B) 9
   C) S
   D) $
   E) !

Option D
Explanation:
Left of right = 13 + 5 = 18th from right

Directions (1-5): In each question below is given a group of digits followed by four combinations of digits/symbols given in (A), (B), (C) and (D). You have to find out which of the combinations correctly represents the group of digits based on the rules and mark the answer accordingly. If none of the combinations correctly represents the group of digits, mark (E) as your answer.

(i) If the first digit is odd and last is even, then interchange the codes for both digits
(ii) If there is a digit which is getting repeated in the given number, then code that digit as the code of 5
(iii) If the third digit is followed by an even number and is preceded by an odd number, then skip its code.
(iv) If the middle digit is odd then interchange the codes of middle digit and last number.
(v) 0 is neither odd nor even

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<td>O</td>
<td>#</td>
<td>D</td>
<td>H</td>
<td>!</td>
<td>F</td>
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1. 53678
   A) #©DH!
   B) ©!DH#
   C) !©DH#
   D) !©HD#
   E) None of these
Option C  
Solution:  
The given number satisfies rule (i)  

2. 12375  
A) @L©H#  
B) @L#H©  
C) @H#L©  
D) @L!H©  
E) None of these  

Option B  
Solution:  
The given number satisfies rule (iv)  

3. 36014  
A) ©DE@O  
B) OED@©  
C) ODE%©  
D) ODE@©  
E) None of these  

Option D  
Solution:  
The given number satisfies rule (i)  

4. 81624  
A) !@LDO  
B) !@DLO  
C) !@LO  
D) !@OL  
E) None of these  

Option C  
Solution:  
The given number satisfies rule (iii)  

5. 60456  
A) *O#H#  
B) #EO##  
C) *©#H#
D) OB©# # 
E) None of these

**Option B**

**Solution:**
The given number satisfies rule (ii)

**Directions (6-10): Study the following arrangement and answer questions given:**

H N 4 & T E 3 ( @ 5 R 1 * J S 2 % 9 M 6 A L O # V U 7 !

1. Which of the following is the 6th letter to the right of the 20th letter from the right end?
   A) J
   B) S
   C) 2
   D) %
   E) @

   **Option B**

   **Solution:**
   Right to right = 20 - 6 = 14th from right

2. How many such numbers are there in the above arrangement each of which is immediately preceded by a symbol and immediately followed by a letter?
   A) None
   B) One
   C) Two
   D) Three
   E) More than three

   **Option C**

   **Solution:**
   S, and 9

3. Complete the series: T&3 (35 R5* J*2 ?
   A) %26
   B) %29
   C) %SM
   D) %2M
   E) None of these
Option D

4. How many such consonants are there each of which is immediately preceded by a number?
   A) None
   B) One
   C) Two
   D) Three
   E) More than three

Option C
Solution:
R and M

5. Four of the five are alike in a certain way based on arrangement, which does not belong to the group?
   A) 4T&
   B) 51R
   C) *SJ
   D) 29M
   E) OV#

Option D

Directions (1-5): Study the following arrangement and answer questions given:

J % K 7 D E $ 4 9 H I 3 ( @ A M 8 ^ F Q O U + & B P W ! 2

1. How many such vowels are there in the above arrangement, each of which is immediately followed by a symbol?
   A) Four
   B) Three
   C) Two
   D) Five
   E) None

Option C
Explanation:
E, U

2. If all the symbols are dropped from the above arrangement, how many such numbers will be there in the above arrangement, each of which is immediately followed by a consonant?
A) Four
B) Three
C) Two
D) Five
E) None

**Option B**

Explanation:
7, 9, 8

3. What will come in place of question mark (?) based on the above arrangement?

A) 94H
B) Other than those given in options
C) H4I
D) H43
E) 9$I

**Option E**

4. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?

A) K%$
B) H$\left(\right.$
C) U^+
D) O^+
E) P+!

**Option E**

Explanation:
All options carry a letter followed by 2 symbols. Observe that the first symbol is the symbol which is before the letter and second symbol after letter as:

% K 7 D E $
\$ 4 9 H I 3 ( ^ F Q O U + ^ F Q O U + & B P W ! 2
So with P should be P&!
5. Which of the following is the 6th to the left of the 17th from the left end of the above arrangement?
   A) 3
   B) ( 
   C) H
   D) I
   E) 9

   Option D
   Explanation:
   Left of left – 17 - 6 = 11th from left = I

Directions (6-10): Study the following arrangement and answer questions given:

R 4 % D ) A 5 T I 3 # 1 W E 2 @ * 9 ^ B H O 5 ! Y

6. How many such numbers are there in the above arrangement, each of which is immediately preceded by a consonant and immediately followed by a vowel?
   A) Four
   B) Three
   C) Two
   D) Five
   E) None

   Option E

7. How many such consonants are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by a letter?
   A) Four
   B) Three
   C) Two
   D) Five
   E) None

   Option C
   Explanation:
   T, W
8. Which of the following is the 5th to the right of the 19th from the right end of the above arrangement?
   A) 3  
   B) #  
   C) W  
   D) 1  
   E) None of these

   **Option D**  
   **Explanation:**
   Right to right = 19 - 5 = 14th from right = 1

9. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?
   A) D) 4  
   B) 5  
   C) I  
   D) @* 2  
   E) HO^  

   **Option D**

10. Which of the following is the 8th to the left of the 9th from the right end of the above arrangement?
   A) 3  
   B) T  
   C) I  
   D) j  
   E) A

   **Option C**  
   **Explanation:**
   Left of right = 9 + 8 = 17th from right

**Directions (1-5): Study the following arrangement and answer questions given:**

2  D  I  4  §  K  J  7  %  L  A  T  3  8  @  F  6  U  #  V  P  1  E  *  9  H  5
1. How many such vowels are there in the above arrangement, each of which is immediately followed by a symbol?
A) Four
B) Three
C) Two
D) Five
E) None

**Option C**
**Explanation:**
U, E

2. If all the numbers are dropped from the above arrangement, which of the following will be the 10th from the right end of above arrangement?
A) T
B) @
C) #
D) I
E) A

**Option A**

3. What will come in place of questions mark (?) based on the above arrangement?
D4$  K7%  LT3  ?
A) F6#
B) Other than those given in options
C) 8@6
D) 8F6
E) FU#

**Option D**

4. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?
A) J%7
B) D4I
C) T38
D) E9*
E) FU6

**Option C**
5. Which of the following is the 12th to the right of the 6th from the left end of the above arrangement?
   A) 1  
   B) #  
   C) 6  
   D) U  
   E) L  
   Option D

Directions (6-10): Study the following arrangement and answer questions given:

R  D  A  K  5  B  I  2  M  J  E  N  9  7  U  Z  V  1  W  3  H  4  F  Y  8  P  6  T  G

6. How many such numbers are there in the above arrangement, each of which is immediately preceded by a consonant and immediately followed by a vowel?
   A) Four  
   B) Three  
   C) Two  
   D) Five  
   E) None  
   Option E

7. How many such consonants are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by a consonant?
   A) Four  
   B) Three  
   C) Two  
   D) Five  
   E) None  
   Option B

   Explanation:
   M, F, T

8. Which of the following is the 6th to the right of the 19th from the right end of the above arrangement?
10. Which of the following is the 8th to the left of the 17th from the left end of the above arrangement?
A) 8
B) J
C) M
D) 5
E) None of these

Option C

Directions (1-5): In each question below is given a group of digits followed by four combinations of digits/symbols given in (A), (B), (C) and (D). You have to find out which of the combinations correctly represents the group of digits based on the rules and mark the answer accordingly. If none of the combinations correctly represents the group of letters, mark (E) as your answer.

(i) If the first digit is odd and the last digit is even their codes are to be swapped
(ii) If the first as well as the last digits are even, both are to be coded by the code for the first digit.
(iii) If the first digit is even and the last digit is odd, both are to be coded by the code for the odd digit.

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<td>F</td>
<td>#</td>
<td>%</td>
<td>T</td>
<td>Q</td>
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</table>

1. 431068
   A) %FT@$#
   B) %FT$@#
   C) %FT@$%
   D) %FT@$#
   E) None of these

   **Option C**
   **Solution:**
   From rule (iii)

2. 803279
   A) E@FLWE
   B) #@FLWE
   C) #@FLW#
   D) E@FLW#
   E) None of these

   **Option A**
   **Solution:**
   No rule is implied here. So all codes written as it is

3. 384695
   A) F#$%$EF
   B) F#$%$EQ
   C) Q#$%$EQ
   D) Q#$%$EF
   E) None of these
Option B
Solution:
From rule (i)

4. 584632
A) Q#%$FL
B) L#%$FQ
C) L#%$QF
D) L#%$FQ
E) None of these

Option D
Solution:
No rule is implied here. So all codes written as it is
BAEFNP becomes — !@46$

5. 765984
A) W$QE#%
B) W$QE#W
C) %$QE#%
D) %$QE#L
E) None of these

Option E
Solution:
From rule (ii)

Directions (6-10): Study the following arrangement and answer questions given:

Q 4 N S F # K 7 Y $ C 8 3 P I T 6 % 9 H U 2 R J * V 5 W A 1 B D G

6. How many such consonants are there in the above arrangement, each of which is
   immediately preceded by either a symbol or number but not immediately followed by a
   letter?
   A) Four
   B) Three
   C) Two
   D) Five
   E) None
7. If all the numbers are dropped from the above arrangement, which of the following will be the 12th from the right end of above arrangement?
   A) T
   B) H
   C) %
   D) I
   E) *

Option C

8. What will come in place of question mark (?) based on the above arrangement?
   1AG *JW H9R IP% ?
   A) Y$#
   B) Other than those given in options
   C) 7KC
   D) $J8
   E) $Y3

Option E

9. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?
   A) KY#
   B) %H6
   C) J*R
   D) NF4
   E) 1DA

Option C

10. Which of the following is the 7th to the right of the 15th from the left end of the above arrangement?
    A) H
1. How many such numbers are there which are immediately followed by a symbol and immediately preceded by letter?
   - A) Four
   - B) Two
   - C) None
   - D) One
   - E) Three

   **Option B**
   **Solution:**
   - Y 7 %, S 2 @

2. If all the symbols are dropped from the above arrangement, then which is ninth from the right end?
   - A) N
   - B) 2
   - C) 7
   - D) S
   - E) M

   **Option D**
   **Solution:**
   - The series become:
   - B L 4 G A 8 P X Y 7 N S 2 D M 9 * 5 C F 6

3. If all the numbers immediately after symbols are added, what will be the sum?
   - A) 26
   - B) 20

   **Option E**
C) 15
D) 22
E) 18

Option E
Solution:
4 + 9 + 5 = 18

4. If every fourth element in the above series from the left end is omitted then which among the following is fourth to the right of ninth from the right end?
   A) 5
   B) 9
   C) M
   D) =
   E) @

Option D
Solution:
B L $ # G A P X Y % β N S 2 @ M = 9 5 C F

5. How many such vowels are there which is immediately followed by consonants and immediately preceded by number?
   A) Four
   B) Two
   C) None
   D) One
   E) Three

Option C

Directions (6-10): Study the following arrangement and answer questions given:

E 3 * L J 8 # R I 4 % S A δ 6 K 9 M $ X 7 β B Z @ 2 L

6. How many such symbols are there which is immediately followed by number and immediately followed by letter?
   A) Four
7. How many such numbers are there in the above arrangement each of which is immediately preceded by a symbol and immediately followed by a letter?
   A) None
   B) One
   C) Two
   D) Three
   E) More than three

   **Option C**
   **Solution:**
   \( \delta 6 K, @ 2 L \)

8. Complete the series: \( K9 X \delta 6M \delta K \) ?
   A) %AX
   B) 4%A
   C) SA%
   D) 4%δ
   E) None of these

   **Option D**

9. If all the numbers are dropped from the above sequence, then which element is eleventh from the right end?
   A) \( M \)
   B) %
   C) S
   D) δ
Option E
Solution:
The series becomes:
E * L J # R % S A δ K M $ X β B Z @ L

10. Four of the five are alike in a certain way based on arrangement, which does not belong to the group?
A) LJ*
B) SA%
C) K96
D) M9$
E) BZβ

Option D