

Alphanumeric Series

Introduction

Alphanumeric sequence is an important chapter in reasoning and the questions on this subject are asked in almost all the competitive exams. Alphanumeric sequence is a sequence which consists of both alphabets and numbers. In this sequence, we can also add some symbols along with alphabets and numbers.

For example we can make an alphanumeric sequence as follows –

A \$ E R 9 * T 5 F 6 @ D 8

In the above sequence, we can see that there are numbers, alphabets, and symbols. These types of sequences are called alphanumeric sequence. We can make many sequences like this and can deduce questions based on the sequences.

Important Points to Remember

Let's have an alphanumeric sequence –

A \$ E R 9 * T 5 F 6 @ D 8

Questions regarding this chapter can come in this way –

- a. Which element is n th from the left of the sequence?
- b. Which element is n th from the right of the sequence?
- c. Which element is m th to the right of n th from the left of the sequence?
- d. Which element is m th to the left of n th from the left of the sequence?
- e. Which element is m th to the right of n th from the right of the sequence?
- f. Which element is m th to the left of n th from the right of the sequence?
- g. A precedes B
- h. B is preceded by A
- i. B follows A
- j. A is followed by B

To solve questions like this, we have to watch the sequence thoroughly and answer accordingly.

- a. Which element is n th from the left of the sequence?

To get the answer of the above question, we have to look at the sequence from the left side and have to count the exact number that is asked in the question.

- b. Which element is n th from the right of the sequence?

To get the answer of the above question, we have to look at the sequence from the right side and have to count the exact number that is asked in the question.

c. Which element is m th to the right of n th from the left of the sequence?

To get the answer for such type of questions, we have to find out the n th element from the left side of the sequence and then find out the m th element to the right of that particular element.

d. Which element is m th to the left of n th from the left of the sequence?

To get the answer for such type of questions, we have to find out the n th element from the left side of the sequence and then find out the m th element to the left of that particular element.

e. Which element is m th to the right of n th from the right of the sequence?

To get the answer for such type of questions, we have to find out the n th element from the right side of the sequence and then find out the m th element to the right of that particular element.

f. Which element is m th to the left of n th from the right of the sequence?

To get the answer for such type of questions, we have to find out the n th element from the right side of the sequence and then find out the m th element to the left of that particular element.

g. If it is written that A precedes B then it means A is placed before B.

h. Similarly if it is written that B is preceded by A then it means A is placed before B.

i. If it is written that B follows A then it means B is placed after A.

j. If it is written that A is followed by B then B is placed after A.

These ten type of questions are normally asked in this chapter. Whether it is of a type or b type or c type or j type we have to read the question carefully and see the sequence and finally we can get the answer according to the question.

Samples

A F % 5 G H & 8 Y 6 3 N M * ! H 8

1 - Which element is 3rd to the right of 5th from left?

Options –

A - &

B - 8

C - 6

D - 3

Answer – Option B

Explanation –

By observing the sequence, we can get that 8 is the required element at the required place, hence, option b is correct.

2 - How many numbers are there which are immediately preceded by a symbol and followed by a consonant?

Options –

A - One

B - Two

C - Three

D - None

Answer – Option B

Explanation –

Only two are possible and they are: % 5 G and & 8 Y.

3 - Which element is 4th to the left of 5th from right?

Options –

A - 8

B - 6

C - 3

D - Y

Answer – Option D

Explanation –

Y is the required element. Hence option D.

Study the following arrangement carefully and answer the question given below –

6 R O T 4 A 8 % B F 1 E # W @ 9 H I \$ M N * 3 2 V \$ 5 G P 7 Q

Alphanumeric Series Questions with Solutions

Q 1 - How many such consonants are there in the above arrangement, each of which is immediately preceded by a consonant and immediately followed by a number?

A - None

B - One

C - Two

D - Three

Answer - C

Explanation

According to question

Consonant –C consonant-Number

B -F -1

G -P -7

Study the following arrangement carefully and answer the question given below -

6 R 0 T 4 A 8 % B F 1 E # W @ 9 H I \$ M N * 3 2 V \$ 5 G P 7 Q

Q 2 – How many such vowels are there in the above arrangement, each of which is immediately preceded by a letter but immediately not followed by a symbol?

A - None

B - One

C - Two

D - Three

Answer - B

Explanation

According to question

Letter-Vowels-Letter/Number

R - O - T

Study the following arrangement carefully and answer the question given below –

6 R 0 T 4 A 8 % B F 1 E # W @ 9 H I \$ M N * 3 2 V \$ 5 G P 7 Q

Q 3 – Which of the following is the fourth to left of the twelfth from the left end?

A - 8

B - B

C - 2

D - %

Answer - D

Explanation

According to question.

$L - L = L$

$12 - 4 = 8TH$

So the required element is %.

Study the following arrangement carefully and answer the question given below –

6 R 0 T 4 A 8 % B F 1 E # W @ 9 H I \$ M N * 3 2 V \$ 5 G P 7 Q

Q 4 – Three of the following four 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 - 406

B - F%A

C - @#1

D - \$H9

Answer - D

Explanation

According to question.

| | | | | |
|----|-------|---|-------|---|
| | -2 | | -2 | |
| 4 | _____ | O | _____ | 6 |
| | -2 | | -2 | |
| F | _____ | % | _____ | A |
| | -2 | | -2 | |
| @ | _____ | # | _____ | 1 |
| | -2 | | -1 | |
| \$ | _____ | H | _____ | 9 |

Study the following arrangement carefully and answer the question given below –

6 R 0 T 4 A 8 % B F 1 E # W @ 9 H I \$ M N * 3 2 V \$ 5 G P 7 Q

Q 5 – If all the symbols are eliminated from the above arrangement, than which of the following will be the 5th to the right of 10th element from the right end?

A - 4

B - 5

C - V

D - A

Answer - B

Explanation

According to question.

R - R = R

10 - 5 = 5th from right end after deleting all the symbols is 5.

These question based on the following letter /symbol/number sequence.
Study it carefully and answer the question.

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

Q 6 – Which of the following elements is the fourth to the right of 12th from right end?

A - 9

B - 6

C - 5

D - \$

Answer - B

Explanation

Remember, $R_{12} - R_4 = R = 6$

These question based on the following letter /symbol/number sequence.
Study it carefully and answer the question.

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

Q 7 – How many such numbers are there in the above arrangement which are immediately preceded by a symbol?

A - 2

B - 1

C - None

D - 3

Answer - A

Explanation

The numbers which are preceded by a symbol are \$2,*8.

These question based on the following letter /symbol/number sequence.
Study it carefully and answer the question.

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

Q 8 - If started from M, M is interchanged with 3 and R is interchanged with #and so on than which element will be twelfth from left?

A - 1

B - \$

C - N

D - D

Answer - D

Explanation

As, M 3 R # A P 4 9 @ K D 1

So it will be D

These question based on the following letter /symbol/number sequence.
Study it carefully and answer the question.

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

Q 9 – What will come next in the following sequence-MRP,9KU,52W?

A - QT7

B - 6V8

C - QT*

D - QV7

Answer - C

Explanation

As, M_R__P,_9_K__U,
_5_2__W,_Q_T__*.

These question based on the following letter /symbol/number sequence.
Study it carefully and answer the question.

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

Q 10 – Three of the following four are alike in a certain way based on their position in the above arrangement. Which of the following does not belong to the group?

A - M3X

B - R#8

C - P4V

D - KDE

Answer - D

Explanation

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

It should be Q in place of E.

Q 11 - Find the next term in series C4X, F9U, I16R,?

A - K25P

B - L25P

C - L25O

D - L27P

Answer : C

Explanation

The answer will be L25O as number increases with alphabet.

Q 12 - Find the next term in series 25P, 16K, 9F, ...?

A - 4A

B - 3A

C - 2B

D - 5Z

Answer : A

Explanation

The answer will be 4A as number decreases with alphabet.

Study the following arrangement carefully and answer the question that follow:

S K 6 £ Q 2 R * C F 8 E \$ G 2 # 4 9 L N 3 U V 5 Y α B 7 W 9

Q 13 - Which of the following letters, numbers, or symbols will be third to the left of fifth of left?

A - Q

B - S

C - 6

D - 2

Answer : C

Explanation

Fifth of left of third to the left the number is 6.

Analyze the below arrangement carefully and try to answer below question:

SL1R%4JE#7MT2I9BH3A\$9FQ5DG6USP

Q 14 - Which element is 14th from the left side?

A - 5

B - D

C - \$

D - 9

Answer : D

Explanation

The element 9 will come at the required place, hence, option D is correct.

Study the following arrangement carefully and answer the question given below:

G Q W 3 & A 9 8 @ * V S ^ 4 H X P L M K 1 4 5 D

Q 15 - If each symbol will be dropped then which will be the 14th element from right?

A - 9

B - 8

C - W

D - 3

Answer : B

Explanation

If each symbol will be dropped then 8 will be the 14th element from right, hence, option B is correct.

Q 16 - QKA, RLA, SMB, TNB, ?

A - UOC

B - HAL

C - HAK

D - JAI

Answer : A

Explanation

The first letter series is Q R S T U and the second letter series is K L M N O and the final letter series is A A B B C.

In these series, you will be looking at both the letter pattern and the number pattern. Fill the blank in the middle of the series or end of the series.

Q 17 - PEC, QFC2, RG2C2, _____, T2I2C3

A - SBC3

B - S3BC3

C - A3BC3

D - S3H3C3

Answer : D

Explanation

The series is very simple.

The subscript numbers follow this series:

111, 112, 122, 222, 223, 233, 333, ...

Study the following arrangement carefully and answer the question given below:

T 7 4 A G H K # 5 Q R % 2 3 D F * L M 6 B E 8 @ I \$ P V 9

Q 18 - Which is 7th to the right of 18th from left.

A - 1

B - 2

C - 3

D - 6

Answer : A

Explanation

I will come at the required place, hence option A is correct.

Study the following arrangement carefully and answer the question given below:

1 8 Q W 3 8 Z 5 * 2 J @ U K 9 P I % R 4 \$ M E 7 T # A 6 F

Q 19 - Which of the following will be the second to the right eighth from left end?

A - F

B - 4

C - Q

D - B

Answer : B

Explanation

Remember when right-left combination is there, adding the numbers ($8 + 2 = 10$). So the element at the 10th position from right end is 4.

Study the following arrangement carefully and answer the question given below:

\$ S A P T # * 5 E 8 Z 7 U + 1 \$ 3 @ V R ? L M I

Q 20 - In the series, which element is in the middle of * and 3?

A - Z

B - U

C - +

D - 7

Answer : D

Explanation

* S E 8 Z (7) U + 1 \$ 3 S

Q.21. W-144, ?, S-100, Q-81, O-64

(A) U-121

(B) U-122

(C) V-122

(D) V-128

Answer

Ans . A

Solution

Letters : W $\xrightarrow{-2}$ U $\xrightarrow{-2}$ S $\xrightarrow{-2}$ Q $\xrightarrow{-2}$ O
Numbers : 144 (12^2) \longrightarrow 121 (11^2) \longrightarrow 100 (10^2) \longrightarrow 81 (9^2) \longrightarrow 64 (8^2)

Q.22. 2, A, 9, B, 6, C, 13, D, ?

(A) 9

(B) 10

(C) 12

(D) 19

Answer

Ans . B

Solution

The given sequence is a combination of two series :

I. 2, 9, 6, 13, ?

and

II. A, B, C, D

The pattern in I is : 2 $\xrightarrow{+7}$ 9 $\xrightarrow{-3}$ 6 $\xrightarrow{+7}$ 13 $\xrightarrow{-3}$ (10)

So, the missing term is 10.

Q.23. KMP, IP8, GS11, EV14, ?

(A) BX17

(B) BY17

(C) CY17

(D) CY18

(E) CZ17

Answer

Ans . C

Solution

1st letter : C $\xrightarrow{+3}$ F $\xrightarrow{+3}$ I $\xrightarrow{+3}$ (L)

Number : 4 (2^2) \longrightarrow 9 (3^2) \longrightarrow 16 (4^2) \longrightarrow (25) (5^2)

3rd letter : X $\xrightarrow{-3}$ U $\xrightarrow{-3}$ R $\xrightarrow{-3}$ (O)

Q.24. C4X, F9U, 116R, ?

(A) K25P

(B) L25P

(C) L25O

(D) L27P

Answer

Ans . C

Solution

1st letter : C $\xrightarrow{+3}$ F $\xrightarrow{+3}$ I $\xrightarrow{+3}$ (L)

Number : 4 (2^2) \longrightarrow 9 (3^2) \longrightarrow 16 (4^2) \longrightarrow (25) (5^2)

3rd letter : X $\xrightarrow{-3}$ U $\xrightarrow{-3}$ R $\xrightarrow{-3}$ (O)

Q.5. 2Z5, 7Y7, 14X9, 23W11, 34V13, ?

(A) 27U24

(B) 45U15

(C) 47U15

(D) 47V14

Answer

Ans . C

Solution

1st number : $2 \xrightarrow{+5} 7 \xrightarrow{+7} 14 \xrightarrow{+9} 23 \xrightarrow{+11} 34 \xrightarrow{+13} \textcircled{47}$
Middle letter : $Z \xrightarrow{-1} Y \xrightarrow{-1} X \xrightarrow{-1} W \xrightarrow{-1} V \xrightarrow{-1} \textcircled{U}$
3rd number : $5 \xrightarrow{+2} 7 \xrightarrow{+2} 9 \xrightarrow{+2} 11 \xrightarrow{+2} 13 \xrightarrow{+2} \textcircled{15}$

Q.26. N5V, K7T, ?, E14P, B19N

- (A) H9R
- (B) H10Q
- (C) H10R
- (D) I10R

Answer

Ans . C

Solution

$$\begin{array}{l} \text{1st letter} \quad : \quad N \xrightarrow{-3} K \xrightarrow{-3} \textcircled{H} \xrightarrow{-3} E \xrightarrow{-3} B \\ \text{Middle letter} : \quad 5 \xrightarrow{+2} 7 \xrightarrow{+3} \textcircled{10} \xrightarrow{+4} 14 \xrightarrow{+5} 19 \\ \text{2nd letter} \quad : \quad V \xrightarrow{-2} T \xrightarrow{-2} \textcircled{R} \xrightarrow{-2} P \xrightarrow{-2} N \end{array}$$

Q.27. Q1F, S2F, U6D, W21C ?

(A) Y44B

(B) Y66B

(C) Y88B

(D) Z88B

Answer

Ans . C

Solution

1st number : $2 \xrightarrow{\times 2} 4 \xrightarrow{\times 3} 12 \xrightarrow{\times 4} \textcircled{48}$
Middle letter : $A \xrightarrow{+3} D \xrightarrow{+3} G \xrightarrow{+3} \textcircled{J}$
3rd number : $11 \xrightarrow{+2} 13 \xrightarrow{+4} 17 \xrightarrow{+6} \textcircled{23}$

Q.28. 2A11, 4D13, 12G17, ?

(A) 36I19

(B) 36J21

(C) 48J21

(D) 48J23

Answer

Ans . D

Solution

$$\begin{array}{l} \text{1st number} : 2 \xrightarrow{\times 2} 4 \xrightarrow{\times 3} 12 \xrightarrow{\times 4} \textcircled{48} \\ \text{Middle letter} : A \xrightarrow{+3} D \xrightarrow{+3} G \xrightarrow{+3} \textcircled{J} \\ \text{3rd number} : 11 \xrightarrow{+2} 13 \xrightarrow{+4} 17 \xrightarrow{+6} \textcircled{23} \end{array}$$

Q.29. J2Z, K4X, 17V, ?, H16R, M22P

(A) I11T

(B) L11S

(C) L12T

(D) L12S

Answer

Ans . D

Solution

The first letters in odd numbered terms form series. $J \xrightarrow{-1} I \xrightarrow{-1} H$ and in even numbered terms form series $K \xrightarrow{+1} \textcircled{L} \xrightarrow{+1} M$.

Middle number : $2 \xrightarrow{+2} 4 \xrightarrow{+3} 7 \xrightarrow{+4} \textcircled{11} \xrightarrow{+5} 16 \xrightarrow{+6} 22$

3rd letter : $Z \xrightarrow{-2} X \xrightarrow{-2} V \xrightarrow{-2} \textcircled{T} \xrightarrow{-2} R \xrightarrow{-2} P$

Q.30. Find the term which does not fit into the series:

- (A) 5FU
- (B) 15LS
- (C) 9IT
- (D) 17OR

Answer

Ans . B

Solution

1st number : $1 \xrightarrow{+4} 5 \xrightarrow{+4} 9 \xrightarrow{+4} \textcircled{13} \xrightarrow{+4} 17$

2nd letter : $C \xrightarrow{+3} F \xrightarrow{+3} I \xrightarrow{+3} \textcircled{L} \xrightarrow{+3} O$

3rd letter : $V \xrightarrow{-1} U \xrightarrow{-1} T \xrightarrow{-1} \textcircled{S} \xrightarrow{-1} R$

Thus, the term 15LS is wrong and must be replaced by 13LS.