

RBI PHASE 1 RECAP

31th JULY '18

REASONING – ALPHABET SERIES

APPHABET SERIES

The questions here are similar to the questions in number series. Instead of numbers we have letters of the alphabet given here. We have to first identify the pattern that the series of letters follow. Then, we have to find the missing letter based on the pattern already identified.

In this topic, questions are asked relating to positions of English alphabets. you need to memorize the positions of the alphabets so that you can handle each and every question based on this topic.

APPHABET SERIES



BASIC CONCEPTS:

These two are the basic concepts to solve the questions based on alphabet series:

1. THE ALPHABET: The English alphabet contains 26 letters, as given below:

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

From A to M, the alphabet completes the first 13 letters that is the first half, while the second half starts from 14th letter that is it starts from N and ends at Z.

(First Alphabetical Half) A to M \Rightarrow 1 to 13

(Second Alphabetical Half) N to Z \Rightarrow 14 to 26

2. Concept of EJOTY: The positions of alphabets can be remembered with the help of this simple concept, you can easily find out the position of any letter without much effort. But it is advisable that you learn the positions of different letters in the alphabet.

E - 5

J - 10

O - 15

T - 20

Y - 25

Q.1) Find the next letter in the series:

AK, FP, ____, PZ, UE, ZJ

[a] KU

[b] JT

[c] JU

[d] KV

[e] UK

Solution (a)

If we write the position numbers of each letter group, we will get the following series:

(1, 11), (6, 16), ____, (16, 26), (21, 5), (26, 10).

First number of every pair is obtained by adding 5 to previous number.

So, the first number in the unknown pair is 11.

Second number of every pair is obtained by adding 10 to the first number.

So, the second number of the pair would be $11+10 = 21$.

Hence, we have (11, 21) which is equivalent to (K, U).

(use the concept of 'EJOTY' to get quick answer)

Q.2) Find the next letter in the series:

Z X V T R P N L Y W U S Q O ____

- [a] M**
- [b] K**
- [c] H**
- [d] J**
- [e] none of these**

Solution (a)

First eight even positioned letters (Z = 26, X = 24, V=22, T = 20, R = 18, P = 16, N = 14 and L = 12) are written from the end of the alphabet.

Next come the eight odd positioned ones (Y = 25, W=23, U =21, S=19, Q=17, O=15 and M = 13).

Hence, next letter is M.

Q.3) Find the next letter in the series:

a _ b c _ a _ b c d a _ c c d _ b c d _

- [a] adbcad**
- [b] adbbad**
- [c] acbdbb**
- [d] abddbd**
- [e] none of these**

Solution (e)

The series aabcd / abbcd/ abccd/ abcdd.

Thus, a, b, c and d are repeated twice one by one.

Hence, the answer should be 'abcd' which is not in the options.

Q.4) Find the next letter in the series:

UPI, ____, ODP, MBQ, IAW

- [a] TIJ**
- [b] SIK**
- [c] SHJ**
- [d] THK**
- [e] SHO**

Solution (c)

For first letter:

Skip one and three letters alternatively and move backward” sequence, as given below:

U(T) S(RQP) O(N) M(LKJ) I

For second letter:

Counting backwardly, starting from ‘A’ move one, two, four and eight places forward in the English alphabet. Hence, the second letter of the blank space will be ‘H’

For third letter:

Third letter of each group starting from ‘I’ moves one and six places alternatively in the English alphabet. Hence, the third letter of the blank space will be J. So, the answer is ‘SHJ’.

Q.5) Find the next letter in the series:

YA, CW, __, GS, QI

- [a] EU
- [b] TE
- [c] ET
- [d] FU
- [e] UE

Solution (e)

Putting the values of alphabetical positions of given letters in the series we have:

$25+1=26$, $3+23=26$, __, $7+19=26$, $17+9=26$

Here, we observe that the sum of the numerical values assigned to the group is 26.

Here we also observe that the numerical value of first letter of each alternate group is greater.

Hence, missing pair can be filled with $21+5$ which is equal to 26.

The requires answer is UE.

Q.6) Find the next letter in the series:

AC, DC, EF, IG, _ _

- [a] MI
- [b] IL
- [c] IM
- [d] LI
- [e] none of these

Solution (c)

Putting the value of alphabetical positions of given letters in the series we have:

$1+3=4$, $4+3=7$, $5+6=11$, $9+7=16$, _ _

So, the next term would be 22.

Here, we also observe that the numerical value of first letter of each alternate group is lesser.

By looking at the given choices, we observe that the first letter should be I and the second letter should be M. assigned numerical values of I and M, are 9 and 13 respectively. And $9+13=22$.

Hence, the required answer is 'IM' i.e., (c)

Q.7) Find the next letter in the series:

C/12, E/30, G/56, ____, K/132, M/182

- [a] J/80
- [b] I/80
- [c] J/90
- [d] I/90

Solution (d)

Pattern for the letters:

C=3

E=5

G=7

I=9 (ans.)

K=11

M=13

pattern for the numbers:

$$12 = 3 \times (3+1)$$

$$30 = 5 \times (5+1)$$

$$56 = 7 \times (7+1)$$

$$90 = 9 \times (9+1) \text{ (ans.)}$$

$$132 = 11 \times (11+1)$$

$$182 = 13 \times (13+1)$$

Hence, I/90 is the missing term in the series.

Q.8) find the next letter in the series:
EUILN, DWFPI, _____, CXEQH, GSKJP

- [a] FTJKO
- [b] FUILM
- [c] EULIM
- [d] ETJKO

Solution (a)

The given series is a mixed series:

Pattern for the first letters:

E-1, D+2, F-3 (ans.), C+4, G

pattern for the second letters:

U+2, W-3, T+4(ans.), X-5, S

Pattern for the third letters:

I-3, F+4, J-5(ans.), E+6, K

pattern for the fourth letters:

L+4, P-5, K+6 (ans.), Q-7, J

Pattern for the fifth letters:

N-5, I+6, O-7, (ans.), H+8, P

Hence, the missing group is, FTJKO.

Q.9) Find the next letter in the series:

X, P, J, F, ____

- [a] A**
- [b] B**
- [c] C**
- [d] D**

Solution (d)

The pattern is as follows:

$$X-8 = P$$

$$P-6 = J$$

$$J-4 = F$$

$$F-2 = D \text{ (ans.)}$$

The values that are subtracted are consecutive even numbers in decreasing order starting from 8. Hence, the next letter in the series is $F-2 = D$

Q.10) Find the next letter in the series:

MTD, NSA, PVE, PVC, SXF, RYE, _____

- [a] VXY**
- [b] VZG**
- [c] UVW**
- [d] UWV**

Solution (b)

The alternate groups are in different series:

MTD, PVE, SXF are in one series:

Pattern for the first letters:

M+3, P+3, S+3, V (ans.)

Pattern for the second letters:

T+2, V+2, X+2, Z (ans.)

Pattern for the third letters:

D+1, E+1, F+1, G (ans.)

Hence, the next pair is VZG.