

# Study Notes On Alphabetical Reasoning & Word Formation

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#### Alphabetical Reasoning:

The questions are usually based on the place of the English letter and with reference to their position, we find out the logic behind and solve the question. This type of question varies on the arrangement of alphabetical order. It can be Backward, first half backward, second half backward, multiple letter segments in changed order etc. Some of the questions asked are based on finding the middle letter of two specified letters and in some questions, it is asked that which letters do not change their place after alphabet arrangement. So, the detailed explanation with examples is as follow:

Place of letter in forward order

In this type of questions the exact letter has to be found out with the help of direction of place given in the question. The example discussed as below will give you a better

idea about this type of questions.

Ex 1: Find the 11<sup>th</sup> letter to the left of 20<sup>th</sup> letter from left in the English alphabet. D

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J
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Κ
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Solution: (d) Let us see

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Hence, 11<sup>th</sup> letter to the left of 20<sup>th</sup> letter from left is I.

Alternate Method

In English alphabet  $11^{th}$  letter to the left of  $20^{th}$  letter of your left =(20-11) th letter from the left= $9^{th}$  letter from the left =I

Place Of Letter in Completely Backward Order

In such questions the order of letters is completely reversed or they are counted from Z to A and then the place of letter is asked with the help of direction.

Ex 2: If English alphabet is written in backward order, then what will be 13<sup>th</sup> letter to the left of the 3<sup>rd</sup> letter from right?



From right

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a) P

b) N

c) R

d) Q

Solution: (a)

Backward order is written as

12 34 5 678 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

ZYXWVUTSRQ (P)O NMLKJI HGFEDCBA

13th To the left
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Now, the 13<sup>th</sup> letter to left of the 3rd letter from right is P.

Alternate Method

In backward order of alphabet,  $13^{th}$  letter to the left of the  $3^{rd}$  letter of your right =(3+13)th letter from right =16<sup>th</sup> letter from right P.

Place of a Letter When First Half is in Backward Order

In such type of question, only the 1<sup>st</sup> half of the order of alphabetical series is reversed and remaining are left unaltered i.e., order of A to M is reversed and then questions related

to position of latter are asked.

Ex 3: If 1<sup>st</sup> half of the English alphabet is written in backward order, then what will be the 7<sup>th</sup> letter to the left the 10<sup>th</sup> letter from your right?

The 7<sup>th</sup> letter to the left of 10<sup>th</sup> letter from our right is D.



Place of a Letter When Second Half is in Backward Order

In such type of questions the 2<sup>nd</sup> half is reversed i.e., from N to Z and remaining are kept as it is and then questions related to place of English alphabet are asked. Ex 4: If 2<sup>nd</sup> half of the English alphabet is written in backward order, then what will be the 7<sup>th</sup> letter to the right of 13<sup>th</sup> letter from your left?

- a) T
- b) U
- c) V
- d) S

Solution: (a) Let us see

#### 1 2 3 4 5 6 7 8 9 10 11 12 13 26 25 24 23 22 21 20 19 18 17 16 15 14 ABCDEFGHIJ KLM ZYXWVU (SRQPON



The 7<sup>th</sup> letter to the right of 13<sup>th</sup> letter from our left is T.

Multiple Letter Segment in Backward Order

In such type of questions, no specified order of change is followed in alphabetical order. The are changed according to the condition given in particular question.

Ex 5: If first four letters of the English alphabet are written in reverse order; again next 5 letters are written in reverse order ;again next 6 letter s are written in reverse order ; next 7 letter are written in reverse order and finally, the remaining letters are also written in reverse order, then what will be the 7<sup>th</sup> letter to the left of the 8<sup>th</sup> letter from right?

a) M b) N c) O d) L Solution: (a) Let us see the arrangement





The 7<sup>th</sup> letter to the 8<sup>th</sup>th letter from right is M.

Number of Letter in the Middle of Two Letters

In this particular type, question asked to calculated the total number of English letters between any two specified letter as directed in the question. Four situations can be created under these type of problems



Ex 6: How many letters are there between 8<sup>th</sup> letter from left and 7<sup>th</sup> letter right in the English alphabet?

a) 7

- b) 11
- c) 8
- d) 9

Solution: (b) Let us see

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





There are 11<sup>th</sup> letters between 8<sup>th</sup> letter from left and 7<sup>th</sup> letter from right. Alternate Method

Total number of letter in the English alphabet =26 Required number of letters =26-(8+7) =11

Middle Letter between Two letters

In these types of questions, it is asked to find the middle letter the two specified letters of English alphabet.

Ex 7: Which letter is in the middle of 7<sup>th</sup> letter from left and 10<sup>th</sup> letter from right in the English alphabet?

a) L

b) P

c) M

d) Q

Solution: (a) Let us see

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



Letters between G and Q is L.

Alternate Method

 $10^{\text{th}}$  letter from right =27-10 =17^{\text{th}} letter from left.

Required middle letter = $7+(17-7)/2 = 24/2 = 12^{\text{th}}$  letter from left =L

Same Position of alphabet after arranging Alphabetically.

In this type of questions, a word is given and then asked how many letters remain same in their position, if they are arranged in alphabetical order.



Ex 8: How many such letters are there in the word 'CADMP' which remain same in their

#### position, if they are arranged in alphabetical order?

One Two

| I. | WU   |
|----|------|
| Т  | hree |

Four

Solution: (c)

| Original word | CADM  | P |
|---------------|-------|---|
| Rearrangement | ACD M | P |

So, such type of letters are D, M and P.

Arranging the letters of the word

Ex 9: Arrange the following words in natural way and find odd one out.

ELMSL

ERHA

IKNTH

SAETE

Ans. **B** 

Solution –

On arranging the given words we get-

SMELL

HEAR/HARE

THINK

TEASE

Here, only ERHA gives two meaningful words on arranging of its letters. Hence, the correct answer is option (C). Pair of alphabets –

Ex 10: How many such pairs of letters are there in the word CRYING each of which has as many letters between them in the word as in the English alphabet? a) None

b) One

c) Two

d) Three



www.byjusexamprep.com Ans. B Solution – C R Y I N

Only one pair we see from the backward, no pair from forward. Hence, the correct answer is option B.

Position of letters interchanged -

Ex 11: The positions of the first and the tenth letters of the word MICROPHONE are interchanged, similarly, the positions of the second and ninth letters and the third and eighth letters and fourth and seventh letters and fifth and sixth letters are interchanged. In the new arrangement thus formed, how many alphabets are there between the fourth letter from the left and letter third from the right end?

G

(a) 3
(b) 1
(c) 2
(d) More than 3
Ans. A
Solution –
In this question, we show that –

1 2 3 4 5 6 7 8 9 10 M I C R O P H O N E

After the rearrangement of the word will be -

#### ENOHPORCIM

Thus the alphabet between the fourth letter from left means H and third letter from the right means C is three (P, O, R). So the correct answer is option A.



#### WORD FORMATION:

#### Finding Correct option-

In this type of questions, a word is given and then asked out of four options (words) which option(word) can be formed using the letters given in given word. For example:

Ex 12. In the following question, select the word which can be formed using the letters of the given word CHOCOLATE

TELL HEALTH LATE COOLER

Solution- **LATE** is the only word which can be formed from the given word CHOCOLATE. Hence, option (c) is the correct answer.

#### Finding Incorrect option:

For example: Ex 13. In the following question, select the word which cannot be formed using the letters of the given word LACTOBACILLUS ABOUT LAST TABLET BASIC

Solution- E is not present in the word LACTOBACILLUS. Therefore, we cannot form the word TABLET. Hence, option (c) is the correct response.



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