



RRB-NTPC

CBT-I , CBT-II

GENERAL INTELLIGENCE
& REASONING



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ALPHABET

Alphabet :-

These are 26 letters in an English Alphabet, A to Z.

Left →													← Right												
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
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

(when counted from Z to A)

Place Value
Reverse order

First half →	1	A	2	B	3	C	4	D	5	E	6	F	7	G	8	H	9	I	10	J	11	K	12	L	13	M → 13
(A to M)	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑	Reverse of the letters
Second half →	Z	Y	X	W	V	U	T	S	R	Q	P	O	N → 13													
(N to Z)	26	25	24	23	22	21	20	19	18	17	16	15	14													

E	J	O	T	Y
5	10	15	20	25

Remember 'EJOTY'

C	F	I	L	O	R	U	X
3	6	9	12	15	18	21	24

'CFILORUX'

Nowels →

A	E	I	O	U
1	5	9	15	21

when at the left of the left letter or right of the right letter is asked, we'll find -the difference of their sequence (for same side).

ex am pl e : Which is the 7th letters from the left of the 10th letter from letter from left in english alphabet?

solⁿ

$$\begin{array}{r} \text{Left} \quad \text{left} \\ 10 \quad - \quad 7 \quad = \quad 3\text{rd letter} \end{array}$$

$$3\text{rd letter} = C$$

when at the left of the right letter or right of the left letter is asked, we'll find the sum of their sequences (for two difference side's sequence)

ex am pl e : (a) which will be the 8th letters at the right from 12th letter from left.

solⁿ

$$\begin{array}{r} \text{Left} \quad + \quad \text{Right} \\ 12 \quad + \quad 8 \quad = \quad 20\text{th letter} = T \end{array}$$

T will be the 20th letters from left in the english alphabet.

(b) which will be the letters in English Alphabet, which is 7th at left from 12th from right.

solⁿ Here for 2 different sides we add sequence no. of the letters

i.e

$$\begin{array}{r} \text{Right} \quad + \quad \text{left} \\ 12 \quad + \quad 7 \quad = \quad 19 \end{array}$$

So, 19th letter from Right side, we subtract 19 from 27.

$$27 - 19 = 8^{\text{th}}$$

8th letters from left side is 'H'

* == When position of letter is asked from right side (Z), we minus from 27. ==

Like 1. R is 10 from left side then what is the position from right side.

Sol.ⁿ $27 - 18 = 9$

R is 9th from Right side in English Alphabet.

Example : which will be the letter in English alphabet, which is 6th at right from 22nd from right?

Sol.ⁿ

Right	-	Right	
22	-	6	= 16

So, 16th letters from right means

$$27 - 16 = 11^{\text{th}} \text{ from left. and}$$

K is the 11th letter from left.

Example : which letter is 10th to Right of 19th letters from Right.

Sol.ⁿ

Right	-	Right	
19	-	10	= 9

So, $27 - 9 = 18 = R$

In short

= At the right from right] (-)
 At the left from left]
 At the left from Right] (+)
 At the Right from left]

↳ Q. 2. When a series of letters symbol digit is given :

Example : Study the following arrangement carefully and answer the following questions :

R4PIJM@3%T@@UKSVIw\$Y2BEG#9DHOQ*ZN

Q1. which is 6th at the left of 15th from the left in above arrangement.

Solⁿ Left - left
 15 - 6 = 9th from left
 So answer = %.

Q2 : In the above arrangement; how many numbers are such which are produced by consonant and not followed by a letter?

Solⁿ Answer = one

@ 3 % → not letters.
 ↓ ↓
 consonant number

↳ 3. Arrangement according to Dictionary : In this arrangement, we arrange the letters in the

Orders in which they appear in the English alphabet.

For example : 1. Choose the one that comes at the second place according to Dictionary.

- | | |
|-----------------|--------------|
| A. Bathing | B. Banking |
| C. Backing | D. Banishing |
| E. Barricading. | |

Solⁿ: According to English Dictionary.

Backing, Banishing, Banking, Barricading, Bathing
 1 2 3 4 5

So, banishing is at second place.

* 2. How many letters pairs in the word PARADISE are such pairs, which contain the same no. of letters between them as they have in the English Alphabet?

Solⁿ

P	A	R	A	D	I	S	E
19	1	21	1	4	9	22	5



we have 3 letters pairs here.

* 3. If the 2nd half of the English alphabet is written in reverse order, then which letter will be the 13th at right from 8th from left?

Explanation :

According to Question A → MZ → N

A B C D E F G H I J K L M N Z Y X W V U T S R Q P O

Now $\frac{L}{0} + \frac{R}{13} = 21$

So, 21 letters, 13 are from A to M, remaining 8 should be counted from Z to N, which is '8'.

Solved Examples

Q.1 if the second half of the English Alphabet is reversed then which letter will be 4th to the right of 20th letter from the right?

sol: Right - Right

$$\Rightarrow 20 - 4 = 16^{\text{th}} \text{ from Right}$$

$$\text{So } 27 - 16 = 11^{\text{th}} \text{ from left} = \text{K}$$

$$16^{\text{th}} \text{ from Right} = 11^{\text{th}} \text{ from Right}$$

Q.2 which letter is in the middle between the 9th letter from the right and 8th letter from the left in the English Alphabet?

sol: A \rightarrow I

$$8^{\text{th}} \text{ from left} = \text{H}$$

$$9^{\text{th}} \text{ from the right } (27 - 9 = 18 = \text{R})$$

$$\text{So middle letter} = \frac{8 + 18}{2} = 13^{\text{th}} = \text{M}$$

Q.3 A E C B % 7 D \$ E B 5 C ? 3 D E 9 @ 2 # , if all the vowels are dropped from the above arrangement which of the following will be the 12th from the left end of the above arrangement?

sol: After dropping vowels we have

C B % 7 D \$ B 5 C ? 3 D 9 @ 2 #

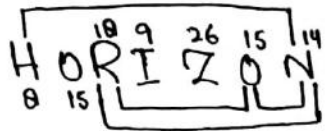
↑
Ans

Q.4 if the sequence of the English alphabet is reversed then which is 7th to the left of second vowel. From the right of English Alphabet in the new series?

sol: Second vowel from the right of reversed English alphabet is E and 7th letter to the left of E in the new series is L.

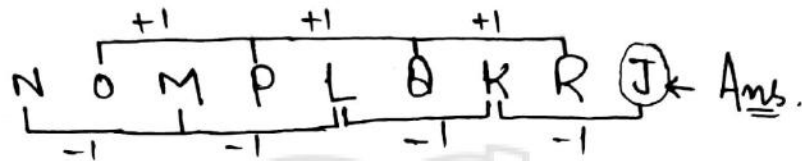
Q.5 How many pairs of letter are there in the word 'HORIZON' which have as many letters between them in the word as in the English Alphabet?

sol:


 $H \quad O \quad R \quad I \quad Z \quad O \quad N$
 8 15 10 9 26 15 14
 = 4 pairs of letters.

Q.6 What is the next letter of the following sequence N, O, M, P, L, Q, K, R, ?

sol:


 $N \quad O \quad M \quad P \quad L \quad Q \quad K \quad R \quad \textcircled{J} \leftarrow \text{Ans.}$

Q.7 If the first and second letters in the word 'MISFORTUNE' were interchanged, also the third and the fourth letters, the fifth and sixth letters and so on, which letter would then be the eight letter counting to your left?

sol:

New sequence = I M F S R O U ^{8th} T E N

Ans. = T.

Q.8 Arrange the given words in alphabetical order and choose the one that comes in the middle?

sol: According to alphabet order \rightarrow

shout, skist, slaughter, specify, straight

middle word = slaughter.

Q.9 If NAMO = 172 and OM = 56, then SHIVAY = ?

sol:

$$NAMO = 14 + 1 + 13 + 15 = 43 \times 4 = 172$$

$$OM = 15 + 13 = 28 \times 2 = 56$$

$$SHIVAY = 19 + 8 + 9 + 22 + 1 + 25 = 84 \times 6 = 504$$

Directions(10-14): study the following arrangement of numbers, letters and symbols carefully and answer the questions given below.

R @ 2 9 T V A Y 5 @ # J I P 8 Q \$ E 3 * H % 6 W 4 I δ U Z

Q.10 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 the group?

J P @, E * Q, W I %, 9 V @, I # δ

sol: $\begin{matrix} \text{J P @} \\ \text{+2 -4} \end{matrix}$ $\begin{matrix} \text{E * Q} \\ \text{+2 -4} \end{matrix}$ $\begin{matrix} \text{W I \%} \\ \text{+2 -4} \end{matrix}$ $\begin{matrix} \text{9 V @} \\ \text{+2 -4} \end{matrix}$ $\begin{matrix} \text{I \# \delta} \\ \text{-2 +16} \end{matrix}$

Ans I # δ

Q.11 which of the following is the fifth to the right of the 19th element from the right end?

P, V, W, 8, Q

sol: $19 - 5 = 14^{\text{th}}$ element from the right end = Q.

Q.12 How many such number are there in the given arrangement, each of which is immediately preceded by the consonant and immediately followed by a symbol?

sol: Y S @ → 1 pair

Q.13 If the positions of the last 18 elements in the given arrangement are reversed, which will be the 17th from the left end?

sol: After arrangement

R @ 2 9 T V A Y S @ # 2 U S I 4 W 6 % H * 3 E \$ Q P I J

Q.14 How many such vowels are there in the given arrangement, each of which is either immediately followed by a symbol?

sol:

3 Vowels = E, I and U

Q.15 How many meaningful words can be formed from the 3rd, 4th, 6th and 8th letter of the word 'CONTROVERSIAL'?

sol:

C O N T R O V E R S I A L
 ↓ ↓ ↓ ↓
 3rd 4th 6th 8th

N, T, O, E → 2 words : Note, Tone can formed

ANALOGY

The relationship between one pair of words is similar to another pair of words then we say that both the pairs of words is analogous to each other.

Example : Devotee : Temple and patient : Hospital is a parallel pair of words because they have similar kind of relationship between them.

↳ Types of Analogy :

1. words Analogy.
2. Numbers Analogy.

↳ Kinds of Word Relationship :-

1: Opposite Relationship :

If two given pairs are opposite in meaning to each other, similar kind of Relationship has to be chosen for the question pairs from the given option.

Ex :

Kinetic : Potential

Fat : Thin

2: Synonymous Relationship :-

The two words of the question pairs are similar in meaning.

Ex :

Huge : Big

Slim : Thin

3. Cause and Effect :- In this type one word will be the cause, then other will be its effect.

Ex :-

Fire : Death
Fasting : Starvation.

4. Worker and Article Relationship :- The relationship is about the maker or producer with its production.

Ex :-

Writer : Novel
Artist : Painting

5. Worker and Tool Relationship :- Relationship is among a particular class of people and the tools used by them.

Ex :-

Student : Pen
DTP operator : Computers.

6. Tool and object Relationship :- It describes the relationship between the tool and its corresponding object.

Ex :-

Paint : Wall
Knife : Vegetables.

7. Number Analogy :- There will be certain relationship among the first two numbers.

Ex : 4 : 8 :: 16 : ?

- A. 21 B. 19 C. 32 D. 51

Sol : $4 \times 2 = 8$

Similarly, $16 \times 2 = 32$

8. Gender based Analogy : In such type of analogy, one word is masculine and another word is feminine of it.

Ex : Man : Woman

Boy : Girl

9. Habit based Analogy : In this type of analogy, 2nd word is the habit of 1st and vice-versa.

Ex : Cat : Omnivorous

Tiger : Carnivorous

10. State and Capital based Analogy : 1st word is the state and second word is the capital of that state.

Ex : Bihar : Patna

West Bengal : Kolkata

11. Capital and Country based Analogy :

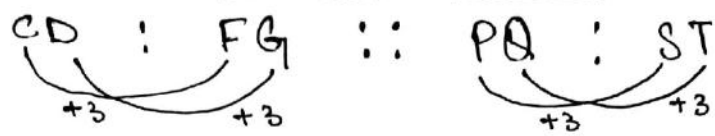
Ex :- Rome : Italy

Muskat : Oman.

12. Trophy and Game based Analogy :

Ex:- Ranji trophy : Cricket
 Dhyan chand trophy : Hockey.

↳ Analogy Based on Alphabet :-
 1. Forward Alphabetical Sequence :-

Ex: CD : FG :: PQ : ST


2. Backward Alphabetical Sequence :-

Ex: DC : GF :: OP : TS


3. Vowel-Consonant Relation :-

Ex: ATL : EVX :: IPR : ORS

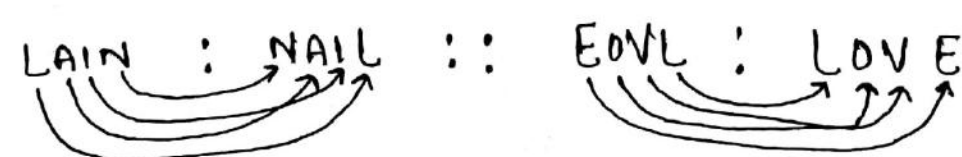
Here, the 1st two words start with the 1st two vowels A & E and the next two words start with the next two vowels I and O. Last two letters of every word are consonants.

4. Skip Letters Relation :-

Ex: ABC : FGH :: IJK : NOP

Between ABC and FGH two letters skip and they are D and E. Similarly between IJK and NOP two letters skip and they are L and M.

5. Jumbled Letters Relation :-

Ex: LAIN : NAIL :: EOVL : LOVE


Solved Examples

Q.1 King : Throne :: Judge :
 (A) Lawyer (B) Bench (C) Court (D) Trial

Sol: 'B'

As 'King' is related to 'Judge' in the same way 'Throne' is related to 'Bench'.

Q.2 Video : Cassette :: Computer : ?
 (A) Reels (B) Recordings (C) Files (D) Floppy

Sol: 'D'

Recordings of the second are visualised on the first.

Q.3 Cobbler : Leather :: Carpenter : ?
 (A) Furniture (B) Wood (C) Hammer (D) Chair

Sol: 'A'.

As 'Cobbler' uses 'leather' to make shoes etc. Similarly 'Carpenter' uses 'wood' to make furniture.

Q.4 Plant : Seed :: ? : Bud
 (A) Leaf (B) Twig (C) Flower (D) Fruit

Sol: 'C'

As, grown form of 'seed' is 'plant'. Similarly grown form of 'bud' is 'flower'.

Q.5 Tadpole : ? :: Caterpillar : Butterfly
 (A) Crow (B) Goose (C) Fish (D) Frog

Sol: 'D'

'Caterpillar' is the younger one of 'Butterfly'. Similarly 'Tadpole' is the younger one of 'frog'.

Q.6 Eye : See :: Leg : ?
 (A) Write (B) Breath (C) Walk (D) Hear

Sol: 'C'

'Eye' is the part of body which is used to 'see' and in the same way 'leg' is the part of body which is used to 'walk'.

Q.7 Chaos : Peace :: Lanky : ?
 (A) Short (B) Lengthy (C) Great (D) Fine

Sol: 'A'

'Chaos' is the antonym of 'peace' and similarly 'Lanky' is the antonym of 'short'.

Q. 8 Thunder : Rain :: ? : Night

- (A) Dus (B) Dark (C) Evening (D) Dusk

Sol: 'D'

'Rain' is followed by 'Thunder' and similarly 'Night' follows 'Dusk'.

Q. 9 Dearth : scarcity :: substitute : ?

- (A) Rumor (B) Assume (C) Replace (D) Destroy

Sol: 'C'

'Dearth' is the synonym of 'scarcity' and similarly 'substitute' is the synonym of 'Replace'.

Q. 10 Lion : Roar :: Ass : ?

- (A) Bark (B) Trumpet (C) Haul (D) Bray

Sol: 'D'

'Roar' is the sound produced by 'Lion', similarly 'Bray' is the sound produced by 'Ass'.

Q. 11 Lamb : Frisk :: Mouse : ?

- (A) Trot (B) Scamper (C) Gallop (D) Flit

Sol: 'B'

'Frisk' is the name given to the movement of 'Lamb'. Similarly 'Scamper' is the name given to the movement of 'Mouse'.

Q. 12 Circle : Arc :: Square : ?

- (A) Line (B) Triangle (C) Sphere (D) Rectangle

Sol: 'A'

An 'arc' is a part of 'circle', in the same way 'Line' is a part of 'square'.

Q. 13 Brinjal : vegetable :: orange : ?

- (A) Fruit (B) stem (C) Leaf (D) Root

Sol: 'A'

'Brinjal' is a 'vegetable', in the same way, 'orange' is a 'fruit'.

Q. 14 Aluminum : Bauxite :: Iron : ?

- (A) Pyrite (B) Magnesite (C) Pyrolasite (D) Haematite

Sol: 'D'

Haematite represents the ore of Iron.