



JUDICIAL SERVICES EXAM

**Delhi, Haryana, Punjab, U.P., U.K., Gujarat
& All Other States Judicial Exam**

CIVIL JUDGE

General Paper

Reasoning



JUDICIAL SERVICES EXAM

CONTENTS

REASONING

1.	Alphabet Test	1
2.	Coding - Decoding	13
3.	Blood Relation	21
4.	Distance & Direction	32
5.	Number Series	51
6.	Ranking & Order	64
7.	Syllogism	78
8.	Seating Arrangement	105
9.	Inequalities	147
10.	Input - Output	164
11.	Binary Coding	174
12.	Data Sufficiency	180
13.	Statement - Assumption	190
14.	Statement & Argument	197
15.	Cause & Effect	213
16.	Decision Making	219
17.	Puzzle Test	227
18.	Arithmetic Reasoning	255
19.	Clock & Calender	260
20.	Cube & Dice	260
21.	Logical Venn Diagram	277

ALPHABET TEST

Alphabetical Order →

Arranging words in alphabetical order implies to arrange them in the order as they appear in dictionary.

Some Important facts:—

- (1) A → Z = English alphabet series.
- (2) Z → A = Reverse order of English alphabet.
- (3) A → M = First half of English alphabet.
- (4) M → A = Reverse order of 1st half.
- (5) N → Z = Second half
- (6) Z → N = Reverse order of Second half.
- (7) = 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
 ← Right

Ex 1 ⇒ Which is the 15th alphabet from the left in the English alphabet series?

Ans → O.

Ex 2 ⇒ Which is the 15th alphabet from the right?

Ans → 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 ?

Ans → L

(8) In the alphabet series for any particular alphabet if we are asked, toward left it implies that we have to Count from R → L or Z to A and towards Right it implies that we have to Count from L → R or A to Z.

Ex → 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

(i) Which alphabet is adjacent to the alphabet 'H' towards left?

Ans: - G

(ii) - Which alphabet is adjacent to the alphabet 'H' towards Right?

Ans - I.

(9) Meaning of 'To' & 'From' →

To - Counting excluding the related Alphabet.

From - Counting including the related Alphabet.

Ex → (ii) 6th alphabet to the left to V ?

Solⁿ → N O P Q R S T U V
 | |
 5th Excluding Ans - Q.

(ii) - 6th alphabet to the right from J ?

J K L M N O P Q
 | |
 Including 6th Ans - O
 (1)

(10) Ex - Which will be 7th letter to the right of the 8th letter from left in English alphabet?

Solⁿ → $\frac{\text{8th letter from the left}}{\text{the left}} \uparrow \frac{\text{7th letter}}{\text{to its right}}$

8th letter from the left is 'h' & 7th letter to its right is 'o'

Ans → 0.

11) Ex → Consider the words Cat, Cart, case, Viper, Dazzle arrange them according to the English alphabet.

Solⁿ → $\left. \begin{array}{l} \text{Cat} \\ \text{Cart} \\ \text{Case} \end{array} \right\}, \text{Dazzle, Viper}$

Now is how to arrange Cat, Cart, Case?

Consider their second letters the Considering third letters,

Cart, Cat, Case, Dazzle, Viper.

(12) → How many pairs of letters are there in the word CASTE which have as many letters b/w them as the English alphabet?

Solⁿ → C A S T E
└───┘

The pair will be ST.

Ans → One pair

Q.1 If the alphabets in the word DIET are arranged according to the alphabet series, how many alphabets will remain at the same position

sol: D I E T
D E I T

Ans → 2 (Two).

Q.2 If the first, fourth, eighth & 11th letters of word INTERMEDIATE are used only once, then how many meaningful words can be formed?

sol: 1st, 4th, 8th, & 11th - I, E, D and T. Meaningful words are :- EDIT, TIED, TIDE, DIET.

Q.3 Arrange them according to their position in the dictionary.

(A) Delete (B) Defer (C) Demean (D) Delirium (E) Delude

sol: Defer, Delete, Delirium, delude, demean.

Q.4 How many such pairs of letters are there in the word INSTRUCTION which have as many letters between them in the word as in the English alphabet?

sol:

Ans - Four

Q.5 If the 1st and 3rd letter in the word CORPORATE were interchanged, also the 4th & 6th letters and the 7th and 9th letters, what will be the 7th letter from the left?

sol: CORPORATE
R O C R A P E T A

Ans - Left

Q.6 If the 1st three letters of the word COMPREHENSION are reversed, then the last three letters are added and then the remaining letters are reversed and added, then which letter will be exactly in the middle?

sol: COMPREHENSION → (COM) (PREHENS) (ION)

Ans → S

M O C I O N S N E H E R P

(question 7 to 11)

find out how many such pairs of letters are there in the given word each of which has as many letters between them in the word as in the English Alphabet.

Q.7 BRIGHTER

sol: Three

Q.8 CREATION

sol: TWO

Q.9 OVERWHELM

sol: Four

Q.10 SEQUENTIAL

sol: 4

Q.11 ADVERTISEMENT

sol: 5

Q. 12 The position of how many letters in the word BRAKES remains unchanged when they are arranged in alphabetical order?

sol: BRAKES
 ABEKRS

Ans → K & S

(13-16) study the following arrangement carefully and answer the question given below -

3 D K \$ P 27 # 4 J T H 9 * F M S 20 % 7 8

Q. 13 How many such numbers are there in the above arrangement, each of which immediately followed by a symbol and preceded by a letter?

sol: 3 D K \$ P 27 # @ 4 J T H 9 * F M S 20 % 7 8, One.

Q. 14 9F DP : 70 :: 7@ : ?

sol: Here D & P are 2nd & 5th elements respectively from the left end, where 7 & 0 are 2nd & 5th elements respectively from the right end.

Q. 15 How many symbols are there in the above arrangement each of which is immediately followed by a letter but not preceded by a letter?

sol: One.

Q. 16 which of the following will according to the above question

KPD, 7@2, JH4, *M9

(A) 4T@ (B) JH@ (C) 4T# (D) JH4

sol: KPD ⁺⁴ 7@2 ⁺⁴ JH4 ⁺⁴ *M9

(17-18) each of the following, five words are given which of them will come in the middle if all them are arranged alphabetically as in a dictionary.

- Q. 17 (A) People (B) Penitent (C) Pepsin (D) Penury
(E) Penalty

sol: Penalty, Penitent, Penury, People, Pepsin

- Q. 18 (A) colon (B) collective (C) colloid (D) collotype
(E) college

sol: Collective, College, Colloid, Collotype, Colon.

(19-20) Arrange them alphabetical order.

- Q. 19 (A) Ascetic (B) Astrology (C) Anarchy (D) Anecdote

sol: Anarchy, Anecdote, Ascetic, Astrology.

- Q. 20 (A) Inexplicit (B) Inexcusable (C) Inevitable (D) Infallible

sol: Inevitable, Inexcusable, Inexplicit, Infallible.

Exercise :- (1-3) Find out how many such pairs of letters are there in the given word of each has as many letters between them in the word as in the English Alphabet.

Q1 VALEDICTION

sol: 3.

Q2 FRUSTRATION

sol: 4.

Q3 PERSONIFY

sol: 3.

Exercise :- (4-6) Arrange them according to the alphabet series.

Q.4 (A) prey (B) pyre (C) prejudice (D) preparation

sol: Prey
prejudice
Preparation } , Pyre

Now is how to arrange Prey, Prejudice, Preparation Consider their IVth letter and arranged them according to alphabet series.

**Q.5 (A) obsessive (B) obscene (C) oblivion
(D) obsolete**

sol: Consider their IIIrd letter.
(l comes before 'r')

Ans: Oblivion, Obscene, Obsessive, Obsolete.

Q. 6 (A) Enmity (B) Enormity (C) Errand (D) Errant

sol :

Enmity } — Consider their IIIrd letter
 Enormity } { 'm' Comes before 'o' }

Errand } — Consider their last letter
 Errant } { 'd' Comes before 't' }

Ans: Enmity, Enormity, Errand, Errant.

Q. 7 If 1st and 4th letter in the word EGALITARIAN were interchanged and also 5th & 6th letters and 9th & 11th letters, what will be the 9th letter from the right?

sol : E G A L I T A R I A N
 L G A E I T A R N A I
 Ans → A ← Right

Q. 8 If the alphabets in the word EXHAUST are arranged according to the alphabet series. How many alphabets will remain at the same position?

sol : E X (H) A U S T
 A E (H) S T U X

Ans → H

(9-10) In each of the following, five words are given. Which of them will come in the middle if all of them are arranged alphabetically.

Q. 9 (A) Flair (B) Flare (C) Flaunt (D) Illegal
 (E) Illicit

sol : Flair } Consider their IVth letter
 Flare } { 'i' Comes before 'n' & 'n' Comes before 'u' }
 Flaunt }

Illegal } Consider their IVth letter :
 Illicit } { 'e' Comes before 'l' } :

Ans → Flair, Flare, Flaunt, Illegal, Illicit.

Q. 10 (A) Apprise (B) censor (C) Appraise (D) canon
 (E) cannon

sol : Apprise } Consider their Vth letter
 Appraise } { 'a' Comes before 'i' }
 Censor }
 Canon } - Consider their IVth letter
 Cannon } { 'n' Comes before 'o' }

Ans → Appraise, Apprise, Cannon, Canon, Censor.

Q. 11 If the 2nd half of the alphabet is written in reverse order then find out the letter that would be 20th letter from the left.

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

Left →
Ans → T

Q. 12 The position of how many letters in the word SOULMATE remain unchanged when they are arranged in alphabetical order?

sol : S O U L M A T E
 A E L M O S T U
 Left →

Ans → T (i.e. T)

Q. 13 EZM, GXO, IVQ, , MRU

sol : E Z M , G X O , I V Q , K T S , MRU
 5 26 13 7 24 15 9 22 17 13 18 24
 +2 -2 +2 -2 -2
 +2 -2 +2 -2 +2

Ans → KTS

Q. 14 which letter is 9th from left of 12th from right in English alphabet?

sol: Rules -

L + L	= (-)
R + R	= (-)
L + R	= (+)
R + L	= (+)

So $L + R = 9 + 12 = 21^{\text{st}}$ (From Right)

Ans → 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

← Right

Q. 15 if English alphabet is written in reverse order then which letter is 6th at right of 11th from right?

sol: $R + R = 11 - 6 = 5^{\text{th}}$ (From Right)

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

← Right

Ans → E

Q. 16 PWD, , RYJ,

sol: P W D, Q X G, R Y J, S Z M

$\begin{matrix} 16 & 23 & 4 & & 17 & 18 & 7 \\ \text{P} & \text{W} & \text{D} & , & \text{Q} & \text{X} & \text{G} \\ \text{---} & \text{---} & \text{---} & & \text{---} & \text{---} & \text{---} \\ & +1 & & & +1 & & +3 \end{matrix}$

$\begin{matrix} 18 & 25 & 10 & & 19 & 26 & 13 \\ \text{R} & \text{Y} & \text{J} & , & \text{S} & \text{Z} & \text{M} \\ \text{---} & \text{---} & \text{---} & & \text{---} & \text{---} & \text{---} \\ & +1 & & & +1 & & +3 \end{matrix}$

Ans → Q X G, S Z M

(17-18) Arrange them alphabetically as in a dictionary.

Q. 17 (A) Reign (B) Replica (C) Rein (D) Reigne

sol :

First Consider their IIIrd letter then Regime will come first.

Reign } - Consider their IVth letter
Rein } - { 'g' comes before 'n' }

Ans → Regime, Reign, Rein, Replica

Q. 18 (A) scum (B) scrap (C) shirk (D) scant

sol : Scant, Scrap, Scum, Shirk

Consider their IIIrd letter then—

Scant will come first - Shirk will be the last (by IInd letter).

CODING - DECODING

Introduction:-

A particular code or pattern that is used to express a word in English language as a different word or in different form. The coded word itself does not make any sense unless we know the pattern or code that has been followed.

Note:-

In order to solve these type of questions we have to learn the place value from A to Z. Like A have place value 1.

Example:-

If the coding for 'BRASS' is 'CTBUT' what will be the coding of 'AMIT'?

Solution ⇒

+1	+2	+1	+2	+1	
B	R	A	S	S	} →
↓	↓	↓	↓	↓	
C	T	B	U	T	

+1	+2	+1	+2	[∴ Alternate +1 & +2]
A	M	I	T	
↓	↓	↓	↓	
B	O	J	V	

Ans :- BOJV

Example:-

In a certain code language, if the word 'PARTNER' is coded as 'OZQSMDQ' then what is the code for the word 'SEGMENT' in that language?

- (A) TFHNFOU (B) RDFLDMS
 (C) RDELDMS (D) RDFEDNS

Solution:-

<u>Word</u> :-	-1	-1	-1	-1	-1	-1	-1
	P	A	R	T	N	E	R
	↓	↓	↓	↓	↓	↓	↓
code →	O	Z	Q	S	M	D	Q

sly

<u>Word</u> :-	-1	-1	-1	-1	-1	-1	-1
	S	E	G	M	E	N	T
	↓	↓	↓	↓	↓	↓	↓
	R	D	F	L	D	M	S

Example:- If Code for

UNDER → 6152 @

DEAF → 52#7

What is the code for FRAUD?

- (a) 7@#65 ✓ (b) 765@#
 (c) 7#65 (d) #765

Solution :-

U N D E R → 8 1 5 2 @

D E A F → 5 2 # 7

F R A U D → 7 @ # 6 5

 → solution

{ F → 7
 R → @
 A → #
 U → 6
 D → 5 }

Example :-

If the code for.

hope to see you → re so na di

Please come to see the party → fi ga na di ki zo.

hope to come → di so ga

see you the party → re fi zo na

solution :-

In order to solve the question we have to find the common words in both left & right.

hope is in 1st & 3rd line → so

to → di

see → na

you → re

the party → ofi/zo [it can be anything]

Come → ga.

hope → so