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IBPS-RRB

Office Assistant and Officer Scale - 1

REGIONAL RURAL BANKS

Volume – 3

Reasoning

SIERRA INNOVATIONS

IBPS – RRB

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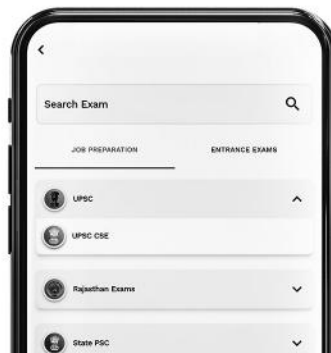To install the app, scan the QR code with your mobile phone camera or Google Lens

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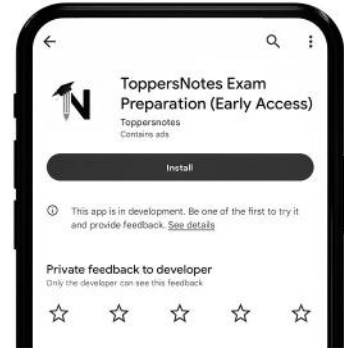
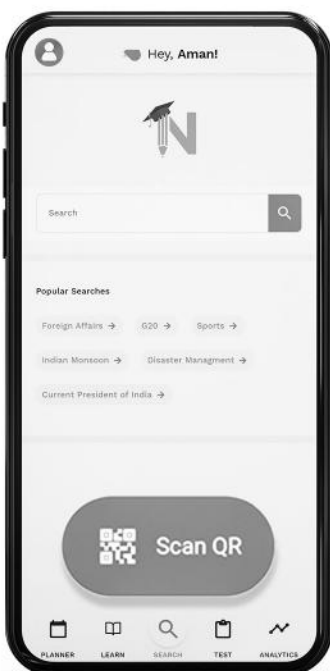**Download the app** from Google play store

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ALPHABET TEST

Alphabet :-

There 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 (A to M) →
$$\begin{array}{cccccccccccccc}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 \\ A & B & C & D & E & F & G & H & I & J & K & L & M \to 13\end{array}$$

Reverse of the letters

Second half (N to Z) →
$$\begin{array}{cccccccccccccc} Z & Y & X & W & V & U & T & S & R & Q & P & O & N \to 13 \\ 26 & 25 & 24 & 23 & 22 & 21 & 20 & 19 & 18 & 17 & 16 & 15 & 14\end{array}$$

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'

Vowels →

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).

r example :- Which is the 7th letter from the left of the 10th letter from letter from left in english alphabet ?

Solⁿ:
Left   left

$$10 - 7 = 3rd\ letter$$

$$3rd\ letter = C$$

• 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)

example :-(a) which will be the 8th letter at the right from 12th letter from left.

Solⁿ:
Left + Right

$$12 + 8 = 20th\ letter = T$$

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

b) which will be the letter in english Alphabet, which is 7th at left from 12th from right.

^l: Here for 2 different sides we add sequence no. of the letters

i.e Right + left

$$12 + 7 = 19$$

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

$$27 - 19 = 8th$$

8th letter from left side is 'H'

* $\underline{=}$ When position of letter is asked from right side (Z), we minus from 27. $\underline{=}$

Like 1. R is 18 from left side then what is the position from right side.

Sol. $$27 - 18 = 9$$

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.   Right — Right
$$22 - 6 = 16$$

So, 16th letter from right means

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

K is the 11th letter from left.

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

Sol.   Right — Right
$$19 - 10 = 9$$

So, $$27 - 9 = 18 = R$$

In short

$\underline{\underline{\;}}$ → At the right from right ⎤
At the left from left ⎦ (−)

At the left from Right ⎤
At the right from left ⎦ (+)

↳ 2. **When a series of letter symbol digit is given :**

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

R4PIJMA3%T∂☺∪KSVIW\$Y2BE6#9DH∂G✱ZN

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

Sol^n.
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 ?

Sol^n. Answer = one

Q 3 % → not letter.
↓ ↓
Consonant Number

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

Order 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.

Sol": 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?

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

we have 3 letter 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 $\rightarrow$ MZ $\rightarrow$ 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 N

Now $\overset{L}{8}$ + $\overset{R}{13}$ = 21

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

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 = 16th from Right

So 27 — 16 = 11th from left = K

16th from Right = 11th 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 $\longrightarrow$ Z

8th from left = H 9th from the right $(27-9=18=R)$

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

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 #

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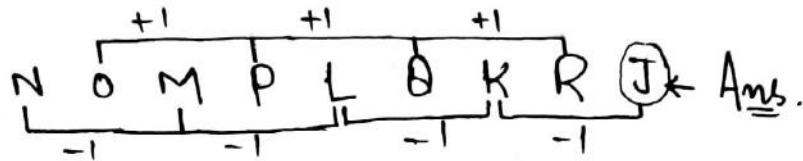
Q.5 How many pairs of letter are there. in the word 'HORIZON' which have as many letters between them in the word as in the English Alphabet?

sol:

 = 4 pairs of letters.
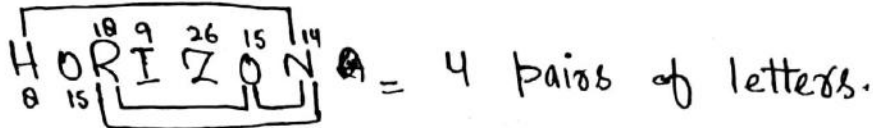
Q.6 what is the next letter of the following sequence N, O, M, P, L, Q, K, R, ?

sol:

N O M P L Q K R (J) ← 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 (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 →

shout , skirt, slaughter , specify , straight

middle word = Slaughter.

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

sol:

NAMO = 14 + 1 + 13 + 15 = 43 * 4 = 172

OM = 15 + 13 = 28 × 2 = 56

SHIVAY = 19 + 8 + 9 + 22 + 1 + 25 = 84 × 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?

JP©, E*Q, WI%, 9V@, I#8

sol:

$$J \underset{+2}{P} \underset{-4}{C} \qquad E \underset{+2}{*} \underset{-4}{Q} \qquad W \underset{+2}{I} \underset{-4}{\%} \qquad 9 \underset{+2}{V} \underset{-4}{@} \qquad I \underset{-2}{\#} \underset{+16}{8}$$

Ans I # 8

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 = 19ᵗʰ element from the right end = Q.

Q.12 How many such number are these 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 Ⓦ 6 % H * 3 E $ Q 8 P I J

Ans: W

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

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

9

coding is the process of assigning a code to something for classification or identification.

Decoding is the reverse process of coding. Here coded message is deciphered.

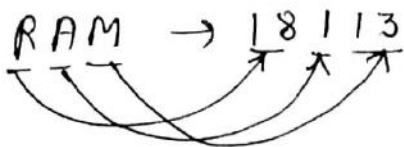There are three methods which are mostly used in coding and decoding.

a) According to place value

b) opposite letter relation / F-26 rule

c) Cyclic use / F-13 rule.

a) According to place value:

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

Que If E = S , RAM = 18113 then SHYAM = ?

Sol^n 5 is place value of E

RAM → 18 1 13   So SHYAM → 19 8 25 1 13

Que If ON = 15 14 , OLD = 15 12 4 then SING = ?

Sol^n

O N → 15 14

OLD → 15 12 4

SING → 19 9 14 7

b) Opposite letter ruletion / formula - 26 rule :—

A	B		C		D	E	F	G	H	I	J	K	L	M
Z	Y		X		W	V	U	T	S	R	Q	P	O	N
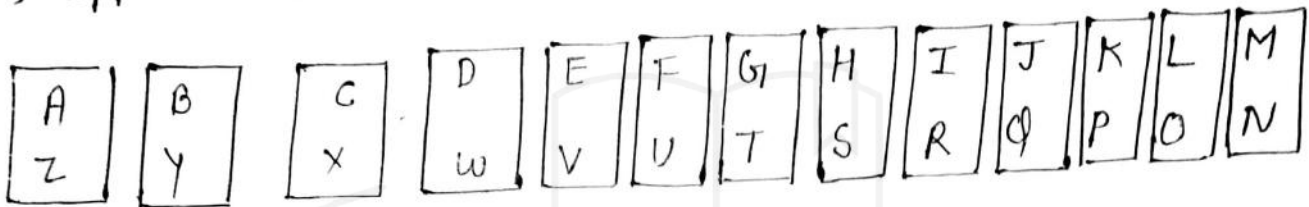
Here in this method Sum of opposite letters be 27

like :

$A \to 1$ $D \to 4$ $J \to 10$

$\dfrac{Z \to 26}{27}$ $\dfrac{W \to 23}{27}$ $\dfrac{Q \to 17}{27}$

If we are given G and asked opposite letter
then place value of G is 7
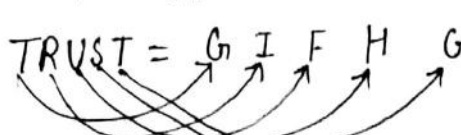
opposite letter 27 - 7 = 20 → T (on place value 20)
this comes

Que If Rust = 9 6 8 7 , P = 11 then Trust = ?

Sol^n

R U S T   P   ∵ Here place values are given
↓ ↓ ↓ ↓   ↓   of opposite letter so
9 6 8 7   11
(I) (F) (H) (G)   (K)   TRUST = G I F H G = 7 9 6 8 7

Que If K=16, PEN = 11 22 13 then CAT = ?

Sol^n   K → P = 16   PEN → K Y M = 11 22 13

SO

CAT → X Z G = 24 26 7

c) Cyclic use/ formula -13 :

Here difference of opposite number and the number should be 13.

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

like A = 1
then
cyclic opposite = 1+13
= 14 = N
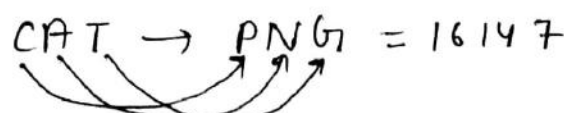
F = 6
then
cyclic opposite = 6 +13
= 19 = S

Que If C=16, DOG = 17 220 then CAT = ?

Sol^n

C → P = 16   DOG → Q B T = 17 2 20

CAT → P N G = 16 14 7

Que If L = 25   HOME = 2122618   then PLUS = ?

Sol^m   L → Y = 25

HOME → UBZR = 21 22 6 18

PLUS → CYHF → 3 25 86

→ There are other criteria, on the basis of that coding is done.

• **PLUS (+)** :

Like:

+1	+1	+1	+1
+1	+2	+3	+4
+4	+3	+2	+1
+1	+2	+1	+2	... etc

Que If CODING = DPEJOH then DECODING = ?

Sol^m   C O D I N G → D P E J O H

DECODING → E F D P E J O H

Que If MUMBAI = SZQECJ then JAIPUR = ?

Sol^m   M U M B A I → S Z Q E C J

JAIPUR → PFMSWS

• Minus (-):
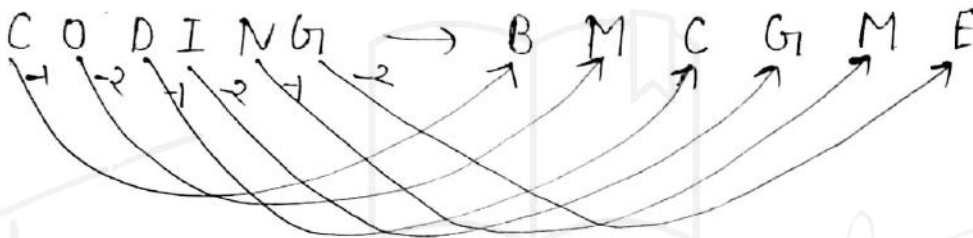
Like: -1   -1   -1   -1   -1
         -2   -1   -2   -1   -2
         -2   -2   -2   -2   -2
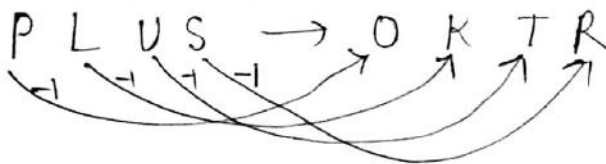   -5   -4   -3   -2   -1 .... etc.

Que If CODING = BMCGME then DECODING = ?

Som

C O D I N G → B M C G M E

DECODING → CCBMCGME

Que If PLUS = OKTR then LESS = ?

Som

P L U S → O K T R

LESS → KDRR

• PLUS - Minus or Minus - plus:

    +1   -1   +1   -1
    +1   -2   +3   -4
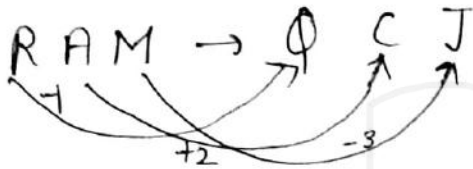   +1   -2   +1   -2   etc

Que If SHYAM = TFZYN then BABLU = ?

Sol^m

S H Y A M → T F Z Y N

BABLU → CYCJV

Que If RAM = QCJ then TOY = ?

Sol^m RAM → Q C J

TOY → SQV

• **Miscellaneous :**

Que If SUM = 53 then EAT = ?

Sol^m SUM → (19 + 21 + 13) = 53

EAT → (5 + 1 + 20) = 26

Que IF SUM = 28 then EAT = ?

Sol^m

S U M
↓ ↓ ↓
H F N → (8 + 6 + 14) = 28

E A T
↓ ↓ ↓
V Z G → (22 + 26 + 7) = 55