

Coding and Decoding

Coding is a method of transmitting a message between the sender and the receiver without a third person knowing it.

The coding and decoding test is set up to judge the candidate's ability to decipher the law that codes a particular message and break the code to reveal the message. In these questions, the candidate is required to find out the original words from code values assigned to the word.

A	B	C	D	E	F	G	H	I	J
1	2	3	4	5	6	7	8	9	10

K	L	M	N	O	P	Q	R	S	T
11	12	13	14	15	16	17	18	19	20

U	V	W	X	Y	Z
21	22	23	24	25	26

F R E E Z E
 E Q D D Y D

REVERSE

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

TYPE I: LETTER CODING: In these types of questions, code values are assigned to a word in terms of the alphabet and the requirement may be.

Case I: Coding: To form the code for the given word. TAP: SZO ::

EXAMPLE 1 If in a certain language, TAP is coded as SZO, then how will FREEZE be coded ?

(a) ESDFYF

(b) GQFDYF

(c) EQDFYG

(d) EQDDYD

Solution Clearly, each letter in the code is the alphabet before the corresponding letter in the word.

S	Z	O
↑		
T	A	P

Thus, in FREEZE, F is coded as E, R as Q, E as D and Z as Y. So, the answer is (d).

Case II: Decoding: To find the word from the given code. In decoding, instead of finding a code for a given word, you have to find the word from the given code.

EXAMPLE 4 If in a certain code, ALMIRAH is written as BNPMWGO, which word would be written as DNRWLUA?

(a) COSGOLT (b) TOGSOLC (c) TOGCLOS (d) CLOSGOT (e) COLSTOG

Solution In the code, the first letter is one place ahead, the second letter is two places ahead and so on than the corresponding letter in the word.

So apply the same in the reverse direction to the given code so as to find the word. Therefore the answer is (d).

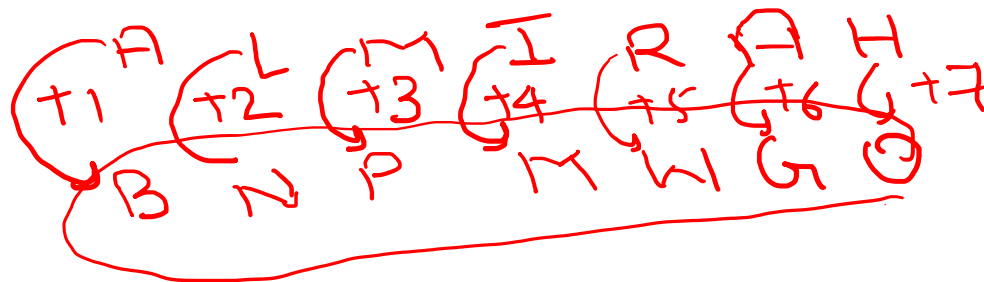


Diagram illustrating the decoding process for the code DNRWLUA. The letters of the code are written above the corresponding letters of the word CLOSGOT. Arrows indicate the reverse shift: D to C (-1), N to L (-2), R to O (-3), W to S (-4), L to G (-5), U to G (-6), and A to O (-7).

TYPE II: NUMBER CODING: In these type of questions, either numerical code values are assigned to a word or alphabetical code values are assigned to numbers. You have to analyse the code as per the directions.

EXAMPLE 7 If in a certain code language SISTER is coded as 535301, UNCLE as 84670 and BOY as 129, how will SON be coded in that code language?

- ✓ (a) 524 (b) 643 (c) 353 (d) 846 (e) None of these

Solution: Clearly, in the given code, the alphabets are coded as:

S	I	T	E	R	U	N	C	L	B	O	Y
5	3	3	0	1	8	4	6	7	1	2	9

So, S is coded as 5, O is coded as 2 and N is coded as 4. Hence correct code is 524. Therefore, the answer is (a).