

Coding Decoding

Coding decoding

A coding-decoding is a type of code which need to be deciphered to get the final message. The codes are based on various principles and patterns. In order to identify the pattern, we will consider all possible arrangements or order that will provide the methodology to solve the coding-decoding questions.

Some common types of relationships which are asked in the exam,

1. Opposite pair letter codes
2. Letter coded with some other letter
3. Substitution
4. Identify message from codes
5. Numerical values assigned to words
6. Letters interchanging with each other
7. If then coding
8. Meaning of the words changed
9. Addition of the place values of the letters

Below we are going to share the type of series with examples to explain it,

Opposite pair of letters

1. If, in a certain code, EDITION is written as VWRGRLM, which word would be coded as SLMVHGB ?

- a. HAUGHTY
- b. HONESTY
- c. EDITORS
- d. AMNESTY

Ans. D

Solution –

The letters of the word are coded with the opposite letter.

As,

E D I T I O N
V W R G R L M

Similarly,

S L M V H G B
H O N E S T Y

Hence, the correct option is B

Letter Coded with some other letter

2. In a certain code language, CERTAIN is written as DFSUBJO, then in the same code language, SUMMER will be written as?

- a. TUNMFS
- b. TVNNFS
- c. TVNNFT
- d. RVNNFS

Ans. B

Solution –

As,

C	E	R	T	A	I	N
↓ +1	↓ +1	↓ +1	↓ +1	↓ +1	↓ +1	↓ +1
D	F	S	U	B	J	O

Similarly,

S	U	M	M	E	R
↓ +1	↓ +1	↓ +1	↓ +1	↓ +1	↓ +1
T	V	N	N	F	S

Hence, option B is the correct response.

Substitution

3. If 'jk su mo' stands for 'Nation and Kashmir', 'mo zu aq' stands for 'Nation or Ladakh' and 'hy mo se' stands for 'United Nation Speech', which word stands for 'Kashmir'?

- a. Jk
- b. Su
- c. either jk or su
- d. zu

Ans. C

Solution –

'jk su mo' = 'Nation and Kashmir' _____ (1)

'mo zu aq' = 'Nation or Ladakh' _____ (2)

'hy mo se' = 'United Nation Speech' _____ (3)

'Nation' is common in all, thus

'Nation' = mo

Code of 'Kashmir' = either 'jk or su'

Hence, option C is the correct answer.

Identify message from codes.

4. If " @ & % ! " is the code for DREAM and " @ 97 # " is the code for DUKE, then what is the code for KUMAR?

- a. 7 # ! % &
- b. 79 ! % @
- c. 79 ! # &
- d. 79 ! % &

Ans. D

Solution –

Code corresponding to each letter:

D-@	Therefore, code for
R-&	K-7
E-#	U-9
A-%	M-!
M- !	A-%
K-7	R-&
U-9	

Answer is 79!%&.

Numerical values assign to words

5. In a code language, YOGHURT is written as 251578211820. How will DEVELOP be written as in that language?

- a. 45225121516
- b. 45225111516
- c. 45225121515
- d. 45215121516

Ans. A

Solution –

YOGHURT = 251578211820

The place value of English alphabet is written here.

Like

A = 1 , B = 2, C = 3, _____ z = 26

Similarly

DEVELOP = 45225121516

Hence, option (A) is the correct answer.

6. If Q = 10 and FAX = 50, then XEROX = ?

- a. 45
- b. 46
- c. 49
- d. 50

Ans. C

Solution –

10 is the place of Q if we count from Z i.e. from opposite side.

Similarly for FAX = $21+26+3 = 50$

So, XEROX = $3+22+9+12+3 = 49$

Letters interchanging with each other

7. In a code language, SELECTION is written as ESELDITNO. How will NOSTALGIA be written in the same language?

- a. ONTSBGLAI
- b. ONTSZGLAI
- c. NOTSBLGAI
- d. ONSTBGLAI

Ans. A

Solution –

S	E	L	E	C	T	I	O	N
↘	↗	↘	↗	+1	↘	↗	↘	↗
E	S	E	L	D	I	T	N	O

Similarly,

N	O	S	T	A	L	G	I	A
↘	↗	↘	↗	+1	↘	↗	↘	↗
O	N	T	S	B	G	L	A	I

Hence, option (A) is correct

If then coding

8. If $9 * 7 * 5 = 72975$ & $4 * 8 * 6 = 6486$ then find $7 * 3 * 5 = ?$

- a. 82559
- b. 34335
- c. 14527
- d. 47865

Ans. B

Solution –

$9 * 7 * 5$ is operated as last two numbers are written as it is, but first number is cubed.
cube of 9 = 729 and 75 makes 72975

$4 * 8 * 6 = 6486$

$7 * 3 * 5 = 34335$

Hence, option B is the correct response.

Meaning of the words changed

9. In a certain code language, "pink" is written as "green", "green" is written as "yellow", "yellow" is written as "red", "red" is written as "white" and "white" is written as "indigo", then in the same code language what is the colour of blood?

- a. White
- b. Red
- c. Green
- d. Yellow

Ans. A

Solution –

Pink \Rightarrow Green

Green \Rightarrow Yellow

Yellow \Rightarrow Red

Red \Rightarrow White

White \Rightarrow Indigo

Since the color of Blood is RED and RED is written as **White**.

Hence, the correct option is A.

Addition of the place value of the letters

10. If each of the letters in the English alphabet is assigned an even numerical value beginning A = 2, B = 4 and so on, what will be the total value of the letters for the word MODERN?

a. 126

b. 64

c. 138

d. 140

Ans. C

When the letters of English alphabet is assigned an even numerical value, then letters of the given word i.e. MODERN may be represented as follows:

$$M \Rightarrow 13 \times 2 = 26$$

$$O \Rightarrow 15 \times 2 = 30$$

$$D \Rightarrow 04 \times 2 = 08$$

$$E \Rightarrow 05 \times 2 = 10$$

$$R \Rightarrow 18 \times 2 = 36$$

$$N \Rightarrow 14 \times 2 = 28$$

$$\text{Total value of the letters for word MODERN} = 26 + 30 + 08 + 10 + 36 + 28 = 138$$

Hence, C is the required answer.