

What is Coding-Decoding?

In a Coding-Decoding question, letters, numbers or words are changed into a secret code using a fixed rule. You are given one or more coded examples as a clue - work out the rule they follow, then apply that same rule to a new word to find its code.

PART 1 · LETTER CODING

Q1. Shift the Letters Forward

CODE CLUE

CAT → DBU

If CAT is coded as DBU, how will DOG be coded in the same language?

ANSWER OPTIONS

EPH

(A)

EPI

(B)

FQH

(C)

DOH

(D)

Answer: (A)

Each letter of CAT has moved 1 step forward in the alphabet: C → D, A → B, T → U. Applying the same +1 shift to DOG gives D → E, O → P, G → H, so DOG is coded as EPH.

Q2. Shift the Letters Backward

CODE CLUE

FISH → DGQF

If FISH is coded as DGQF, how will LION be coded in the same language?

ANSWER OPTIONS

JGML

(A)

JGMK

(B)

KHNM

(C)

JFML

(D)

Answer: (A)

Each letter of FISH has moved 2 steps backward in the alphabet: F → D, I → G, S → Q, H → F. Applying the same -2 shift to LION gives L → J, I → G, O → M, N → L, so LION is coded as JGML.

Q3. Opposite Letter Code

CODE CLUE

A ↔ Z, B ↔ Y, C ↔ X, and so on

In this code, every letter is replaced by the letter exactly opposite to it in the alphabet. How will BAD be written in this code?

ANSWER OPTIONS

YZW

(A)

ZYX

(B)

XYZ

(C)

YZX

(D)

Answer: (A)

Pairing letters from opposite ends of the alphabet: B pairs with Y, A pairs with Z, and D pairs with W. So BAD becomes YZW, keeping the letters in the same order as the original word.

PART 2 · NUMBER & SYMBOL CODING

Q4. Number Coding

CODE CLUE

A=1, B=2, C=3, ... Z=26

If every letter is coded by its position in the alphabet, what is the code for the word BAG?

ANSWER OPTIONS

2, 1, 7

(A)

2, 1, 6

(B)

1, 2, 7

(C)

2, 7, 1

(D)

Answer: (A)

B is the 2nd letter, A is the 1st letter, and G is the 7th letter of the alphabet. Keeping them in the same order as the word, BAG is coded as 2, 1, 7.

Q5. Word Substitution Code

CODE CLUE

'red' → 'blue'
'blue' → 'green'
'green' → 'yellow'

In this code language, what is the colour of grass called?

ANSWER OPTIONS

green

(A)

blue

(B)

yellow

(C)

red

(D)

Answer: (C)

Grass is normally green in colour. But in this code, 'green' is called 'yellow'. So the colour of grass is called yellow in this code language.

Q6. Verify the Rule, Then Apply It

CODE CLUE

PEN → RGP
BAG → DCI

Using the same rule shown by both examples, what is the code for CAT?

ANSWER OPTIONS

ECV

(A)

EDV

(B)

DCV

(C)

ECW

(D)

Answer: (A)

In both examples, every letter has moved 2 steps forward: P → R, E → G, N → P and B → D, A → C, G → I. The same +2 rule applied to CAT gives C → E, A → C, T → V, so CAT is coded as ECV.

Exam Tip

Compare each letter of the original word with its coded letter, one position at a time, to find the shift or pattern being used. If two example pairs are given, check that the SAME rule works for both before applying it to the new word.