AILET

Understanding Coding-Decoding for CLAT 2020

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Coding decoding is one of the most widely asked topics in reasoning section initially there used to be a different type of questions that are asked in the examination while these days as the level of examination is increasing new types of questions are added in the topic to make the overall paper challenging.

We will discuss the basic approach and concept related to the coding and decoding and discuss each type of question from this topic.

CODING AND DECODING

Coding is a method of transmitting a message between the sender and the receiver which the third person cannot understand or comprehend. Coding is a process used to encrypt a word coma a number in a particular code or pattern based on the set of rules.

Decoding is a process of decrypting the pattern into its original form the given codes. Thus, coding and decoding test is given to judge the candidate’s ability to decipher the rule which is applied for coding a particular message and break the code to reveal the message.

Approach to solve the questions

- Detect the rule in which the alphabet number or codes follow.
- Observe the codes alphabets are numbers given in the direction of questions.
- Figure out the rules followed by the given arrangement of Codes, number, alphabets, words.
- Try to find the pattern or sequence it follows they could be in ascending or descending order, arranged in an alternative fashion and all other ways as well.

Some important types of coding-decoding questions.

Type 1

The alphabet in the words is directly replaced by some number or symbols.

Example. If MANGO is coded as 12478 and GUAVA is coded as 76292, Goa will be coded as?

Solution: in the statement code for mango and guava are given which will help us to get the code for each of the alphabet of for word Goa.

- M-1
- A-2
- N-4
- G-7
- O-8

Similarly

- G–7
- U-6
- A-2
- V-9
- A-2

GOA will be coded as

- G-7
- O-8
- A-2

GOA-782

TYPE 2

The alphabets are replaced by some other alphabets in a given word and thus a coded word is obtained. The alphabets replacement occur according to some pattern.

Example: in a certain code EXAMPLE is written as FYBNQME , then WATER will be coded as?

Solution: There is always a concept behind the code which we need to find out looking at the question we can see that all the alphabets of EXAMPLE are increased by +1.

- E+1=F ,
- X+1=Y
- A+1=B

- M+1=N
- P+1=Q
- L+1=M
- E+1=F

Similarly, WATER is written as

- W+1=X
- A+1=B
- T+1=U
- E+1=F
- R+1=S

WATER = XBUFS

TYPE 3

Sometimes the coding is not at alphabet level while it is given directly for the words one word is replaced by some other words

Example: if RED is called WHITE, WHITE is called BLUE, BLUE is called GREEN and GREEN is called BLACK then what will be the colour of blood?

1. RED
2. WHITE
3. GREEN
4. BLACK
5. BLUE

Solution: logically the colour of blood should be RED but we have to write the code for the word red which is WHITE so the WHITE is the answer from the given option(b)

TYPE 4

The code for the various digit is given in the mixed form followed by some rules this consists of series of digits and the rules specify the modification in the digit while the writing of the coding for the given series. we have to check all the rules while writing the code for the given series of digits.

Directions: in such questions, a group of digits is given followed by four combinations of letters and symbols.

Digits are to be coded as per the scheme and condition are given below you have to find out which of the four combinations correctly represents the group of digit serial number of that combination is your answer if none of the combinations is correct, your answer is none of these.

DIGIT – 5 1 2 8 6 3 9 0 4 7

CODE – H $ T A U %# FR @

Question 1 what will be the code of 4097?

1. H$AT
2. RF#@
3. T $#@
4. @T $#

Solution: b 4 is coded as R,0 is coded as F, 9 is coded as #, and 7 is coded as @ (RF#@)

2 what will be the code of 1234?

1. H $ U %
2. $ T @ R
3. $ T % R
4. T # R H

Solution: c. 1 is coded as $, 2is coded as T, 3 is coded as %, 4 is coded as R ($T %R)

Important Points to remember

- We have to translate the code according to the given information in the question.
- We have to read the given information properly and decode the codes as the question demands.
- We have to short the patterns of coding and decoding from the questions or from the given information.
- We have to check all the codes carefully and try to make in the simple form.

- Try to pick up on the possible combination of two or three or entire message that can be analysed from the codes.

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