

## Coding-Decoding

### Objective

- Students will develop the ability to understand the logic that codes a particular message to read the message.

### Introduction

A code means arrangement of letters. Therefore, coding is a method of transforming any instruction from the given form to the required form.

### Coding

A particular code pattern is used to express a word in English language to express it as a different word. The coded word itself does not make any sense unless we know the code, i.e. unless we know the pattern or code that has been followed.

### Decoding

Decoding helps in tracing out the actual meaning of a coded letter/word/ sentence.

### Types of Coding

1. Letter Coding
2. Number Coding
3. Substitution Coding
4. Sentence Coding
5. Symbols Coding

#### 1. Letter Coding

In these questions, code values are given to a word in terms of letters. A particular letter stands for another letter in letter coding.

#### Example 1

In a certain code language, TEACHER is written as VGCEJGT, then how will CHILDREN be written in that code language?

(a) ENAGITEV

(b) PGTFNKJE

(c) EJKNFTGP

(d) MGAETVIE

**Ans.** (c)

**Explanation:**

T	E	A	C	H	E	R
+2↓	+2↓	+2↓	+2↓	+2↓	+2↓	+2↓
V	G	C	E	J	G	T

**Similarly,**

C	H	I	L	D	R	E	N
+2↓	+2↓	+2↓	+2↓	+2↓	+2↓	+2↓	+2↓
E	J	K	N	F	T	G	P

Hence, answer is (c).

## 2. Number Coding

In these questions, either numerical code values are assigned to a word or alphabetical code values are assigned to numbers.

**Example 2:**

If in a certain code TERM is coded as 2345, SHAPE is coded as 67893, then what will be code for PASTE?

(a) 98632

(b) 98623

(c) 32689

(d) 23689

**Ans.** (b)

**Explanation:** The alphabets are coded as follows:

T	E	R	M	S	H	A	P
2	3	4	5	6	7	8	9

So, PASTE is coded as 98623.

## 3. Substitution Coding

In these types of questions, a particular word is assigned to a certain substituted name and a question is asked to be answered in that substituted name.

**Example 3:**

If Parrot is known as Peacock, Peacock is known as Swallow, Swallow is known as Pigeon and Pigeon is known as Sparrow, then what would be the name of National Bird of India?

- (a) Parrot                      (b) Peacock                      (c) Pigeon                      (d) Swallow

**Ans.** (d)

**Explanation:** We know that Peacock is the National Bird but here Peacock is assigned as Swallow. So, option (d) is correct.

#### 4. Sentence Coding

In these types of questions, a group of words will be coded.

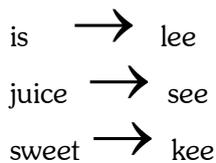
##### Example 4:

If 'drink fruit juice' is written as 'tee see pee', 'juice is sweet' is written as 'see kee lee' and 'he is intelligent' is written as 'lee ree mee'. What will be the code for 'sweet' in that code language?

- (a) see                      (b) kee                      (c) pee                      (d) lee

**Ans.**(b)

##### Explanation:



In first and second step we get the code of 'juice' which is 'see'. In the same manner, from second and third step we get the code of 'is' which is 'lee'. In the second step, the remaining word is "sweet" and the remaining code is "kee".

Hence, answer is (b).

#### 5. Symbols Coding

In these types of questions, either alphabetical code values are assigned to symbols or symbols are assigned to alphabets.

**Example 5:**

In a certain code 'TOME' is written as '@ \$ \* ?' and 'ARE' is written as '• £?' How can 'REMOTE' be written in that code.

(a) £ ? • \$ © ?

(b) @ ? \* \$ @ ?

(c) £ ? \* \$ @ ?

(d) None of these

**Ans.** (c)

**Explanation:**

From the data we have

T	O	M	E	A	R
↓	↓	↓	↓	↓	↓
@	\$	*	?	•	£

Hence, REMOTE is coded as £ ? \* \$ @ ?

So, (c) is the answer.