CODING – DECODING

INTRODUCTION

Most competitive exams have a dedicated section of Coding – Decoding in Reasoning or Mental Ability. Many of students
and readers find difficulty to solve questions based on Coding – Decoding in Mental Aptitude.

a) Observe alphabets or numbers given in the code keenly.
b) Find the sequence it follows whether it is ascending or
c) descending.
d) Detect the rule in which the alphabets/numbers/words follow. Fill the appropriate letter/number/word in the blank given.

CODING DECODING
A 'Code' is a system of conveying a message through signals. It is a method of sending a message between sender and the

receiver in such a way that only the sender and the receiver can know its meaning. However 'Coding' is done according a
certain pattern in the mind of the sender. Therefore, its meaning can be deciphered by a third person. Only if he carefully
studies this pattern . This process is called 'Decoding'. This capability is important in many fields of application.

APPROACH
There are many types of coding :
1. LETTER CODING
In such questions, code values are assigned to a word in terms of the alphabets. There are following types of letter coding.

Type 1
In this category, one word is coded according to a particular pattern and the candidate is asked to give the code letters for
another word following the same pattern of coding.
Example 1 : If MADRAS is coded as NBESBT. How is BOMBAY coded in that code?
Solution : We are given that MADRAS is coded as NBESBT. In which the word MADRAS is moved one step forward to
obtain the corresponding letter of the code that is M is coded as N, A is coded as B and so on. Therefore,

M A D R A S   N B E S B T
B O M B A Y   C P N C B Z

Type 2

Sometimes a full sentence may be coded and the candidates are asked to code a word bearing in mind that code. It is
possible that the code may nor follow the method of going farward or backward in the alphabetic sequence. Simply a
letter of the original sentence may be given a different letter as a code. While solving puzzle, you have to keep that
method in mind.

Example 2 : In a secrete way of writing , GANDHI WAS A GREAT LEADER OF INDIA is written as RUFZOJ SUV U RDTUB
QTUZTD EP JFZJU. Keeping in mind , pick the code for STRONG.

Solution : Since we are given that GANDHI WAS A GREAT LEADER OF INDIA is written as RUFZOJ SUV U RDTUB QTUZTD EP
JFZJU. Therefore,

S T R O N G   V B D E F R
Hence the code for STRONG is VBDEFR

2. LETTER AND NUMERICAL CODING

In these questions either numerical values are assigned to a word or alphabetical code values are assigned to the
numbers. The candidate is required to analyze the code according to the directions.

Example 3 : In a language A is coded as 1, B is coded as 2, ….. then find the code for FACE in that language.
Solution : Since we are given that In a language A is coded as 1, B is coded as 2, …..Therefore,

A	1
B	2
C	3
D	4 …………

Thus F is coded as 6, A is coded as 1, C is coded as 3, and E is coded as 5
Hence the code for FACE is 6135

3. SUBSTITUTION

In this section an object names are substituted with different object names. We should carefully trace the substitution and
answer given question. Some examples are given below:

Example 5 : 'Reds' are 'blues', 'blues' are 'whites', 'whites' are 'yellows', 'yellows' are 'oranges', 'oranges' are 'pinks', then
what is the colour of the sky?
Solution : We need to find the colour of the sky and we know that the colour of sky is blue but we are given that blues are
whites. So the colour of sky is white.

Example 6 : 'man is coded as 'woman', woman is coded as 'girl', 'girl' is coded as 'boy', 'boy' is coded as 'worker' then 6
years female is known as?
Solution : We know that 6 years female is girl, but we are given that 'girl' is coded as 'boy'. So the 6 year girl's will be 'boy'

CODING – DECODING

EXERCISE-

1. If in a certain code 'SEQUENCE' is as 'HVJFVMXV' then how will be written 'CHILDREN' in that code?
    (A) MVIWORSX   (B) XSRMWIVM   (C) XSROWIVM   (D) DSRMOWIV   (E) None of these

2. If in a certain code 'CGZ' is as 'XTA' then how will be written 'DFP' in that code?
    (A) WHK   (B) KUW   (C) WUK   (D) WUQ   (E) None of these

3. If in a certain code 'ABDH' is as 'ZYWS' then how will be written 'EFIL' in that code?
    (A) VUKO   (B) VUIO   (C) ORUV   (D) VOUR   (E) None of these

4. If in a certain code 'LION' is as 'ORLM' then how will be written 'TIGER' in that code?
    (A) ZRKVI   (B) GRTVI   (C) GRGVI   (D) GITVI   (E) None of these

5. If in a certain code 'BOYS' is as 'ACNPXZRT' then how will be written 'GIRL' in that code?
    (A) FHJHQSKM   (B) FHHJQSMN   (C) FHHJQRKM   (D) FHHJSQKM   (E) None of these

6. If in a certain code 'NOSE' is as 'OPPQTUFG' then how will be written 'ROSE' in that code?
    (A) STPQTUFG   (B) STQPTUFG   (C) STPQTUDF   (D) STQRTUFG   (E) None of these

7. If in a certain code 'MAYOR' is as 'NBBPS' & 'SUPREME' is as 'TVQIFNF' then how will be written 'HOUSE' in that code?
    (A) INFTF   (B) IPFRF   (C) IOVTE   (D) IPFTF   (E) None of these

8. If in a certain code 'ROSE' is as 'FHBA' & 'CHAIR' is as 'GCDEF' then how will be written 'SEARCH' in that code?
    (A) BDFAGC   (B) BADFGC   (C) BADGFC   (D) BAFDGC   (E) None of these

9. If in a certain code 'MATCH' is as 'NCWGM' & 'BOX' is as 'CQA' then how will be written 'NOTEBOOK' in that code?
    (A) OQWGIUVS   (B) OQWIGVUS   (C) OQWIGUVS   (D) OQWIGUSV   (E) None of these

10. If in a certain code 'ORAL' is as '3196' then how will be written 'WRITTEN' in that code?
    (A) 5529295   (B) 5522959   (C) 5992255   (D) 5522995   (E) None of these

11. If in a certain code 'KNOWLEDGE' is as '256535475' then how will be written 'GENERAL' in that code?
    (A) 7555193   (B) 7555931   (C) 7555913   (D) 7555139   (E) None of these

12. If in a certain code 'SINGLE' is as '66' then how will be written 'WINKLE' in that code?
    (A) 76   (B) 78   (C) 74   (D) 66   (E) None of these

13. If in a certain code 'TEN' is as '256' & 'SIXTY' is as '19827' then how will be written 'SIXTEEN' in that code?
    (A) 1982556   (B) 1982536   (C) 1928556   (D) 1982553   (E) None of these

14. If in a certain code 'TABLE' is as 'VCDNG' then how will be written if code is 'EJCKT'?
    (A) CHEAR   (B) CHAIR   (C) CHIAR   (D) CHAER   (E) None of these

15. If in a certain code 'STABILISE' is as 'UVCDKNKUG' then how will be written if code is 'ETKEMGV'?
    (A) CIRCKET   (B) CRIKCET   (C) CRICKET   (D) CIRKCET   (E) None of these

16. If in a certain code 'PLUGH' is as 'OMTHG' then how will be written if code is 'ASNBC'?
    (A) BRODD   (B) BAROD   (C) BROOD   (D) BRADO   (E) None of these

17. If ORANGE is as BUTTER and BUTTER is as SOAP and SOAP is as INK and INK is as HONEY and HONEY is as ORANGE then what will be for CLOTH?
    (A) SOAP   (B) BUTTER   (C) ORANGE   (D) INK   (E) HONEY

18. If AIR is as WATER and WATER is as GREEN and GREEN is as DUST and DUST is as YELLOW and YELLOW is as CLOUD then where will be lived FISH?
    (A) WATER   (B) AIR   (C) YELLOW   (D) GREEN   (E) DUST

19. If AIR is as STONE and STONE is as WATER and WATER is as BRIDGE and BRIDGE is as RAIN and RAIN is as HOT is as COLD then what will be used for hand wash?
    (A) WATER   (B) STONE   (C) BRIDGE   (D) COLD   (E) RAIN

ANSWER SHEET

CODING-DECODING EXERCISE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
C	C	E	B	E	A	D	B	C	D	C	C	A	B	B	E	D	D	C