

PUZZLE 10

Many years ago in a small Indian village, a farmer had the misfortune of owing a large sum of money to a village moneylender. The moneylender, who was old and ugly, fancied the farmer's beautiful daughter. So he proposed a bargain. He said he would forgo the farmer's debt if he could marry his daughter. Both the farmer and his daughter were horrified by the proposal. So the cunning money-lender suggested that they let providence decide the matter. He told them that he would put a black pebble and a white pebble into an empty money bag. Then the girl would have to pick one pebble from the bag.

If she picked the black pebble, she would become his wife and her father's debt would be forgiven.

If she picked the white pebble she need not marry him and her father's debt would still be forgiven.

If she refused to pick a pebble, her father would be thrown into jail.

They were standing on a pebble strewn path in the farmer's field. As they talked, the moneylender picked up two pebbles., the sharp-eyed girl noticed that he had picked up two black pebbles and put them into the bag. He then asked the girl to pick a pebble from the bag.

Now, imagine that you were standing in the field. What would you have done if you were the girl?

LOGICAL REASONING

SESSION - 4

🌀 CODING & DECODING - I

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 the pattern. This process is called 'Decoding'. This capability is important in many fields of application.

APPROACH

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

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.

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 forward 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.

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.

There are several ways of CODING letters of English alphabets, some consequently used are as follows-

(1) English alphabets Position from left to right:-

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

(2) English alphabets position from Right to left:-

Z	Y	X	W	V	U	T	S	R	Q	P	O	N
1	2	3	4	5	6	7	8	9	10	11	12	13

M	L	K	J	I	H	G	F	E	D	C	A	B
14	15	16	17	18	19	20	21	22	23	24	25	26

(3) Series of opposite English Alphabets:

A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N

By using 'EJOTY', CFILORUX and DHLPTX formulae, we can easily remember the position of letters of English Alphabet.

3	6	9	12	15	18	21	24	4	8	12	16	20	24	5	10	15	20	25
C	F	I	L	O	R	U	X	D	H	L	P	T	X	E	J	O	T	Y

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

Implies

B	O	M	B	A	Y
↓	↓	↓	↓	↓	↓
C	P	N	C	B	Z

Likewise code may be moved one step backward also.

Example 2: If in a language APPLE is coded as 25563, RUNG is coded as 7148. Then find the code for PURPLE in that language.

Solution:

Since we are given that Apple is coded as 25563, Rung is coded as 7148. Therefore,

A	P	P	L	E	R	U	N	G
2	5	5	6	3	7	1	4	8

Hence P is coded as 5, U is coded as 1, R is coded as 7, L is coded as 6, and E is coded as 3

Thus the code for PURPLE is 517563.

3. SUBSTITUTION

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

Example 3: '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 4: If cloud is called white, white is called rain, rain is called green is called air, air is called blue and blue is called water, where will the birds fly?

(a) Air (b) Cloud (c) Blue (d) Rain

Ans: [c]

Solution:

Clearly, the birds fly in the 'air' and 'air' is called 'blue'. So, the birds fly in the 'blue'.

- In a certain code, APPLE is written as BPPLD and CEAT is written as DEAS, then how will be HEART written in that code?
(a) GEARS (b) HEARS (c) HEAST
(d) TREETH (e) None of these
- In a certain code, CAT is written as SATC and DEAR is written as QEARD. How would SING be written in that code?
(a) BGINS (b) SGNIS (c) SIGNS
(d) GNISS (e) None of these
- In a certain code language, STRAIN is written as UWTDKQ. How will be PLACES written in that code?
(a) ROCFGV (b) RNDFGV
(c) RODEGV (d) ROCFHV
(e) None of these
- In a certain code language, ANTICIPATION is written as ICITNANOITAP. How will be PRODUCTIVITY written in that code?
(a) CUDORPYTIVIT (b) CUDORPYTIUIT
(c) CUDOPRYTIVIT (d) CUDORPTYIYIT
(e) None of these
- In a certain code language, the word FILAMENT is written as VPGOHKNC. How will be the word COINJUGAL written in that code?
(a) NCIWLPQE (b) NCIWEQPL
(c) NCWILPQE (d) NCIEWPQL
(e) None of these

Directions for Q6 and Q7: In each question below is given a group of digits followed by four combinations of letters/symbols as options (a), (b), (c) and (d). You have to find out which of the combinations correctly represents the group of digits based on the coding system and the conditions given below and mark the number of that combination as your answer. If none of the combinations correctly represents the group of digits, mark (e) i.e., 'None of these' as your answer.

Digit	5	1	3	4	9	6	8	2	7
Letters/ symbols	P	A	K	%	R	@	D	©	R

Conditions

- If the first digit is odd and the last digit is even, the codes for the first and last digits are to be reversed.
 - If both the first and the last digits are even, both are to be coded as *.
 - If both the first and the last digits are odd, both are to be coded as \$.
- 215349
(a) RAPK%© (b) *APK%* (c) \$APK%\$
(d) ©PAK%R (e) None of these

7. 671254
(a) @MA@P% (b) \$MA@P\$ (c) *MA@P*
(d) %MA@P@ (e) None of these

Directions for Q8 to Q10: Study the following information carefully and answer the questions given below it.

Digit in the numbers are to be coded as follows:

Digit	7	3	5	0	2	1	6	4	9	8
Code	N	H	L	T	F	D	R	Q	G	P

Following conditions are to be observed

- If the first digit is even and the last digit is odd, they are to be coded as \$ and @ respectively.
- If the first digit is odd and the last digit is even, they are to be coded as # and £ respectively.
- If 0 is preceded as well as followed by an odd digit, then 0 is to be coded as ↑.
- If 0 is preceded as well as followed by an even digit, then 0 is to be coded as ↓.
- 0 is not considered as either even or odd.

8. What will be the code for 7620486?
(a) #RF↓QPE (b) £RF↓QP# (c) #RFTQPE
(d) £RF↑QP# (e) None of these
9. \$QRL↑H@ could be the code for which of the following numbers?
(a) 8465032 (b) 8456037 (c) 8455022
(d) 6475031 (e) None of these
10. QLP↓RNT is the code for which of the following numbers?
(a) 658070 (b) 4780650
(c) 6580470 (d) Data inadequate
(e) None of these
11. If in a certain code, COVET is written as FRYHW, which word would be written as SHDUO?
(a) QUAKE (b) REPAY (c) STINK
(d) PEARL (e) TIEVP
12. If in a certain language, TRIANGLE is coded as SQHZMFKD, which word would be coded as DWZLOKD?
(a) EXAMPLE (b) FIGMENT
(c) DISMISS (d) DISJOIN
(e) None of these
13. If ELCSUM is the code for MUSCLE, which word has the code LATIPAC?
(a) CONFESS (b) CONDUCE
(c) CAPITAL (d) CAPRICE
(e) None of these

14. If in a certain language, ITNIETAM is the code for INTIMATE, which word has the code TREVNIETARBI?
(a) INVRETIBRATE (b) INVERTIBARTE
(c) INVERTIBRETA (d) INVERTIBRATE
(e) INVERITBARTE
15. If in a certain language, DIUGNAL is the code for LANGUID, which word would be coded as ELKCAHS?
(a) SHINGLE (b) SHERBET
(c) SHACKLE (d) SHOCKLE
(e) None of these
16. If in a certain language DISPEL is coded as IDPSLE, how is EFFECT coded in that language?
(a) FEEFTC (b) CTFEFF (c) EFFETC
(d) ECTEFF (e) EEEFCT
17. In a certain language HUNTER is coded as UHNTRE, how is MANAGE coded in that code?
(a) MAANGE (b) MNAAEG
(c) AMNAEG (d) EGNAAM
(e) NMAAGE
18. If RAMAYANA is coded as AMARANAY, how is TULSIDAS written?
(a) SLUTSADI (b) UTSLIDSA
(c) SADISLUT (d) SADITULS
(e) IDASTULS
19. If CANOE is coded as IFRRG, how is MUSIC written in that code?
(a) NWVNI (b) MWVMH (c) NTULB
(d) QYWMG (e) SZWLE
20. If TABLE is coded as GZYOV, how is JUICE coded?
(a) OZLFJ (b) QFRXV (c) HOFAD
(d) QZHMT (e) EPQIL

LOGICAL REASONING

SESSION - 5

CODING & DECODING - II

21. If FOUGHT is coded as EQRKCZ, how is MALE coded?
(a) LCII (b) NZMD (c) KCMI
(d) NBIF (e) LBID
22. If BATCH is coded as ABSDG, how is FORSAKE coded in that code?
(a) ABDGS (b) EPQTZLD (c) EQPZLTD
(d) GDSBA (e) None of these

23. In a certain code HUMIDITY is written as UHMIIDTY. How is POLITICS written in that code?
(a) OPILITCS (b) OPLIITCS
(c) OPLITISC (d) POILTISC
(e) None of these
24. If 'ski rps tri' stands for 'nice Sunday morning', 'tpk sti rps' stands for 'every Tuesday morning', and 'ski ptr qlm' stands for 'nice market place', what would 'Sunday' stand for?
(a) ski (b) rps (c) tri (d) qlm
25. If train is called bus, bus is called tractor, tractor is called car, car is called scooter, scooter is called bicycle, bicycle is called moped, which is used to plough a field?
(a) Train (b) Bus (c) Tractor
(d) Car (e) Moped
26. In a certain code, ROSE is written as #43\$ and FIRST is written as 5*#37. How is STORE written in that code?
(a) 473\$# (b) 473##
(c) 374#\$ (d) 347#\$
(e) None of these
- Directions for Q27 and Q28:** In a certain code language,
(i) 'pit na sa' means 'you are welcome'.
(ii) 'na ho pa la' means 'they are very good'.
(iii) 'ka da la' means 'who is good'.
(iv) 'od ho pit la' means 'they welcome good people'.
27. Which of the following means 'people' in that code language?
(a) ho (b) pit (c) la
(d) od (e) Data inadequate
28. Which of the following means 'very' in that code language?
(a) na (b) da
(c) pa (d) Data inadequate
(e) None of these
29. If in a certain language CHARCOAL is coded as 45164913 and MORALE is coded as 296137, how is COLLER coded in that language?
(a) 397758 (b) 497758
(c) 483359 (d) 493376
30. If in a certain code, ALMIRAH is written as BNPMWGO, which word would be written as DNRWLUA?
(a) COSGOLT (b) TOGSOLC
(c) TOGCLOS (d) CLOGSOT
31. If the word NUMBER is coded as PXQGKY, how the word SERIAL should be coded?
(a) UHVNKS (b) UHVNGS
(c) UGTCN (d) UHVSKN
32. If in a certain code, TWENTY is written as 863985 and ELEVEN is written as 323039, how are TWELVE written in that code?
(a) 863203 (b) 863584
(c) 863903 (d) 863063
33. In a certain code language, '526' means 'sky is blue'; '24' means 'blue colour' and '436' means 'colour is fun'. Which digit in that language means 'fun'?
(a) 5 (b) 4 (c) 3 (d) 2
34. In a certain code, 'ile be pee' means 'roses are blue'; 'sik hee' means 'red flowers' and 'pee mit hee' means 'flowers are vegetables'. How is 'red' written in that code?
(a) hee (b) sik
(c) be (d) Cannot be determined
35. If ZIP = 30 and ZAP = 38, what will be VIP = ?
(a) 174 (b) 43 (c) 34 (d) 113
36. In a certain language, 36492 is written as SMILE and 058 is written as RUN. How IS 92486 coded in that language?
(a) LEIMN (b) ELINR (c) LEINM (d) EILNM
37. If finger is called toe, toe is called foot, foot is called thumb, thumb is called ankle, ankle is called palm and palm is called knee, which one finger has a different name?
(a) Thumb (b) Ankle (c) Knee (d) Palm
38. If PRATAP could be given the code number 1618120116, what code number can be given to NAVIN?
(a) 14122914 (b) 19274651
(c) 24639125 (d) 73957614
- Directions for Q39 to Q40:** Each of the questions below consists of a question and two statements numbered I and II are given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and
Give answer
(a) if the data in statement I alone is sufficient to answer the question, while the data in Statement II alone is not sufficient to answer the question.
(b) if the data in statement II alone is sufficient to answer the question, while data in Statement I alone is not sufficient to answer the question.
(c) if the data in Statement I alone or in Statement II alone is sufficient to answer the question.
(d) if the data in both the Statements I and II are not sufficient to answer the question.
(e) if the data in both the Statements I and II together are necessary to answer the question.
39. What does 'ja' mean in the code language?
Statements:
I. 'ja pa na' means 'go home now' in that code language.
II. 'na da ta' means 'come back home' in that code language.