

Coding - Decoding

A code is a system of signals. Therefore, coding is a method of transmitting messages between the sender and receiver without a third person understanding it.

The Coding and Decoding test is set up to judge the candidate's ability to decipher the law that codes a particular message and break the code to reveal the message.

LETTER CODING

A particular letter stands for another letter in letter coding.

Eg: If COURSE is coded as FRXUVH, how is RACE coded in that code?

- (1) HFDU (2) UCFH (3) UDFH
(4) UDFH (5) UDFG

In the given code, each letter is moved three steps forward than the corresponding letter in the word. So R is coded as U, A as D, C as F, E as H. Hence (3) is the answer.

NUMBER CODING

In these questions, either numerical code values are assigned to a word or alphabetical code values are assigned to numbers. The candidate is required to analyse the code as per directions.

Case I: When numerical values are assigned to words.

Eg: If in a certain code ROPE is coded as 6821, CHAIR is coded as 73456 what will be the code for CRAPE?

- (1) 73456 (2) 76421 (3) 77246
(4) 77123 (5) None of these

Clearly, in the given code, the alphabets are coded as follows.

R	O	P	E	C	H	A	I
6	8	2	1	7	3	4	5

So CRAPE is coded as 76421

So the answer is (2)

Case II: When alphabetical code values are assigned to the numbers.

Eg: In a certain code 3456 is coded as ROPE. 15546 is coded as APPLE. Then how is 54613 coded?

- (1) RPPEO (2) ROPEA (3) POEAR
(4) PAREO (5) None of these

Clearly in the given figures, the numbers are coded as follows.

3	4	5	6	1	4
R	O	P	E	A	L

So 54613 is coded as POEAR. The answer is (3)

MIXED CODING

In this type of question, three or four complete messages are given in the coded language and the code for a particular word is asked.

To analyse such codes, any two messages bearing the common word are picked up. The common code word will mean that word. Proceeding similarly by picking up all possible combinations of two messages the entire message can be analysed.

Eg: If *tee see pee* means *drink fruit juice*, *see kee lee* means *juice is sweet*, and *lee ree mee* means *he is intelligent*, which word in that language means *sweet*?

- (1) see (2) kee (3) lee
(4) pee (5) tee

In the first and the second statements the common word is juice and the common code word is *see*. So *see* means juice. In the second and the third statements, the common word is 'is' and the common code is *lee*. So *lee* means is. Thus in the second statement, the remaining word *sweet* is coded as *kee*. Hence the answer is (2).

MIXED NUMBER CODING

In this type of questions, three or four complete messages are given in the coded language and the code number for a particular word is asked.

Eg: If in a certain code language, 851 means *good sweet fruit*; 783 means *good red rose* and 341 means *rose and fruit* which of the following digits stands for *sweet* in that language?

- (1) 8 (2) 5 (3) 1
(4) 3 (5) None of these

In the first and the second statements, the common code digit is 8 and the common word is *good*. So 8 stands for *good*. In the first and the third statements, the common code digit is 1 and the common word is *fruit*. So 1 stands for *fruit*. Therefore in the first statement, 5 stands for *sweet*. Hence the answer is (2).

DECODING

In these questions, artificial or code values are assigned to a word or a group of words and the candidate is required to find out the original words.

Eg: If in a certain language FLOWER is written as EKNVDQ, what will be written as GNTRD?

- (1) HEOUS (2) HOUES (3) HUOSE
 (4) HOUSE (5) None of these

Each letter of the word is one step ahead of the corresponding letter of the code.

E	K	N	V	D	Q	G	N	T	R	D
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
F	L	O	W	E	R	H	O	U	S	E

Thus HOUSE is written as GNTRD, So the answer is (4)

NEW TYPE OF CODING

This is a kind of coding recently included in the Reasoning section. In this type of questions either alphabetical code values are assigned to symbols or

symbols are assigned to alphabets. The candidate is required to analyse the code as per direction.

Eg: 1. In a certain code 'TOME' is written as @ \$ * ? and

ARE is written as '• £ ?' How can 'REMOTE' be written in that code?

- (1) £ ? • \$ @ ? (2) @ ? * \$ @ ? (3) £ ? * \$ @ ?
 (4) Cannot be determined (5) None of these

Sol: From the data we have

T ⇒ @ O ⇒ \$ M ⇒ * E ⇒ ? and

A ⇒ • R ⇒ £ E ⇒ ?

Hence REMOTE is coded as £ ? * \$ @ ? So (3) is the answer.

Speed Developing Practice Test No. 7

- If in a certain language CHAMPION is coded as HCMAIPNO, how can NEGATIVE be coded in that code?
 (1) ENAGITEV (2) NEAGVEIT (3) MGAETVIE
 (4) EGAITEVN (5) NEGATIEV
- In a certain language KINDLE is coded as ELDNIK, how can EXOTIC be coded in that code?
 (1) EXOTLC (2) CXOTIE (3) COXITE
 (4) CITOXE (5) EOXITC
- If in a certain language GAMBLE is coded as FBLCKF, how can FLOWER be coded in that language?
 (1) GKPVFQ (2) EMNXDS (3) GMPVDS
 (4) HNQYGT (5) EKNVDQ
- If in a certain language FASHION is coded as FOIHSAN, how can PROBLEM be coded in that code?
 (1) ROBLEMP (2) PLEBRUM (3) PRBOELM
 (4) RPBOELM (5) PELBORM
- If FRIEND is coded as HUMJTK, how can CANDLE be written in that code?
 (1) EDRIRL (2) DCQHQK (3) ESJFME
 (4) FYOBOC (5) DEQJQM
- If in a certain code, TWENTY is written as 863985 and ELEVEN is written as 323039, how can TWELVE be written in that code?
 (1) 863203 (2) 863584 (3) 863903
 (4) 863063 (5) None of these
- If PALE is coded as 2134, EARTH is coded as 41590, how can PEARL be coded in that language?
 (1) 29530 (2) 24153 (3) 25413
 (4) 25430 (5) None of these
- If ROSE is coded as 6821, CHAIR is coded as 73456 and PREACH is coded as 961473, what will be the code for SEARCH?
 (1) 246173 (2) 214673 (3) 214763
 (4) 216473 (5) None of these
- In a certain code *nee tim see* means *how are you*; *ble nee see* means *where are you*. What will be the code for *where*?
 (1) nee (2) tim (3) see
 (4) Cannot be determined (5) None of these
- In a certain code language *pit nae tom* means *apple is green*; *nae ho tap* means *green and white* and *ho tom ka* means *shirt is white*. Which of the following represents *apple* in that language?
 (1) nae (2) tom (3) pit
 (4) ho (5) ka
- If *nitco sco tingo* stands for *softer than flower*; *tingo rho mst* stands for *sweet flower fragrance* and *mst sco tmp* stands for *sweet than smile* what would *fragrance stand for*?
 (1) rho (2) mst (3) tmp
 (4) sco (5) None of these
- In a certain code language, 743 means *Mangoes are good*; 657 means *Eat good food*; and 934 means *Mangoes are ripe*. Which digit means *ripe* in that language?
 (1) 5 (2) 4 (3) 9
 (4) 7 (5) Cannot be determined

13. In a certain code, 247 means *spread red carpet* ; 256 means *dust one carpet* and 234 means *one red carpet* which digit in that code means *dust*?
 (1) 2 (2) 3 (3) 5
 (4) 6 (5) Cannot say
14. In a certain code language, 134 means *good and tasty*, 478 means *see good pictures* ; and 729 means *pictures are faint*. Which of the following digits stands for *see*?
 (1) 4 (2) 7 (3) 9
 (4) 8 (5) None of these
15. In a certain code 253 means *books are old* ; 546 means *man is old* and 378 means *buy good books*. What stands for 'are' in that code?
 (1) 2 (2) 4 (3) 5
 (4) 6 (5) 9
16. In a certain code language TSSNOFFQ is written as STRONGER then GQFDENN will be written as
 (1) DOMEERF (2) FEEDORM (3) FREEDOM
 (4) FREEDMO (5) None of these
17. If FULFNHW is the code for CRICKET, EULGH will be coded as
 (1) PRIDE (2) BRIDE (3) BLADE
 (4) BLIND (5) None of these
18. If in a certain language REMOTE is coded as ROTEME, which word would be coded as PNIICC?
 (1) NPIICC (2) PICCIN (3) PINCIC
 (4) PICNIC (5) PICINC
19. 163542
 (1) XTJCNZ (2) TXJCNZ (3) XTJCNZ
 (4) XTCJNZ (5) None of these
20. 925873
 (1) ZQCFOJ (2) QZCFOJ (3) QZCOFJ
 (4) QZCFJO (5) None of these
21. 741568
 (1) ONCXTF (2) NOXCFT (3) ONCFCT
 (4) ONXCTF (5) None of these
22. In a certain code ORANGE is written as ' ? ÷ @ • + * ' and EAT is written as ' * @ \$ '. How can ROTATE be written in that code?
 (1) ÷ ? \$ @ * \$ (2) ÷ ? \$ @ • * (3) ÷ ? \$ @ \$ *
 (4) ÷ ? \$ * • @ (5) None of these
23. In a certain code 'PALM' is written as ' £ @ ? \$ ' and 'ARM' is written as ' @ * \$ '. How can 'ALARM' be written in that code?
 (1) @ £ @ ? \$ (2) @ \$? £ @ (3) ? @ @ £ \$
 (4) @ ? @ £ \$ (5) None of these
24. In a certain code 'HEAT' is written as ' ? * \$ @ ' and 'FINGER' is written as ' * £ • & * @ '. How can 'FATHER' be written in that code?
 (1) * \$ @ ? * @ (2) \$ @ * ? @ * (3) @ ? * @ \$ *
 (4) * \$ @ ? @ * (5) None of these
25. In a certain code 'BODE' is written as ' @ \$ * ? ' and 'EAT' is written as ' ? • £ ' How can 'DEBATE' be written in that code?
 (1) ? * @ * £ • (2) * ? @ • £ ? (3) * ? @ * £ ?
 (4) Cannot be determined (5) None of these

Directions (19-21): The number in each question below is to be codified in the following code.

Digit: 5 3 7 1 4 9 6 2 8
 Letter: C J O X N Q T Z F

Answers: Speed Developing Practice Test No. 7

1. (1) 2. (4) 3. (2) 4. (5) 5. (1) 6. (1) 7. (2) 8. (2) 9. (5) 10. (3) 11. (1)
 12. (3) 13. (3) 14. (4) 15. (1) 16. (3) 17. (2) 18. (4) 19. (1) 20. (2) 21. (4) 22. (3)
 23. (5) 24. (1) 25. (2)

Explanatory Answers: Speed Developing Practice Test No. 7

1. (1) In the code each of the two letters are reversed in arrangement.
2. (4) In the code the arrangement of the letters in the word is wholly reversed.
3. (2) The letters preceding the first, third and fifth letters of the given word and those succeeding the second, fourth and last letters of the word in the alphabet form the code.
4. (5) The 1st and the last letters of the word are kept as such in the code and all other letters in between them are wholly reversed.
5. (1) In the code, the first letter is the second alphabet, the second letter is the third alphabet, the third letter is the fourth alphabet and so on after the corresponding letter in the word.
6. (1) The letters are coded accordingly T as 8, W as 6, E as 3, L as 2, and V as 0. So TWELVE is coded as 863203.
7. (2) The letters are coded accordingly P as 2, E as 4, A as 1, R as 5 and L as 3. So PEARL is coded as 24153.
8. (2) The letters are coded accordingly S as 2, E as 1, A as 4, R as 6, C as 7 and H as 3. i.e., 214673
9. (5) In the first and the second statements the common words are 'are' and 'you' and the common code words are *nee* and *see*. So *nee* and *see* means *are* and *you*. In the second statement the remaining code *ble* means *where*.
10. (3) In the first and the second statements, the common code word is *nae* and the common word is *green*. So *nae* means *green*. In the first and the third statements, the common code word is *tom* and the common word is *is* so *tom* means *is*. Therefore in the first statement *pit* means *apple*.
11. (1) In the first and the second statements the common code is *tingo* and the common word is *flower*. So *tingo* means *flower*. In the second and the third statements, the common code is *mst* and the common word is *sweet*. So *mst* means *sweet*. Therefore in the second statement, *rho* means *fragranee*.
12. (3) In the first and the third statements, the common code digits are 4 and 3; and the common words are *mangoes* and *are*. So 4 and 3 are the codes for *mangoes* and *are*. Thus in the third statement 9 means *ripe*.
13. (3) In the first and the second statements, the common code digit is 2 and the common word is *carpet*. So 2 means *carpet*. In the second and the third statements, the common code digit is 6 and the common word is *one*. So 6 means *one*. Therefore in the second statement, 5 means *dust*.
14. (4) In the first and the second statements, the common code digit is 4 and the common word is *good*. So 4 stands for *good*. In the second and the third statements, the common code digit is 7 and the common word is *pictures*. So 7 stands for *pictures*. Thus in the second statement 8 stands for *see*.
15. (1) In the first and the second statements, the common code digit is 5 and the common word is *old*, so 5 stands for *old*. In the first and third statements, the common code digit is 3 and the common word is *books* so 3 stands for *books*. Thus in the first statement, 2 stands for *are*.
16. (3) The first letter is moved one step backward and second is moved one step forward the third letter is moved one step backward, the fourth letter one step forward and so on. So the answer is (3)
17. (2) Each letter of the word is three steps ahead of the corresponding letter of the code.
18. (4) The groups of second and third letters and fourth and fifth letters in the word interchange places in the code.
19. (1) As given 1 is coded as X, 6 is coded as T, 3 is coded as J, 5 is coded as C, 4 is coded as N and 2 is coded as Z. So 163542 is coded as XTJCNZ.
20. (2) As given 9 is coded as Q, 2 as Z, 5 as C, 8 as F, 7 as O and 3 as J. So 925873 is coded as QZCFOJ.
21. (4) 7 is coded as O, 4 as N, 1 as X, 5 as C, 6 as T and 8 as F. So 741568 is coded as ONXCTF.
22. (3)

O	R	A	N	G	E	E	A	T
↓	↓	↓	↓	↓	↓	↓	↓	↓
?	÷	@	•	+	*	*	@	\$

So we can code ROTATE as ÷ ? \$ @ \$ *
23. (5) P ⇒ £ A ⇒ @ L ⇒ ? M ⇒ \$ R ⇒ * M ⇒ \$
ALARM ⇒ @ ? @ \$ £ *
24. (1) H ⇒ ? A ⇒ \$ T ⇒ @ F ⇒ *
I ⇒ £ N ⇒ • G ⇒ & E ⇒ * R ⇒ Δ
FATHER ⇒ * \$ @ ? * Δ
25. (2) B ⇒ @ O ⇒ \$ D ⇒ * E ⇒ ? A ⇒ • T ⇒ £
DEBATE ⇒ * ? @ • £ ?