

CUET(UG) 2024

COMMON UNIVERSITY ENTRANCE TEST- EXAM CONDUCTED BY NTA



CHAPTER

1

ALPHABETS AND SERIES

This chapter covers the following types of questions:

- (i) Coding—Decoding
- (ii) Series

CODING—DECODING

Group of letters consists of alphabet and the English alphabet consists of 26 letters. You have to remember the position of all the letters from left to right and vice-versa.

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.

Trick to Remember:

With the help of this trick, you can easily locate the position of letters.

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From Left to Right—EJOTY				
E	J	O	T	Y
5	10	15	20	25

From Right to Left—BGLQV				
B	G	L	Q	V
25	20	15	10	5

TYPE 1: LETTER CODING

In these questions, the real letters in a word are replaced by certain other letters according to a specific rule to form the code. The candidate is required to detect the common rule and answer the questions accordingly.

EXAMPLES:

1. If in a certain language MYSTIFY is coded as NZTUJGZ, how is NEMESIS coded in that language?

- a) MDLHRDR b) OFNFTJT c) ODNHTDR d) PGOKUGU.

SOLUTION:

Each letter in MYSTIFY is moved one step forward to obtain the corresponding letter of the code.

	M	Y	S	T	I	F	Y
+1	↓ N	Z	T	U	J	G	Z

So, in NEMESIS, N will be coded as O, E as F, M as N and so on. Thus, code becomes OFNFTJT. Hence, answer is (b).

TYPE 2: NUMBER CODING

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

EXAMPLES:

1. If PAINT is coded as 74128 and EXCEL is coded as 93596, then how would you code ACCEPT?

- a) 455978 b) 547978 c) 554978 d) 735961.

SOLUTION:

In the given code, the letters are coded as follows.

P	A	I	N	T	E	X	C	L
7	4	1	2	8	9	3	5	6

So in ACCEPT, A is coded as 4, C as 5, E as 9 and so on. Therefore answer is (a).

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TYPE 3: MIXED LETTER CODING

In this type of questions, 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 a common word are picked up. The common code will mean that word. Proceeding similarly by picking up all possible combinations of two, the entire message can be analysed.

EXAMPLE:

1. If 'nso ptr kli chn' stands for 'Sharma gets marriage gift', 'ptr inm wop chn' means 'wife gives marriage gifts', 'ti wop thi' stands for 'he gives nothing', what would stand for 'gives'?

- a) chn b) nhi c) ptr d) wop.

SOLUTION:

In the second and third statements, the common word is 'gives' and the common code word is 'wop'. So 'wop' means 'gives'. Hence, answer is (d).

SERIES

This deals with the questions in which series of numbers or alphabetical letters are given, which are generally called terms of the series. These terms follow a certain pattern through out. The candidate is required to recognize this pattern and either complete the given series with the most suitable alternative or find the wrong term in the series.

TYPE 1: NUMBER SERIES

Important Patterns:

- (1) $a, a \pm d, a \pm 2d, a \pm 3d, \dots$
- (2) a, ak, ak^2, ak^3, \dots
- (3) $a, a/k, a/k^2, a/k^3, \dots$
- (4) $(a)^n, (a \pm d)^n, (a \pm 2d)^n, (a \pm 3d)^n, \dots$
- (5) $a^n + k, (a + k)^n + k, [(a + k)]^n + k, \dots$
- (6) $a^n + k, (a + 1)^n + k, (a + 2)^n + k, \dots$
- (7) $1n, 1^n + 2^n, 1^n + 2^n + 3^n, 1^n + 2^n + 3^n + 4^n, \dots$
- (8) Series of prime numbers *i.e.* 2, 3, 5, 7, 11, 13, 17, 19, 23, etc.

EXAMPLE:

1. Which number would replace question mark in the series 7, 12, 19, ?, 39.

- a) 29c b) 28 c) 26 d) 24.

SOLUTION:

The given sequence follows the pattern:

$$+ 5, + 7, + 9 \dots \text{ i.e. } 7 + 5 = 12$$

$$12 + 7 = 19, \dots$$

\therefore Missing number = $19 + 9 = 28$ Hence, answer is (b).

TYPE 2: ALPHABET SERIES

EXAMPLE:

1. What terms will fill the blank spaces?

Z, X, V, T, R,,

- a) O, K b) N, M c) M, N d) P, N.

SOLUTION:

Series consists of alternate letters in reverse order. So, the terms are P, N. Hence, answer is (d).

2. Which term comes next in the series? YEB, WFD, UHG, SKI,

- a) QOL b) QGL c) OL d) QNL.

SOLUTION:

The first letter of each term is moved two steps backward to obtain the first letter of the next term. So, the first letter of the missing term will be Q. The second letter of the first, second, third & fourth terms have respectively moved one, two, three, four steps forward to obtain the corresponding letter of the subsequent term. So, the second letter in the missing term will be O.

Hence, answer is (a).