

## **SNS COLLEGE OF TECHNOLOGY**



### An Autonomous Institution Coimbatore-35

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

## DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

19GET276 - VQAR II

II YEAR/ IV SEMESTER

**UNIT 4 – NON- VERBAL REASONING** 

TOPIC – INSERT THE MISSING CHARACTERS



# COMMON TYPES OF NON-VERBAL RESONING QUESTION



- **1.Sequence Patterns**: Identify the next shape in a sequence by recognizing the pattern or rule governing the changes.
- **2.Analogies**: Find the relationship between two shapes and apply the same relationship to another pair of shapes.
- **3.Matrices**: Determine the missing shape in a matrix by analyzing the pattern across rows and columns.
- **4.Classification**: Identify the odd one out from a group of shapes based on differing characteristics.
- **5.Series**: Recognize the sequence and predict the next figure based on the established pattern.
- **6.Symmetry**: Identify symmetrical shapes or complete a shape to make it symmetrical.



## TRICKS FOR SOLVING NON- VERBAL REASONING QUESTIONS

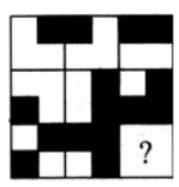


- **1.Identify the Rule**: Determine whether the pattern involves changes in size, shape, rotation, reflection, shading, or position.
- **2.Count Elements**: Check the number of elements or parts within the shapes to identify numerical patterns.
- **3.Observe Movement**: Look for rotational or directional movement within the sequence or pattern.
- **4.Check for Symmetry**: Identify lines of symmetry and check for symmetrical changes.
- **5.Use Visual Memory**: Improve your visual memory by practicing and recalling patterns and shapes.





Select a suitable figure from the four alternatives that would complete the figure matrix.





- **(A)** 1
- **B** 2
- **©** 3
- **1** 4

Answer: Option (1)

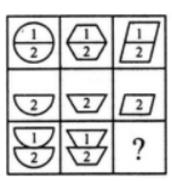
#### **Explanation:**

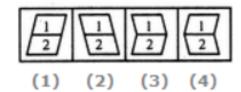
In each row (as well as each column), the third figure is a combination of all the, elements of the first and the second figures





. Select a suitable figure from the four alternatives that would complete the figure matrix.





- **(A)** 1
- **B** 2
- **©** 3
- 0 4

Answer: Option ©

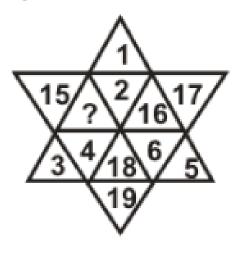
#### **Explanation:**

In each column, the second figure (middle figure) is obtained by removing the upper part of the first figure (uppermost figure) and the third figure (lowermost figure) is obtained by vertically inverting the upper part of the first figure.





Find the missing character in each of the following questions.



- (A) 13
- (B) 14
- (C) 20
- (D) 21

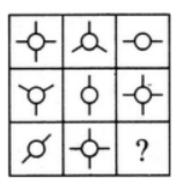
Ans: B

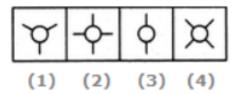
The given figure contains numbers 1 to 6 in three alternate segments, the smaller number being towards the outside and the numbers 14 to 19 in the remaining three alternate segments with the smaller number towards the inside.





.. Select a suitable figure from the four alternatives that would complete the figure matrix.





- **A** 1
- **B** 2
- **©** 3
- 0 4

**Answer:** Option **(B)** 

#### **Explanation:**

Each row (as well as each column) contains a figure consisting of a circle and two line segments, a figure consisting of a circle and three line segments and a figure consisting of a circle and four line segments.





In the following question, a matrix of certain characters is given. These characters follow a certain trend, row-wise or column wise. Find out this trend and choose the missing character accordingly.

В	G	N
D	J	R
G	N	?

□ C) W □ D) X

- Answer & Explanation

Answer: C) W

#### **Explanation:**

The letters in the first row follow the sequence +5, +7.

The letters in the second row follow the sequence +6, +8.

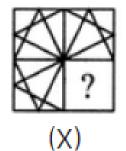
In the third row, the first letter G moves 7 steps forward to give the second letter N.

Clearly, the missing letter will be 9 steps ahead of N i.e. W.



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. Identify the figure that completes the pattern.











**(A)** 1

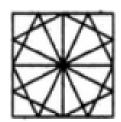
**B** 2

**©** 3

**1** 4

Answer: Option (1)

**Explanation:** 

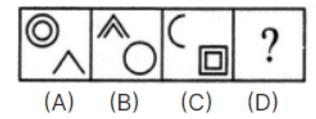




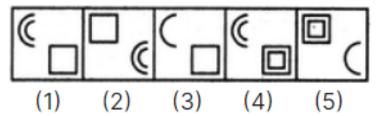


. Select a suitable figure from the Answer Figures that would replace the question mark (?).

#### Problem Figures:



#### Answer Figures:



- **(A)** 1
- **B** 2
- **©** 3
- 0 4
- **E** 5

**Answer:** Option **B** 

#### **Explanation:**

Each one of the upper elements is replaced by an element similar to the lower element(s) and each one of the lower elements is replaced by an element similar to the upper element(s).





25200	5
3600	5
?	10
120	30

1.350 2.320

3.500 4.600

Answer & Explanation

Answer Key: 4

Explanation: By going in clockwise direction we find the following pattern

5×1=5; 5×2=10; 10×3=30;30×4=120; 120×5=600.

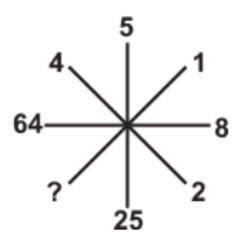
600×6= 3600. And 3600×7=25200

Hence, the answer is option 4





Find the missing character in each of the following questions.



- (A) 1
- (B) 2
- (C) 3
- (D) 4

#### View Answer

Ans: A

The two ends of each line segment contain a number and its square.

So, missing number =  $1^2 = 1$ .





In each of the following questions, a matrix of certain characters is given. These characters follow a certain trend, row wise or column wise. Find out this trend and choose the missing character accordingly.

2	4	0
1	2	4
3	1	3
36	?	91

- (A) 25
- (B) 48
- (C) 59
- (D) 73

Ans: D

Clearly,  $(1st row)^3 + (2nd row)^3 + (3rd row)^3 = 4th row$ .

So, in the first column,  $2^3 + 1^3 + 3^3 = 8 + 1 + 27 = 36$ .

In the third column,  $0^3 + 4^3 + 3^3 = 0 + 64 + 27 = 91$ .

In the second column, missing number =  $4^3 + 2^3 + 1^3 = 64 + 8 + 1 = 73$ .





## THANK YOU