

# Analogy (Non-Verbal)

The dictionary defines 'analogy' as a process of reasoning from parallel cases. These are also called relationship tests. The figures are presented in two sets ; one is called problem figure and the other answer figure. The problem figure consists of two sets. The first set has two units marked 1 and 2. [Sometimes separated by the sign of colon (:)] and the second set (which is sometimes separated by the sign :) also has two units marked 3 and 4. The figures in the first set bear a certain analogy or relationship with each other. The same relationship is reflected in the third figure of the second set. The fourth unit is either blank or contains a question mark (?). You have to choose from the set of answer figures marked 1, 2, 3 and 4 (sometimes 5 also) one figure bearing the same analogy in the first unit to fill the blank column or to replace the question mark.

**DIRECTIONS (ILLUSTRATION 3) :** Each of the following examples consists of two sets of figures . Figures A, B, C and D constitute the problem set while figures 1, 2, 3, 4 and 5 constitute the answer set. There is a definite relationship between figures 1 and 2. Establish a similar relationship between figures 3 and 4 and choose the one figure from answer set as the correct answer.



#### ILLUSTRATION 2:



**Answer Figures** 



*Sol.* (5) The lower LHS figure of portion in (A) become the upper portion in (B), shifted to the other side. Similarly RHS figure of the upper portion in (A) become the lower portion (B) shifted to the other side with one vertical line therein. The other two halves are deleted.

#### **ILLUSTRATION 3:**

## Problem Figures (A) (B) (C) (D) Answer Figures



*Sol.* (1). (A) is rotated 180° ACW or CW to obtain (B). Then the shaded and the unshaded leaves are interchanged. Hence, (1) should replace the question mark.

#### **ILLUSTRATION4:**



*Sol.* (5) The diamond rotates 90°. The square goes inside the diamond. The semicircle rotates 180° and moves to the top.

**DIRECTIONS (ILLUSTRATION 5) :** In the following examples in four out of the five figures, element I is related to element II in some particular way. Find out the figures in which the element I is not so related to element II and write its letter in front of appropriate question number.

#### **ILLUSTRATION 5:**

#### **Problem Figures**



**Answer Figures** 









The first design from upper side comes at lowest corner after reversing two times. Third design comes at first place after rotating 90° clockwise and a new design comes at the place of N. The fourth design comes after reversing at the second place.

**DIRECTIONS (ILLUSTRATION 6) :** Figures A and B are related in a particular manner. Establish the same relationship between figures C and D by choosing a figure from amongst the four alternatives, which would replace the question mark in fig. (D)

**ILLUSTRATION 6:** 







Mental Ability Test (MAT)

#### ILLUSTRATION 7:



*Sol.* (3) The figure gets turned to the other side by rotating about the main line joining the arrow with the small line segment.

#### ILLUSTRATION 8:





*Sol.* (1) The upper element gets enlarged and becomes the central element. The central element reduces in size and becomes the lower element. The lower element becomes the upper element.

#### ILLUSTRATION 9:

There is a definite relationship between figures A and B. Establish a similar relationship between figure C and D by choosing a suitable figure (4) from the answer figures. **Problem Figures** 



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*Sol.* (3) The figure is replaced by a figure with two sides move and the new figure is shaded. Similar relationship of (C) is thus figure (3).

#### **ILLUSTRATION 10:**



(1) (2) (3) (4)

*Sol.* (2) The triangle folds into the hexagon and changes from white to black.

**DIRECTIONS (Q.1) :** Figures A and B are related in a particular manner. Establish the same relationship between Figures C and D by choosing a figure from amongst the alternatives, which would replace the question mark.



2.



**DIRECTIONS (Qs. 3-5) :** Figures A and B are related in a particular manner. Establish the same relationship between Figures C and D by choosing a figure from amongst the alternatives, which would replace the question mark.



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**DIRECTIONS (Qs. 9-10) :** Each of the following questions consists of two sets of figures. Figures A, B, C and D constitute the problem set while figures 1, 2, 3, 4 and 5 constitute the answer set. There is a definite relationship between figures A and B. Establish a similar relationship between figures C and D and choose the one figure from answer set as alternative letter.

9. Problem Figures



Mental Ability Test (MAT)

**DIRECTIONS (Q.11-22) :** Select the correct figure from among five alternatives given below to fit the pattern



0

(2)

(1)

0

(3)

(4)

0

(5)

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**DIRECTIONS (Qs. 23-28) :** Figures A and B are related in a particular manner. Establish the same relationship between figures C and D by choosing a figure from amongst the five alternatives, which would replace the question mark in fig. (D)

23. Problem Figures

24.

25.

26.



27. Problem Figures



**DIRECTIONS (QS. 29-33)** : Each of the following questions consists of two sets of figures. Figures A, B, C and D constitute the problem set while figures 1, 2, 3, 4 and 5 constitute the Answer Set. There is a definite relationship between figures A and B. Establish a similar relationship between figures C and D by selecting a suitable figure from the Answer Set that would replace the question mark(?) in fig. (D).

29. Problem Figures





#### Analogy (Non-Verbal)



**DIRECTIONS (Q.1) :** In the following example four out of the five figures element I is related to element II is the same particular way. Find out the figures in which the element I is not so related to element II and write down its letter infront of appropriate question number.

4.

5.

6.



**DIRECTIONS (Qs. 2-3) :** Figures A and B are related in a particular manner. Establish the same relationship between figures C and D by choosing a figure from amongst the four alternatives, which would replace the question mark in fig. (D)







7. The second figure in the first unit of the Problem Figures bears a certain relationship to the first figure. Similarly the second figure in the second unit of the problem figures bears same relationship with one of the five answer figures. Find out that figure.



**DIRECTIONS (Qs. 8-13) :** Figures A and B are related in a particular manner. Establish the same relationship between figures C and D by choosing a figure from amongst the five alternatives, which would replace the question mark in fig. (D)

8. Problem Figures

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9. Problem Figures





10. Problem Figures





11. Problem Figures



**Answer Figures** 







Answer Figures



13. Problem Figures



Answer Figures





### Exercise 1

- 1. (4). From fig. (2) to fig.(1), the straight lines are converted to curved lines (or arcs).
- 2. (3) The circle moves to the bottom of the main figure with black/white reversal.
- **6. (4)** Triangles turn to circles and vice versa, and white figures turn to black and vice versa.
- 7. (1) The center geometric shape adds on an additional side. All dots change from white to black, and vice versa.
- 8. (3) Divide the circles into groups of four. In each group, the circle originally on the far left is moving one place to the right.
- **9.** (3) The two lower arcs of the right hand side design of problem figure (A) turns over vertically, then the whole design of right hand side reverses horizontally and shifts to left hand side in the problem figure (B). The uppermost arc of left hand side design of problem figure (A) reverses vertically and shifts to the right hand side in the Problem Figure (B). Applying the same rule with Problem Figure (C), the answer figure (3) is obtained.
- **10.** (1) From problem figure first to second whole design reverses vertically. Applying the same rule with the problem figure (C), the answer figure (1) is obtained.
- 11. (2) Movement of the circle is zig-zag, that of the square is anticlockwise and the third figure goes up and down by turns.
- 12. (5) The flag moves towards right going up and down and changing direction, the circle moves along three points anticlockwise and the cross along corners, clockwise.
- **13.** (1) The whole figure rotates clockwise; the circle at the opening and arms of the swastik change alternately and the black spot moves along with it.
- (4) The main figure rotates anti-clockwise but the small circles move faster and go one step ahead, adding one circle with each step.
- **15. (5)** The triangles move along the three points anti- clockwise but change direction, the two circles interchanges with each step.
- **16.** (1) Hollow circle and rectangle move along the edges anti-clockwise, solid circle also moves anti-clockwise, but the triangle moves clockwise each time reversing its position.
- **17.** (2) The pattern in the centre changes alternately and one line is added to branches right and left.
- **18.** (4) The required figure should have two arrows with arrowheads reversed.
- **19.** (3) The whole pattern changes alternately and the triangle moves to three positions in a pattern and inverts position.
- **20.** (5) Triangle moves along three points remaining upright but shaded area is changing sides. Shaded circle moves diagonally, shaded area alternating up and down
- **21.** (1) Triangle rotates anti clockwise through 45°. Circle moves alternately at the two ends.
- **22.** (1) Symbols used for representing cap, forehead, eyes, nose, lips descend one position with each step.
- (4) Clearly fig.(A) rotate through 135° CW to from fig. (B) Similar relationship will give fig. (4) from fig. (C). Hence, fig. (4) is the answer.
- 24. (4) The two partially shaded circles rotate through 180°.
- **25.** (4) The curved pin rotates 90°ACW and moves to the adjacent side (of the square boundary) in a CW direction. The curved arrow rotates 90°ACW and moves to the adjacent side in a CW direction

- 26. (5) The contents of the outer main figure rotate through 45°CW.
- 27. (2) The upper part of the figure gets separated along the line and is lost.
- 28. (1) The figure gets divided into eight equal parts.
- 29. (3) The upper-left and the lower-right elements rotate 90°CW while the upper-right and the lower-left elements rotate 90°ACW.
- **30.** (4) The inner element gets enlarged, rotates 45°CW and becomes the outer element. The outer element reduces in size, gets vertically inverted and becomes the inner element.
- **31.** (1) The two elements approach each other and get overlapped.
- 32. (4) Both the elements move to the adjacent side in a CW direction; the half-arrow rotates 90°ACW; the semi-circular element rotates 90°ACW and gets laterally inverted.
- 33. (5) The figure gets laterally inverted.

#### Exercise 2

1. (3). The half circles of the figure I comes in figure II with rotation as follow –



- 2. (4) One of the line segments close to each side of the main figure, shifts inside the main figure. These line segments are joined to form a closed figure.
- **3.** (4) the figure rotates 45°CW; reduces in size and is placed a triangle touching its base.
- 4. (4) Matching triangles in the same position of the first three hexagons cancel each other out. If all three triangles match, then the position in the fourth hexagon is a blank.
- 5. (2) The large half-circle moves from right to top to left to bottom. The medium half-circle alternates from left to right. The small half-circle moves from bottom to right to top to left. The center dot alternates between appearing and disappearing.
- 6. (3) The bottom right-hand quarter increases in size and becomes the main figure. The two components that previously made up the main figure go inside the new main figure.
- 7. (2) In first figure from second, the designs inside the pentagon change their places as follows :



The design ' $\uparrow$ ' rotates 90° in clockwise direction and a new design comes at the place on N and design ' $\bullet$ ' or ' $\blacksquare$ ' comes without colour.

- (3) The outer element divides into two equal parts; the lower half is lost; the upper part gets shaded and moves to the lower position. The inner element reduces in size; rotates through 45°; gets unshaded and reaches the upper position.
- **9.** (2) The figure rotates through 180° and three line segments forming a zig-zag are added to its lower end.
- 10. (1) The figure gets laterally inverted.
- 11. (2) The upper element rotates through 180° and its head gets inverted. The lower element gets vertically inverted.
- **12.** (4) All the arrows reverse their directions.
- (1) The figure rotates 90°CW; gets reduced in size and also gets enclosed in a figure with one less number of sides.