

NON-VERBAL SERIES

SSC CGL Reasoning - Complete Chapter Guide

Pattern Recognition | Visual Reasoning | Shape Series | Figure Analysis | SSC CGL Exam Focus

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📖 Chapter Overview: This chapter covers non-verbal series techniques including pattern recognition, visual reasoning, shape series analysis, and figure completion skills essential for SSC CGL reasoning section.



1. INTRODUCTION TO NON-VERBAL SERIES

What are Non-Verbal Series?

💡 Definition: Non-verbal series are sequences of figures, shapes, or patterns that follow a specific logical rule. The task is to identify the pattern and determine the next figure in the sequence.

🔑 Key Insight: Non-verbal series test your visual reasoning, pattern recognition, and logical thinking skills without relying on language or numbers.

Types of Non-Verbal Series Problems

↔ Linear Series

- Figures change in one direction
- Simple progression patterns
- Rotation, size, or shape changes
- Color or shading patterns
- Position movement

▣ Matrix Series

- Figures arranged in rows and columns
- Patterns in both directions
- Combination of changes
- Row-wise and column-wise patterns
- Diagonal patterns

🧩 Complex Patterns

- Multiple changing elements
- Alternating patterns
- Mathematical operations on figures
- Mirror images or reflections
- Overlapping figures

2. PATTERN RECOGNITION TECHNIQUES

Common Pattern Types

💡 Example: Rotation Pattern



Pattern: 90° clockwise rotation at each step

Next Figure: The pattern would continue with another 90° rotation



Pattern: Alternating colors (red, teal, red, teal, red)

Systematic Approach to Pattern Solving

☰ Step-by-Step Pattern Analysis:

- 1 **Observe the Series-** Look at all figures carefully
- 2 **Identify Changing Elements-** Note what changes between figures
- 3 **Look for Rotation/Movement** - Check for clockwise/counterclockwise patterns
- 4 **Check Size/Shape Changes-** Look for increasing/decreasing patterns
- 5 **Analyze Color/Shading-** Note any color or shading patterns
- 6 **Test Your Hypothesis-** Verify the pattern works for all given figures
- 7 **Predict Next Figure-** Apply the pattern to find the next figure

 3. COMMON NON-VERBAL PATTERNS

Rotation and Movement Patterns

Pattern Type	Description	Example
Clockwise Rotation	Figures rotate 45°, 90°, or 180° clockwise	▲ → ► → ▼ → ◀
Anti-clockwise Rotation	Figures rotate in counterclockwise direction	▲ → ◀ → ▼ → ►
Position Movement	Elements move within the figure in specific directions	Dot moves corner to corner
Flip/Reflection	Figures are mirrored horizontally or vertically	◀ becomes ▶

Size and Quantity Patterns

↑ Increasing Pattern

- Number of elements increases
- Size of elements increases
- More complex figures
- Additional details added
- Arithmetic progression

↓ Decreasing Pattern

- Number of elements decreases
- Size of elements decreases
- Simpler figures
- Details removed
- Reverse progression

↻ Alternating Pattern

- Two different patterns alternate
- Odd-even position differences
- Color/shape alternation
- Size alternation
- Position alternation

☰ 4. PRACTICE QUESTIONS WITH SOLUTIONS

Rotation Pattern Questions

Q1. What comes next in the series?

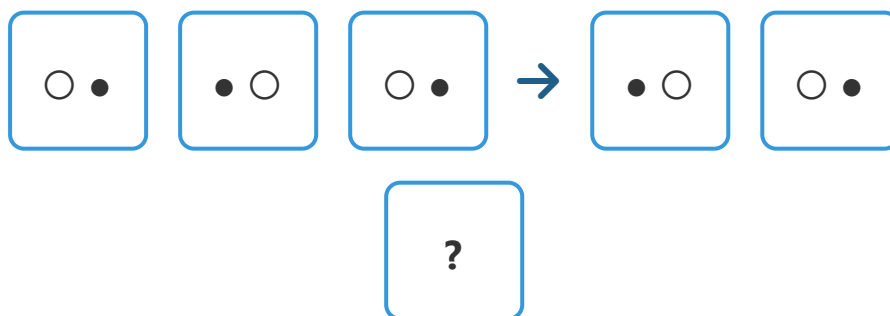


- ☐ A) ■ (no rotation)
- ☐ B) ■ rotated 135°
- ☐ C) ■ rotated 180°
- ☐ D) ■ rotated 270°

[Check Answer](#)

Complex Pattern Questions

Q2. Identify the missing figure in the series:



- ☐ A) ● ○
- ☐ B) ○ ●
- ☐ C) ○ ○
- ☐ D) ● ●



[Check Answer](#)

5. SSC CGL EXAM STRATEGY

Time Management & Approach

Exam Strategy for Non-Verbal Series:

1. **Quick Series Scan** - Observe all figures (10 seconds)
2. **Identify Changing Elements** - Note what's different (15 seconds)
3. **Hypothesize Pattern** - Form initial theory about the pattern (10 seconds)
4. **Test Your Theory** - Verify with all given figures (15 seconds)
5. **Check Options** - Compare with answer choices (10 seconds)
6. **Final Verification** - Double-check your selection (5 seconds)

Common SSC CGL Non-Verbal Patterns:

- 45°/90° rotation patterns
- Alternating figure sequences
- Increasing/decreasing elements
- Position movement within figures
- Color/shading alternation
- Mirror image patterns
- Combination of multiple changes

Quick Recognition Techniques

Speed Solving Tips:

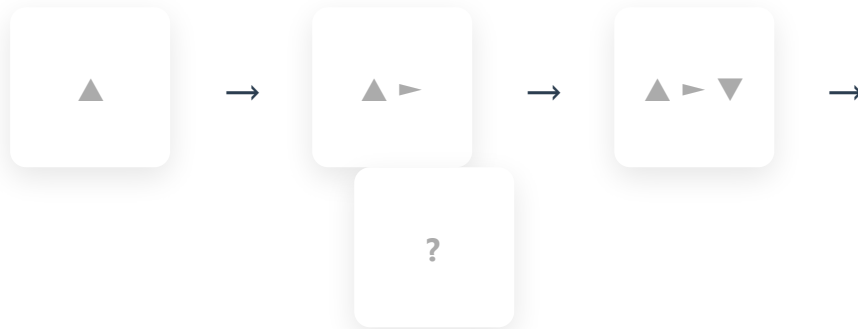
- Look for obvious rotation first - it's the most common pattern
- Check if elements are being added or removed
- See if there's position movement of internal elements
- Look for alternating colors or shapes
- For matrix problems, check both row and column patterns
- Use elimination method for multiple choices
- Practice common patterns to build recognition speed



6. ADVANCED PATTERNS & PRACTICE

Complex Pattern Types

💡 Example: Combined Rotation and Addition



Pattern: Adding a new arrow rotated 90° clockwise at each step

Next Figure: ▲ ▶ ▼ ◀ (four arrows pointing in all directions)

Daily Practice Routine

📅 4-Week Preparation Plan:

Week 1: Basic Rotation Patterns (15 questions/day)
Week 2: Size and Quantity Patterns (20 questions/day)
Week 3: Complex Combined Patterns (20 questions/day)
Week 4: Speed Practice & Mock Tests (25 questions/day)

🎓 Effective Non-Verbal Practice:

- Start with simple rotation patterns
- Practice identifying multiple changing elements
- Work on matrix pattern recognition
- Time yourself to improve speed
- Review mistakes to understand pattern types
- Create your own patterns for practice
- Use visualization techniques for complex patterns

Non-Verbal Series - SSC CGL Reasoning Preparation

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