



The topic of Averages is one of the most fundamental yet highly scoring areas in the **Staff Selection Commission Combined Graduate Level (SSC CGL)** Quantitative Aptitude section. Whether you're preparing for Tier I or Tier II, questions from averages appear consistently across shifts in various forms, ranging from simple, direct formula-based problems to complex applications involving weighted averages, age-based scenarios, income-expense analysis, and error corrections. Due to its versatility and integration with other arithmetic concepts, mastering this topic is crucial for boosting your overall score in the exam. In this blog, brought to you by Quant Sir, we'll cover everything you need to know about SSC CGL average questions, from core concepts and formulas to high-frequency patterns and previous year problems. We'll also explore smart-solving tricks, real **SSC CGL** level examples, and a variety of question types that can help you handle average-based issues of speed and precision. Whether you're a beginner aiming to build your basics or an advanced learner targeting accuracy and time management, this comprehensive guide is designed to help you excel.

SSC CGL Average Questions - What is Average?

Average (Arithmetic Mean) = Total Sum of Items ÷ Number of Items

It is the simplest way to represent a dataset with a single value that lies somewhere between the smallest and largest observations.

Example: Find the average of 10, 15, 20, 25, 30, 35

- Sum = 135, Count = 6
- Average = $135 \div 6 = 22.5$

In SSC CGL, the idea of average is extended far beyond basic number sets. You'll find it applied in real-life contexts, such as the average age of a family, the average speed of a vehicle, or the average marks of students, often combined with topics like ratios, percentages, or time and work. While the concept may seem simple, the exam often tests your ability to manipulate averages logically, especially when new members are added or removed, values are misread, or groups are merged. That's why it's essential not just to memorize the formula but to understand its practical application across various question types.

SSC CGL Average Questions - Importance

The topic of SSC CGL average questions is a key component of the Quantitative Aptitude section and appears in almost every shift of the Tier-I exam. These questions are typically based on simple formulas but are often twisted using logical reasoning, making them both scoring and slightly challenging. Whether it's finding the average of a set of numbers, calculating the effect of replacing a member in a group, or solving real-life problems involving averages of age, weight, or salary, these questions test a candidate's conceptual clarity and speed.



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Moreover, mastering SSC CGL average questions helps candidates build a strong foundation in arithmetic and enhances their problem-solving ability across multiple topics. Since these questions are often mixed with practical scenarios, they are also helpful in building real-world quantitative aptitude. Regular practice under guided mentorship, such as from Quant Sir, can ensure accuracy and boost confidence in attempting these questions efficiently during the actual exam.



[Source: Quant Sir]

SSC CGL Average Questions - Basic Formulae

To solve SSC CGL average questions quickly and accurately, it's essential to memorize and apply a few core formulas that form the foundation of this topic.



Type	Formula
Average	Sum of all terms ÷ Number of terms
Average of the First 'n' Natural Numbers	$(n + 1)/2$
First n Even Numbers	$(n + 1)$
First n Odd Numbers	n
AP Series	$(\text{First term} + \text{Last term})/2$
Square of the First 'n' Natural Numbers	$[n(n + 1)(2n + 1)]/6$
Cubes of the First 'n' Natural Numbers	$\{[n(n + 1)]/2\}^2$

SSC CGL Average Questions - Concepts and Formulae

Understanding the core concepts and practicing diverse examples is the key to mastering SSC CGL average questions, as they range from basic calculations to logic-based applications seen in the actual exam.

1. Basic Average Calculation

These are straightforward, formula-based questions.

Example 1: What is the average of the first 5 even numbers?

Even Numbers: 2, 4, 6, 8, 10 → Sum = 30

→ Average = $30 \div 5 = 6$

Example 2: A cricketer scores 35, 56, 45, 43, 67, 70, and 48. Find the average.

→ Sum = 364, Count = 7

→ Average = $364 \div 7 = 52$

Quant Sir Tip: Use the deviation method to simplify calculations using a reference value (R).

2. Weighted Average

When groups with different counts are combined, use:



Weighted Average = $[(m \times a) + (n \times b)] / (m + n)$

Where m, n = number of items; a, b = respective averages

Example 1: Average age of 17 girls = 20; 23 boys = 22

→ Weighted Avg = $(17 \times 20 + 23 \times 22) / 40 = 21.15$ years

Example 2: 70% of employees earn 50K; 20% earn 80K. Avg salary = 80K. What's the average of the rest 10%?

→ Let x be the average of the rest.

→ $0.7 \times 50000 + 0.2 \times 80000 + 0.1x = 80000$

→ $x = 2.9$ lakhs

3. Average in Replacement Questions

When a person/item is replaced:

New Value = Replaced Value \pm (Change in Average \times Total Members)

Example 1: The Average weight of 5 men drops by 3 kg when a 150 kg person is replaced.

→ Drop = $3 \times 5 = 15$ → New person = $150 - 15 = 135$ kg

Example 2: In a group of 30 people, avg drops by 2 when a person is replaced.

→ Drop = $2 \times 30 = 60$ → Replaced person – new person = 60

Quant Sir Tip: Use a deviation-based formula to save time.

To know more types of SSC CGL average questions and shortcuts to solve them, stay tuned to our upcoming blogs on the topic of SSC CGL Average.

SSC CGL Average Questions - Tips to Score High

To excel in SSC CGL average questions, candidates must go beyond simply memorizing formulas. Success in this area demands a smart and strategic approach that combines strong conceptual understanding, effective time management, and consistent practice. With the right techniques, even the most complex average problems can be solved accurately and confidently during the exam.



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- **Master Core Concepts:** Focus on essential average formulas and understand their application in various scenarios like age, income, and replacements.
- **Use Deviation Method:** Simplify calculations by using a reference point to reduce mental math.
- **Solve Mock Tests Regularly:** Practice average-based questions from real SSC exam patterns, including those integrated with ratios, DI, or number series.
- **Manage Time Smartly:** Aim to solve average questions within 30–45 seconds using shortcuts.
- **Analyze PYQs:** Study **previous year questions** to identify common formats and tricky variations.
- **Apply Smart Techniques:** Use logic-based approaches and elimination strategies instead of lengthy algebra.

By integrating these methods into your preparation, you'll be fully equipped to handle SSC CGL average questions efficiently and boost your overall Quant score.

Mastering SSC CGL Average Questions is not just about solving formulas, it's about strategy, shortcuts, and interpretation. With consistent practice, concept clarity, and applying the techniques shared above, you can easily secure 4–6 marks from this chapter in under 5 minutes. At **Quant Sir's** class, we focus not just on formulas, but on thinking patterns, so that even tricky questions become manageable. Keep revising, keep solving, and keep tracking your accuracy.

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