



### Welcome to the Quant Sir Comprehensive Guide – Your Trusted Companion for SSC CGL Tier I Exam Success

Preparing for the **SSC CGL Tier I** exam demands more than just hard work—it calls for a focused strategy, a solid grasp of core concepts, and refined problem-solving skills. This guide is designed to support your preparation journey with a thorough analysis of the **SSC CGL 2023 Quant Previous Year Paper - 14 July 2023 - Shift 3**, complete with accurate answer keys and explanations.

At **Quant Sir**, we provide the actual 2024 question paper alongside detailed, step-by-step solutions to help you understand the exam pattern and develop the techniques needed to solve even the most challenging problems with ease. This real-exam practice ensures you're not only aware of the question trends but also confident in your ability to solve them efficiently.

Whether you're a first-time aspirant or aiming to refine your preparation, this guide is here to enhance your approach and boost your performance. With **Quant Sir**, you're not just preparing harder— you're preparing smarter.

## SSC CGL 2023 Quant Previous Year Paper - Exam Pattern

Take a look at the exam pattern for the SSC CGL Tier I 2023 exam.

Tier I: Computer-Based Exam (Qualifying Nature)

Subject	No. of Questions	Maximum Marks	Duration
General Intelligence & Reasoning	25	50	
General Awareness	25	50	
Quantitative Aptitude	25	50	60 minutes
English Comprehension	25	50	(80 min for PwD)
Total	100	200	

## SSC CGL 2023 Quant Previous Year Paper - Topicwise Weightage

The table below offers a topic-wise analysis of the SSC CGL 2023 Quant Previous Year Paper - 14 July 2023 - Shift 3. It highlights the main focus areas and the number of questions from each topic, giving you clear insights into the exam pattern and enabling you to fine-tune your preparation strategy.

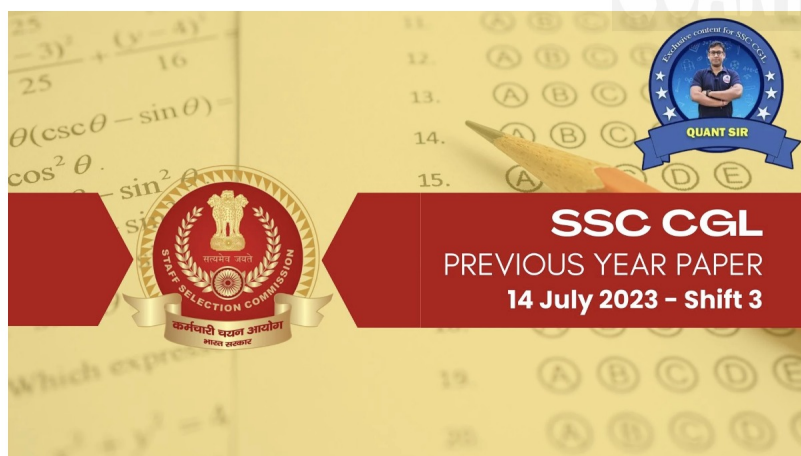


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## FREE PDF

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Topic	No. of Questions
Arithmetic	10
Geometry & Mensuration	4
Algebra	3
Trigonometry	4
Data Interpretation (DI)	2
Number System / Ratio	2
Percentage & Election Problems	1
Time, Speed & Distance	1



## SSC CGL 2023 Quant Previous Year Paper - Tips to Solve

Here are top tips for cracking the SSC CGL Quantitative Aptitude section:



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1. **Understand the Question Completely:** Always take a moment to read each question carefully. Make sure you grasp the core concept before diving into calculations—this helps reduce errors.
2. **Start with Your Strong Areas:** Focus first on topics you're confident in, such as Ratio & Proportion or Simplification. These usually require less time and can help build momentum early in the exam.
3. **Practice Smart Time Management:** Allocate a specific time limit per question. Avoid spending too long on any single problem—if it's too time-consuming, skip and come back later.
4. **Leverage Shortcut Techniques:** Master quick-solving tricks for common topics like Mensuration, Percentages, and Profit & Loss to improve your speed and efficiency.
5. **Focus on Accuracy:** While working fast is crucial, don't let accuracy suffer. Use estimation when appropriate and double-check your answers when time allows.
6. **Boost Your Data Interpretation Skills:** Practice analyzing charts, tables, and graphs. Look for patterns and key values to draw insights quickly and accurately.
7. **Apply Formulas Wisely:** Keep essential formulas for Algebra, Geometry, and Trigonometry at your fingertips—and more importantly, understand when and how to use them.
8. **Get Comfortable with Word Problems:** Learn to break down word problems by identifying key information and translating it into equations. Thinking in real-life terms can often make problems easier to solve.
9. **Review When Possible:** If you have time left, go back to any questions you skipped or were unsure about, and check your calculations to catch avoidable mistakes.
10. **Stay Calm and Focused:** A composed mind helps you think clearly and approach each problem logically. Keep your stress in check during the exam.

Consistent practice and familiarity with the exam pattern are essential for mastering the Quantitative Aptitude section and steadily improving your score.

## SSC CGL 2023 Quant Previous Year Paper - 14 July 2023 - Shift 3

**Q:1** The present age of Ram is five times the present age of his daughter, Savita. Seven years from now, Ram will be three times as old as Savita. What is the present age (in years) of Ram?

1. 45
2. 35
3. 40
4. 30





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**Q:2** A thief steals a van at 3:00 a.m. and drives it at a speed of 57 km/h. The thief is discovered at 4:00 a.m., and the owner starts the chase with another van at a speed of 76 km/h. At what time will he catch the thief?

1. 7:30 a.m.
2. 7:00 p.m.
3. 7:00 a.m.
4. 6:00 a.m.

**Q:3** If the simple interest at the same interest rate on ₹500 for 4 years and ₹700 for 2 years, combined together, is ₹280, then what is the rate of interest?

1.  $9\frac{3}{17}\%$
2.  $6\frac{5}{17}\%$
3.  $8\frac{4}{17}\%$
4.  $7\frac{3}{17}\%$



**Q:4** What is the value of  $\sec^2 54^\circ - \cot^2 36^\circ + \frac{3}{2} \sin^2 37^\circ \times \sec^2 53^\circ + \frac{2}{\sqrt{3}} \tan 60^\circ$ ?

1.  $5/2$
2.  $9/2$
3.  $3/2$
4.  $7/2$

**Q:5** A 15 cm long perpendicular is drawn from the center of a circle to its 40 cm long chord. Find the radius of the circle.

1. 25 cm
2. 27 cm
3. 22 cm
4. 20 cm



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**Q:6** 4 women or 6 boys can finish a work in the same number of days. A boy can finish it in 60 days. In how many days can 5 women finish the work, working together every day?

1. 4
2. 10
3. 8
4. 6

**Q:7** The mean proportional between 7 and 112 is:

1. 42
2. 28
3. 21
4. 14

**Q:8** Let ABC and PQR be two congruent triangles such that  $\angle A = \angle P = 90^\circ$ . If BC = 13 cm and PR = 5 cm, find AB.

1. 12 cm
2. 8 cm
3. 10 cm
4. 5 cm

**Q:9** Find the simplified value of the given expression.

$$4\frac{4}{5} \div \frac{3}{5} \text{ of } 5 + \frac{4}{5} \times \frac{3}{10} - \frac{1}{5}$$

1.  $1\frac{4}{5}$
2. 5
3.  $1\frac{16}{25}$
4. 6

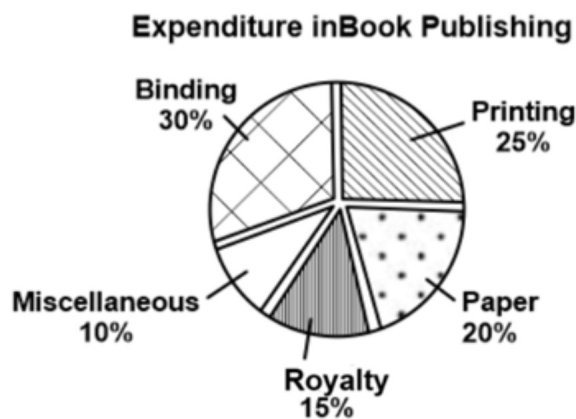


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**Q:10** If the total surface area of a cube is 24 square units, then what is the volume of the cube?

1. 8 cu. units
2. 16 cu. units
3. 10 cu. units
4. 4 cu. units

**Q:11** Study the given pie-chart and answer the question that follows. The pie-chart shows the expenditure incurred in the preparation of a book by a publisher, under various heads.



What is the difference between the angle of the pie chart showing the expenditure incurred on binding and printing?

1.  $15^\circ$
2.  $20^\circ$
3.  $18^\circ$
4.  $22^\circ$

**Q:12** Evaluate the following:

$$\cos(36^\circ + A) \cdot \cos(36^\circ - A) + \cos(54^\circ + A) \cdot \cos(54^\circ - A)$$

1.  $\sin 2A$
2.  $\cos A$



3.  $\sin A$

4.  $\cos 2A$

**Q:13** What is the value of  $a^3 + b^3 + c^3$  if  $(a + b + c) = 0$ ?

1.  $a^2 + b^2 + c^2 - 3abc$

2. 0

3.  $3abc$

4.  $a^2 + b^2 + c^2 - ab - bc - ca$

**Q:14** An electronic store owner allows two successive discounts of 20% and 25% on each item. The store has a reward points scheme that enables a customer to get free shopping worth ₹0.10 on every 1 reward point credited to the customer's account on previous purchases from the store. A customer decides to buy a laptop that is marked at ₹72,000. What will be its net selling price if he has 2850 reward points to his credit?

1. ₹43,200

2. ₹42,915

3. ₹42,215

4. ₹42,942

**Q:15** 5 women and 9 girls earn a total of ₹18,720 in 9 days, while 9 women and 16 girls earn a total of ₹52,080 in 14 days. How much will 12 women and 7 girls together earn (in ₹) in 13 days?

1. 42510

2. 41990

3. 42380

4. 42120

**Q:16** In what ratio must water be mixed with milk, costing ₹32 per litre, in order to get a mixture costing ₹28 per litre?

1. 8 : 1



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2. 1 : 7

3. 1 : 8

4. 7 : 1

**Q:17** If D is the midpoint of BC in  $\triangle ABC$  and  $\angle A = 90^\circ$ , then  $AD =$  \_\_\_\_\_.

1.  $BC/4$

2.  $2BC$

3.  $BC/2$

4.  $BC$

**Q:18** A shopkeeper uses 940 gm of weight in place of one kg of weight. He sells it at 4% profit. What will the actual profit percentage be? (rounded off to two decimal places)

1. 9.25%

2. 10.32%

3. 10.64%

4. 10.96%

**Q:19** X and Y can complete a work in 9 days and 36 days, respectively. X begins to do the work, and they work alternately, one at a time, for one day each. The whole work will be completed in:

1.  $12\frac{1}{2}$  Days

2.  $14\frac{1}{4}$  Days

3.  $13\frac{1}{3}$  Days

4.  $15\frac{1}{5}$  Days

**Q:20** What is the value of  $64x^3 + 38x^2y + 20xy^2 + y^3$ , when  $x = 3$  and  $y = -4$ ?

1. 1236

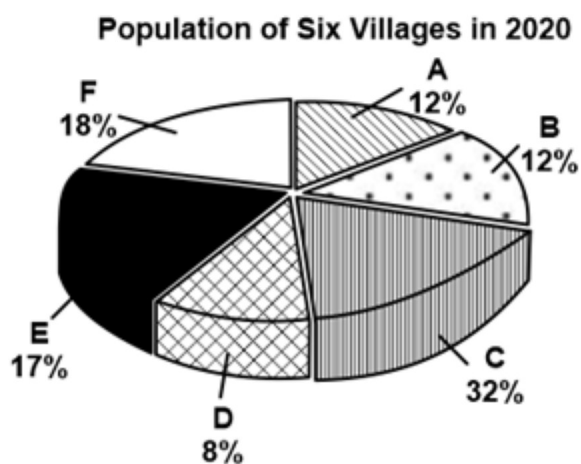




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2. 488
3. 536
4. 1256

**Q:21** Study the given pie chart and answer the question that follows.



The total population of these six villages is 100%. The population of Village D in 2020 was 10,500. What was the population of village A in 2020?

1. 15,570
2. 15,750
3. 17,500
4. 7,875

**Q:22** Evaluate the following:  
 $\sin 25^\circ \sin 65^\circ - \cos 25^\circ \cos 65^\circ$ .

1. 40
2. 4
3. 0
4. 1



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**Q:23** In an election, 2% of the people enrolled in the voter list did not participate, and 500 votes were invalid. Two candidates, A and B, fought the election, and A defeated B by 200 votes. If 43% of the people enrolled in the voter list casted their votes in favor of A, then what is the total number of casted votes?

1. 2450
2. 2800
3. 3000
4. 3250

**Q:24** P is two times more efficient than Q. P is able to complete a piece of work in 40 days less than Q. Working together, the whole number of days taken by them to complete the work is:  
(Round off to the nearest integer.)

1. 26
2. 25
3. 27
4. 28

**Q:25** In a race around a circular cycling track of 75 km, two cyclists are riding at a speed of 30 km/h and 25 km/h in the same direction. After what time (in hours) will they meet at the point from which they started their journey?

1. 16
2. 7
3. 14
4. 15

## SSC CGL 2023 Quant Previous Year Paper - Answer Key

You can check your score for this test here.



title

1. (2)	2. (3)	3. (3)	4. (2)	5. (1)
6. (3)	7. (2)	8. (1)	9. (3)	10. (1)
11. (3)	12. (4)	13. (3)	14. (2)	15. (4)
16. (2)	17. (3)	18. (3)	19. (2)	20. (4)
21. (2)	22. (3)	23. (1)	24. (3)	25. (4)

Each question carries 2 marks.

- Scored above 45? Great job! You're well on track to cracking the exam.
- Scored between 35 and 45? That's a solid performance—keep up the momentum and aim higher.
- Scored below 30? No worries. Treat this as a learning opportunity to identify weak areas and focus your practice accordingly.

To boost your performance, make sure to go through the detailed solutions provided. They'll help you grasp the correct approaches and sharpen your problem-solving skills.

Stay consistent with your preparation, and work on smart time-management strategies for the actual exam.

Keep checking back **Quant Sir** for more SSC CGL 2023 question papers, complete with answer keys and explanations, to take your prep to the next level.