



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

Cracking the **SSC CGL Tier I** exam requires more than just hard work—it calls for smart strategy, clear concepts, and sharp problem-solving skills. This guide is carefully crafted to strengthen your preparation through an in-depth analysis of the **SSC CGL 2024 Quant Previous Year Paper - 9 Sep 2024 - Shift 1**. Inside, you'll find accurate answer keys and detailed step-by-step solutions for every question.

At **Quant Sir**, we provide you with the actual exam paper, enriched with expert explanations to help you recognize question patterns, assess difficulty levels, and master the most effective solving techniques. Practicing with real exam questions builds your familiarity and confidence—key ingredients for exam success.

Whether you're just starting your SSC CGL journey or looking to fine-tune your preparation, this guide serves as a dependable resource to enhance your speed, accuracy, and overall performance. With Quant Sir, you're not just preparing harder—you're preparing smarter.

## SSC CGL 2024 Quant Previous Year Paper - Exam Pattern

Here's the exam pattern for SSC CGL Tier I exam held in 2024.

Tier I: Computer-Based Exam

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

## SSC CGL 2024 Quant Previous Year Paper - Topicwise Weightage



title

The table below offers a topic-wise breakdown of the SSC CGL 2024 Quant Previous Year Paper - 9 Sep 2024 - Shift 1. It highlights the major focus areas and the number of questions asked from each topic, giving you valuable insights into the exam pattern. This analysis will help you fine-tune your preparation strategy with greater precision and confidence.

Topic	No. of Questions
Arithmetic	10
Data Interpretation	3
Geometry & Mensuration	4
Algebra & Polynomials	3
Number System	2
Speed, Time & Distance	2
Trigonometry	3
Miscellaneous	1



## SSC CGL 2024 Quant Previous Year Paper - Tips to Solve

Here are top tips to ace the SSC CGL Quantitative Aptitude section

- 1. Understand the Question First:** Before diving into calculations, take a moment to fully grasp what's being asked. Even a small misinterpretation can lead to unnecessary errors.
- 2. Start with Your Strengths:** Kick off with the topics you're most confident in—such as Simplification or Ratio & Proportion. Solving these quicker questions first can build confidence and momentum.
- 3. Use Time Strategically:** Assign a rough time limit to each question. If a problem seems too lengthy, skip it for now and return later. This approach maximizes your overall attempt count.
- 4. Learn Smart Shortcuts:** Master shortcut techniques for frequently tested topics like Percentages, Profit & Loss, and Mensuration. They can greatly boost your solving speed during the exam.
- 5. Prioritize Accuracy Over Speed:** While time is important, accuracy is what earns you marks. Use estimation where it makes sense, and double-check your answers if time allows.



QUANT SIR

FREE  
PDF

title



Consistent practice, a strong conceptual foundation, and a clear understanding of the exam pattern are key to mastering the Quant section and securing a top score.

## SSC CGL 2024 Quant Previous Year Paper - 9 Sep 2024 - Shift 1

**Q:1** Directions: The following table shows the marks (out of 100) obtained by five students in five different subjects.

Student/Subject	Maths	Physics	Chemistry	English	Physical Education
Tarun	65	80	75	85	90
Rohit	69	76	80	88	94
Mohit	73	84	77	90	95
Shobhit	76	85	76	86	78
Sumit	90	88	78	82	68

Who obtained 79% marks in all the subjects taken together?

1. Sumit
2. Mohit
3. Rohit
4. Tarun





**Q:2** A grocer professes to sell rice at the cost price, but uses a fake weight of 870 g for 1 kg. Find his profit percentage (correct to two decimal places).

1. 15.11%
2. 14.94%
3. 18.21%
4. 11.11%

**Q:3** Rajesh, in printing press, got an order to print some books, out of which he complete  $17/27$  of the order in 34 days. In how many days did he complete the entire order of printing?

1. 60
2. 20
3. 54
4. 56

**Q:4** Simplify:  $\frac{x^2-9}{x+3}$ .

1.  $x + 3$
2.  $x - 3$
3.  $\sqrt{x^2-9}$
4.  $x - 9$

**Q:5** Mohan borrows a sum of ₹4,22,092 at the rate of 20% per annum simple interest. At the end of the first year, he repays ₹21,679 towards return of principal amount borrowed. If Mohan clears all pending dues at the end of the second year, including interest payment that accrued during the first year, how much does he pay (in ₹) at the end of the second year?

1. 556367
2. 558380



3. 561347

4. 564914

**Q:6** In an election between two candidates,  $y\%$  of the voters did not vote. 10% of the votes cast were declared invalid, while all the valid votes were cast in favour of either of the two candidates. The candidate who got 59.375% of the valid votes cast was declared elected by 2484 votes. If the number of people eligible to vote in that election was 16,000, what is the value of  $y$ ?

1. 7.2

2. 8.4

3. 8

4. 7.5

**Q:7** R pays ₹100 to P with ₹5, ₹2 and ₹1 coins. The total number of coins used for paying are 40. What is the number of coins of denomination ₹5 in the payment?

1. 16

2. 17

3. 18

4. 13

**Q:8** In a circular race of 840 m, A and B start running in the same direction at the same time from the same point at the speeds of 6 m/s and 12 m/s, respectively. After how much time will they meet next?

1. 140 s

2. 20 s

3. 40 s

4. 70 s

**Q:9** The distance between the centres of two circles of radii 22 cm and 10 cm is 37 cm. If the points of contact of a direct common tangent to these circles are M and Q, then find the length of the line segment MQ.



title

1. 35 cm
2. 39 cm
3. 29 cm
4. 25 cm

**Q:10** If  $\operatorname{cosec}\theta = 5/3$ , then evaluate  $(\sec^2\theta - 1) \cot^2\theta (1 + \cot^2\theta)$ .

1. 25/16
2. 9/16
3. 25/9
4. 4/5

**Q:11** Let O be the centre of the circle and AB and CD are two parallel chords on the same side of the radius. OP is perpendicular to AB and OQ is perpendicular to CD. If AB = 10 cm, CD = 24 cm and PQ = 7 cm, then the diameter (in cm) of the circle is equal to:

1. 26
2. 13
3. 12
4. 24

**Q:12** Which of the following can be the value of k, if  $\frac{88 \div 8 \times (-3) \times 3}{6^2 - 7 \times 5 - k^2} = 1$

1. 10
2. 7
3. 3
4. 4

**Q:13** Simplify:



$$\frac{x^3+15x^2+75x+125}{x^2-25} (x-5)$$

1.  $x^2 + 25$
2.  $x^2 + 5x + 25$
3.  $x^2 + 10x + 25$
4.  $x^2 - 25$

**Q:14** The radii of the two cones are in the ratio of 2 : 5 and their volumes are in the ratio of 3 : 5. What is the ratio of their heights?

1. 15 : 4
2. 11 : 15
3. 13 : 11
4. 4 : 11



**Q:15** Fill pipe P is 21 times faster than fill pipe Q. If Q can fill a cistern in 110 minutes, find the time it takes to fill the cistern when both fill pipes are opened together.

1. 5 minutes
2. 4 minutes
3. 3 minutes
4. 6 minutes

**Q:16** Directions: The given table shows the percentage of marks obtained by three students in three different subjects in an institute. (maximum marks are given in brackets)



title

Subject / Student	History (175)	Geography (200)	Botany (125)
Ram	54	87	71
Mohan	51	79	78
Shyam	75	49	76

If in order to pass the exam, a minimum of 105 marks is needed in History, how many students pass the exam?

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



**Q:17** An article is marked at Rs. 550. If it is sold at a discount of 40%, Then the selling price becomes 10% more than its cost price. What is the cost price (in Rs.)?

1. 220
2. 330
3. 300
4. 200

**Q:18** The value of  $\cos^2 29^\circ + \cos^2 61^\circ$  is:

1.  $\frac{\sqrt{3}}{2}$
2. 2
3. 1
4. 0

**Q:19** The value of  $\sin^2 30^\circ - \sin^2 40^\circ + \sin^2 45^\circ - \sin^2 55^\circ - \sin^2 35^\circ + \sin^2 45^\circ - \sin^2 50^\circ + \sin^2 60^\circ$  is:





title

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

**Q:20** Directions: Read the given information and answer the question that follows.

The following table gives the percentage of marks obtained by seven students in six different subjects in an examination.

The number in the brackets gives the maximum marks in each subject.

Student	Subject (Max. Marks)					
	Maths	Chemistry	Physics	Geography	History	Computer Science
	(150)	(130)	(120)	(100)	(60)	(40)
Ayush	90	50	90	60	70	80
Aman	100	80	80	40	80	70
Sajal	90	60	70	70	90	70
Rohit	80	65	80	80	60	60
Muskan	80	65	85	95	50	90
Tanvi	70	75	65	85	40	60
Tarun	65	35	50	77	80	80

If someone secured all the highest scores that have been obtained by some student or the other in the six subjects as given in the table above, what would be the exact overall percentage score obtained by that student?

1.  $91\frac{1}{6}\%$
2. 95.16%
3. 91%
4.  $90\frac{5}{6}\%$



**Q:21** Which of the following can be the value of 'k' so that the number 217924k is divisible by 6?

1. 4
2. 6
3. 2
4. 0

**Q:22** Directions: The following table shows the total number of candidates who appeared and the number of candidates present, in different exam centres – P, Q and R. Study the table and answer the question that follows.

Year	P		Q		R	
	Total	Present	Total	Present	Total	Present
2016	45	42	56	45	55	50
2017	50	45	75	55	45	40
2018	64	60	65	45	65	55
2019	80	69	84	72	70	62
2020	55	44	80	66	90	85

In which year was the number of absentees the second highest in the total of all centers?

1. 2018
2. 2017
3. 2020
4. 2019

**Q:23** If the sum of two sides of an equilateral triangle is 16 cm, then find the third side.

1. 4 cm
2. 16 cm



3. cannot be determined

4. 8 cm

**Q:24** The average marks (out of 100) of boys and girls in an examination are 75 and 80, respectively. If the average marks of all the students in that examination are 78. Find the ratio of the number of boys to the number of girls.

1. 2 : 3

2. 3 : 4

3. 1 : 3

4. 1 : 2

**Q:25** Which of the following statements is sufficient to conclude that two triangles are congruent?

1. These have two equal sides and the same perimeter.

2. These have the same area and the same base.

3. One side and one angle of both triangles are equal.

4. These have the same base and the same height.

## SSC CGL 2024 Quant Previous Year Paper - Answer Key

You can check your score for this test here.

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



title

Each question carries 2 marks.

- Scored above 45? Excellent work! You're well on track to cracking the exam. Keep the momentum going and maintain consistent practice.
- Scored between 35 and 45? Good job! You've built a solid foundation. With continued effort and focus, you're sure to see significant improvement.
- Scored below 30? Don't be discouraged. Use this opportunity to identify your weaker areas and work on them through focused revision and targeted practice.

To enhance your performance, make sure to go through the detailed solutions included in this paper. They'll help you understand the correct methods and refine your problem-solving approach.

Remember, smart preparation and consistency are the keys to success—practice regularly, learn from your mistakes, and manage your time wisely during the exam.

For more SSC CGL 2024 papers with answer keys and in-depth explanations, stay connected with [Quant Sir](#) and continue your preparation with clarity and confidence.

