



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

Preparing for the **SSC CGL Tier I** exam takes more than dedication—it requires a clear strategy, strong conceptual understanding, and sharp problem-solving skills. This guide is crafted to support your journey by providing a detailed review of the **SSC CGL 2024 Quant Previous Year Paper - 9 Sep 2024 - Shift 3**, complete with accurate answer keys.

At **Quant Sir**, we bring you the actual 2024 question paper along with step-by-step solutions, helping you decode the exam pattern and master the techniques needed to tackle complex problems with confidence. This real-exam practice ensures you're not only familiar with the types of questions asked but also well-equipped to handle them efficiently.

Whether you're appearing for the exam for the first time or looking to strengthen your preparation further, this guide is designed to sharpen your strategy and elevate your performance. With **Quant Sir** by your side, you're not just preparing hard—you're preparing smart.

## 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 (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 2024 Quant Previous Year Paper - Topicwise Weightage

The table below presents a topic-wise breakdown of the questions from the SSC CGL 2024 Quant Previous Year Paper - 9 Sep 2024 - Shift 3. It outlines the key focus areas along with the number of questions from each topic, providing valuable insights into the exam pattern and helping you tailor your preparation accordingly.



Topic	Total Questions
Mensuration	4
Time, Speed & Distance	1
Profit, Loss & Discount	2
Percentage	2
Algebra	3
Geometry / Triangles	2
Trigonometry	1
Number System / Divisibility	2
Data Interpretation (DI)	4
Simple Interest	1
Averages	1
Inequalities / Optimization	1
Linear Equations	1
Mean Proportion	1

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

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

**Strengthen Data Interpretation Skills:** Carefully analyze graphs, tables, and charts. Practice spotting patterns to quickly interpret data and extract key insights.

**Apply Formulas Smartly:** Memorize essential formulas for Algebra, Geometry, and Trigonometry, and understand the right context to apply them effectively.

**Master Word Problems:** Identify key phrases and translate them into mathematical equations. Relating problems to real-life scenarios can often simplify your approach.

**Review Your Answers:** If time permits, revisit any skipped or uncertain questions and review your solutions to minimize avoidable errors.

**Stay Calm and Focused:** A clear and composed mindset helps you think logically and solve problems efficiently during the exam.



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Regular practice and familiarity with exam patterns are key to mastering the Quant section and improving your performance over time.

## SSC CGL 2024 Quant Previous Year Paper - 9 Sep 2024 - Shift 3

**Q:1** Find the area (in  $\text{cm}^2$ ) of the sector whose perimeter is  $64/3$  cm and central angle is  $60^\circ$ . (Use  $\pi = \frac{22}{7}$ )

1.  $47/3$
2.  $77/3$
3.  $68/2$
4.  $85/3$

**Q:2** A thief noticed a policeman at a distance of 600 metres. The thief started running and the policeman chased him. The thief and policeman are running at speeds of 12 km/h and 15 km/h, respectively. Find the time (in minutes) required for the policeman to catch the thief.

1. 8
2. 10
3. 12
4. 15





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**Q:3** A dishonest shopkeeper claims to sell salt at a rate of ₹25/kg. The cost price of the salt is ₹25/kg. Not satisfied with this, he tries to make profit by removing 200 gm from each kg. What is the shopkeeper's gain percentage?

1. 15%
2. 25%
3. 30%
4. 20%

**Q:4** A number is first increased by 12% and then increased by 23%. The number, so obtained, is now decreased by 34%. What is the net increase or decrease percent in the original number (nearest to an integer)?

1. 10% increase
2. 9% decrease
3. 10% decrease
4. 9% increase

**Q:5** If  $\frac{7\sin\theta + 4\cos\theta}{9\sin\theta - 2\cos\theta} = \frac{5}{4}$ , then the value of  $\frac{\tan^2\theta + 5}{\tan^2\theta - 5}$  is:

1.  $\frac{212}{769}$
2.  $-\frac{2121}{769}$
3.  $\frac{769}{2121}$
4.  $-\frac{769}{2121}$

**Q:6** In a  $\Delta PQR$ , the bisectors of  $\angle Q$  and  $\angle R$  meet at point O, inside the triangle. If  $\angle QOR = 107^\circ$ , then the measure of  $\angle P$  is:

1.  $40^\circ$
2.  $23^\circ$
3.  $17^\circ$



4.  $34^\circ$

**Q:7** If A is an acute angle, which of the following is equal to  $\frac{\sin A}{1 + \cos A}$  ?

1.  $(1 - \cos A) / \sin A$
2.  $(1 + \cos A) / \sin A$
3.  $(1 - \sin A) / \cos A$
4.  $(1 + \sin A) / \cos A$

**Q:8** If 7845K854 is divisible by 11, then what is the value of K?

1. 6
2. 9
3. 7
4. 8



**Q:9** What is the perimeter (in cm, rounded off to one decimal place) of the sector of a circle with a radius of 10 cm and an angle of  $30^\circ$ ? (Use  $\pi = 3.14$ )

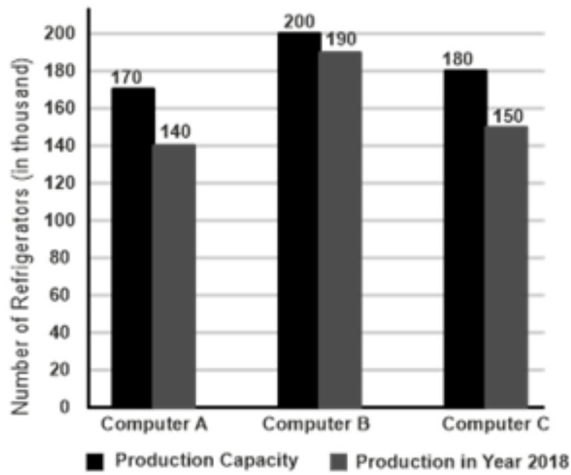
1. 20.4
2. 35.7
3. 82.8
4. 25.2

**Q:10** Directions: Study the given graph and answer the question that follows.

The graph shows the production of refrigerators by three companies in 2018.



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The refrigerators produced by company C form what percentage of the total production?

1. 34.35%
2. 32.56%
3. 30.25%
4. 31.25%

**Q:11** Directions: The following table shows the sale (in thousands) of different types of helmets by a shop over the given years.

Type of Helmet/Year	1998	1999	2000	2001	2002
A	78	45	56	63	88
B	58	64	78	60	68
C	46	54	58	64	68
D	76	65	72	78	82
E	87	66	74	80	84

What was the percentage increase in the sale of Helmets C in 2002 as compared to that in 1999?

1. 25.93%



2. 26.39%
3. 28.26%
4. 27.62%

**Q:12** If the length, breadth and height of a cuboid is 8 cm, 4 cm and 6 cm, respectively, then the volume (in  $\text{cm}^3$ ) of the cuboid is:

1. 218
2. 192
3. 96
4. 172

**Q:13** Ramesh has ₹18,000. He deposited ₹7,000 in a bank at the rate of 5% per annum and ₹6,000 in another bank at the rate of 6% per annum simple interest. If he received ₹1,160 as simple interest at the end of one year, then the rate of interest per annum on the rest of the capital is equal to:

1. 10%
2. 11%
3. 9%
4. 8%

**Q:14** If  $\frac{\sec a + \tan a}{\sec a - \tan a} = \frac{7}{4}$  then, find the value of cosec a.

1.  $1/3$
2.  $1/11$
3.  $11/3$
4.  $3/11$

**Q:15** The mean proportional of  $8a^2$  and  $18/a^4$ , where a is a positive number, is \_\_\_\_\_.



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1.  $12/a^2$
2.  $12a$
3.  $12a^2$
4.  $12/a$

**Q:16** If  $x$ ,  $y$  and  $z$  are positive numbers and  $x + y + z = 1$ , then the least value of  $1/x + 1/y + 1/z$  is:

1. 7
2. 5
3. 9
4. 11

**Q:17** Directions: Study the given table and answer the question that follows.

The given table shows the production of T-shirts by four companies i.e., C1, C2, C3 and C4 over the four years.

Year	Production (in thousands)			
	C1	C2	C3	C4
2019	243	244	244	240
2020	248	239	236	230
2021	232	240	235	248
2022	242	244	230	242

Which company had the maximum average production of T-shirts during these four years?

1. C1
2. C3
3. C2
4. C4





**Q:18** If the equations  $4x + (k - 2)y + 3 = 0$  and  $(k - 2)x + 9y - 5 = 0$  ( $k > 0$ ) are parallel, then find the value of  $k^2 + 6$ .

1. 68
2. 70
3. 72
4. 64

**Q:19** Let  $a + b = 2c$ , then which of the following expressions is true?

1.  $a^2 + 2ac = b^2 + 2bc$
2.  $a^2 - 2bc = b^2 + 2ac$
3.  $a^2 + 2bc = b^2 + 2bc$
4.  $a^2 - ac = b^2 + c$



**Q:20** Two triangles EFG and HIJ are congruent. If the area of  $\triangle EFG$  is  $124 \text{ cm}^2$ , then the area of  $\triangle HIJ$  will be:

1.  $124 \text{ cm}^2$
2.  $248 \text{ cm}^2$
3.  $62 \text{ cm}^2$
4.  $31 \text{ cm}^2$

**Q:21** A pipe can fill an overhead tank in 12 hours. But due to a leak at the bottom, it is filled in 18 hours. If the tank is full, how much time will the leak take to empty it?

1. 3.6 hours
2. 63 hours
3. 7.2 hours
4. 36 hours

**Q:22** In a clearance sale, a sari whose marked price was ₹10,490 is now sold for ₹9,441. What is the discount percentage on the sari?



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1. 10%
2. 15%
3. 18%
4. 12%

**Q:23** Directions: The given table shows the number of pages printed by four printers in three days.

Days	Printers			
	L	M	N	O
Friday	10,230	9580	7560	9600
Saturday	8540	11,230	6580	7890
Sunday	9235	8264	7546	10,325

If the total number of pages printed by all the given printers together on Wednesday was 15% more than the total number of pages printed by all the given printers together on Saturday, what was the total number of pages printed by all the given printers together on Wednesday?

1. 38,450
2. 42,577
3. 40,263
4. 39,376

**Q:24** Simplify:

$$13 - [7 - (4 + 7) - \{7 - (7 - 4 + 7)\} + 14]$$

1. 13
2. 9
3. 0
4. 26



**Q:25** A stock portfolio consists of four stocks. Stock A represents 20% of the portfolio and has a return of 6%. Stock B represents 30% of the portfolio and has a return of 8%. Stock C represents 20% of the portfolio and has a return of 4%. Stock D represents the remaining 30% of the portfolio and has a negative return of 5%. What is the average return of the portfolio?

1. 2.9%
2. 2.6%
3. 3.2%
4. 3.4%

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

Here you can check out your score in this test.

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

Each question carries 2 marks.

- If you scored above 45, great job! You're well on track to ace the exam.
- A score between 35 and 45 reflects solid preparation—keep up the momentum!
- If your score is below 30, don't be discouraged. Use this as an opportunity to identify weak areas and focus on improving them with targeted practice.

To boost your performance, go through the detailed solutions provided for this paper to understand the right approach and sharpen your problem-solving skills. Stay consistent with your practice and focus on smart time management during the exam. Keep an eye out at **Quant Sir** for more SSC CGL 2024 question papers, complete with solutions and answer keys, to help take your preparation to the next level. Remember, persistence and dedication are your biggest assets on the road to success!